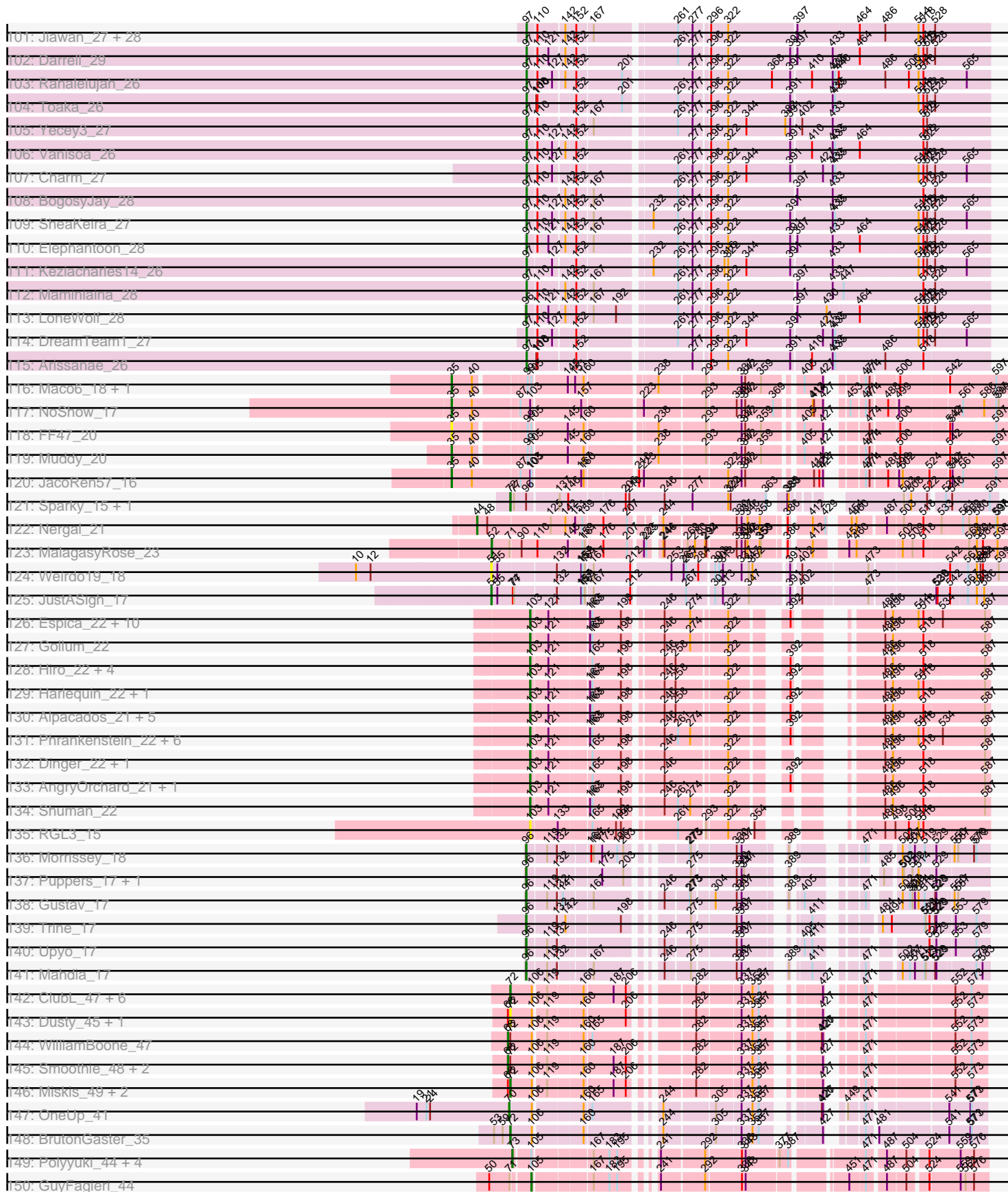




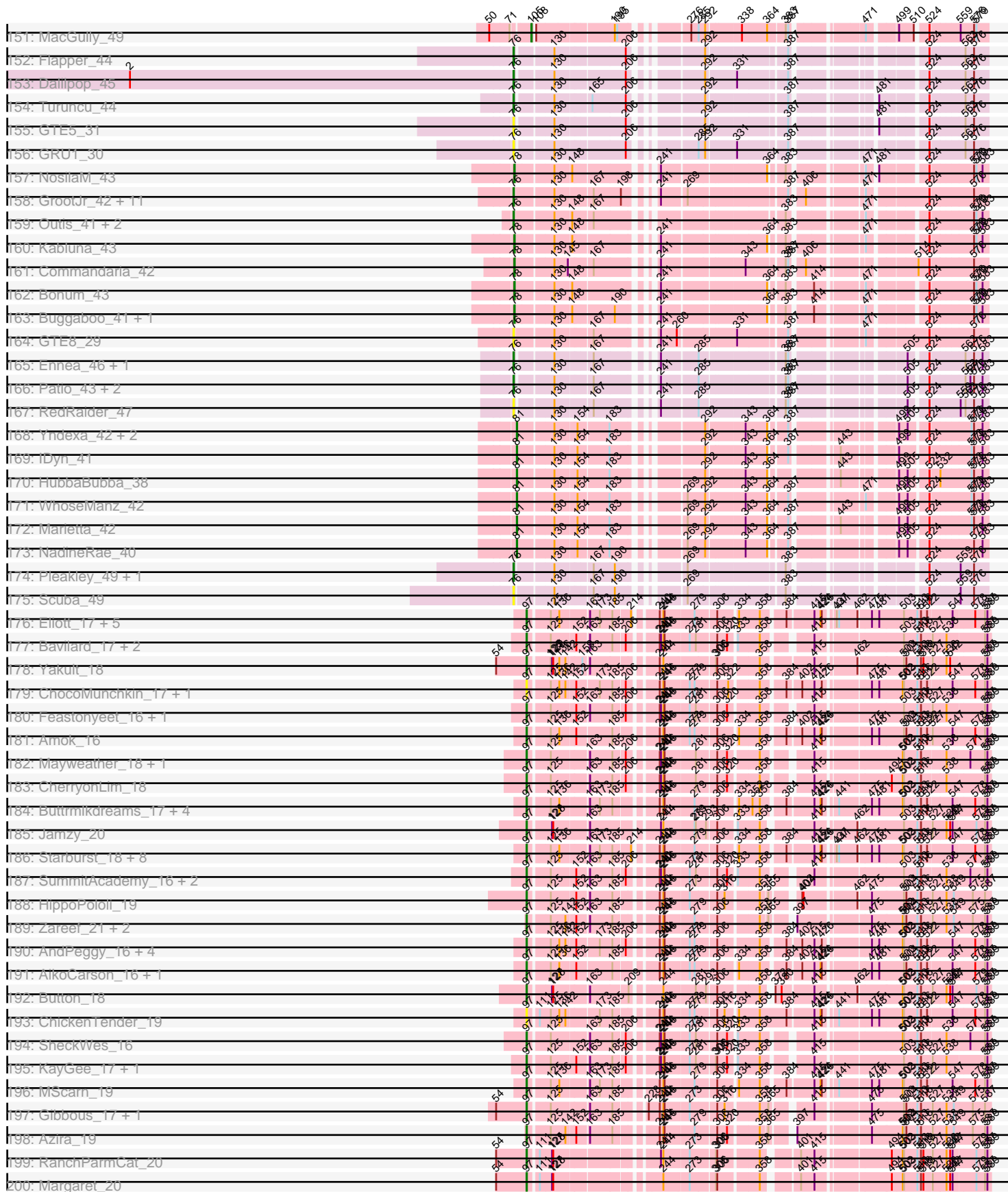
Pham 215638

|                         |     |     |     |     |     |     |  |     |     |     |     |     |     |     |     |     |     |
|-------------------------|-----|-----|-----|-----|-----|-----|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 51: NicoleTera_31       | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 52: LionsBait_28        | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 53: Serenity_26         | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 54: TarsusIV_27         | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 55: EZIMoney23_31       | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 56: Trxie_30            | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 57: WeiHuaDA_33         | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 58: Milko_30 + 1        | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 59: Kaipine_30          | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 60: CRB1_27 + 1         | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 61: Acolyte_27          | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 62: ZUES_27             | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 63: HarryHoudini_29     | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 64: BabyBack_29 + 1     | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 65: Chef2_29            | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 66: Jsquared_26         | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 67: Journey13_25        | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 68: ArcherNIM_29        | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 69: SwimSquare_29       | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 70: Tristan_28          | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 71: Colin_31            | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 72: Changeing_29        | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 73: Hellatump_29        | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 74: XianYue_27          | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 75: First_0027          | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 76: Anthony_26          | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 77: Kimmap_27           | 91  | 110 | 121 | 132 | 167 | 183 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 78: Micasa_23 + 7       | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 79: Archetta_23 + 7     | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 80: PickleBack_23 + 5   | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 81: Theia_21 + 1        | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 82: Chadwick_24 + 1     | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 83: Midas2_23 + 3       | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 84: PetterN_24          | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 85: LittleCherry_23 + 2 | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 86: UnionJack_23 + 1    | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 87: ElTiger69_23        | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 88: Scorpio_24 + 1      | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 89: Jabiru_23           | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 90: Jeffabunny_30 + 17  | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 91: Davinci_30 + 21     | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 92: Indra_30 + 3        | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 93: Ritter_30           | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 94: Koko_30             | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 95: Candia_30           | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 96: Blinn1_30 + 1       | 91  | 110 | 121 | 132 | 167 | 201 |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 97: PP_36               | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 98: Smeadley_23 + 7     | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 99: Phyllis_23 + 1      | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |
| 100: Stephig9_23        | 103 | 163 | 183 | 210 |     |     |  | 261 | 271 | 280 | 290 | 296 | 300 | 344 | 382 | 430 | 446 |

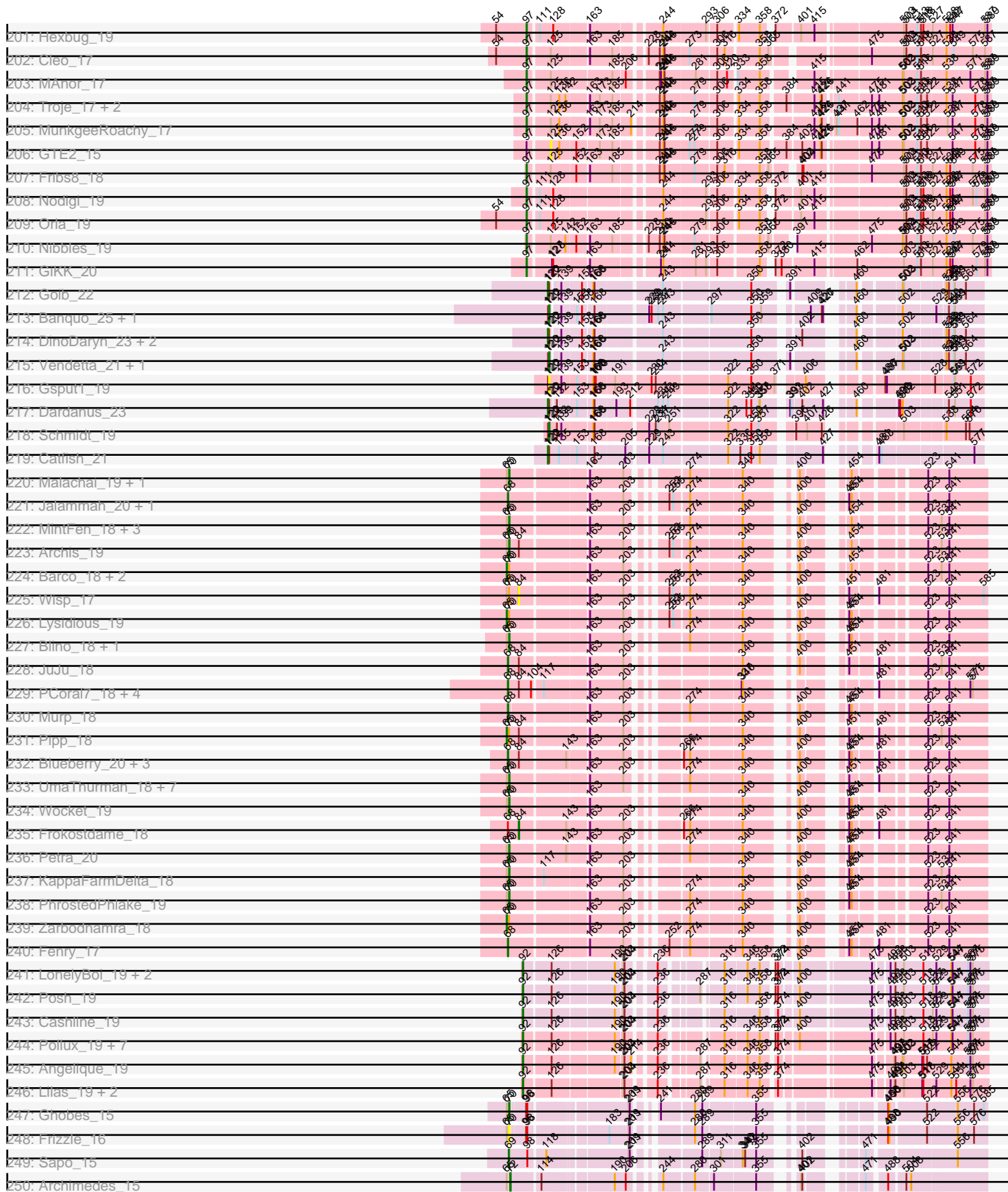
Pham 215638



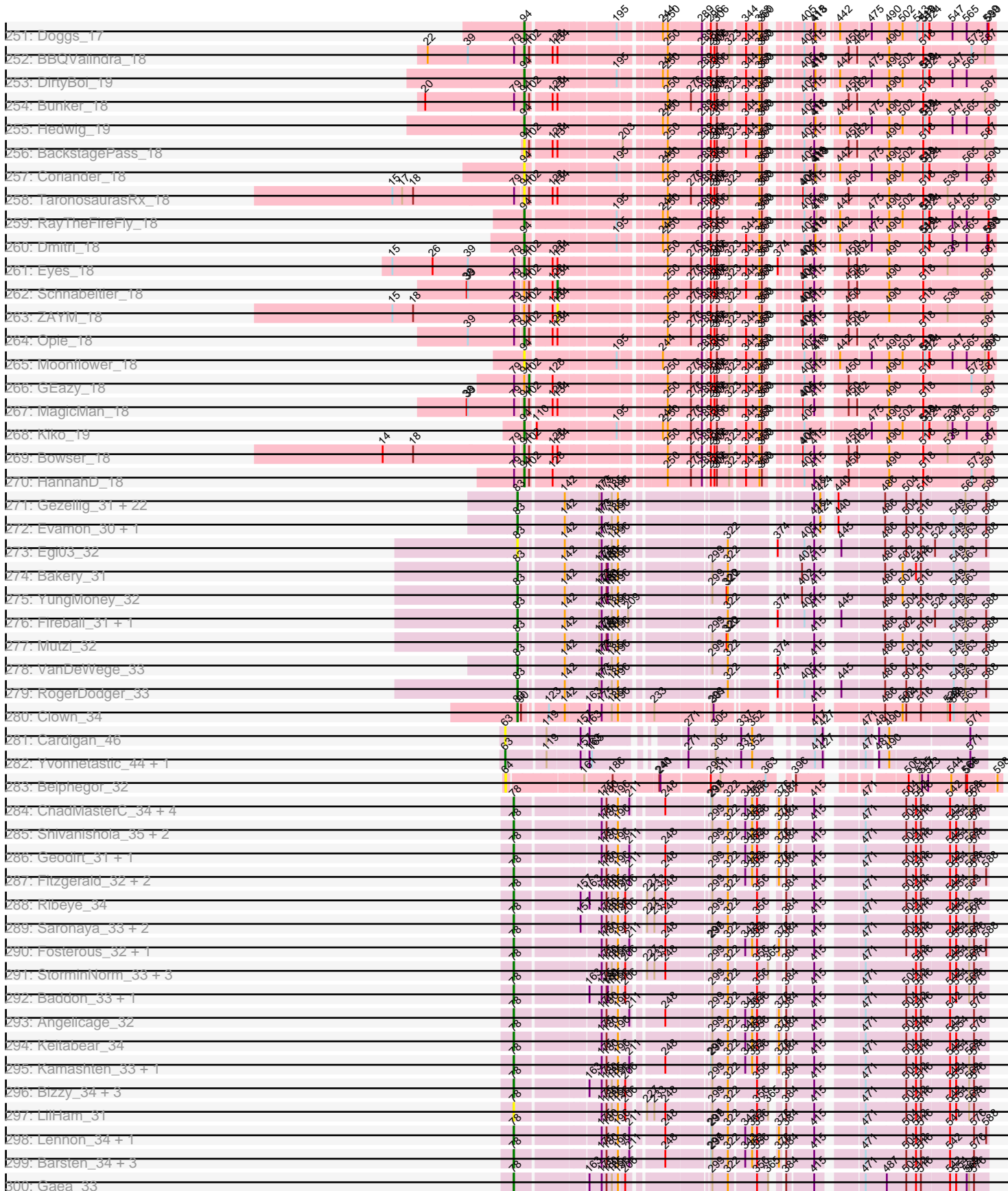
Pham 215638



Pham 215638

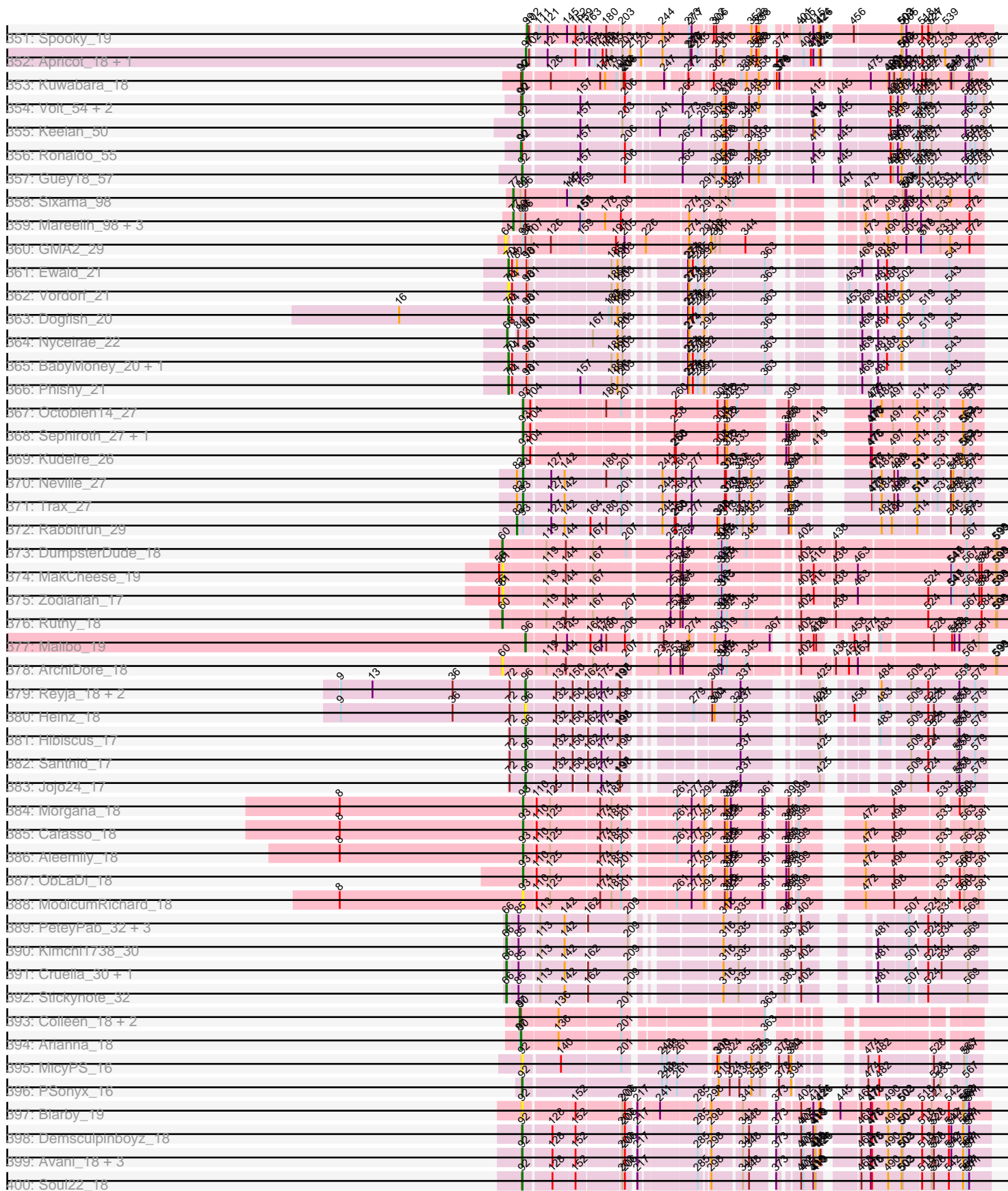


Pham 215638



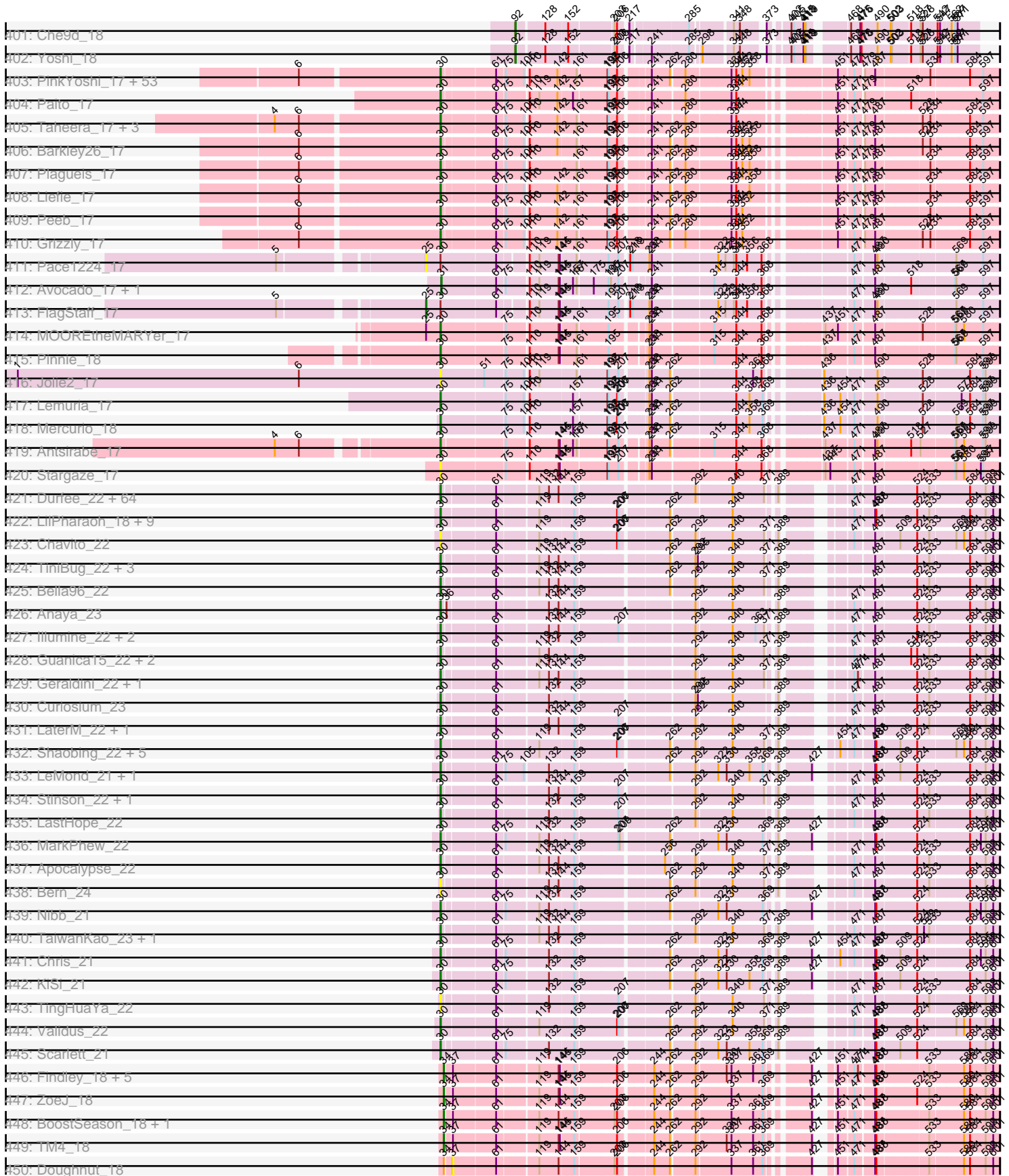


Pham 215638





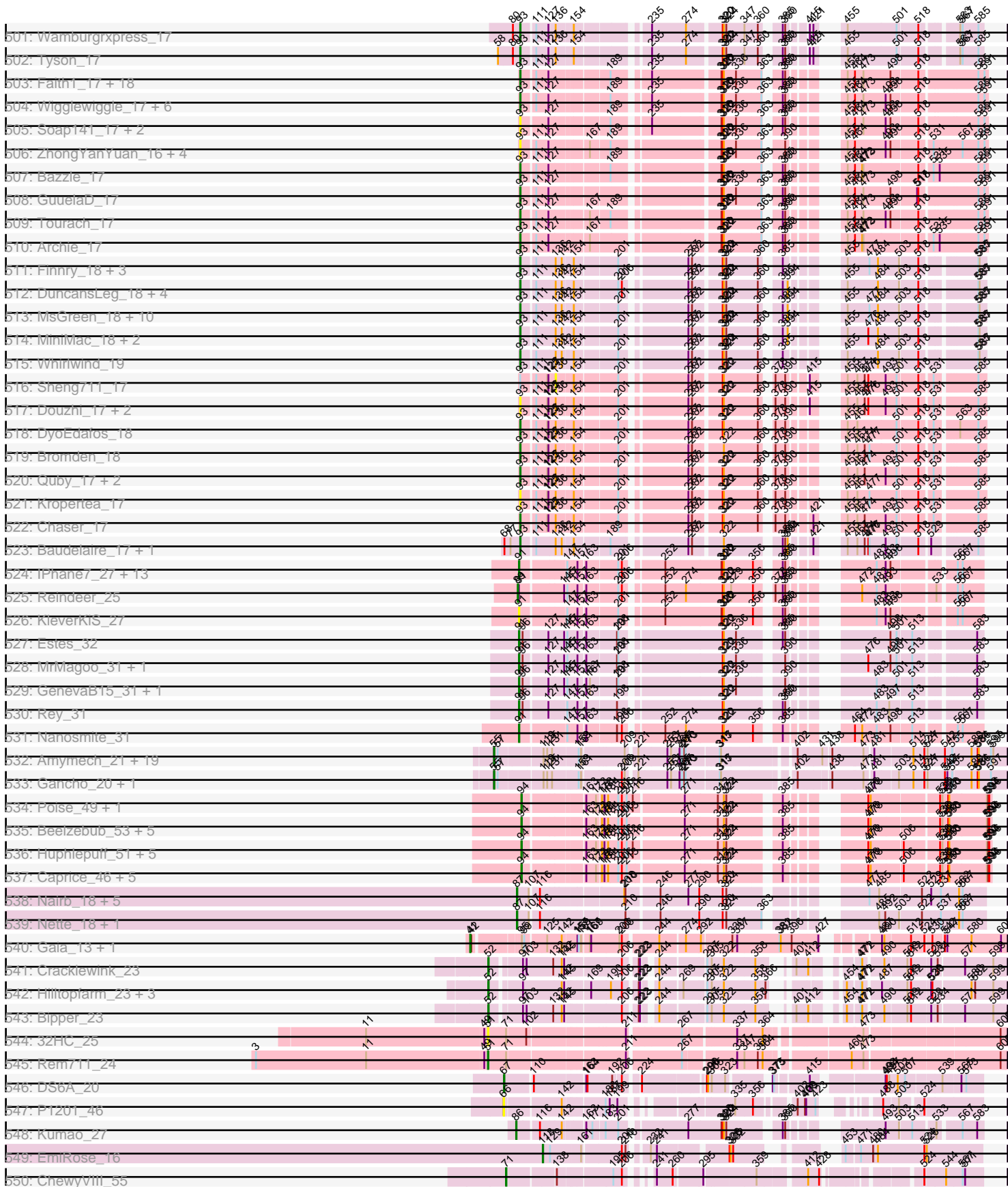
Pham 215638



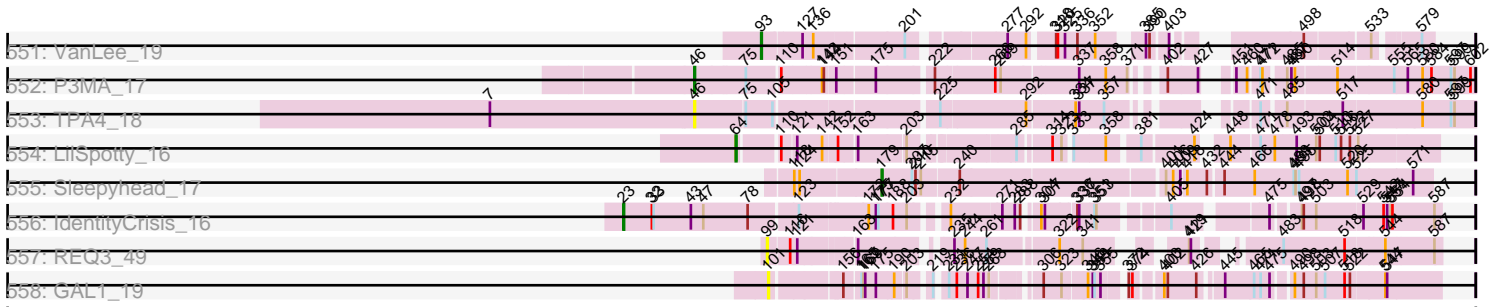
Pham 215638

|                            |    |    |     |     |     |     |     |     |     |
|----------------------------|----|----|-----|-----|-----|-----|-----|-----|-----|
| #51: MacnCheese_22         | 20 | 20 | 61  | 146 | 195 | 244 | 262 | 300 | 451 |
| #52: Pixie_21              | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #53: TBond007_21           | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #54: ShedlockHolmes_21 + 1 | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #55: Pharb_21              | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #56: NobleTrouble_20       | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #57: Hurricane_21          | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #58: Keshu_21              | 20 | 61 | 146 | 195 | 244 | 262 | 300 | 451 | 571 |
| #59: Bobquesha_24 + 2      | 20 | 51 | 119 | 144 | 201 | 292 | 383 | 474 | 565 |
| #60: FionnBharth_23 + 6    | 20 | 51 | 119 | 144 | 201 | 292 | 383 | 474 | 565 |
| #61: SamScheppers_21 + 4   | 20 | 51 | 119 | 144 | 201 | 292 | 383 | 474 | 565 |
| #62: Eponine_23 + 2        | 20 | 51 | 119 | 144 | 201 | 292 | 383 | 474 | 565 |
| #63: Cheetorro_23 + 2      | 20 | 51 | 119 | 144 | 201 | 292 | 383 | 474 | 565 |
| #64: Reptar3000_23         | 20 | 51 | 119 | 144 | 201 | 292 | 383 | 474 | 565 |
| #65: Omnicron_20           | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #66: InvictusManeo_20 + 3  | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #67: AileyCat_20 + 4       | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #68: Hellyboy_20 + 2       | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #69: Miryou_20 + 1         | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #70: Gullsminger_20 + 2    | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #71: Waterfoul_20 + 1      | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #72: Rando14_20            | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #73: Dadosky_20            | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #74: OriRoe_20             | 20 | 75 | 108 | 141 | 208 | 299 | 390 | 481 | 572 |
| #75: Kratio_19             | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #76: Phrank_21 + 3         | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #77: Shadow1_20 + 1        | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #78: Ekodiam_19            | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #79: Ellie_19 + 2          | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #80: Amohnton_21           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #81: Hammy_21 + 1          | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #82: Marshawn_23           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #83: Syra333_21            | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #84: PhelpsODU_21 + 1      | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #85: Amgine_20             | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #86: TCill_21              | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #87: Krueger_21            | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #88: Yuna_22               | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #89: Ximenita_22           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #90: November_21           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #91: SirPhilp_21           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #92: Aminay_20             | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #93: Bollgate_19           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #94: Wyatt2_17 + 1         | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #95: Helena_17             | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #96: MAckerman_17 + 4      | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #97: Appietree2_17 + 1     | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #98: OPTe_17               | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| #99: Calm_17 + 3           | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |
| 500: Enceladus_17 + 2      | 20 | 91 | 119 | 159 | 208 | 309 | 400 | 491 | 582 |

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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 215638 Report

This analysis was run 02/22/25 on database version 588.

Pham number 215638 has 1339 members, 185 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_27
- Track 2 : Aneem\_27, Insomnia\_27, Salz\_27, Hutc2\_27, Bud\_27, Bachome\_27, MaCh\_27, Orange\_27, Jabith\_27, Ebony\_27, Sham4\_27, TinyTimmy\_27, Flaverint\_27, Joselito\_27, Gilberta\_27, Et2Brutus\_26, Bowtie\_27, Mabel\_27, Fibonacci\_27, Mulciber\_27, Petersenfast\_26, Snape\_27, Munch\_27, Lucivia\_27, Timothy\_27
- Track 3 : Refuge\_30
- Track 4 : Pharaoh\_27
- Track 5 : DarthPhader\_28
- Track 6 : Steamy\_28
- Track 7 : Zimmer\_29
- Track 8 : Phlei\_22
- Track 9 : Gail\_26
- Track 10 : Jeeves\_26
- Track 11 : SororFago\_26
- Track 12 : Luchador\_28
- Track 13 : Sunhee\_25
- Track 14 : Anon\_27
- Track 15 : Boohoo\_29, Strosahl\_29, DekHockey33\_29, Oofda\_30, Looper\_30, MinecraftSteve\_30, Rosalind\_29, Nebulosus\_29, JSwag\_29, Battleship\_30, ShayRa\_30, ReMo\_29, Soups\_29, Waits\_29, KatherineG\_29, Epsocamisio\_29, LastResort\_29, Warrior24\_30, Switzerland\_29, Anaysia\_29, Remus\_29
- Track 16 : Nedarya\_28
- Track 17 : Lucyedi\_28, PainterBoy\_28, EagleEye\_29
- Track 18 : 40AC\_30
- Track 19 : Landor\_28, Phaded\_30, Bactobuster\_28, Jaan\_30
- Track 20 : SemperFi\_29, QueenBeesly\_27, Georgie2\_28, Anselm\_27, FiringLine\_27, SnapTap\_27, SweetiePie\_27, Crucio\_27, Fameo\_27, QueenB2\_27, Power\_27
- Track 21 : Trooper\_27
- Track 22 : TipsytheTRex\_26
- Track 23 : Benvolio\_27, Echild\_27
- Track 24 : Bradman\_26, MajorMajor\_26, Quokka\_25
- Track 25 : RedRock\_30
- Track 26 : Deloris\_28, BengiVuitton\_28
- Track 27 : Herbertwm\_24
- Track 28 : Odin\_26

- Track 29 : JoshKayV\_29, Dignity\_29, KingCyrus\_29, Smeagan\_29, Whabigail7\_29, AbbyPaige\_29, Jerm\_29, Buggy\_29, Leviathan\_29, LilTurb\_29, Turbido\_29, EvilGenius\_29, ChipMunk\_29, Agape74\_29
- Track 30 : Naji\_30, D32\_30, Tomathan\_30, D29\_27, Pomar16\_30, Travvers\_30
- Track 31 : Centaur\_29, Equemioh13\_29, Flare16\_27, Baehexic\_28, Gratitude\_28, Sknot\_28, Drake55\_29, NaSiaTalie\_27, Piro94\_28, WideWale\_29, Terrific\_31, Updawg\_29, MiculUcigas\_27
- Track 32 : Larenn\_28, Malec\_28
- Track 33 : Adzzy\_28, Ph8s\_28
- Track 34 : IronMan\_29
- Track 35 : Retro23\_27, Dalmatian\_27, DudeLittle\_27
- Track 36 : L5\_27, Koduck\_27
- Track 37 : MissWhite\_27
- Track 38 : BiancaTri92\_29, Leogania\_29
- Track 39 : Kerberos\_30
- Track 40 : BobSwaget\_30, Rachaly\_30
- Track 41 : NothingSpecial\_29
- Track 42 : ANI8\_30, VC3\_30, AN9\_30, C3\_25, VA6\_27
- Track 43 : StarStuff\_30
- Track 44 : AnnaL29\_30
- Track 45 : Loser\_30
- Track 46 : AN3\_27
- Track 47 : Iwokeuplikedis\_28
- Track 48 : Superchunk\_26, Caraxes\_26
- Track 49 : DBQu4n\_30, Duplo\_30
- Track 50 : Pukovnik\_29
- Track 51 : NicoleTera\_31
- Track 52 : LionsBait\_28
- Track 53 : Serenity\_26
- Track 54 : TarsusIV\_27
- Track 55 : EZMoney23\_31
- Track 56 : Trixie\_30
- Track 57 : WeiHuaDA\_33
- Track 58 : Miko\_30, Lokk\_30
- Track 59 : Kalpine\_30
- Track 60 : CRB1\_27, LadyBird\_27
- Track 61 : Acolyte\_27
- Track 62 : 20ES\_27
- Track 63 : HarryHoudini\_29
- Track 64 : BabyBack\_29, GaugeLDP\_29
- Track 65 : Che12\_29
- Track 66 : Jsquared\_26
- Track 67 : Journey13\_25
- Track 68 : ArcherNM\_29
- Track 69 : SwirlSquare\_29
- Track 70 : Tristan\_28
- Track 71 : Colin\_31
- Track 72 : Changeling\_29
- Track 73 : Heffalump\_29
- Track 74 : XianYue\_27
- Track 75 : First\_0027
- Track 76 : Anthony\_26
- Track 77 : Kinmap\_27

- Track 78 : Micasa\_23, George\_22, Tarynearal\_22, Swirley\_23, Milcery\_23, HuhtaEnerson15\_23, Prin Ashe11\_24, Cuco\_23
- Track 79 : Archetta\_23, Bluefalcon\_22, ForGetIt\_23, Jovo\_23, Ghoulboy\_23, Zolita\_22, Conspiracy\_23, SydNat\_23
- Track 80 : PickleBack\_23, Lev2\_23, Phlorence\_23, AgentM\_23, Aragog\_23, Discoknowium\_23
- Track 81 : Theia\_21, Twigg\_23
- Track 82 : Chadwick\_24, Naca\_23
- Track 83 : Midas2\_23, Dublin\_22, MarysWell\_22, Coog\_23
- Track 84 : PetterN\_24
- Track 85 : LittleCherry\_23, Bonamassa\_23, Tiger\_23
- Track 86 : UnionJack\_23, Airmid\_23
- Track 87 : EITiger69\_23
- Track 88 : Scorpia\_24, Benedict\_23
- Track 89 : Jabiru\_23
- Track 90 : Jeffabunny\_30, BlessJoy\_30, CloudWang3\_30, Gladiator\_30, Blue7\_30, Wiks\_30, Tucker\_30, Hammer\_30, Zaka\_30, Lilbunny\_30, Yokurt\_30, Gruunaga\_30, Roksolana\_30, Hexamo\_30, ToneTone\_28, Artemis2UCLA\_30, Zulu\_30, WunderPhul\_30
- Track 91 : DaVinci\_30, SuperAwesome\_30, JewelBug\_30, Polyphemus\_29, GreedyLawyer\_30, Jordennis\_30, Neeharika16\_30, Isiphiwo\_30, EricB\_30, Pmask\_30, BABullseye\_30, SmellyB\_30, VohminGhazi\_30, Newrala\_30, Chartreuse\_30, Kipper29\_30, Dorothea\_30, Cookiedough\_30, McFly\_30, Kazan\_30, SuperCallie99\_30, Hoot\_30
- Track 92 : Indra\_30, Garak\_31, Helmet\_31, Temprado\_31
- Track 93 : Rifter\_30
- Track 94 : Koko\_30
- Track 95 : Candra\_30
- Track 96 : Blinn1\_30, Priamo\_30
- Track 97 : PP\_36
- Track 98 : Smeadley\_23, NearlyHeadless\_23, Danforth\_22, Expelliarmus\_22, Dixon\_23, Saintus\_23, Roary\_23, Astro\_23
- Track 99 : Phillis\_23, Groundhog\_22
- Track 100 : Stephig9\_23
- Track 101 : Jiawan\_27, ExplosioNervosa\_28, Conquerage\_28, Phaeder\_28, Spouty\_28, Beemo\_28, RyeScarlet\_29, EmyBug\_28, Aliter\_28, Lilleskat\_26, Priya\_28, Tubs\_28, EdogawaKiddo\_26, Scherzo\_28, Hanray\_27, Catalina\_28, Onglai\_27, Eidsmoe\_28, Ugenie5\_25, Qobbit\_28, Pioneer\_28, PackMan\_28, Fayely\_28, Myxus\_28, Phonnegut\_28, Halex\_27, Sachima\_26, Alma\_28, HortumSL17\_28
- Track 102 : Darrell\_29
- Track 103 : Rahalelujah\_26
- Track 104 : Toaka\_26
- Track 105 : Yecey3\_27
- Track 106 : Vanisoa\_26
- Track 107 : Charm\_27
- Track 108 : BogosyJay\_28
- Track 109 : SheaKeira\_27
- Track 110 : Elephantoon\_28
- Track 111 : Keziacharles14\_26
- Track 112 : Maminiaina\_28
- Track 113 : LoneWolf\_28
- Track 114 : DreamTeam1\_27

- Track 115 : Arissanae\_26
- Track 116 : Maco6\_18, 8UZL\_20
- Track 117 : NoShow\_17
- Track 118 : FF47\_20
- Track 119 : Muddy\_20
- Track 120 : JacoRen57\_16
- Track 121 : Sparky\_15, Farewell\_15
- Track 122 : Nergal\_21
- Track 123 : MalagasyRose\_23
- Track 124 : Weirdo19\_18
- Track 125 : JustASigh\_17
- Track 126 : Espica\_22, UhSalsa\_22, Naiad\_22, Belenaria\_22, Natosaleda\_22, RER2\_15, Swann\_22, StCroix\_22, Alatin\_22, Nancinator\_22, RexFury\_22
- Track 127 : Gollum\_22
- Track 128 : Hiro\_22, Krishelle\_22, PhailMary\_21, AppleCloud\_20, Jester\_22
- Track 129 : Harlequin\_22, Bryce\_22
- Track 130 : Alpacados\_21, BobbyDazzler\_22, Bonanza\_22, Yoncess\_22, Yogi\_22, Rasputin\_22
- Track 131 : Phrankenstein\_22, CosmicSans\_22, TWAMP\_22, Bradshaw\_22, Lillie\_22, Erik\_22, Rhodalysa\_22
- Track 132 : Dinger\_22, Partridge\_22
- Track 133 : AngryOrchard\_21, Takoda\_22
- Track 134 : Shuman\_22
- Track 135 : RGL3\_15
- Track 136 : Morrissey\_18
- Track 137 : Puppies\_17, Widow\_17
- Track 138 : Gustav\_17
- Track 139 : Trine\_17
- Track 140 : Upyo\_17
- Track 141 : Mahdia\_17
- Track 142 : ClubL\_47, Cucurbita\_49, Bachita\_49, Aphelion\_47, Toniann\_47, Geeche\_46, PhinkBoden\_47
- Track 143 : Dusty\_45, Abscondus\_46
- Track 144 : WilliamBoone\_47
- Track 145 : Smoothie\_48, Norvs\_48, Culver\_47
- Track 146 : Miskis\_49, Lozinak\_47, Engineer\_48
- Track 147 : OneUp\_41
- Track 148 : BrutonGaster\_35
- Track 149 : Polyuyuki\_44, CoffeeBean\_44, Apiary\_44, Braxoaddie\_44, Maselop\_44
- Track 150 : GuyFagieri\_44
- Track 151 : MacGully\_49
- Track 152 : Flapper\_44
- Track 153 : Dalilpop\_45
- Track 154 : Turuncu\_44
- Track 155 : GTE5\_31
- Track 156 : GRU1\_30
- Track 157 : NosilaM\_43
- Track 158 : GrootJr\_42, Wheezy\_40, Emianna\_40, Jifall16\_39, Kurt\_40, KidneyBean\_40, Tracker\_40, Arti\_40, NatB6\_40, Phomeo\_39, NovumRegina\_40, Foxboro\_41
- Track 159 : Outis\_41, MerCougar\_41, StarStruck\_41
- Track 160 : Kabluna\_43
- Track 161 : Commandaria\_42



- Track 162 : Bonum\_43
- Track 163 : Buggaboo\_41, SuperSulley\_41
- Track 164 : GTE8\_29
- Track 165 : Ennea\_46, Lollipop1437\_45
- Track 166 : Patio\_43, Skysand\_42, Float294\_42
- Track 167 : RedRaider\_47
- Track 168 : Yndexa\_42, Sukkupi\_42, BiPauneto\_43
- Track 169 : IDyn\_41
- Track 170 : HubbaBubba\_38
- Track 171 : WhoseManz\_42
- Track 172 : Marietta\_42
- Track 173 : NadineRae\_40
- Track 174 : Pleakley\_49, Fury\_49
- Track 175 : Scuba\_49
- Track 176 : Elliott\_17, Sopespian\_17, PsychoKiller\_17, Burnsey\_17, Cozz\_17, GoldHunter\_18
- Track 177 : Bavidard\_17, Yucky\_19, Vine\_18
- Track 178 : Yakult\_18
- Track 179 : ChocoMunchkin\_17, CanesSauce\_17
- Track 180 : Feastonyeet\_16, BigChungus\_16
- Track 181 : Amok\_16
- Track 182 : Mayweather\_18, Pons\_17
- Track 183 : CherryonLim\_18
- Track 184 : Buttrmilkdreams\_17, SweatNTears\_19, Blondies\_17, Biskit\_18, SketchMex\_16
- Track 185 : Jamzy\_20
- Track 186 : Starburst\_18, RedBaron\_18, Socotra\_18, Agatha\_17, Axym\_17, Quasar\_17, Typhonmarchy\_18, Carsonalex\_18, Nina\_18
- Track 187 : SummitAcademy\_16, PotPie\_17, Lauer\_16
- Track 188 : HippoPololi\_19
- Track 189 : Zareef\_21, MaVan\_19, Survivors\_19
- Track 190 : AndPeggy\_16, BillDoor\_19, SteamedHams\_19, Yarn\_16, Tolls\_19
- Track 191 : AikoCarson\_16, Emalyn\_16
- Track 192 : Button\_18
- Track 193 : ChickenTender\_19
- Track 194 : SheckWes\_16
- Track 195 : KayGee\_17, Elinal\_18
- Track 196 : MScarn\_19
- Track 197 : Gibbous\_17, Dre3\_17
- Track 198 : Azira\_19
- Track 199 : RanchParmCat\_20
- Track 200 : Margaret\_20
- Track 201 : Hexbug\_19
- Track 202 : Cleo\_17
- Track 203 : MAnor\_17
- Track 204 : Troje\_17, Horseradish\_18, Yummy\_18
- Track 205 : MunkgeeRoachy\_17
- Track 206 : GTE2\_15
- Track 207 : Fribs8\_18
- Track 208 : Nodigi\_19
- Track 209 : Orla\_19
- Track 210 : Nibbles\_19
- Track 211 : GiKK\_20

- Track 212 : Goib\_22
- Track 213 : Banquo\_25, TinaLin\_24
- Track 214 : DinoDaryn\_23, Huff\_23, TZGordon\_23
- Track 215 : Vendetta\_21, Splinter\_21
- Track 216 : Gspu1\_19
- Track 217 : Dardanus\_23
- Track 218 : Schmidt\_19
- Track 219 : Catfish\_21
- Track 220 : Malachai\_19, Begonia\_19
- Track 221 : Jalamah\_20, Samba\_18
- Track 222 : MintFen\_18, JasperJr\_18, BlingBling\_18, Utz\_18
- Track 223 : Archis\_19
- Track 224 : Barco\_18, Melba\_18, Guacamole\_18
- Track 225 : Wisp\_17
- Track 226 : Lysidious\_19
- Track 227 : Blino\_18, CarolAnn\_18
- Track 228 : JuJu\_18
- Track 229 : PCoral7\_18, William\_18, PrincePatrick\_18, Fairfaxidum\_18, Toast\_18
- Track 230 : Murp\_18
- Track 231 : Pipp\_18
- Track 232 : Blueberry\_20, MissRona\_20, Gambino\_20, Azula\_20
- Track 233 : UmaThurman\_18, CaptainKirk2\_18, Mellie\_17, Hitter\_18, Obliviate\_17, ZiggyZoo\_17, Delian\_18, Walrus\_19
- Track 234 : Wocket\_19
- Track 235 : Frokostdame\_18
- Track 236 : Petra\_20
- Track 237 : KappaFarmDelta\_18
- Track 238 : PhrostedPhlake\_19
- Track 239 : Zarbodnamra\_18
- Track 240 : Fenry\_17
- Track 241 : LonelyBoi\_19, BeeGee\_19, Confidence\_19
- Track 242 : Posh\_19
- Track 243 : Cashline\_19
- Track 244 : Pollux\_19, BritBrat\_19, EMSquaredA\_19, Wrigley\_19, Jablanski\_19, Pytheas\_19, Floral\_19, Marteena\_19
- Track 245 : Angelique\_19
- Track 246 : Lilas\_19, Bradissa\_19, EnalisNailo\_19
- Track 247 : Ghobes\_15
- Track 248 : Frizzle\_16
- Track 249 : Sapo\_15
- Track 250 : Archimedes\_15
- Track 251 : Doggs\_17
- Track 252 : BBQValindra\_18
- Track 253 : DirtyBoi\_19
- Track 254 : Bunker\_18
- Track 255 : Hedwig\_19
- Track 256 : BackstagePass\_18
- Track 257 : Coriander\_18
- Track 258 : TaronosaurusRx\_18
- Track 259 : RayTheFireFly\_18
- Track 260 : Dmitri\_18
- Track 261 : Eyes\_18
- Track 262 : Schnabeltier\_18

- Track 263 : ZAYM\_18
- Track 264 : Opie\_18
- Track 265 : Moonflower\_18
- Track 266 : GEazy\_18
- Track 267 : MagicMan\_18
- Track 268 : Kiko\_19
- Track 269 : Bowser\_18
- Track 270 : HannahD\_18
- Track 271 : Gezellig\_31, CoveyB\_33, Valary\_33, Nubi\_30, Danyall\_32, Arri\_33, Shinji\_30, Togo\_30, Phlop\_30, Savbucketdawg\_30, Portcullis\_30, Wizard\_30, PullumCavea\_30, SmokingBunny\_30, Fugax\_32, PinkCoffee\_32, Twister6\_32, Barb\_32, CherryCola\_34, ClamChowder\_32, Jambalaya\_30, KimmyK\_32, Halo3\_31
- Track 272 : Evamon\_30, Salvador\_30
- Track 273 : Egi03\_32
- Track 274 : Bakery\_31
- Track 275 : YungMoney\_32
- Track 276 : Fireball\_31, TillyBobJoe\_30
- Track 277 : Mutzi\_32
- Track 278 : VanDeWege\_33
- Track 279 : RogerDodger\_33
- Track 280 : Clown\_34
- Track 281 : Cardigan\_46
- Track 282 : Yvonnestic\_44, JonJames\_46
- Track 283 : Belphegor\_32
- Track 284 : ChadMasterC\_34, Rofo\_34, McKinley\_36, Vivi2\_36, Paries\_36
- Track 285 : Shivanishola\_35, Affeca\_32, Sedona\_34
- Track 286 : Geodirt\_31, Kewpiedoll\_33
- Track 287 : Fitzgerald\_32, BobBob\_31, Charming\_34
- Track 288 : Ribeye\_34
- Track 289 : Saronaya\_33, Gustavo\_33, Tangerine\_33
- Track 290 : Fosterous\_32, FuegoCuervo\_36
- Track 291 : StorminNorm\_33, Baumdotcom\_33, Ashertheman\_34, SchottB\_32
- Track 292 : Baddon\_33, Derg\_29
- Track 293 : Angelicage\_32
- Track 294 : Keitabear\_34
- Track 295 : Kamashten\_33, Thing3\_33
- Track 296 : Bizzy\_34, Kroos\_34, Kwobi\_34, Tycho\_33
- Track 297 : LilHam\_31
- Track 298 : Lennon\_34, Sitar\_34
- Track 299 : Barsten\_34, Sanjuju\_32, Ailee\_32, Jabberwocky\_32
- Track 300 : Gaea\_33
- Track 301 : JKSyngboy\_31
- Track 302 : Flatwoods\_34, YorkOnyx\_34
- Track 303 : Brandonk123\_35, Nordenberg\_28
- Track 304 : Tangent\_34, Galadriel\_34, Stultus\_32
- Track 305 : Bibwit\_33
- Track 306 : Love\_37
- Track 307 : RiverRaider\_34
- Track 308 : MoontowerMania\_33
- Track 309 : EMoore\_30
- Track 310 : Phauci\_25, Hans\_34, Ali17\_30, Inspectinfecti\_33
- Track 311 : MelBins\_33
- Track 312 : Leonard\_32, Phinally\_32

- Track 313 : Twonlo\_29, Dxdert\_32
- Track 314 : RoadKill\_29
- Track 315 : GTE6\_31
- Track 316 : Chickadee\_31, Tiamoceli\_32, EdmundFerry\_30
- Track 317 : Kwekel\_31
- Track 318 : Natkenzie\_34, Sampson\_34, Abblin\_34, Scioto\_34
- Track 319 : Zipp\_33, DoctorFroggo\_33, Verity\_33, Delrey21\_33
- Track 320 : APunk\_35
- Track 321 : Tardus\_35
- Track 322 : ViaConlectus\_34
- Track 323 : Zitch\_35
- Track 324 : Lilbeanie\_29
- Track 325 : Morkie\_17, PhorbesPhlower\_17
- Track 326 : Lucky10\_17
- Track 327 : Parada\_21, Brylie\_21, Mulch\_21, NancyRae\_21, WheatThin\_21, BetterKatz\_21, Nadeem\_21
- Track 328 : DelRio\_22, Pimento\_22
- Track 329 : Ayotoya\_21, Hamood\_21, Chop\_21, GrandSlam\_21
- Track 330 : Bock\_21
- Track 331 : Francois\_21
- Track 332 : GodonK\_88
- Track 333 : Phendrix\_86
- Track 334 : Bantam\_29
- Track 335 : SpeedDemon\_310
- Track 336 : DatBoi\_30
- Track 337 : Daredevil\_28, Towmatter\_28
- Track 338 : Mollymur\_30
- Track 339 : Budski\_19, Kenna\_18, LitninMcQueen\_19, Kamaru\_19
- Track 340 : Birdsong\_18, MortyNRick\_18, Ecliptus\_23
- Track 341 : ODay\_23
- Track 342 : BearBQ\_18
- Track 343 : Malisha\_20
- Track 344 : CheeseTouch\_19
- Track 345 : Phabuloso\_19, Holliday\_19, Lutum\_19
- Track 346 : Getalong\_20, Periwinkle\_21, Horus\_19, Whitney\_20
- Track 347 : Asapag\_19, BENtherdunthat\_19, Frickyeah\_19, BotCity\_20
- Track 348 : ShawBrad\_19, Leroy\_19
- Track 349 : Phistory\_20
- Track 350 : Squiddly\_21
- Track 351 : Spooky\_19
- Track 352 : Apricot\_18, Crater\_17
- Track 353 : Kuwabara\_18
- Track 354 : Volt\_54, Fryberger\_52, Ziko\_55
- Track 355 : Keelan\_50
- Track 356 : Ronaldo\_55
- Track 357 : Guey18\_57
- Track 358 : Sixama\_98
- Track 359 : Mareelih\_98, Forza\_100, Boopy\_100, BlueNGold\_99
- Track 360 : GMA2\_29
- Track 361 : Ewald\_21
- Track 362 : Vordorf\_21
- Track 363 : Dogfish\_20
- Track 364 : Nyceirae\_22

- Track 365 : BabyMoney\_20, Meyran\_20
- Track 366 : Phishy\_21
- Track 367 : Octobien14\_27
- Track 368 : Sephiroth\_27, Syleon\_27
- Track 369 : Kudrefre\_26
- Track 370 : Neville\_27
- Track 371 : Trax\_27
- Track 372 : Rabbitrun\_29
- Track 373 : DumpsterDude\_18
- Track 374 : MakCheese\_19
- Track 375 : Zodiariah\_17
- Track 376 : Ruthy\_18
- Track 377 : Malibo\_19
- Track 378 : ArchiDore\_18
- Track 379 : Reyja\_18, DonkeyMan\_17, Tarzan\_17
- Track 380 : Heinz\_18
- Track 381 : Hibiscus\_17
- Track 382 : Santhid\_17
- Track 383 : Jojo24\_17
- Track 384 : Morgana\_18
- Track 385 : Cafasso\_18
- Track 386 : Aleemily\_18
- Track 387 : ObLaDi\_18
- Track 388 : ModicumRichard\_18
- Track 389 : PeteyPab\_32, Zion\_33, Darwin\_33, PotatoChip\_33
- Track 390 : Kimchi1738\_30
- Track 391 : Cruella\_30, C3PO\_30
- Track 392 : Stickynote\_32
- Track 393 : Colleen\_18, Poushou\_18, TouchMeNot\_18
- Track 394 : Arianna\_18
- Track 395 : MicyPS\_16
- Track 396 : PSonyx\_16
- Track 397 : Blarby\_19
- Track 398 : Demsculpinboyz\_18
- Track 399 : Avani\_18, SilverChicken\_18, Zapner\_19, Jabbawokkie\_20
- Track 400 : Soul22\_18
- Track 401 : Che9d\_18
- Track 402 : Yoshi\_18
- Track 403 : PinkYoshi\_17, Crespo\_17, Jolene\_17, Zombie\_17, Wendigo\_17, Gideon\_17, CassieYates\_17, Angel\_17, OctaviousRex\_17, ECartman\_17, Hotshotbaby7\_17, Periodt\_17, Avrafan\_17, Sizemore\_17, Schiebel\_17, Hope\_17, Cedasite\_17, Renaissance\_17, AzulaCat\_17, BPs\_17, ZoMa\_17, Marmie\_17, BQuat\_17, Coleslaw\_17, GoldenAsh\_17, DMoney\_17, DNAlll\_0017, Cherrybomb426\_17, Aroostook\_17, Annihilator\_17, Phreak\_17, Mowgli\_17, Kareem\_17, BruceB\_17, Darionha\_17, Frosty24\_17, Gomashi\_17, Sweets\_17, Remy19\_17, TomBrady\_17, Kasen3\_17, Halo\_17, LouisV14\_17, Maliketh\_17, Chance64\_17, Camri\_17, JorRay\_17, ShaboiShabazz\_17, Jane\_17, CLED96\_17, Jonghyun\_17, Phish\_17, TinaBug\_17, Olga\_17
- Track 404 : Paito\_17
- Track 405 : Taheera\_17, Terror\_17, Rabbs\_17, Sneeze\_17
- Track 406 : Barkley26\_17
- Track 407 : Plagueis\_17
- Track 408 : Liefie\_17

- Track 409 : Peeb\_17
- Track 410 : Grizzly\_17
- Track 411 : Pace1224\_17
- Track 412 : Avocado\_17, Cambiare\_18
- Track 413 : FlagStaff\_17
- Track 414 : MOOREtheMARYer\_17
- Track 415 : Pinnie\_18
- Track 416 : Jolie2\_17
- Track 417 : Lemuria\_17
- Track 418 : Mercurio\_18
- Track 419 : Antsirabe\_17
- Track 420 : Stargaze\_17
- Track 421 : Durfee\_22, Joy99\_22, Adonis\_22, Zavala\_22, HedwigODU\_22, Dalmuri\_22, Inky\_22, TreyKay\_22, BGlluviae\_22, Capricorn\_22, Jeckyll\_22, CallaLilly\_23, Veliki\_22, Clipper\_24, Zabiza\_22, Sulley\_22, Ramen\_22, CREW\_22, Rapunzel97\_22, Pokerus\_21, Boiiii\_22, Belladonna\_22, CheetoDust\_22, Peel\_22, Angelica\_22, Jayhawk\_22, Tiri\_22, Mynx\_22, Asayake\_22, Ganymede\_23, MacKat\_23, AlishaPH\_22, Twitch\_22, Emerson\_22, BarrelRoll\_22, Adephegia\_22, Padpat\_22, Deby\_22, Piatt\_22, Blizzard\_22, BaghaKamala\_22, JAWS\_22, Slimphazie\_22, Prithvi\_22, BEEST\_22, CrimD\_22, CaseJules\_22, YoureAdopted\_21, Hyperbowlee\_22, Jarvi\_22, Llorens\_22, Beezoo\_22, Spock\_22, QuincyRose\_21, LindNT\_22, TruffulaTree\_22, Tachez\_22, Topper\_22, Atiba\_22, ShiaSurprise\_22, ActinUp\_22, Homura\_22, Padfoot\_22, Rosmarinus\_22, Lunahalos\_22
- Track 422 : LilPharaoh\_18, Nutello\_18, Teejan\_18, SgtBeansprout\_18, Mdavu\_18, Enkosi\_18, Amelie\_18, Binglebops\_18, Torres\_18, Nikao\_18
- Track 423 : Chavito\_22
- Track 424 : TiniBug\_22, Urkel\_22, DrHayes\_22, SamuelLPlaqson\_22
- Track 425 : Bella96\_22
- Track 426 : Anaya\_23
- Track 427 : Illumine\_22, Devera\_22, Dole\_22
- Track 428 : Guanica15\_22, Yunkel11\_22, Efra2\_22
- Track 429 : Geraldini\_22, MeaningOfLife\_22
- Track 430 : Curiosium\_23
- Track 431 : LaterM\_22, Murucutumbu\_22
- Track 432 : Shaobing\_22, Dartin\_22, Peanam\_22, Richo\_22, McMater\_22, Niklas\_22
- Track 433 : LeMond\_21, Oscar\_21
- Track 434 : Stinson\_22, Ageofdapage\_22
- Track 435 : LastHope\_22
- Track 436 : MarkPhew\_22
- Track 437 : Apocalypse\_22
- Track 438 : Bern\_24
- Track 439 : Nibb\_21
- Track 440 : TaiwanKao\_23, Megsy\_22
- Track 441 : Chris\_21
- Track 442 : KiSi\_21
- Track 443 : TingHuaYa\_22
- Track 444 : Validus\_22
- Track 445 : Scarlett\_21
- Track 446 : Findley\_18, Strobilo\_18, DismalStressor\_18, DismalFunk\_18, Milly\_18, Marcoliusprime\_18
- Track 447 : ZoeJ\_18
- Track 448 : BoostSeason\_18, Mufasa\_18

- Track 449 : TM4\_18
- Track 450 : Doughnut\_18
- Track 451 : MacnCheese\_22
- Track 452 : Pixie\_21
- Track 453 : TBond007\_21
- Track 454 : ShedlockHolmes\_21, Lea83\_22
- Track 455 : Pharb\_21
- Track 456 : TribbleTrouble\_20
- Track 457 : Hurricane\_21
- Track 458 : Keshu\_21
- Track 459 : Bobquesha\_24, MissDaisy\_23, Patt\_23
- Track 460 : Fionnbharth\_23, Kraw\_24, Y10\_23, Wintermute\_23, Y2\_23, JF1\_23, Malthus\_24
- Track 461 : SamScheppers\_21, OmniCritical\_23, Lebo14\_24, Taquito\_21, Mitti\_23
- Track 462 : Eponine\_23, Juliette\_23, Ruthiejr\_22
- Track 463 : Cheetobro\_23, Slarp\_23, Chancellor\_23
- Track 464 : Reptar3000\_23
- Track 465 : Omnicron\_20
- Track 466 : InvictusManeo\_20, ViviJ\_19, Agent47\_20, Collard\_20
- Track 467 : AlleyCat\_20, Edugator\_19, Neighly\_20, Psycho\_20, Larva\_20
- Track 468 : Heftyboy\_20, Gengar\_20, SoSeph\_20
- Track 469 : Miryou\_20, Thyatira\_20
- Track 470 : Guillsminger\_20, Leston\_20, Paola\_20
- Track 471 : Waterfoul\_20, Feyre\_20
- Track 472 : Rando14\_20
- Track 473 : Dadosky\_20
- Track 474 : OkiRoe\_20
- Track 475 : Kratio\_19
- Track 476 : Phrank\_21, Bryler\_21, Cain\_21, Tierra\_21
- Track 477 : Shadow1\_20, Sunflower1121\_20
- Track 478 : Ekdilam\_19
- Track 479 : Ellie\_19, Applecrisp\_21, Fefferhead\_21
- Track 480 : Amohntion\_21
- Track 481 : Hammy\_21, DarthP\_21
- Track 482 : Marshawn\_23
- Track 483 : Syra333\_21
- Track 484 : PhelpsODU\_21, Unicorn\_21
- Track 485 : Amgine\_20
- Track 486 : TClif\_21
- Track 487 : Krueger\_21
- Track 488 : Yuna\_22
- Track 489 : Ximenita\_22
- Track 490 : November\_21
- Track 491 : SirPhilip\_21
- Track 492 : Aminay\_20
- Track 493 : Boilgate\_19
- Track 494 : Wyatt2\_17, Acquire49\_17
- Track 495 : Halena\_17
- Track 496 : MAckerman\_17, AvadaKedavra\_17, Silverleaf\_17, Rose5\_17, Poochiewood\_17
- Track 497 : Appletree2\_17, JoeDirt\_17
- Track 498 : UPIE\_17
- Track 499 : Calm\_17, LeBron\_17, Zaria\_17, CicholasNage\_17

- Track 500 : Enceladus\_17, DirkDirk\_17, OhShagHennessy\_17
- Track 501 : Wamburgxpress\_17
- Track 502 : Tyson\_17
- Track 503 : Faith1\_17, DrSeegs\_17, Zakai\_17, Crossroads\_17, Gabriela\_17, SoJulia\_17, Finemlucis\_17, BigCheese\_17, Rumpelstiltskin\_17, BobsGarage\_17, LilDestine\_17, Lewan\_17, Miley16\_17, Breezona\_17, Itos\_17, MkaliMitinis3\_17, Vetrix\_17, Netyap\_17, Winky\_17
- Track 504 : Wigglewiggles\_17, Loadrie\_17, Underpass\_17, Nicholasp3\_17, Gardann\_17, Wilder\_17, Kahlid\_17
- Track 505 : Soap141\_17, Sarshaun\_17, Hafay\_17
- Track 506 : ZhongYanYuan\_16, Claus\_17, Baoshan\_16, DanBing\_16, DHan\_17
- Track 507 : Bazzle\_17
- Track 508 : GuuelaD\_17
- Track 509 : Tourach\_17
- Track 510 : Archie\_17
- Track 511 : Finnry\_18, Bellis\_18, Samty\_18, Moostard\_18
- Track 512 : DuncansLeg\_18, BourbonZero\_17, KirDoubleO7\_16, LiyuLake\_18, Ellson\_18
- Track 513 : MsGreen\_18, Jobypre\_18, Jubie\_18, Clautastrophe\_18, Snenia\_18, Krypton555\_18, Red305\_18, Kingsolomon\_18, TriFive\_18, Nicholas\_18, Lumos\_18
- Track 514 : MiniMac\_18, Lolly9\_18, MiniLon\_18
- Track 515 : Whirlwind\_19
- Track 516 : Sheng711\_17
- Track 517 : Douzhi\_17, BrainDrainer\_18, PYPDinur\_17
- Track 518 : DyoEdafos\_18
- Track 519 : Bromden\_18
- Track 520 : Quby\_17, Douge\_17, FarmResident\_17
- Track 521 : Kropertea\_17
- Track 522 : Chaser\_17
- Track 523 : Baudelaire\_17, Aegeus\_17
- Track 524 : IPhane7\_27, Auspice\_27, LilhomieP\_26, FreakyGoo\_27, Diminimus\_28, Bricole\_27, Glaske16\_28, Bongo\_27, SlimJimmy\_26, PegLeg\_27, Izel\_26, TyDawg\_27, Skinny\_28, Dulcita\_28
- Track 525 : Reindeer\_25
- Track 526 : KleverKiS\_27
- Track 527 : Estes\_32
- Track 528 : MrMagoo\_31, GardenSalsa\_31
- Track 529 : GenevaB15\_31, Aziz\_31
- Track 530 : Rey\_31
- Track 531 : Nanosmite\_31
- Track 532 : Amymech\_21, Giles\_21, Hadrien\_21, Kinbote\_21, Webster2\_21, DeepSoil15\_21, LilHazelnut\_21, Luke\_21, Evanesce\_21, HH92\_21, Wishmaker\_21, Ein37\_21, Daegal\_22, Dewey\_21, Hail\_21, Amochick\_21, Ubuntu\_21, Forge\_21, OBUpride\_21, Luna22\_21
- Track 533 : Gancho\_20, Gravaillia\_21
- Track 534 : Poise\_49, Blackbeetle\_49
- Track 535 : Beelzebub\_53, Pringar\_49, GoongGoong\_48, Marvin\_47, VasuNzinga\_49, JoieB\_50
- Track 536 : Huphlepuuff\_51, LittleLaf\_49, FeliMaine\_51, Corazon\_47, Clarkson\_50, Lilbit\_50
- Track 537 : Caprice\_46, MosMoris\_47, Tesla\_48, Gattaca\_48, Raela\_49, RedRaider77\_49



- Track 538 : Nairb\_18, ZenTime222\_18, Ibrahim\_18, Bernal13\_18, Whitty\_18, RonRayGun\_18
- Track 539 : Nette\_18, Mendokysei\_17
- Track 540 : Gaia\_13, Nebkiss\_14
- Track 541 : Cracklewink\_23
- Track 542 : Hilltopfarm\_23, Faiyaz\_23, AuntGwenStacy\_23, Typha\_23
- Track 543 : Bipper\_23
- Track 544 : 32HC\_25
- Track 545 : Rem711\_24
- Track 546 : DS6A\_20
- Track 547 : P1201\_46
- Track 548 : Kumao\_27
- Track 549 : EmiRose\_16
- Track 550 : ChewyVIII\_55
- Track 551 : VanLee\_19
- Track 552 : P3MA\_17
- Track 553 : TPA4\_18
- Track 554 : LilSpotty\_16
- Track 555 : Sleepyhead\_17
- Track 556 : IdentityCrisis\_16
- Track 557 : REQ3\_49
- Track 558 : GAL1\_19

***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 97, it was called in 272 of the 1154 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES\_27, 40AC\_30, AN3\_27, AN9\_30, ANI8\_30, AbbyPaige\_29, Acolyte\_27, Adzzy\_28, Agape74\_29, Agatha\_17, AikoCarson\_16, Aliter\_28, Alma\_28, Amok\_16, AndPeggy\_16, Aneem\_27, AnnaL29\_30, Anselm\_27, Anthony\_26, Apricot\_18, ArcherNM\_29, Arissanae\_26, Artemis2UCLA\_30, Axym\_17, Azira\_19, BABullseye\_30, BabyBack\_29, Bachome\_27, Bactobuster\_28, Baehexic\_28, Bavailard\_17, Beemo\_28, BengiVuitton\_28, Benvolio\_27, BiancaTri92\_29, BigChungus\_16, BillDoor\_19, Biskit\_18, BlessJoy\_30, Blinn1\_30, Blondies\_17, Blue7\_30, BobSwaget\_30, BogosyJay\_28, Bowtie\_27, Bradman\_26, Bud\_27, Buggy\_29, Burnsey\_17, Button\_18, Buttrmilkdreams\_17, C3\_25, CRB1\_27, Candra\_30, CanesSauce\_17, Caraxes\_26, Carsonalex\_18, Catalina\_28, Centaur\_29, Changeling\_29, Chargerpower\_27, Charm\_27, Chartreuse\_30, Che12\_29, CherryonLim\_18, ChickenTender\_19, ChipMunk\_29, ChocoMunchkin\_17, Cleo\_17, CloudWang3\_30, Colin\_31, Conquerage\_28, Cookiedough\_30, Cozz\_17, Crater\_17, Crucio\_27, D29\_27, D32\_30, DBQu4n\_30, DaVinci\_30, Dalmatian\_27, Darrell\_29, DARTHPhader\_28, Deloris\_28, Dignity\_29, Dorothea\_30, Drake55\_29, Dre3\_17, DreamTeam1\_27, DudeLittle\_27, Duplo\_30, EZMoney23\_31, EagleEye\_29, Ebony\_27, Echild\_27, EdogawaKiddo\_26, Eidsmoe\_28, Elephantoon\_28, Elinal\_18, Elliott\_17, Emalyn\_16, EmyBug\_28, Equemioh13\_29, EricB\_30, Et2Brutus\_26, EvilGenius\_29, ExplosioNervosa\_28, Fameo\_27, Fayely\_28, Feastonyeet\_16, Fibonacci\_27, FiringLine\_27, First\_0027, Flare16\_27, Flaverint\_27, Fribs8\_18, Gail\_26, Garak\_31, GaugeLDP\_29, Georgie2\_28, GiKK\_20,

Gibbous\_17, Gilberta\_27, Gladiator\_30, GoldHunter\_18, Gratitude\_28, GreedyLawyer\_30, Gruunaga\_30, Hammer\_30, Hanray\_27, HarryHoudini\_29, Heffalump\_29, Helmet\_31, Herbertwm\_24, Hexamo\_30, Hexbug\_19, HippoPololi\_19, Horex\_27, Hoot\_30, Horseradish\_18, HortumSL17\_28, Hutc2\_27, Indra\_30, Insomnia\_27, IronMan\_29, Isiphiwo\_30, Iwokeuplikedis\_28, Jaan\_30, Jabith\_27, Jamzy\_20, Jeeves\_26, Jeffabunny\_30, Jerm\_29, JewelBug\_30, Jiawan\_27, Jordennis\_30, Joselito\_27, JoshKayV\_29, Journey13\_25, Jsquared\_26, Kalpine\_30, KayGee\_17, Kazan\_30, Kerberos\_30, Keziacharles14\_26, KingCyrus\_29, Kinmap\_27, Kipper29\_30, Koduck\_27, Koko\_30, L5\_27, LadyBird\_27, Landor\_28, Larenn\_28, Lauer\_16, Leogania\_29, Leviathan\_29, LiTurb\_29, Lilbunny\_30, Lilleskat\_26, LionsBait\_28, Lokk\_30, Loser\_30, Luchador\_28, Lucivia\_27, Lucyedi\_28, MAnor\_17, MScarn\_19, MaCh\_27, MaVan\_19, Mabel\_27, MajorMajor\_26, Malec\_28, Maminiana\_28, Margaret\_20, Mayweather\_18, McFly\_30, MiculUcigas\_27, Miko\_30, MissWhite\_27, Mulciber\_27, Munch\_27, MunkgeeRoachy\_17, Myxus\_28, NaSiaTalie\_27, Naji\_30, Neeharika16\_30, Newrala\_30, Nibbles\_19, NicoleTera\_31, Nina\_18, Nodigi\_19, NothingSpecial\_29, Odin\_26, Onglai\_27, Orange\_27, Orla\_19, PackMan\_28, PainterBoy\_28, Petersenfast\_26, Ph8s\_28, Phaded\_30, Phaeder\_28, Pharaoh\_27, Phlei\_22, Phonnegut\_28, Pioneer\_28, Piro94\_28, Pmask\_30, Polyphemus\_29, Pomar16\_30, Pons\_17, PotPie\_17, Power\_27, Priamo\_30, Priya\_28, PsychoKiller\_17, Pukovnik\_29, Qobbit\_28, Quasar\_17, QueenB2\_27, QueenBeesly\_27, Quokka\_25, Rachaly\_30, Rahalelujah\_26, RanchParmCat\_20, RedBaron\_18, RedRock\_30, Refuge\_30, Retro23\_27, Rifter\_30, Roksolana\_30, RyeScarlet\_29, Sachima\_26, Salz\_27, Scherzo\_28, SemperFi\_29, Serenity\_26, Sham4\_27, SheaKeira\_27, SheckWes\_16, SketchMex\_16, Sknot\_28, Smeagan\_29, SmellyB\_30, SnapTap\_27, Snape\_27, Socotra\_18, Sopespian\_17, SororFago\_26, Spouty\_28, StarStuff\_30, Starburst\_18, SteamedHams\_19, Steamy\_28, SummitAcademy\_16, SuperAwesome\_30, SuperCallie99\_30, Superchunk\_26, Survivors\_19, SweatNTears\_19, SweetiePie\_27, SwirlSquare\_29, TarsusIV\_27, Temprado\_31, Terrific\_31, Timothy\_27, TinyTimmy\_27, TipsytheTRex\_26, Toaka\_26, Tolls\_19, Tomathan\_30, ToneTone\_28, Travvers\_30, Tristan\_28, Trixie\_30, Troje\_17, Trooper\_27, Tubs\_28, Tucker\_30, Turbido\_29, Typhonmarchy\_18, Ugenie5\_25, Updawg\_29, VA6\_27, VC3\_30, Vanisoa\_26, Vine\_18, VohminGhazi\_30, WeiHuaDA\_33, Whabigail7\_29, WideWale\_29, Wiks\_30, WunderPhul\_30, XianYue\_27, Yakult\_18, Yarn\_16, Yecey3\_27, Yokurt\_30, Yucky\_19, Yummy\_18, Zaka\_30, Zareef\_21, Zimmer\_29, Zulu\_30,

Genes that have the "Most Annotated" start but do not call it:

- Amgine\_20, Amohnition\_21, Applecrisp\_21, AuntGwenStacy\_23, Bipper\_23, Cracklewink\_23, DarthP\_21, Ekdilam\_19, Ellie\_19, Faiyaz\_23, Fefferhead\_21, GTE2\_15, Hammy\_21, Hilltopfarm\_23, November\_21, Typha\_23,

Genes that do not have the "Most Annotated" start:

- 32HC\_25, 8UZL\_20, APunk\_35, Abblin\_34, Abscondus\_46, Acquire49\_17, ActinUp\_22, Adephagia\_22, Adonis\_22, Aegeus\_17, Affeca\_32, Agent47\_20, AgentM\_23, Ageofdapage\_22, Ailee\_32, Airmid\_23, Alatin\_22, Aleemily\_18, Ali17\_30, AlishaPH\_22, AlleyCat\_20, Alpacados\_21, Amelie\_18, Aminay\_20, Amochick\_21, Amymech\_21, Anaya\_23, Anaysia\_29, Angel\_17, Angelica\_22, Angelicage\_32, Angelique\_19, AngryOrchard\_21, Annihilator\_17, Anon\_27, Antsirabe\_17, Aphelion\_47, Apiary\_44, Apocalypse\_22, AppleCloud\_20, Appletree2\_17, Aragog\_23, Archetta\_23, ArchiDore\_18, Archie\_17, Archimedes\_15, Archis\_19, Arianna\_18, Aroostook\_17, Arri\_33, Arti\_40, Asapag\_19, Asayake\_22, Ashertheman\_34, Astro\_23, Atiba\_22, Auspice\_27, AvadaKedavra\_17, Avani\_18,

Avocado\_17, Avrafan\_17, Ayotoya\_21, Aziz\_31, AzulaCat\_17, Azula\_20, BBQValindra\_18, BEEST\_22, BENtherdunthat\_19, BGlluviae\_22, BPs\_17, BQuat\_17, BabyMoney\_20, Bachita\_49, BackstagePass\_18, Baddon\_33, BaghaKamala\_22, Bakery\_31, Banquo\_25, Bantam\_29, Baoshan\_16, Barb\_32, Barco\_18, Barkley26\_17, BarrelRoll\_22, Barsten\_34, Battleship\_30, Baudelaire\_17, Baumdotcom\_33, Bazzle\_17, BearBQ\_18, BeeGee\_19, Beelzebub\_53, Beezoo\_22, Begonia\_19, Belenaria\_22, Bella96\_22, Belladonna\_22, Bellis\_18, Belphegor\_32, Benedict\_23, Bern\_24, Bernal13\_18, BetterKatz\_21, BiPauneto\_43, Bibwit\_33, BigCheese\_17, Binglebops\_18, Birdsong\_18, Bizzy\_34, Blackbeetle\_49, Blarby\_19, BlingBling\_18, Blino\_18, Blizzard\_22, BlueNGold\_99, Blueberry\_20, Bluefalcon\_22, BobBob\_31, BobbyDazzler\_22, Bobquesha\_24, BobsGarage\_17, Bock\_21, Boiii\_22, Boilgate\_19, Bonamassa\_23, Bonanza\_22, Bongo\_27, Bonum\_43, Boohoo\_29, Boopy\_100, BoostSeason\_18, BotCity\_20, BourbonZero\_17, Bowser\_18, Bradissa\_19, Bradshaw\_22, BrainDrainer\_18, Brandonk123\_35, Braxoaddie\_44, Breezona\_17, Bricole\_27, BritBrat\_19, Bromden\_18, BruceB\_17, BrutonGaster\_35, Bryce\_22, Bryler\_21, Brylie\_21, Budski\_19, Buggaboo\_41, Bunker\_18, C3PO\_30, CLED96\_17, CREW\_22, Cafasso\_18, Cain\_21, CallaLilly\_23, Calm\_17, Cambiare\_18, Camri\_17, Caprice\_46, Capricorn\_22, CaptainKirk2\_18, Cardigan\_46, CarolAnn\_18, CaseJules\_22, Cashline\_19, CassieYates\_17, Catfish\_21, Cedasite\_17, ChadMasterC\_34, Chadwick\_24, Chance64\_17, Chancellor\_23, Charming\_34, Chaser\_17, Chavito\_22, Che9d\_18, CheeseTouch\_19, CheetoDust\_22, Cheetobro\_23, CherryCola\_34, Cherrybomb426\_17, ChewyVIII\_55, Chickadee\_31, Chop\_21, Chris\_21, CicholasNage\_17, ClamChowder\_32, Clarkson\_50, Claus\_17, Clautastrophe\_18, Clipper\_24, Clown\_34, ClubL\_47, CoffeeBean\_44, Coleslaw\_17, Collard\_20, Colleen\_18, Commandaria\_42, Confidence\_19, Conspiracy\_23, Coog\_23, Corazon\_47, Coriander\_18, CosmicSans\_22, CoveyB\_33, Crespo\_17, CrimD\_22, Crossroads\_17, Cruella\_30, Cuco\_23, Cucurbita\_49, Culver\_47, Curiosium\_23, DHan\_17, DMoney\_17, DNAll\_0017, DS6A\_20, Dadosky\_20, Daegal\_22, Dalilpop\_45, Dalmuri\_22, DanBing\_16, Danforth\_22, Danyall\_32, Dardanus\_23, Daredevil\_28, Darionha\_17, Dartin\_22, Darwin\_33, DatBoi\_30, Deby\_22, DeepSoil15\_21, DekHockey33\_29, DelRio\_22, Delian\_18, Delrey21\_33, Demsculpinboyz\_18, Derg\_29, Devera\_22, Dewey\_21, Dextert\_32, Diminimus\_28, Dinger\_22, DinoDaryn\_23, DirkDirk\_17, DirtyBoi\_19, Discoknowium\_23, DismalFunk\_18, DismalStressor\_18, Dixon\_23, Dmitri\_18, DoctorFroggo\_33, Dogfish\_20, Doggs\_17, Dole\_22, DonkeyMan\_17, Douge\_17, Doughnut\_18, Douzhi\_17, DrHayes\_22, DrSeegs\_17, Dublin\_22, Dulcita\_28, DumpsterDude\_18, DuncansLeg\_18, Durfee\_22, Dusty\_45, DyoEdafos\_18, ECartman\_17, EMOore\_30, EmsquaredA\_19, Ecliptus\_23, EdmundFerry\_30, Edugator\_19, Efra2\_22, Egi03\_32, Ein37\_21, ElTiger69\_23, Ellson\_18, Emerson\_22, EmiRose\_16, Emianna\_40, EnalisNailo\_19, Enceladus\_17, Engineer\_48, Enkosi\_18, Ennea\_46, Eponine\_23, Epsocamisio\_29, Erik\_22, Espica\_22, Estes\_32, Evamon\_30, Evanesce\_21, Ewald\_21, Expelliarmus\_22, Eyes\_18, FF47\_20, Fairfaxidum\_18, Faith1\_17, Farewell\_15, FarmResident\_17, FeliMaine\_51, Fenry\_17, Feyre\_20, Findley\_18, Finemlucis\_17, Finnry\_18, Fionnbharth\_23, Fireball\_31, Fitzgerald\_32, FlagStaff\_17, Flapper\_44, Flatwoods\_34, Float294\_42, Floral\_19, ForGetIt\_23, Forge\_21, Forza\_100, Fosterous\_32, Foxboro\_41, Francois\_21, FreakyGoo\_27, Frickyeah\_19, Frizzle\_16, Frokostdame\_18, Frosty24\_17, Fryberger\_52, FuegoCuervo\_36, Fugax\_32, Fury\_49, GAL1\_19, GEazy\_18, GMA2\_29, GRU1\_30, GTE5\_31, GTE6\_31, GTE8\_29, Gabriela\_17, Gaea\_33, Gaia\_13, Galadriel\_34, Gambino\_20, Gancho\_20, Ganymede\_23, Gardann\_17, GardenSalsa\_31, Gattaca\_48, Geeche\_46, GenevaB15\_31, Gengar\_20, Geodirt\_31, George\_22, Geraldini\_22, Getalong\_20, Gezellig\_31, Ghobes\_15, Ghoulboy\_23, Gideon\_17, Giles\_21, Glaske16\_28,

GodonK\_88, Goib\_22, GoldenAsh\_17, Gollum\_22, Gomashi\_17, GoongGoong\_48, GrandSlam\_21, Gravallia\_21, Grizzly\_17, GrootJr\_42, Groundhog\_22, Gspu1\_19, Guacamole\_18, Guanica15\_22, Guey18\_57, Guillsminger\_20, Gustav\_17, Gustavo\_33, GuuelaD\_17, GuyFagieri\_44, HH92\_21, Hadrien\_21, Hafay\_17, Hail\_21, Halena\_17, Halo3\_31, Halo\_17, Hamood\_21, HannahD\_18, Hans\_34, Harlequin\_22, HedwigODU\_22, Hedwig\_19, Heftyboy\_20, Heinz\_18, Hibiscus\_17, Hiro\_22, Hitter\_18, Holliday\_19, Homura\_22, Hope\_17, Horus\_19, Hotshotbaby7\_17, HubbaBubba\_38, Huffy\_23, HuhtaEnerson15\_23, Huphlepuuff\_51, Hurricane\_21, Hyperbowlee\_22, IDyn\_41, IPhane7\_27, Ibrahim\_18, IdentityCrisis\_16, Illumine\_22, Inky\_22, Inspectinfecti\_33, InvictusManeo\_20, Itos\_17, Izel\_26, JAWS\_22, JF1\_23, JKSyngboy\_31, JSwag\_29, Jabbawokkie\_20, Jabberwocky\_32, Jabiru\_23, Jablanski\_19, JacoRen57\_16, Jalammah\_20, Jambalaya\_30, Jane\_17, Jarvi\_22, JasperJr\_18, Jayhawk\_22, Jeckyll\_22, Jester\_22, Jifall16\_39, Jobypre\_18, JoeDirt\_17, JoieB\_50, Jojo24\_17, Jolene\_17, Jolie2\_17, JonJames\_46, Jonghyun\_17, JorRay\_17, Jovo\_23, Joy99\_22, JuJu\_18, Jubie\_18, Juliette\_23, JustASigh\_17, Kabluna\_43, Kahlid\_17, Kamaru\_19, Kamashten\_33, KappaFarmDelta\_18, Kareem\_17, Kasen3\_17, KatherineG\_29, Keelan\_50, Keitabear\_34, Kenna\_18, Keshu\_21, Kewpiedoll\_33, KiSi\_21, KidneyBean\_40, Kiko\_19, Kimchi1738\_30, KimmyK\_32, Kinbote\_21, Kingsolomon\_18, KirDoubleO7\_16, KleverKiS\_27, Kratio\_19, Kraw\_24, Krishelle\_22, Kroos\_34, Kropertea\_17, Krueger\_21, Krypton555\_18, Kudrefre\_26, Kumao\_27, Kurt\_40, Kuwabara\_18, Kwekel\_31, Kwobi\_34, Larva\_20, LastHope\_22, LastResort\_29, LaterM\_22, LeBron\_17, LeMond\_21, Lea83\_22, Lebo14\_24, Lemuria\_17, Lennon\_34, Leonard\_32, Leroy\_19, Leston\_20, Lev2\_23, Lewan\_17, Liefie\_17, LilDestine\_17, LilHam\_31, LilHazelNut\_21, LilPharaoh\_18, LilSpotty\_16, Lilas\_19, Lilbeanie\_29, Lilbit\_50, LilhomieP\_26, Lillie\_22, LindNT\_22, LitninMcQueen\_19, LittleCherry\_23, LittleLaf\_49, LiyuLake\_18, Llorens\_22, Loadrie\_17, Lollipop1437\_45, Lolly9\_18, LoneWolf\_28, LonelyBoi\_19, Looper\_30, LouisV14\_17, Love\_37, Lozinak\_47, Lucky10\_17, Luke\_21, Lumos\_18, Luna22\_21, Lunahalos\_22, Lutum\_19, Lysidious\_19, MACKerman\_17, MOOREtheMARYer\_17, MacGully\_49, MacKat\_23, MacnCheese\_22, Maco6\_18, MagicMan\_18, Mahdia\_17, MakCheese\_19, Malachai\_19, MalagasyRose\_23, Malibo\_19, Maliketh\_17, Malisha\_20, Malthus\_24, Marcoliusprime\_18, Mareelih\_98, Marietta\_42, MarkPhew\_22, Marmie\_17, Marshawn\_23, Marteena\_19, Marvin\_47, MarysWell\_22, Maselop\_44, McKinley\_36, McMater\_22, Mdavu\_18, MeaningOfLife\_22, Megsy\_22, MelBins\_33, Melba\_18, Mellie\_17, Mendokysei\_17, MerCougar\_41, Mercurio\_18, Meyran\_20, Micasa\_23, MicyPS\_16, Midas2\_23, Milcery\_23, Miley16\_17, Milly\_18, MinecraftSteve\_30, MiniLon\_18, MiniMac\_18, MintFen\_18, Miryou\_20, Miskis\_49, MissDaisy\_23, MissRona\_20, Mitti\_23, MkaliMitinis3\_17, ModicumRichard\_18, Mollymur\_30, Moonflower\_18, MoontowerMania\_33, Moostard\_18, Morgana\_18, Morkie\_17, Morrissey\_18, MortyNRick\_18, MosMoris\_47, Mowgli\_17, MrMagoo\_31, MsGreen\_18, Muddy\_20, Mufasa\_18, Mulch\_21, Murp\_18, Murucutumbu\_22, Mutzi\_32, Mynx\_22, Naca\_23, Nadeem\_21, NadineRae\_40, Naiad\_22, Nairb\_18, Nancinator\_22, NancyRae\_21, Nanosmite\_31, NatB6\_40, Natkenzie\_34, Natosaleda\_22, NearlyHeadless\_23, Nebkiss\_14, Nebulosus\_29, Nedarya\_28, Neighly\_20, Nergal\_21, Nette\_18, Netyap\_17, Neville\_27, Nibb\_21, Nicholas\_18, Nicholasp3\_17, Nikao\_18, Niklas\_22, NoShow\_17, Nordenberg\_28, Norvs\_48, NosilaM\_43, NovumRegina\_40, Nubi\_30, Nutello\_18, Nyceirae\_22, OBUpride\_21, ODay\_23, ObLaDi\_18, Obliviate\_17, OctaviousRex\_17, Octobien14\_27, OhShagHennessy\_17, OkiRoe\_20, Olga\_17, OmniCritical\_23, Omnicron\_20, OneUp\_41, Oofda\_30, Opie\_18, Oscar\_21, Outis\_41, P1201\_46, P3MA\_17, PCoral7\_18, PP\_36, PSonyx\_16, PYPDinur\_17, Pace1224\_17, Padfoot\_22, Padpat\_22, Paito\_17, Paola\_20, Parada\_21, Paries\_36, Partridge\_22, Patio\_43,

Patt\_23, Peanam\_22, Peeb\_17, Peel\_22, PegLeg\_27, Periodt\_17, Periwinkle\_21, PeteyPab\_32, Petra\_20, PetterN\_24, Phabuloso\_19, PhailMary\_21, Pharb\_21, Phauci\_25, PhelpsODU\_21, Phendrix\_86, Phillis\_23, Phinally\_32, PhinkBoden\_47, Phish\_17, Phishy\_21, Phistory\_20, Phlop\_30, Phlorence\_23, Phomeo\_39, PhorbesPhlower\_17, Phrank\_21, Phrankenstien\_22, Phreak\_17, PhrostedPhlake\_19, Piatt\_22, PickleBack\_23, Pimento\_22, PinkCoffee\_32, PinkYoshi\_17, Pinnie\_18, Pipp\_18, Pixie\_21, Plagueis\_17, Pleakley\_49, Poise\_49, Pokerus\_21, Pollux\_19, Polyuyki\_44, Poochiewood\_17, Portcullis\_30, Posh\_19, PotatoChip\_33, Poushou\_18, Prinash11\_24, PrincePatrick\_18, Pringar\_49, Prithvi\_22, Psycho\_20, PullumCavea\_30, Puppies\_17, Pytheas\_19, Quby\_17, QuincyRose\_21, REQ3\_49, RER2\_15, RGL3\_15, Rabbitrun\_29, Rabbs\_17, Raela\_49, Ramen\_22, Rando14\_20, Rapunzel97\_22, Rasputin\_22, RayTheFireFly\_18, ReMo\_29, Red305\_18, RedRaider77\_49, RedRaider\_47, Reindeer\_25, Rem711\_24, Remus\_29, Remy19\_17, Renaissance\_17, Reptar3000\_23, RexFury\_22, Rey\_31, Reyja\_18, Rhodalysa\_22, Ribeye\_34, Richo\_22, RiverRaider\_34, RoadKill\_29, Roary\_23, Rofo\_34, RogerDodger\_33, RonRayGun\_18, Ronaldo\_55, Rosalind\_29, Rose5\_17, Rosmarinus\_22, Rumpelstiltskin\_17, Ruthiejr\_22, Ruthy\_18, Saintus\_23, Salvador\_30, SamScheppers\_21, Samba\_18, Sampson\_34, Samty\_18, SamuelLPlaqson\_22, Sanjuju\_32, Santhid\_17, Sapo\_15, Saronaya\_33, Sarshaun\_17, Savbucketdawg\_30, Scarlett\_21, Schiebel\_17, Schmidt\_19, Schnabeltier\_18, SchottB\_32, Scioto\_34, Scorpia\_24, Scuba\_49, Sedona\_34, Sephiroth\_27, SgtBeansprout\_18, ShaboiShabazz\_17, Shadow1\_20, Shaobing\_22, ShawBrad\_19, ShayRa\_30, ShedlockHolmes\_21, Sheng711\_17, ShiaSurprise\_22, Shinji\_30, Shivanishola\_35, Shuman\_22, SilverChicken\_18, Silverleaf\_17, SirPhilip\_21, Sitar\_34, Sixama\_98, Sizemore\_17, Skinny\_28, Skysand\_42, Slarp\_23, Sleepyhead\_17, SlimJimmy\_26, Slimphazie\_22, Smeadley\_23, SmokingBunny\_30, Smoothie\_48, Sneeze\_17, Snenia\_18, SoJulia\_17, SoSeph\_20, Soap141\_17, Soul22\_18, Soups\_29, Sparky\_15, SpeedDemon\_310, Splinter\_21, Spock\_22, Spooky\_19, Squiddly\_21, StCroix\_22, StarStruck\_41, Stargaze\_17, StepHig9\_23, Stickynote\_32, Stinson\_22, StorminNorm\_33, Strobilo\_18, Strosahl\_29, Stultus\_32, Sukkupi\_42, Sulley\_22, Sunflower1121\_20, Sunhee\_25, SuperSulley\_41, Swann\_22, Sweets\_17, Swirley\_23, Switzerland\_29, SydNat\_23, Syleon\_27, Syra333\_21, TBond007\_21, TClif\_21, TM4\_18, TPA4\_18, TWAMP\_22, TZGordon\_23, Tachez\_22, Taheera\_17, TaiwanKao\_23, Takoda\_22, Tangent\_34, Tangerine\_33, Taquito\_21, Tardus\_35, TaronosaurusRx\_18, Tarynearal\_22, Tarzan\_17, Teejan\_18, Terror\_17, Tesla\_48, Theia\_21, Thing3\_33, Thyatira\_20, Tiamoceli\_32, Tierra\_21, Tiger\_23, TillyBobJoe\_30, TinaBug\_17, TinaLin\_24, TingHuaYa\_22, TiniBug\_22, Tiri\_22, Toast\_18, Togo\_30, TomBrady\_17, Toniann\_47, Topper\_22, Torres\_18, TouchMeNot\_18, Tourach\_17, Towmatter\_28, Tracker\_40, Trax\_27, TreyKay\_22, TriFive\_18, TribbleTrouble\_20, Trine\_17, TruffulaTree\_22, Turuncu\_44, Twigg\_23, Twister6\_32, Twitch\_22, Twonlo\_29, TyDawg\_27, Tycho\_33, Tyson\_17, UPIE\_17, Ubuntu\_21, UhSalsa\_22, UmaThurman\_18, Underpass\_17, Unicorn\_21, UnionJack\_23, Upyo\_17, Urkel\_22, Utz\_18, Valary\_33, Validus\_22, VanDeWege\_33, VanLee\_19, VasuNzinga\_49, Veliki\_22, Vendetta\_21, Verity\_33, Vetric\_17, ViaConlectus\_34, Vivi2\_36, ViviJ\_19, Volt\_54, Vordorf\_21, Waits\_29, Walrus\_19, Wamburgrxpress\_17, Warrior24\_30, Waterfoul\_20, Webster2\_21, Weirdo19\_18, Wendigo\_17, WheatThin\_21, Wheezy\_40, Whirlwind\_19, Whitney\_20, Whitty\_18, WhoseManz\_42, Widow\_17, Wigglewiggle\_17, Wilder\_17, WilliamBoone\_47, William\_18, Winky\_17, Wintermute\_23, Wishmaker\_21, Wisp\_17, Wizard\_30, Wocket\_19, Wrigley\_19, Wyatt2\_17, Ximenita\_22, Y10\_23, Y2\_23, Yndexa\_42, Yogi\_22, Yoncess\_22, YorkOnyx\_34, Yoshi\_18, YoureAdopted\_21, Yuna\_22, YungMoney\_32, Yunkel11\_22, Yvonetastic\_44, ZAYM\_18, Zabiza\_22, Zakai\_17, Zapner\_19, Zarbodnamra\_18, Zaria\_17, Zavala\_22, ZenTime222\_18,

ZhongYanYuan\_16, ZiggyZoo\_17, Ziko\_55, Zion\_33, Zipp\_33, Zitch\_35, ZoMa\_17, Zodiariah\_17, ZoeJ\_18, Zolita\_22, Zombie\_17,

### Summary by start number:

#### Start 23:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: IdentityCrisis\_16 (singleton),

#### Start 25:

- Found in 3 of 1339 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 66.7% of time when present
- Phage (with cluster) where this start called: FlagStaff\_17 (G2), Pace1224\_17 (G2),

#### Start 28:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Boilgate\_19 (K8),

#### Start 29:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay\_20 (K7),

#### Start 30:

- Found in 243 of 1339 ( 18.1% ) of genes in pham
- Manual Annotations of this start: 217 of 1154
- Called 99.2% of time when present
- Phage (with cluster) where this start called: ActinUp\_22 (K1), Adephegia\_22 (K1), Adonis\_22 (K1), Ageofdapage\_22 (K1), AlishaPH\_22 (K1), Amelie\_18 (K1), Amgine\_20 (K6), Amohnition\_21 (K6), Anaya\_23 (K1), Angel\_17 (G1), Angelica\_22 (K1), Annihilator\_17 (G1), Antsirabe\_17 (G5), Apocalypse\_22 (K1), Applecrisp\_21 (K6), Aroostook\_17 (G1), Asayake\_22 (K1), Atiba\_22 (K1), Avrafan\_17 (G1), AzulaCat\_17 (G1), BEEST\_22 (K1), BGlluviae\_22 (K1), BPs\_17 (G1), BQuat\_17 (G1), BaghaKamala\_22 (K1), Barkley26\_17 (G1), BarrelRoll\_22 (K1), Beezoo\_22 (K1), Bella96\_22 (K1), Belladonna\_22 (K1), Bern\_24 (K1), Binglebops\_18 (K1), Blizzard\_22 (K1), Bobquesha\_24 (K4), Boiii\_22 (K1), BruceB\_17 (G1), Bryler\_21 (K6), CLED96\_17 (G1), CREW\_22 (K1), Cain\_21 (K6), CallaLilly\_23 (K1), Camri\_17 (G1), Capricorn\_22 (K1), CaseJules\_22 (K1), CassieYates\_17 (G1), Cedasite\_17 (G1), Chance64\_17 (G1), Chancellor\_23 (K4), Chavito\_22 (K1), CheetoDust\_22 (K1), Cheetobro\_23 (K4), Cherrybomb426\_17 (G1), Chris\_21 (K1), Clipper\_24 (K1), Coleslaw\_17 (G1), Crespo\_17 (G1), CrimD\_22 (K1), Curiosium\_23 (K1), DMoney\_17 (G1), DNAll\_0017 (G1), Dalmuri\_22 (K1), Darionha\_17 (G1), DARTH\_21 (K6), Dartin\_22 (K1), Deby\_22 (K1), Devera\_22 (K1), Dole\_22 (K1), DrHayes\_22 (K1), Durfee\_22 (K1), ECartman\_17 (G1), Efra2\_22 (K1), Ekdilam\_19 (K6), Ellie\_19 (K6), Emerson\_22 (K1), Enkosi\_18 (K1), Eponine\_23 (K4), Fefferhead\_21 (K6), Fionnbharth\_23 (K4), Frosty24\_17 (G1), Ganymede\_23 (K1), Geraldini\_22 (K1), Gideon\_17 (G1), GoldenAsh\_17 (G1), Gomashi\_17 (G1), Grizzly\_17 (G1),

Guanica15\_22 (K1), Halo\_17 (G1), Hammy\_21 (K6), HedwigODU\_22 (K1), Homura\_22 (K1), Hope\_17 (G1), Hotshotbaby7\_17 (G1), Hurricane\_21 (K3), Hyperbowlee\_22 (K1), Illumine\_22 (K1), Inky\_22 (K1), JAWS\_22 (K1), JF1\_23 (K4), Jane\_17 (G1), Jarvi\_22 (K1), Jayhawk\_22 (K1), Jeckyll\_22 (K1), Jolene\_17 (G1), Jolie2\_17 (G4), Jonghyun\_17 (G1), JorRay\_17 (G1), Joy99\_22 (K1), Juliette\_23 (K4), Kareem\_17 (G1), Kasen3\_17 (G1), Keshu\_21 (K3), KiSi\_21 (K1), Kraw\_24 (K4), Krueger\_21 (K6), LastHope\_22 (K1), LaterM\_22 (K1), LeMond\_21 (K1), Lea83\_22 (K3), Lebo14\_24 (K4), Lemuria\_17 (G4), Liefie\_17 (G1), LilPharaoh\_18 (K1), LindNT\_22 (K1), Llorens\_22 (K1), LouisV14\_17 (G1), Lunahalos\_22 (K1), MOOREtheMARYer\_17 (G3), MacKat\_23 (K1), MacnCheese\_22 (K3), Maliketh\_17 (G1), Malthus\_24 (K4), MarkPheW\_22 (K1), Marmie\_17 (G1), Marshawn\_23 (K6), McMater\_22 (K1), Mdavu\_18 (K1), MeaningOfLife\_22 (K1), Megsy\_22 (K1), Mercurio\_18 (G4), MissDaisy\_23 (K4), Mitti\_23 (K4), Mowgli\_17 (G1), Murucutumbu\_22 (K1), Mynx\_22 (K1), Nibb\_21 (K1), Nikao\_18 (K1), Niklas\_22 (K1), November\_21 (K6), Nutello\_18 (K1), OctaviousRex\_17 (G1), Olga\_17 (G1), OmniCritical\_23 (K4), Oscar\_21 (K1), Padfoot\_22 (K1), Padpat\_22 (K1), Paito\_17 (G1), Patt\_23 (K4), Peanam\_22 (K1), Peeb\_17 (G1), Peel\_22 (K1), Periodt\_17 (G1), Pharb\_21 (K3), PhelpsODU\_21 (K6), Phish\_17 (G1), Phrank\_21 (K6), Phreak\_17 (G1), Piatt\_22 (K1), PinkYoshi\_17 (G1), Pinnie\_18 (G3), Pixie\_21 (K3), Plagueis\_17 (G1), Pokerus\_21 (K1), Prithvi\_22 (K1), QuincyRose\_21 (K1), Rabbs\_17 (G1), Ramen\_22 (K1), Rapunzel97\_22 (K1), Remy19\_17 (G1), Renaissance\_17 (G1), Reptar3000\_23 (K4), Richo\_22 (K1), Rosmarinus\_22 (K1), Ruthiejr\_22 (K4), SamScheppers\_21 (K4), SamuelLPlaqson\_22 (K1), Scarlett\_21 (K1), Schiebel\_17 (G1), SgtBeansprout\_18 (K1), ShaboiShabazz\_17 (G1), Shadow1\_20 (K6), Shaobing\_22 (K1), ShedlockHolmes\_21 (K3), ShiaSurprise\_22 (K1), SirPhillip\_21 (K6), Sizemore\_17 (G1), Slarp\_23 (K4), Slimphazie\_22 (K1), Sneeze\_17 (G1), Spock\_22 (K1), Stargaze\_17 (G5), Stinson\_22 (K1), Sulley\_22 (K1), Sunflower1121\_20 (K6), Sweets\_17 (G1), Syra333\_21 (K6), TBond007\_21 (K3), TClif\_21 (K6), Tachez\_22 (K1), Taheera\_17 (G1), TaiwanKao\_23 (K1), Taquito\_21 (K4), Teejan\_18 (K1), Terror\_17 (G1), Tierra\_21 (K6), TinaBug\_17 (G1), TingHuaYa\_22 (K1), TiniBug\_22 (K1), Tiri\_22 (K1), TomBrady\_17 (G1), Topper\_22 (K1), Torres\_18 (K1), TreyKay\_22 (K1), TripleTrouble\_20 (K3), TruffulaTree\_22 (K1), Twitch\_22 (K1), Unicorn\_21 (K6), Urkel\_22 (K1), Validus\_22 (K1), Veliki\_22 (K1), Wendigo\_17 (G1), Wintermute\_23 (K4), Ximenita\_22 (K6), Y10\_23 (K4), Y2\_23 (K4), YoureAdopted\_21 (K1), Yuna\_22 (K6), Yunkel11\_22 (K1), Zabiza\_22 (K1), Zavala\_22 (K1), ZoMa\_17 (G1), Zombie\_17 (G1),

#### Start 31:

- Found in 2 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avocado\_17 (G2), Cambiare\_18 (G2),

#### Start 34:

- Found in 11 of 1339 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 10 of 1154
- Called 90.9% of time when present
- Phage (with cluster) where this start called: BoostSeason\_18 (K2), DismalFunk\_18 (K2), DismalStressor\_18 (K2), Findley\_18 (K2), Marcoliusprime\_18 (K2), Milly\_18 (K2), Mufasa\_18 (K2), Strobilo\_18 (K2), TM4\_18 (K2), ZoeJ\_18 (K2),

#### Start 35:

- Found in 6 of 1339 ( 0.4% ) of genes in pham

- Manual Annotations of this start: 4 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 8UZL\_20 (AB), FF47\_20 (AB), JacoRen57\_16 (AB), Maco6\_18 (AB), Muddy\_20 (AB), NoShow\_17 (AB),

#### Start 36:

- Found in 29 of 1339 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 22 of 1154
- Called 82.8% of time when present
- Phage (with cluster) where this start called: Agent47\_20 (K5), AlleyCat\_20 (K5), Collard\_20 (K5), Dadosky\_20 (K5), Edugator\_19 (K5), Feyre\_20 (K5), Gengar\_20 (K5), Guillsminger\_20 (K5), Heftyboy\_20 (K5), InvictusManeo\_20 (K5), Kratio\_19 (K5), Larva\_20 (K5), Leston\_20 (K5), Miryou\_20 (K5), Neighly\_20 (K3), OkiRoe\_20 (K5), Omnicon\_20 (K5), Paola\_20 (K5), Psycho\_20 (K5), Rando14\_20 (K5), SoSeph\_20 (K5), Thyatira\_20 (K5), ViviJ\_19 (K5), Waterfoul\_20 (K5),

#### Start 37:

- Found in 32 of 1339 ( 2.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Doughnut\_18 (K2),

#### Start 41:

- Found in 2 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_13 (X), Nebkiss\_14 (X),

#### Start 44:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nergal\_21 (AG),

#### Start 46:

- Found in 2 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: P3MA\_17 (singleton), TPA4\_18 (singleton),

#### Start 51:

- Found in 29 of 1339 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 13.8% of time when present
- Phage (with cluster) where this start called: 32HC\_25 (Z), JustASigh\_17 (AH), Rem711\_24 (Z), Weirido19\_18 (AH),

#### Start 52:

- Found in 7 of 1339 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 5 of 1154
- Called 100.0% of time when present



- Phage (with cluster) where this start called: AuntGwenStacy\_23 (Y), Bipper\_23 (Y), Cracklewink\_23 (Y), Faiyaz\_23 (Y), Hilltopfarm\_23 (Y), MalagasyRose\_23 (AG), Typha\_23 (Y),

#### Start 55:

- Found in 24 of 1339 ( 1.8% ) of genes in pham
- Manual Annotations of this start: 22 of 1154
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Amochick\_21 (Q), Amymech\_21 (Q), Daegal\_22 (Q), DeepSoil15\_21 (Q), Dewey\_21 (Q), Ein37\_21 (Q), Evanesce\_21 (Q), Forge\_21 (Q), Gancho\_20 (Q), Giles\_21 (Q), Gravaillia\_21 (Q), HH92\_21 (Q), Hadrien\_21 (Q), Hail\_21 (Q), Kinbote\_21 (Q), LilHazelnut\_21 (Q), Luke\_21 (Q), Luna22\_21 (Q), OBUpride\_21 (Q), Ubuntu\_21 (Q), Webster2\_21 (Q), Wishmaker\_21 (Q),

#### Start 60:

- Found in 19 of 1339 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 18 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArchiDore\_18 (DW), Ayotoya\_21 (DI), BetterKatz\_21 (DI), Bock\_21 (DI), Brylie\_21 (DI), Chop\_21 (DI), DelRio\_22 (DI), DumpsterDude\_18 (DW), Francois\_21 (DI), GrandSlam\_21 (DI), Hamood\_21 (DI), Lilbeanie\_29 (DE5), Mulch\_21 (DI), Nadeem\_21 (DI), NancyRae\_21 (DI), Parada\_21 (DI), Pimento\_22 (DI), Ruthy\_18 (DW), WheatThin\_21 (DI),

#### Start 61:

- Found in 253 of 1339 ( 18.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.8% of time when present
- Phage (with cluster) where this start called: MakCheese\_19 (DW), Zodiariah\_17 (DW),

#### Start 62:

- Found in 2 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GodonK\_88 (DK), Phendrix\_86 (DK),

#### Start 63:

- Found in 4 of 1339 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cardigan\_46 (DD), JonJames\_46 (DD), Yvonnestic\_44 (DD),

#### Start 64:

- Found in 31 of 1339 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 25 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: APunk\_35 (DE4), Abblin\_34 (DE4), Ali17\_30 (DE2), Belphegor\_32 (DE), Chickadee\_31 (DE3), Delrey21\_33 (DE4), Dextert\_32 (DE3), DoctorFroggo\_33 (DE4), EMoore\_30 (DE2), EdmundFerry\_30 (DE3), GMA2\_29 (DS), GTE6\_31 (DE3), Hans\_34 (DE2), Inspectinfecti\_33 (DE2),

Kwekel\_31 (DE3), Leonard\_32 (DE2), LilSpotty\_16 (singleton), MelBins\_33 (DE2), Natkenzie\_34 (DE4), Phauci\_25 (DE2), Phinally\_32 (DE2), RoadKill\_29 (DE3), Sampson\_34 (DE4), Scioto\_34 (DE4), Tardus\_35 (DE4), Tiamoceli\_32 (DE3), Twonlo\_29 (DE3), Verity\_33 (DE4), ViaConlectus\_34 (DE4), Zipp\_33 (DE4), Zitch\_35 (DE4),

Start 65:

- Found in 31 of 1339 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 6 of 1154
- Called 19.4% of time when present
- Phage (with cluster) where this start called: Barco\_18 (CV), Guacamole\_18 (CV), Lysidious\_19 (CV), Melba\_18 (CV), Pipp\_18 (CV), Zarbodnamra\_18 (CV),

Start 66:

- Found in 9 of 1339 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 8 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: C3PO\_30 (EN), Cruella\_30 (EN), Darwin\_33 (EN), Kimchi1738\_30 (EN), P1201\_46 (singleton), PeteyPab\_32 (EN), PotatoChip\_33 (EN), Stickyntote\_32 (EN), Zion\_33 (EN),

Start 67:

- Found in 2 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 50.0% of time when present
- Phage (with cluster) where this start called: DS6A\_20 (singleton),

Start 68:

- Found in 33 of 1339 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 24 of 1154
- Called 75.8% of time when present
- Phage (with cluster) where this start called: Azula\_20 (CV), Bantam\_29 (DL), Blueberry\_20 (CV), Culver\_47 (CQ1), Daredevil\_28 (DL), DatBoi\_30 (DL), Fairfaxidum\_18 (CV), Fenry\_17 (CV), Gambino\_20 (CV), Jalammah\_20 (CV), JuJu\_18 (CV), MissRona\_20 (CV), Mollymur\_30 (DL), Murp\_18 (CV), Norvs\_48 (CQ1), Nyceirae\_22 (DT), PCoral7\_18 (CV), PrincePatrick\_18 (CV), Samba\_18 (CV), Smoothie\_48 (CQ1), SpeedDemon\_310 (DL), Toast\_18 (CV), Towmatter\_28 (DL), WilliamBoone\_47 (CQ1), William\_18 (CV),

Start 69:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sapo\_15 (DA),

Start 70:

- Found in 37 of 1339 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 27 of 1154
- Called 81.1% of time when present
- Phage (with cluster) where this start called: Archis\_19 (CV), BabyMoney\_20 (DT), Begonia\_19 (CV), BlingBling\_18 (CV), Blino\_18 (CV), CaptainKirk2\_18 (CV), CarolAnn\_18 (CV), Delian\_18 (CV), Dogfish\_20 (DT), Ewald\_21 (DT), Frizzle\_16 (DA), Ghobes\_15 (DA), Hitter\_18 (CV), JasperJr\_18 (CV), KappaFarmDelta\_18 (CV),

Malachai\_19 (CV), Mellie\_17 (CV), Meyran\_20 (DT), MintFen\_18 (CV), Obliviate\_17 (CV), OneUp\_41 (CQ2), Petra\_20 (CV), Phishy\_21 (DT), PhrostedPhlake\_19 (CV), UmaThurman\_18 (CV), Utz\_18 (CV), Vordorf\_21 (DT), Walrus\_19 (CV), Wocket\_19 (CV), ZiggyZoo\_17 (CV),

Start 71:

- Found in 6 of 1339 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 16.7% of time when present
- Phage (with cluster) where this start called: ChewyVIII\_55 (singleton),

Start 72:

- Found in 27 of 1339 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 12 of 1154
- Called 59.3% of time when present
- Phage (with cluster) where this start called: Abscondus\_46 (CQ1), Aphelion\_47 (CQ1), Archimedes\_15 (DA), Bachita\_49 (CQ1), BrutonGaster\_35 (CQ2), ClubL\_47 (CQ1), Cucurbita\_49 (CQ1), Dusty\_45 (CQ1), Engineer\_48 (CQ1), Farewell\_15 (AF), Geeche\_46 (CQ1), Lozinak\_47 (CQ1), Miskis\_49 (CQ1), PhinkBoden\_47 (CQ1), Sparky\_15 (AF), Toniann\_47 (CQ1),

Start 73:

- Found in 5 of 1339 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 5 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apiary\_44 (CR), Braxoaddie\_44 (CR), CoffeeBean\_44 (CR), Maselop\_44 (CR), Polygyuki\_44 (CR),

Start 76:

- Found in 30 of 1339 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 24 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arti\_40 (CR2), Dalilpop\_45 (CR1), Emianna\_40 (CR2), Ennea\_46 (CR3), Flapper\_44 (CR1), Float294\_42 (CR3), Foxboro\_41 (CR2), Fury\_49 (CR5), GRU1\_30 (CR1), GTE5\_31 (CR1), GTE8\_29 (CR2), GrootJr\_42 (CR2), Jifall16\_39 (CR2), KidneyBean\_40 (CR2), Kurt\_40 (CR2), Lollipop1437\_45 (CR3), MerCougar\_41 (CR2), NatB6\_40 (CR2), NovumRegina\_40 (CR2), Outis\_41 (CR2), Patio\_43 (CR3), Phomeo\_39 (CR2), Pleakley\_49 (CR5), RedRaider\_47 (CR3), Scuba\_49 (CR5), Skysand\_42 (CR3), StarStruck\_41 (CR2), Tracker\_40 (CR2), Turuncu\_44 (CR1), Wheezy\_40 (CR2),

Start 77:

- Found in 10 of 1339 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 5 of 1154
- Called 50.0% of time when present
- Phage (with cluster) where this start called: BlueNGold\_99 (DS), Boopy\_100 (DS), Forza\_100 (DS), Mareelih\_98 (DS), Sixama\_98 (DS),

Start 78:

- Found in 60 of 1339 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 51 of 1154
- Called 98.3% of time when present

- Phage (with cluster) where this start called: Affeca\_32 (DE1), Ailee\_32 (DE1), Angelicage\_32 (DE1), Ashertheman\_34 (DE1), Baddon\_33 (DE1), Barsten\_34 (DE1), Baumdotcom\_33 (DE1), Bibwit\_33 (DE1), Bizzy\_34 (DE1), BobBob\_31 (DE1), Bonum\_43 (CR2), Brandonk123\_35 (DE1), Buggaboo\_41 (CR2), ChadMasterC\_34 (DE1), Charming\_34 (DE1), Commandaria\_42 (CR2), Derg\_29 (DE1), Fitzgerald\_32 (DE1), Flatwoods\_34 (DE1), Fosterous\_32 (DE1), FuegoCuervo\_36 (DE1), Gaea\_33 (DE1), Galadriel\_34 (DE1), Geodirt\_31 (DE1), Gustavo\_33 (DE1), JKSyngboy\_31 (DE1), Jabberwocky\_32 (DE1), Kabluna\_43 (CR2), Kamashten\_33 (DE1), Keitabear\_34 (DE1), Kewpiedoll\_33 (DE1), Kroos\_34 (DE1), Kwobi\_34 (DE1), Lennon\_34 (DE1), LilHam\_31 (DE1), Love\_37 (DE1), McKinley\_36 (DE1), MoontowerMania\_33 (DE1), Nordenberg\_28 (DE1), NosilaM\_43 (CR2), Paries\_36 (DE1), Ribeye\_34 (DE1), RiverRaider\_34 (DE1), Rofo\_34 (DE1), Sanjuju\_32 (DE1), Saronaya\_33 (DE1), SchottB\_32 (DE1), Sedona\_34 (DE1), Shivanishola\_35 (DE1), Sitar\_34 (DE1), StorminNorm\_33 (DE1), Stultus\_32 (DE1), SuperSulley\_41 (CR2), Tangent\_34 (DE1), Tangerine\_33 (DE1), Thing3\_33 (DE1), Tycho\_33 (DE1), Vivi2\_36 (DE1), YorkOnyx\_34 (DE1),

#### Start 80:

- Found in 20 of 1339 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 9 of 1154
- Called 45.0% of time when present
- Phage (with cluster) where this start called: Acquire49\_17 (L1), Appletree2\_17 (L1), Calm\_17 (L1), CicholasNage\_17 (L1), JoeDirt\_17 (L1), LeBron\_17 (L1), UPIE\_17 (L1), Wyatt2\_17 (L1), Zaria\_17 (L1),

#### Start 81:

- Found in 8 of 1339 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 8 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiPauneto\_43 (CR4), HubbaBubba\_38 (CR4), IDyn\_41 (CR4), Marietta\_42 (CR4), NadineRae\_40 (CR4), Sukkupi\_42 (CR4), WhoseManz\_42 (CR4), Yndexa\_42 (CR4),

#### Start 82:

- Found in 4 of 1339 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rabbitrun\_29 (DU2),

#### Start 83:

- Found in 34 of 1339 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 29 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arri\_33 (DC1), Bakery\_31 (DC1), Barb\_32 (DC1), CherryCola\_34 (DC1), ClamChowder\_32 (DC1), Clown\_34 (DC2), CoveyB\_33 (DC1), Danyall\_32 (DC1), Egi03\_32 (DC1), Evamon\_30 (DC1), Fireball\_31 (DC1), Fugax\_32 (DC1), Gezellig\_31 (DC1), Halo3\_31 (DC1), Jambalaya\_30 (DC1), KimmyK\_32 (DC1), Mutzi\_32 (DC1), Nubi\_30 (DC1), Phlop\_30 (DC1), PinkCoffee\_32 (DC1), Portcullis\_30 (DC1), PullumCavea\_30 (DC1), RogerDodger\_33 (DC1), Salvador\_30 (DC1), Savbucketdawg\_30 (DC1), Shinji\_30 (DC1), SmokingBunny\_30 (DC1), TillyBobJoe\_30 (DC1), Togo\_30 (DC1), Twister6\_32 (DC1), Valary\_33 (DC1), VanDeWege\_33 (DC1), Wizard\_30 (DC1), YungMoney\_32 (DC1),

Start 84:

- Found in 15 of 1339 ( 1.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Frokostdame\_18 (CV), Wisp\_17 (CV),

Start 86:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_27 (singleton),

Start 87:

- Found in 14 of 1339 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 10 of 1154
- Called 78.6% of time when present
- Phage (with cluster) where this start called: Bernal13\_18 (T), Colleen\_18 (EO), Ibrahim\_18 (T), Mendokysei\_17 (T), Nairb\_18 (T), Nette\_18 (T), Poushou\_18 (EO), RonRayGun\_18 (T), TouchMeNot\_18 (EO), Whitty\_18 (T), ZenTime222\_18 (T),

Start 89:

- Found in 6 of 1339 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Reindeer\_25 (M1),

Start 90:

- Found in 16 of 1339 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Arianna\_18 (EO), Ronaldo\_55 (DP),

Start 91:

- Found in 23 of 1339 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 19 of 1154
- Called 95.7% of time when present
- Phage (with cluster) where this start called: Auspice\_27 (M1), Aziz\_31 (M2), Bongo\_27 (M1), Bricole\_27 (M1), Diminimus\_28 (M1), Dulcita\_28 (M1), Estes\_32 (M2), FreakyGoo\_27 (M1), GardenSalsa\_31 (M2), GenevaB15\_31 (M2), Glaske16\_28 (M1), IPhane7\_27 (M1), Izel\_26 (M1), KleverKiS\_27 (M1), LilhomieP\_26 (M1), MrMagoo\_31 (M2), Nanosmite\_31 (M3), PegLeg\_27 (M1), Rey\_31 (M2), Skinny\_28 (M1), SlimJimmy\_26 (M1), TyDawg\_27 (M1),

Start 92:

- Found in 43 of 1339 ( 3.2% ) of genes in pham
- Manual Annotations of this start: 38 of 1154
- Called 97.7% of time when present
- Phage (with cluster) where this start called: Angelique\_19 (CY1), Avani\_18 (F2), BearBQ\_18 (DN), BeeGee\_19 (CY), Birdsong\_18 (DN), Blarby\_19 (F), Bradissa\_19 (CY1), BritBrat\_19 (CY2), Cashline\_19 (CY), Che9d\_18 (F2), Confidence\_19 (CY1), Demsculpinboyz\_18 (F2), EMsquaredA\_19 (CY1), Ecliptus\_23 (DN), EnalisNailo\_19 (CY1), Floral\_19 (CY1), Fryberger\_52 (DP), Guey18\_57 (DP), Jabbawokkie\_20 (F2),

Jablanski\_19 (CY), Keelan\_50 (DP), Kuwabara\_18 (DN4), Lilas\_19 (CY1), LonelyBoi\_19 (CY), Lucky10\_17 (DH), Marteena\_19 (CY1), MicyPS\_16 (EQ), Morkie\_17 (DH), MortyNRick\_18 (DN), ODay\_23 (DN), PSonyx\_16 (EQ), PhorbesPhlower\_17 (DH), Pollux\_19 (CY1), Posh\_19 (CY), Pytheas\_19 (CY), SilverChicken\_18 (F2), Soul22\_18 (F2), Volt\_54 (DP), Wrigley\_19 (CY), Yoshi\_18 (F2), Zapner\_19 (F2), Ziko\_55 (DP),

Start 93:

- Found in 116 of 1339 ( 8.7% ) of genes in pham
- Manual Annotations of this start: 72 of 1154
- Called 83.6% of time when present
- Phage (with cluster) where this start called: Aegeus\_17 (L5), Aleemily\_18 (DZ), Archie\_17 (L2), AvadaKedavra\_17 (L1), Baoshan\_16 (L2), Baudelaire\_17 (L5), Bazzle\_17 (L2), Bellis\_18 (L3), BigCheese\_17 (L2), BobsGarage\_17 (L2), BourbonZero\_17 (L3), BrainDrainer\_18 (L4), Breezona\_17 (L2), Bromden\_18 (L4), Cafasso\_18 (DZ), Chaser\_17 (L4), Claus\_17 (L2), Clautastrophe\_18 (L3), Crossroads\_17 (L2), DHan\_17 (L2), DanBing\_16 (L2), DirkDirk\_17 (L1), Douge\_17 (L4), Douzhi\_17 (L4), DrSeegs\_17 (L2), DuncansLeg\_18 (L3), DyoEdafos\_18 (L4), Ellson\_18 (L3), Enceladus\_17 (L1), Faith1\_17 (L2), FarmResident\_17 (L4), Finemlucis\_17 (L2), Finnry\_18 (L3), Gabriela\_17 (L2), Gardann\_17 (L2), GuuelaD\_17 (L2), Hafay\_17 (L2), Halena\_17 (L1), Itos\_17 (L2), Jobypre\_18 (L3), Jubie\_18 (L3), Kahlid\_17 (L2), Kingsolomon\_18 (L3), KirDoubleO7\_16 (L3), Kropertea\_17 (L4), Krypton555\_18 (L3), Kudrefre\_26 (DU1), Lewan\_17 (L2), LilDestine\_17 (L2), LiyuLake\_18 (L3), Loadrie\_17 (L2), Lolly9\_18 (L3), Lumos\_18 (L3), MAckerman\_17 (L1), Miley16\_17 (L2), MiniLon\_18 (L3), MiniMac\_18 (L3), MkaliMitinis3\_17 (L2), ModicumRichard\_18 (DZ), Moostard\_18 (L3), Morgana\_18 (DZ), MsGreen\_18 (L3), Netyap\_17 (L2), Neville\_27 (DU2), Nicholas\_18 (L3), Nicholasp3\_17 (L2), ObLaDi\_18 (DZ), Octobien14\_27 (DU1), OhShagHennessy\_17 (L1), PYPDinur\_17 (L4), Poochiewood\_17 (L1), Quby\_17 (L4), Red305\_18 (L3), Rose5\_17 (L1), Rumpelstiltskin\_17 (L2), Samty\_18 (L3), Sarshaun\_17 (L2), Sephiroth\_27 (DU1), Silverleaf\_17 (L1), Snenia\_18 (L3), SoJulia\_17 (L2), Soap141\_17 (L2), Syleon\_27 (DU1), Tourach\_17 (L2), Trax\_27 (DU2), TriFive\_18 (L3), Tyson\_17 (L1), Underpass\_17 (L2), VanLee\_19 (singleton), Vetrix\_17 (L2), Wamburggrxpress\_17 (L1), Whirlwind\_19 (L3), Wigglewobble\_17 (L2), Wilder\_17 (L2), Winky\_17 (L2), Zakai\_17 (L2), ZhongYanYuan\_16 (L2),

Start 94:

- Found in 55 of 1339 ( 4.1% ) of genes in pham
- Manual Annotations of this start: 30 of 1154
- Called 67.3% of time when present
- Phage (with cluster) where this start called: BBQValindra\_18 (DB), BackstagePass\_18 (DB), Beelzebub\_53 (S), Blackbeetle\_49 (S), Bowser\_18 (DB), Bunker\_18 (DB), Caprice\_46 (S), Clarkson\_50 (S), Corazon\_47 (S), Coriander\_18 (DB), DirtyBoi\_19 (DB), Dmitri\_18 (DB), Doggs\_17 (DB), Eyes\_18 (DB), FeliMaine\_51 (S), Gattaca\_48 (S), GoongGoong\_48 (S), HannahD\_18 (DB), Hedwig\_19 (DB), Huphlepuuff\_51 (S), JoieB\_50 (S), Kiko\_19 (DB), Lilbit\_50 (S), LittleLaf\_49 (S), MagicMan\_18 (DB), Marvin\_47 (S), Moonflower\_18 (DB), MosMoris\_47 (S), Opie\_18 (DB), Poise\_49 (S), Pringar\_49 (S), Raela\_49 (S), RayTheFireFly\_18 (DB), RedRaider77\_49 (S), TaronosaurusRx\_18 (DB), Tesla\_48 (S), VasuNzinga\_49 (S),

Start 95:

- Found in 4 of 1339 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 1154

- Called 50.0% of time when present
- Phage (with cluster) where this start called: PP\_36 (A7), Sunhee\_25 (A14),

#### Start 96:

- Found in 41 of 1339 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 14 of 1154
- Called 39.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan\_17 (DY), Gustav\_17 (CD), Heinz\_18 (DY), Hibiscus\_17 (DY), Jojo24\_17 (DY), LoneWolf\_28 (A9), Mahdia\_17 (CD), Malibo\_19 (DW), Morrissey\_18 (CD), Puppies\_17 (CD), Reyja\_18 (DY), Santhid\_17 (DY), Tarzan\_17 (DY), Trine\_17 (CD), Upyo\_17 (CD), Widow\_17 (CD),

#### Start 97:

- Found in 341 of 1339 ( 25.5% ) of genes in pham
- Manual Annotations of this start: 272 of 1154
- Called 95.3% of time when present
- Phage (with cluster) where this start called: 20ES\_27 (A2), 40AC\_30 (A17), AN3\_27 (A2), AN9\_30 (A2), ANI8\_30 (A2), AbbyPaige\_29 (A2), Acolyte\_27 (A2), Adzzy\_28 (A2), Agape74\_29 (A2), Agatha\_17 (CT), AikoCarson\_16 (CT), Aliter\_28 (A9), Alma\_28 (A9), Amok\_16 (CT), AndPeggy\_16 (CT), Aneem\_27 (A11), AnnaL29\_30 (A2), Anselm\_27 (A2), Anthony\_26 (A20), Apricot\_18 (DN3), ArcherNM\_29 (A2), Arissanae\_26 (A9), Artemis2UCLA\_30 (A6), Axym\_17 (CT), Azira\_19 (CT), BABullseye\_30 (A6), BabyBack\_29 (A2), Bachome\_27 (A11), Bactobuster\_28 (A2), Baehexic\_28 (A2), Bavidard\_17 (CT), Beemo\_28 (A9), BengiVuitton\_28 (A2), Benvolio\_27 (A2), BiancaTri92\_29 (A2), BigChungus\_16 (CT), BillDoor\_19 (CT), Biskit\_18 (CT), BlessJoy\_30 (A6), Blinn1\_30 (A6), Blondies\_17 (CT), Blue7\_30 (A6), BobSwaget\_30 (A2), BogosyJay\_28 (A9), Bowtie\_27 (A11), Bradman\_26 (A2), Bud\_27 (A11), Buggy\_29 (A2), Burnsey\_17 (CT), Button\_18 (CT), Buttrmilkdreams\_17 (CT), C3\_25 (A2), CRB1\_27 (A2), Candra\_30 (A6), CanesSauce\_17 (CT), Caraxes\_26 (A2), Carsonalex\_18 (CT), Catalina\_28 (A9), Centaur\_29 (A2), Changeling\_29 (A2), Chargerpower\_27 (A), Charm\_27 (A9), Chartreuse\_30 (A6), Che12\_29 (A2), CherryonLim\_18 (CT), ChickenTender\_19 (CT), ChipMunk\_29 (A2), ChocoMunchkin\_17 (CT), Cleo\_17 (CT), CloudWang3\_30 (A6), Colin\_31 (A2), Conquerage\_28 (A9), Cookiedough\_30 (A6), Cozz\_17 (CT), Crater\_17 (DN3), Crucio\_27 (A2), D29\_27 (A2), D32\_30 (A2), DBQu4n\_30 (A2), DaVinci\_30 (A6), Dalmatian\_27 (A2), Darrell\_29 (A9), DarthPhader\_28 (A12), Deloris\_28 (A2), Dignity\_29 (A2), Dorothea\_30 (A6), Drake55\_29 (A2), Dre3\_17 (CT), DreamTeam1\_27 (A9), DudeLittle\_27 (A2), Duplo\_30 (A2), EZMoney23\_31 (A2), EagleEye\_29 (A16), Ebony\_27 (A11), Echild\_27 (A2), EdogawaKiddo\_26 (A9), Eidsmoe\_28 (A9), Elephantoon\_28 (A9), Elinal\_18 (CT), Elliott\_17 (CT), Emalyn\_16 (CT), EmyBug\_28 (A9), Equemioh13\_29 (A2), EricB\_30 (A6), Et2Brutus\_26 (A11), EvilGenius\_29 (A2), ExplosioNervosa\_28 (A9), Fameo\_27 (A2), Fayely\_28 (A9), Feastonyeet\_16 (CT), Fibonacci\_27 (A11), FiringLine\_27 (A2), First\_0027 (A2), Flare16\_27 (A2), Flaverint\_27 (A11), Fribs8\_18 (CT), Gail\_26 (A14), Garak\_31 (A6), GaugeLDP\_29 (A2), Georgie2\_28 (A2), GiKK\_20 (CT), Gibbous\_17 (CT), Gilberta\_27 (A11), Gladiator\_30 (A6), GoldHunter\_18 (CT), Gratitude\_28 (A2), GreedyLawyer\_30 (A6), Gruunaga\_30 (A6), Hammer\_30 (A6), Hanray\_27 (A9), HarryHoudini\_29 (A2), Heffalump\_29 (A2), Helmet\_31 (A6), Herbertwm\_24 (A2), Hexamo\_30 (A6), Hexbug\_19 (CT), HippoPololi\_19 (CT), Holes\_27 (A9), Hoot\_30 (A6), Horseradish\_18 (CT), HortumSL17\_28 (A9), Hutc2\_27 (A11), Indra\_30 (A6), Insomnia\_27 (A11), IronMan\_29 (A2), Isiphiwo\_30 (A6), Iwokeuplikedis\_28 (A2), Jaan\_30 (A2), Jabith\_27 (A11), Jamzy\_20 (CT), Jeeves\_26 (A14), Jeffabunny\_30 (A6), Jerm\_29 (A2), JewelBug\_30 (A6), Jiawan\_27 (A9), Jordennis\_30 (A6), Joselito\_27 (A11),

JoshKayV\_29 (A2), Journey13\_25 (A2), Jsquared\_26 (A2), Kalpine\_30 (A2), KayGee\_17 (CT), Kazan\_30 (A6), Kerberos\_30 (A2), Keziacharles14\_26 (A9), KingCyrus\_29 (A2), Kinmap\_27 (A21), Kipper29\_30 (A6), Koduck\_27 (A2), Koko\_30 (A6), L5\_27 (A2), LadyBird\_27 (A2), Landor\_28 (A2), Larenn\_28 (A2), Lauer\_16 (CT), Leogania\_29 (A2), Leviathan\_29 (A2), LiITurb\_29 (A2), Lilbunny\_30 (A6), Lilleskat\_26 (A9), LionsBait\_28 (A2), Lokk\_30 (A2), Loser\_30 (A2), Luchador\_28 (A14), Lucivia\_27 (A11), Lucyedi\_28 (A16), MAnor\_17 (CT), MScarn\_19 (CT), MaCh\_27 (A11), MaVan\_19 (CT), Mabel\_27 (A11), MajorMajor\_26 (A2), Malec\_28 (A2), Maminiaina\_28 (A9), Margaret\_20 (CT), Mayweather\_18 (CT), McFly\_30 (A6), MiculUcigas\_27 (A2), Miko\_30 (A2), MissWhite\_27 (A2), Mulciber\_27 (A11), Munch\_27 (A11), MunkgeeRoachy\_17 (CT), Myxus\_28 (A9), NaSiaTalie\_27 (A2), Naji\_30 (A2), Neeharika16\_30 (A6), Newrala\_30 (A6), Nibbles\_19 (CT), NicoleTera\_31 (A2), Nina\_18 (CT), Nodigi\_19 (CT), NothingSpecial\_29 (A2), Odin\_26 (A2), Onglai\_27 (A9), Orange\_27 (A11), Orla\_19 (CT), PackMan\_28 (A9), PainterBoy\_28 (A16), Petersenfast\_26 (A11), Ph8s\_28 (A2), Phaded\_30 (A2), Phaeder\_28 (A9), Pharaoh\_27 (A12), Phlei\_22 (A13), Phonnegut\_28 (A9), Pioneer\_28 (A9), Piro94\_28 (A2), Pmask\_30 (A6), Polyphemus\_29 (A6), Pomar16\_30 (A2), Pons\_17 (CT), PotPie\_17 (CT), Power\_27 (A2), Priamo\_30 (A6), Priya\_28 (A9), PsychoKiller\_17 (CT), Pukovnik\_29 (A2), Qobbit\_28 (A9), Quasar\_17 (CT), QueenB2\_27 (A2), QueenBeesly\_27 (A2), Quokka\_25 (A2), Rachaly\_30 (A2), Rahalelujah\_26 (A9), RanchParmCat\_20 (CT), RedBaron\_18 (CT), RedRock\_30 (A2), Refuge\_30 (A12), Retro23\_27 (A2), Rifter\_30 (A6), Roksolana\_30 (A6), RyeScarlet\_29 (A9), Sachima\_26 (A9), Salz\_27 (A11), Scherzo\_28 (A9), SemperFi\_29 (A2), Serenity\_26 (A2), Sham4\_27 (A11), SheaKeira\_27 (A9), SheckWes\_16 (CT), SketchMex\_16 (CT), Sknot\_28 (A2), Smeagan\_29 (A2), SmellyB\_30 (A6), SnapTap\_27 (A2), Snape\_27 (A11), Socotra\_18 (CT), Sopespian\_17 (CT), SororFago\_26 (A14), Spouty\_28 (A9), StarStuff\_30 (A2), Starburst\_18 (CT), SteamedHams\_19 (CT), Steamy\_28 (A12), SummitAcademy\_16 (CT), SuperAwesome\_30 (A6), SuperCallie99\_30 (A6), Superchunk\_26 (A2), Survivors\_19 (CT), SweatNTears\_19 (CT), SweetiePie\_27 (A2), SwirlSquare\_29 (A2), TarsusIV\_27 (A2), Temprado\_31 (A6), Terrific\_31 (A2), Timothy\_27 (A11), TinyTimmy\_27 (A11), TipsytheTRex\_26 (A2), Toaka\_26 (A9), Tolls\_19 (CT), Tomathan\_30 (A2), ToneTone\_28 (A6), Travvers\_30 (A2), Tristan\_28 (A2), Trixie\_30 (A2), Troje\_17 (CT), Trooper\_27 (A2), Tubs\_28 (A9), Tucker\_30 (A6), Turbido\_29 (A2), Typhonomachy\_18 (CT), Ugenie5\_25 (A9), Updawg\_29 (A2), VA6\_27 (A2), VC3\_30 (A2), Vanisoa\_26 (A9), Vine\_18 (CT), VohminGhazi\_30 (A6), WeiHuaDA\_33 (A2), Whabigail7\_29 (A2), WideWale\_29 (A2), Wiks\_30 (A6), WunderPhul\_30 (A6), XianYue\_27 (A2), Yakult\_18 (CT), Yarn\_16 (CT), Yecey3\_27 (A9), Yokurt\_30 (A6), Yucky\_19 (CT), Yummy\_18 (CT), Zaka\_30 (A6), Zareef\_21 (CT), Zimmer\_29 (A12), Zulu\_30 (A6),

Start 99:

- Found in 30 of 1339 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 15 of 1154
- Called 63.3% of time when present
- Phage (with cluster) where this start called: Asapag\_19 (DN1), BENtherdunthat\_19 (DN1), BotCity\_20 (DN), Budski\_19 (DN), Frickyeah\_19 (DN1), Getalong\_20 (DN1), Horus\_19 (DN1), Kamaru\_19 (DN1), Kenna\_18 (DN1), Leroy\_19 (DN1), LitninMcQueen\_19 (DN1), Nedarya\_28 (A15), Periwinkle\_21 (DN1), Phistory\_20 (DN1), REQ3\_49 (singleton), ShawBrad\_19 (DN1), Spooky\_19 (DN2), Squiddly\_21 (DN2), Whitney\_20 (DN1),

Start 100:



- Found in 22 of 1339 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 20 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anaysia\_29 (A15), Anon\_27 (A15), Battleship\_30 (A15), Boohoo\_29 (A15), DekHockey33\_29 (A15), Epsocamisio\_29 (A15), JSwag\_29 (A15), KatherineG\_29 (A15), LastResort\_29 (A15), Looper\_30 (A15), MinecraftSteve\_30 (A15), Nebulosus\_29 (A15), Oofda\_30 (A15), ReMo\_29 (A15), Remus\_29 (A15), Rosalind\_29 (A15), ShayRa\_30 (A15), Soups\_29 (A15), Strosahl\_29 (A15), Switzerland\_29 (A15), Waits\_29 (A15), Warrior24\_30 (A15),

#### Start 101:

- Found in 8 of 1339 ( 0.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: GAL1\_19 (singleton),

#### Start 102:

- Found in 37 of 1339 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 6 of 1154
- Called 16.2% of time when present
- Phage (with cluster) where this start called: CheeseTouch\_19 (DN1), GEazy\_18 (DB), Holliday\_19 (DN1), Lutum\_19 (DN1), Malisha\_20 (DN), Phabuloso\_19 (DN1),

#### Start 103:

- Found in 93 of 1339 ( 6.9% ) of genes in pham
- Manual Annotations of this start: 85 of 1154
- Called 95.7% of time when present
- Phage (with cluster) where this start called: AgentM\_23 (A5), Airmid\_23 (A5), Alatin\_22 (CA), Alpacados\_21 (CA), AngryOrchard\_21 (CA), AppleCloud\_20 (CA), Aragog\_23 (A5), Archetta\_23 (A5), Astro\_23 (A8), Belenaria\_22 (CA), Benedict\_23 (A5), Bluefalcon\_22 (A5), BobbyDazzler\_22 (CA), Bonamassa\_23 (A5), Bonanza\_22 (CA), Bradshaw\_22 (CA), Bryce\_22 (CA), Chadwick\_24 (A5), Conspiracy\_23 (A5), Coog\_23 (A5), CosmicSans\_22 (CA), Cuco\_23 (A5), Danforth\_22 (A8), Dinger\_22 (CA), Discoknowium\_23 (A5), Dixon\_23 (A8), Dublin\_22 (A5), EITiger69\_23 (A5), Erik\_22 (CA), Espica\_22 (CA), Expelliarmus\_22 (A8), ForGett\_23 (A5), George\_22 (A5), Ghoulboy\_23 (A5), Gollum\_22 (CA), Groundhog\_22 (A8), Harlequin\_22 (CA), Hiro\_22 (CA), HuhtaEnerson15\_23 (A5), Jabiru\_23 (A5), Jester\_22 (CA), Jovo\_23 (A5), Krishelle\_22 (CA), Lev2\_23 (A5), Lillie\_22 (CA), LittleCherry\_23 (A5), MarysWell\_22 (A5), Micasa\_23 (A5), Midas2\_23 (A5), Milcery\_23 (A5), Naca\_23 (A5), Naiad\_22 (CA), Nancinator\_22 (CA), Natosaleda\_22 (CA), NearlyHeadless\_23 (A8), Partridge\_22 (CA), PetterN\_24 (A5), PhailMary\_21 (CA), Phillis\_23 (A8), Phlorence\_23 (A5), Phrankenstien\_22 (CA), PickleBack\_23 (A5), Prinashe11\_24 (A5), RER2\_15 (CA), RGL3\_15 (CA), Rasputin\_22 (CA), RexFury\_22 (CA), Rhodalysa\_22 (CA), Roary\_23 (A8), Saintus\_23 (A8), Scorpia\_24 (A5), Shuman\_22 (CA), Smeadley\_23 (A8), StCroix\_22 (CA), Stephig9\_23 (A8), Swann\_22 (CA), Swirley\_23 (A5), SydNat\_23 (A5), TWAMP\_22 (CA), Takoda\_22 (CA), Tarynearal\_22 (A5), Theia\_21 (A5), Tiger\_23 (A5), Twigg\_23 (A5), UhSalsa\_22 (CA), UnionJack\_23 (A5), Yogi\_22 (CA), Yoncess\_22 (CA), Zolita\_22 (A5),

#### Start 105:

- Found in 109 of 1339 ( 8.1% ) of genes in pham
- Manual Annotations of this start: 2 of 1154
- Called 1.8% of time when present

- Phage (with cluster) where this start called: GuyFagieri\_44 (CR), MacGully\_49 (CR),

#### Start 118:

- Found in 3 of 1339 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 33.3% of time when present
- Phage (with cluster) where this start called: EmiRose\_16 (singleton),

#### Start 120:

- Found in 12 of 1339 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 6 of 1154
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Catfish\_21 (CU5), Dardanus\_23 (CU3), DinoDaryn\_23 (CU1), Goib\_22 (CU1), Huffy\_23 (CU1), TZGordon\_23 (CU1),

#### Start 122:

- Found in 15 of 1339 ( 1.1% ) of genes in pham
- Manual Annotations of this start: 5 of 1154
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Banquo\_25 (CU1), Gspu1\_19 (CU2), Schmidt\_19 (CU4), Splinter\_21 (CU1), TinaLin\_24 (CU1), Vendetta\_21 (CU1),

#### Start 125:

- Found in 117 of 1339 ( 8.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.9% of time when present
- Phage (with cluster) where this start called: GTE2\_15 (CT),

#### Start 134:

- Found in 10 of 1339 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Schnabeltier\_18 (DB), ZAYM\_18 (DB),

#### Start 136:

- Found in 101 of 1339 ( 7.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 1.0% of time when present
- Phage (with cluster) where this start called: Sheng711\_17 (L4),

#### Start 179:

- Found in 1 of 1339 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 1154
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead\_17 (singleton),

### Summary by clusters:

There are 101 clusters represented in this pham: G5, G4, G3, G2, G1, CQ2, CQ1, T, X, DC2, DC1, M1, M3, M2, EO, EN, S, EQ, CR2, CR3, CR1, CR4, CR5, DE1, DE2, DE3, DE4, DE5, singleton, K3, K2, K1, K7, K6, K5, K4, K8, CU5, CU4, CU3, CU2, CU1, DN4, DN1, DN3, DN2, DU1, DU2, F, CA, CD, CY, CR, Z, CV, CT, A20, A21, F2, DN, DL, DK, DH, DI, DD, DE, DB, DA, DZ, DY, DW, DT, DS, DP, A15, A14, A17, A16,

A11, A13, A12, A2, A5, A7, A6, A9, A8, A, CY2, CY1, AB, AG, AF, AH, Q, L4, L5, L2, L3, L1, Y,

Info for manual annotations of cluster A:

- Start number 97 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A11:

- Start number 97 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 97 was manually annotated 5 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 97 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 99 was manually annotated 1 time for cluster A15.
- Start number 100 was manually annotated 20 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 97 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 97 was manually annotated 102 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 97 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A5:

- Start number 103 was manually annotated 38 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 97 was manually annotated 42 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 95 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:

- Start number 103 was manually annotated 11 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 96 was manually annotated 1 time for cluster A9.
- Start number 97 was manually annotated 34 times for cluster A9.

Info for manual annotations of cluster AB:

- Start number 35 was manually annotated 4 times for cluster AB.

Info for manual annotations of cluster AF:

- Start number 72 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AG:

- Start number 44 was manually annotated 1 time for cluster AG.
- Start number 52 was manually annotated 1 time for cluster AG.

Info for manual annotations of cluster AH:

- Start number 51 was manually annotated 1 time for cluster AH.

Info for manual annotations of cluster CA:

- Start number 103 was manually annotated 36 times for cluster CA.

Info for manual annotations of cluster CD:

- Start number 96 was manually annotated 7 times for cluster CD.

Info for manual annotations of cluster CQ1:

- Start number 68 was manually annotated 4 times for cluster CQ1.
- Start number 72 was manually annotated 8 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 70 was manually annotated 1 time for cluster CQ2.
- Start number 72 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CR:

- Start number 73 was manually annotated 5 times for cluster CR.
- Start number 105 was manually annotated 2 times for cluster CR.

Info for manual annotations of cluster CR1:

- Start number 76 was manually annotated 3 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 76 was manually annotated 14 times for cluster CR2.
- Start number 78 was manually annotated 6 times for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 76 was manually annotated 5 times for cluster CR3.

Info for manual annotations of cluster CR4:

- Start number 81 was manually annotated 8 times for cluster CR4.

Info for manual annotations of cluster CR5:

- Start number 76 was manually annotated 2 times for cluster CR5.

Info for manual annotations of cluster CT:

- Start number 97 was manually annotated 54 times for cluster CT.

Info for manual annotations of cluster CU1:

- Start number 120 was manually annotated 4 times for cluster CU1.
- Start number 122 was manually annotated 4 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 120 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 122 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 120 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster CV:

- Start number 65 was manually annotated 6 times for cluster CV.
- Start number 68 was manually annotated 14 times for cluster CV.
- Start number 70 was manually annotated 21 times for cluster CV.
- Start number 84 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CY:

- Start number 92 was manually annotated 7 times for cluster CY.

Info for manual annotations of cluster CY1:

- Start number 92 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 92 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster DA:

- Start number 69 was manually annotated 1 time for cluster DA.
- Start number 70 was manually annotated 1 time for cluster DA.
- Start number 72 was manually annotated 1 time for cluster DA.

Info for manual annotations of cluster DB:

- Start number 94 was manually annotated 13 times for cluster DB.
- Start number 102 was manually annotated 1 time for cluster DB.
- Start number 134 was manually annotated 1 time for cluster DB.

Info for manual annotations of cluster DC1:

- Start number 83 was manually annotated 28 times for cluster DC1.

Info for manual annotations of cluster DC2:

- Start number 83 was manually annotated 1 time for cluster DC2.

Info for manual annotations of cluster DD:

- Start number 63 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DE1:

- Start number 78 was manually annotated 45 times for cluster DE1.

Info for manual annotations of cluster DE2:

- Start number 64 was manually annotated 8 times for cluster DE2.

Info for manual annotations of cluster DE3:

- Start number 64 was manually annotated 7 times for cluster DE3.

Info for manual annotations of cluster DE4:

- Start number 64 was manually annotated 9 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 60 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DH:

- Start number 92 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DI:

- Start number 60 was manually annotated 15 times for cluster DI.

Info for manual annotations of cluster DK:

- Start number 62 was manually annotated 2 times for cluster DK.

Info for manual annotations of cluster DL:

- Start number 68 was manually annotated 5 times for cluster DL.

Info for manual annotations of cluster DN:

- Start number 92 was manually annotated 4 times for cluster DN.
- Start number 99 was manually annotated 1 time for cluster DN.
- Start number 102 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 99 was manually annotated 11 times for cluster DN1.
- Start number 102 was manually annotated 4 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 99 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 97 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 92 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DP:

- Start number 90 was manually annotated 1 time for cluster DP.
- Start number 92 was manually annotated 5 times for cluster DP.

Info for manual annotations of cluster DS:

- Start number 77 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster DT:

- Start number 68 was manually annotated 1 time for cluster DT.
- Start number 70 was manually annotated 4 times for cluster DT.

Info for manual annotations of cluster DU1:

- Start number 93 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 82 was manually annotated 1 time for cluster DU2.
- Start number 93 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster DW:

- Start number 60 was manually annotated 2 times for cluster DW.
- Start number 96 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

- Start number 96 was manually annotated 5 times for cluster DY.

Info for manual annotations of cluster DZ:

- Start number 93 was manually annotated 4 times for cluster DZ.

Info for manual annotations of cluster EN:

- Start number 66 was manually annotated 8 times for cluster EN.

Info for manual annotations of cluster EO:

- Start number 87 was manually annotated 3 times for cluster EO.

- Start number 90 was manually annotated 1 time for cluster EO.

Info for manual annotations of cluster EQ:

- Start number 92 was manually annotated 1 time for cluster EQ.

Info for manual annotations of cluster F2:

- Start number 92 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster G1:

- Start number 30 was manually annotated 60 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 25 was manually annotated 1 time for cluster G2.

- Start number 31 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 30 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 30 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 30 was manually annotated 1 time for cluster G5.

Info for manual annotations of cluster K1:

- Start number 30 was manually annotated 103 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 34 was manually annotated 10 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 30 was manually annotated 8 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 30 was manually annotated 19 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 36 was manually annotated 22 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 30 was manually annotated 22 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 29 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 28 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster L1:

- Start number 80 was manually annotated 9 times for cluster L1.
- Start number 93 was manually annotated 10 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 93 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 93 was manually annotated 17 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 93 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 93 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 89 was manually annotated 1 time for cluster M1.
- Start number 91 was manually annotated 12 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 91 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 91 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster Q:

- Start number 55 was manually annotated 22 times for cluster Q.

Info for manual annotations of cluster S:

- Start number 94 was manually annotated 17 times for cluster S.

Info for manual annotations of cluster T:

- Start number 87 was manually annotated 7 times for cluster T.

Info for manual annotations of cluster X:

- Start number 41 was manually annotated 2 times for cluster X.

Info for manual annotations of cluster Y:

- Start number 52 was manually annotated 4 times for cluster Y.

Info for manual annotations of cluster Z:

- Start number 51 was manually annotated 1 time for cluster Z.



### **Gene Information:**

Gene: 20ES\_27 Start: 19219, Stop: 20229, Start Num: 97

Candidate Starts for 20ES\_27:

(Start: 97 @19219 has 272 MA's), (127, 19273), (152, 19312), (261, 19528), (296, 19594), (320, 19633), (322, 19636), (430, 19864), (446, 19897), (486, 19999), (497, 20020), (514, 20074), (518, 20086), (565, 20176),

Gene: 32HC\_25 Start: 17876, Stop: 18982, Start Num: 51

Candidate Starts for 32HC\_25:

(11, 17579), (49, 17867), (Start: 51 @17876 has 2 MA's), (Start: 71 @17915 has 1 MA's), (Start: 102 @17960 has 6 MA's), (211, 18167), (267, 18287), (337, 18401), (364, 18461), (473, 18668), (600, 18968),

Gene: 40AC\_30 Start: 21412, Stop: 22422, Start Num: 97

Candidate Starts for 40AC\_30:

(Start: 97 @21412 has 272 MA's), (142, 21487), (152, 21505), (167, 21541), (183, 21580), (277, 21757), (296, 21787), (320, 21826), (322, 21829), (397, 21985), (486, 22192), (514, 22267), (518, 22279), (565, 22369),

Gene: 8UZL\_20 Start: 14891, Stop: 16003, Start Num: 35

Candidate Starts for 8UZL\_20:

(Start: 35 @14891 has 4 MA's), (40, 14939), (Start: 99 @15047 has 15 MA's), (Start: 105 @15056 has 2 MA's), (145, 15125), (151, 15137), (160, 15152), (238, 15299), (293, 15407), (337, 15482), (342, 15491), (359, 15527), (405, 15596), (427, 15638), (471, 15683), (474, 15692), (500, 15749), (542, 15854), (597, 15965),

Gene: AN3\_27 Start: 19197, Stop: 20207, Start Num: 97

Candidate Starts for AN3\_27:

(Start: 97 @19197 has 272 MA's), (127, 19251), (152, 19290), (183, 19365), (261, 19506), (296, 19572), (320, 19611), (322, 19614), (430, 19842), (481, 19962), (486, 19977), (514, 20052), (518, 20064), (528, 20088), (565, 20154),

Gene: AN9\_30 Start: 19185, Stop: 20195, Start Num: 97

Candidate Starts for AN9\_30:

(Start: 97 @19185 has 272 MA's), (127, 19239), (142, 19260), (152, 19278), (240, 19449), (296, 19560), (320, 19599), (322, 19602), (344, 19647), (382, 19737), (481, 19950), (486, 19965), (514, 20040), (518, 20052), (528, 20076), (565, 20142),

Gene: ANI8\_30 Start: 19185, Stop: 20195, Start Num: 97

Candidate Starts for ANI8\_30:

(Start: 97 @19185 has 272 MA's), (127, 19239), (142, 19260), (152, 19278), (240, 19449), (296, 19560), (320, 19599), (322, 19602), (344, 19647), (382, 19737), (481, 19950), (486, 19965), (514, 20040), (518, 20052), (528, 20076), (565, 20142),

Gene: APunk\_35 Start: 29234, Stop: 30211, Start Num: 64

Candidate Starts for APunk\_35:

(Start: 64 @29234 has 25 MA's), (142, 29357), (161, 29393), (212, 29495), (240, 29549), (277, 29621), (312, 29684), (318, 29693), (352, 29750), (363, 29783), (391, 29816), (396, 29819), (474, 29936), (490, 29972), (504, 30005), (507, 30014), (517, 30035), (529, 30062), (540, 30092), (544, 30098), (564, 30131), (566, 30134), (591, 30188), (598, 30200),

Gene: Abblin\_34 Start: 29777, Stop: 30754, Start Num: 64

Candidate Starts for Abblin\_34:

(Start: 64 @29777 has 25 MA's), (115, 29852), (119, 29864), (142, 29900), (161, 29936), (212, 30038), (240, 30092), (277, 30164), (312, 30227), (318, 30236), (352, 30293), (363, 30326), (391, 30359), (396, 30362), (426, 30419), (490, 30515), (504, 30548), (507, 30557), (517, 30578), (529, 30605), (536, 30626), (540, 30635), (544, 30641), (564, 30674), (566, 30677), (591, 30731), (598, 30743),

Gene: AbbyPaige\_29 Start: 19684, Stop: 20700, Start Num: 97

Candidate Starts for AbbyPaige\_29:

(Start: 97 @19684 has 272 MA's), (142, 19759), (152, 19777), (167, 19813), (183, 19852), (296, 20059), (320, 20098), (322, 20101), (361, 20188), (446, 20368), (486, 20470), (514, 20545), (518, 20557),

Gene: Abscondus\_46 Start: 28440, Stop: 29321, Start Num: 72

Candidate Starts for Abscondus\_46:

(Start: 68 @28434 has 24 MA's), (Start: 72 @28440 has 12 MA's), (106, 28488), (119, 28515), (160, 28587), (206, 28683), (282, 28791), (337, 28884), (352, 28908), (357, 28923), (427, 29019), (471, 29067), (552, 29247), (573, 29283),

Gene: Acolyte\_27 Start: 19734, Stop: 20744, Start Num: 97

Candidate Starts for Acolyte\_27:

(Start: 97 @19734 has 272 MA's), (152, 19827), (167, 19863), (183, 19902), (296, 20109), (320, 20148), (322, 20151), (344, 20196), (382, 20286), (430, 20379), (486, 20514), (514, 20589), (518, 20601), (528, 20625), (565, 20691),

Gene: Acquire49\_17 Start: 15847, Stop: 16746, Start Num: 80

Candidate Starts for Acquire49\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: ActinUp\_22 Start: 16020, Stop: 17156, Start Num: 30

Candidate Starts for ActinUp\_22:

(Start: 30 @16020 has 217 MA's), (61, 16137), (119, 16227), (132, 16248), (144, 16269), (159, 16296), (292, 16551), (340, 16632), (371, 16707), (389, 16722), (471, 16833), (487, 16875), (524, 16968), (533, 16992), (584, 17085), (599, 17124), (601, 17142),

Gene: Adephagia\_22 Start: 16017, Stop: 17153, Start Num: 30

Candidate Starts for Adephagia\_22:

(Start: 30 @16017 has 217 MA's), (61, 16134), (119, 16224), (132, 16245), (144, 16266), (159, 16293), (292, 16548), (340, 16629), (371, 16704), (389, 16719), (471, 16830), (487, 16872), (524, 16965), (533, 16989), (584, 17082), (599, 17121), (601, 17139),

Gene: Adonis\_22 Start: 16023, Stop: 17159, Start Num: 30

Candidate Starts for Adonis\_22:

(Start: 30 @16023 has 217 MA's), (61, 16140), (119, 16230), (132, 16251), (144, 16272), (159, 16299), (292, 16554), (340, 16635), (371, 16710), (389, 16725), (471, 16836), (487, 16878), (524, 16971), (533, 16995), (584, 17088), (599, 17127), (601, 17145),

Gene: Adzzy\_28 Start: 17912, Stop: 18922, Start Num: 97

Candidate Starts for Adzzy\_28:

(Start: 97 @17912 has 272 MA's), (142, 17987), (152, 18005), (167, 18041), (296, 18287), (320, 18326), (322, 18329), (382, 18464), (430, 18557), (446, 18590), (497, 18713), (506, 18743), (518,

18779), (528, 18803),

Gene: Aegeus\_17 Start: 15428, Stop: 16309, Start Num: 93

Candidate Starts for Aegeus\_17:

(Start: 68 @15389 has 24 MA's), (Start: 77 @15404 has 5 MA's), (Start: 93 @15428 has 72 MA's), (111, 15452), (136, 15497), (142, 15512), (154, 15530), (189, 15608), (277, 15761), (282, 15770), (322, 15833), (385, 15944), (390, 15950), (394, 15956), (421, 15992), (455, 16019), (467, 16043), (474, 16061), (476, 16070), (477, 16073), (493, 16112), (501, 16139), (518, 16187), (529, 16208), (585, 16298),

Gene: Affeca\_32 Start: 29693, Stop: 30649, Start Num: 78

Candidate Starts for Affeca\_32:

(Start: 78 @29693 has 51 MA's), (175, 29879), (180, 29891), (196, 29918), (299, 30089), (322, 30125), (343, 30158), (352, 30173), (356, 30185), (376, 30215), (384, 30221), (415, 30281), (471, 30371), (504, 30461), (512, 30485), (516, 30497), (542, 30563), (554, 30578), (569, 30602), (576, 30614),

Gene: Agape74\_29 Start: 19660, Stop: 20676, Start Num: 97

Candidate Starts for Agape74\_29:

(Start: 97 @19660 has 272 MA's), (142, 19735), (152, 19753), (167, 19789), (183, 19828), (296, 20035), (320, 20074), (322, 20077), (361, 20164), (446, 20344), (486, 20446), (514, 20521), (518, 20533),

Gene: Agatha\_17 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for Agatha\_17:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441, 15394), (462, 15439), (475, 15466), (481, 15484), (502, 15535), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Agent47\_20 Start: 16419, Stop: 17549, Start Num: 36

Candidate Starts for Agent47\_20:

(Start: 36 @16419 has 22 MA's), (Start: 105 @16593 has 2 MA's), (142, 16659), (144, 16662), (159, 16689), (206, 16788), (262, 16890), (292, 16944), (312, 16974), (330, 17010), (333, 17013), (337, 17022), (369, 17097), (371, 17100), (405, 17136), (427, 17178), (451, 17196), (454, 17202), (471, 17226), (472, 17229), (487, 17268), (584, 17478), (599, 17517), (601, 17535),

Gene: AgentM\_23 Start: 18724, Stop: 19737, Start Num: 103

Candidate Starts for AgentM\_23:

(Start: 103 @18724 has 85 MA's), (152, 18820), (165, 18853), (167, 18856), (183, 18895), (210, 18943), (296, 19096), (308, 19114), (322, 19138), (342, 19180), (481, 19492), (518, 19594), (529, 19621), (565, 19684),

Gene: Ageofdapage\_22 Start: 15951, Stop: 17087, Start Num: 30

Candidate Starts for Ageofdapage\_22:

(Start: 30 @15951 has 217 MA's), (61, 16068), (132, 16179), (144, 16200), (159, 16227), (207, 16329), (292, 16482), (340, 16563), (371, 16638), (389, 16653), (471, 16764), (487, 16806), (524, 16899), (533, 16923), (584, 17016), (599, 17055), (601, 17073),

Gene: AikoCarson\_16 Start: 14069, Stop: 15040, Start Num: 97

Candidate Starts for AikoCarson\_16:

(Start: 97 @14069 has 272 MA's), (125, 14114), (136, 14135), (152, 14171), (185, 14252), (240, 14330), (244, 14339), (246, 14342), (273, 14396), (279, 14408), (306, 14456), (334, 14498), (358,

14546), (384, 14597), (402, 14627), (415, 14657), (424, 14672), (426, 14675), (475, 14771), (481, 14789), (503, 14843), (504, 14846), (513, 14873), (516, 14882), (522, 14897), (547, 14954), (578, 15002), (587, 15026), (589, 15032),

Gene: Ailee\_32 Start: 30183, Stop: 31139, Start Num: 78

Candidate Starts for Ailee\_32:

(Start: 78 @30183 has 51 MA's), (175, 30369), (180, 30381), (196, 30408), (211, 30429), (248, 30489), (297, 30576), (299, 30579), (322, 30615), (343, 30648), (352, 30663), (356, 30675), (376, 30705), (384, 30711), (415, 30771), (471, 30861), (504, 30951), (512, 30975), (516, 30987), (542, 31053), (576, 31104),

Gene: Airmid\_23 Start: 17965, Stop: 18978, Start Num: 103

Candidate Starts for Airmid\_23:

(Start: 103 @17965 has 85 MA's), (152, 18061), (165, 18094), (167, 18097), (183, 18136), (261, 18271), (274, 18301), (293, 18331), (296, 18337), (308, 18355), (322, 18379), (342, 18421), (421, 18592), (518, 18835), (529, 18862), (565, 18925),

Gene: Alatin\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Alatin\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: Aleemily\_18 Start: 15646, Stop: 16554, Start Num: 93

Candidate Starts for Aleemily\_18:

(8, 15193), (Start: 93 @15646 has 72 MA's), (110, 15673), (125, 15706), (174, 15808), (185, 15835), (201, 15859), (261, 15961), (277, 15994), (292, 16024), (318, 16060), (322, 16066), (325, 16075), (361, 16153), (385, 16183), (390, 16189), (399, 16204), (472, 16309), (498, 16375), (533, 16474), (563, 16507), (581, 16543),

Gene: Ali17\_30 Start: 27429, Stop: 28415, Start Num: 64

Candidate Starts for Ali17\_30:

(Start: 64 @27429 has 25 MA's), (142, 27552), (161, 27588), (186, 27648), (240, 27744), (296, 27855), (311, 27876), (363, 27978), (396, 28014), (515, 28230), (517, 28236), (523, 28251), (529, 28266), (544, 28302), (564, 28335), (566, 28338), (598, 28404),

Gene: AlishaPH\_22 Start: 16010, Stop: 17146, Start Num: 30

Candidate Starts for AlishaPH\_22:

(Start: 30 @16010 has 217 MA's), (61, 16127), (119, 16217), (132, 16238), (144, 16259), (159, 16286), (292, 16541), (340, 16622), (371, 16697), (389, 16712), (471, 16823), (487, 16865), (524, 16958), (533, 16982), (584, 17075), (599, 17114), (601, 17132),

Gene: Aliter\_28 Start: 20455, Stop: 21468, Start Num: 97

Candidate Starts for Aliter\_28:

(Start: 97 @20455 has 272 MA's), (110, 20473), (142, 20530), (152, 20548), (167, 20584), (261, 20764), (277, 20800), (296, 20830), (322, 20872), (397, 21031), (464, 21175), (486, 21238), (514, 21313), (518, 21325), (528, 21349),

Gene: AlleyCat\_20 Start: 16301, Stop: 17431, Start Num: 36

Candidate Starts for AlleyCat\_20:

(Start: 36 @16301 has 22 MA's), (Start: 105 @16475 has 2 MA's), (142, 16541), (159, 16571), (206, 16670), (262, 16772), (292, 16826), (312, 16856), (330, 16892), (333, 16895), (337, 16904), (369, 16979), (371, 16982), (405, 17018), (427, 17060), (451, 17078), (454, 17084), (471, 17108), (472,

17111), (487, 17150), (528, 17252), (584, 17360), (599, 17399), (601, 17417),

Gene: Alma\_28 Start: 20534, Stop: 21547, Start Num: 97

Candidate Starts for Alma\_28:

(Start: 97 @20534 has 272 MA's), (110, 20552), (142, 20609), (152, 20627), (167, 20663), (261, 20843), (277, 20879), (296, 20909), (322, 20951), (397, 21110), (464, 21254), (486, 21317), (514, 21392), (518, 21404), (528, 21428),

Gene: Alpacados\_21 Start: 15416, Stop: 16288, Start Num: 103

Candidate Starts for Alpacados\_21:

(Start: 103 @15416 has 85 MA's), (121, 15455), (163, 15536), (165, 15542), (198, 15611), (246, 15689), (258, 15716), (322, 15827), (392, 15923), (486, 16052), (496, 16070), (518, 16139), (587, 16277),

Gene: Amelie\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Amelie\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: Amgine\_20 Start: 16119, Stop: 17255, Start Num: 30

Candidate Starts for Amgine\_20:

(Start: 30 @16119 has 217 MA's), (61, 16236), (Start: 97 @16287 has 272 MA's), (159, 16395), (207, 16497), (209, 16500), (262, 16596), (292, 16650), (330, 16716), (337, 16728), (487, 16974), (488, 16977), (533, 17091), (584, 17184), (599, 17223), (601, 17241),

Gene: Aminay\_20 Start: 16296, Stop: 17435, Start Num: 29

Candidate Starts for Aminay\_20:

(Start: 29 @16296 has 1 MA's), (37, 16320), (Start: 51 @16392 has 2 MA's), (61, 16422), (116, 16506), (144, 16554), (157, 16578), (206, 16680), (262, 16782), (292, 16836), (334, 16905), (337, 16911), (356, 16947), (369, 16986), (427, 17064), (487, 17154), (503, 17190), (514, 17220), (529, 17259), (584, 17364), (599, 17403), (601, 17421),

Gene: Amochick\_21 Start: 16318, Stop: 17412, Start Num: 55

Candidate Starts for Amochick\_21:

(Start: 55 @16318 has 22 MA's), (57, 16327), (119, 16423), (125, 16432), (131, 16441), (159, 16492), (161, 16498), (209, 16594), (221, 16612), (253, 16681), (257, 16690), (265, 16711), (267, 16717), (270, 16723), (273, 16726), (315, 16798), (317, 16801), (402, 16957), (431, 17008), (438, 17026), (473, 17098), (481, 17116), (514, 17200), (524, 17227), (527, 17230), (542, 17266), (555, 17284), (580, 17326), (584, 17341), (586, 17344), (597, 17374), (599, 17380),

Gene: Amohnition\_21 Start: 16493, Stop: 17629, Start Num: 30

Candidate Starts for Amohnition\_21:

(Start: 30 @16493 has 217 MA's), (61, 16610), (75, 16628), (Start: 97 @16661 has 272 MA's), (119, 16700), (159, 16769), (206, 16868), (209, 16874), (262, 16970), (292, 17024), (330, 17090), (337, 17102), (369, 17177), (427, 17258), (454, 17282), (487, 17348), (488, 17351), (524, 17441), (584, 17558), (599, 17597), (601, 17615),

Gene: Amok\_16 Start: 14066, Stop: 15037, Start Num: 97

Candidate Starts for Amok\_16:

(Start: 97 @14066 has 272 MA's), (125, 14111), (136, 14132), (152, 14168), (185, 14249), (240, 14327), (244, 14336), (246, 14339), (273, 14393), (279, 14405), (306, 14453), (334, 14495), (358, 14543), (384, 14594), (402, 14624), (415, 14654), (424, 14669), (426, 14672), (475, 14768), (481,

14786), (503, 14840), (504, 14843), (513, 14870), (516, 14879), (522, 14894), (527, 14903), (547, 14951), (578, 14999), (587, 15023), (589, 15029),

Gene: Amymech\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Amymech\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Anaya\_23 Start: 16036, Stop: 17172, Start Num: 30

Candidate Starts for Anaya\_23:

(Start: 30 @16036 has 217 MA's), (Start: 36 @16042 has 22 MA's), (61, 16153), (132, 16264), (144, 16285), (159, 16312), (292, 16567), (340, 16648), (389, 16738), (471, 16849), (487, 16891), (524, 16984), (533, 17008), (584, 17101), (599, 17140), (601, 17158),

Gene: Anaysia\_29 Start: 18122, Stop: 19099, Start Num: 100

Candidate Starts for Anaysia\_29:

(Start: 100 @18122 has 20 MA's), (163, 18236), (165, 18242), (167, 18245), (286, 18479), (430, 18746), (461, 18800), (518, 18956),

Gene: AndPeggy\_16 Start: 14429, Stop: 15400, Start Num: 97

Candidate Starts for AndPeggy\_16:

(Start: 97 @14429 has 272 MA's), (125, 14474), (136, 14495), (142, 14510), (152, 14531), (173, 14582), (185, 14612), (206, 14639), (240, 14690), (244, 14699), (246, 14702), (273, 14756), (279, 14768), (306, 14816), (358, 14906), (384, 14957), (402, 14987), (415, 15017), (426, 15035), (475, 15131), (481, 15149), (502, 15200), (503, 15203), (513, 15233), (516, 15242), (522, 15257), (547, 15314), (578, 15362), (587, 15386), (589, 15392),

Gene: Aneem\_27 Start: 19736, Stop: 20758, Start Num: 97

Candidate Starts for Aneem\_27:

(Start: 97 @19736 has 272 MA's), (127, 19793), (163, 19868), (232, 19997), (261, 20057), (293, 20117), (296, 20123), (322, 20165), (344, 20210), (347, 20216), (382, 20300), (402, 20333), (518, 20615), (522, 20624), (528, 20639), (565, 20705),

Gene: Angel\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Angel\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Angelica\_22 Start: 15985, Stop: 17121, Start Num: 30

Candidate Starts for Angelica\_22:

(Start: 30 @15985 has 217 MA's), (61, 16102), (119, 16192), (132, 16213), (144, 16234), (159, 16261), (292, 16516), (340, 16597), (371, 16672), (389, 16687), (471, 16798), (487, 16840), (524, 16933), (533, 16957), (584, 17050), (599, 17089), (601, 17107),

Gene: Angelicage\_32 Start: 30110, Stop: 31066, Start Num: 78

Candidate Starts for Angelicage\_32:

(Start: 78 @30110 has 51 MA's), (175, 30296), (180, 30308), (196, 30335), (211, 30356), (248, 30416), (299, 30506), (322, 30542), (343, 30575), (352, 30590), (356, 30602), (376, 30632), (384, 30638),

(415, 30698), (471, 30788), (504, 30878), (512, 30902), (516, 30914), (542, 30980), (576, 31031),

Gene: Angelique\_19 Start: 16805, Stop: 17713, Start Num: 92

Candidate Starts for Angelique\_19:

(Start: 92 @16805 has 38 MA's), (126, 16862), (190, 16997), (203, 17012), (204, 17015), (214, 17030), (236, 17066), (287, 17135), (316, 17174), (346, 17222), (358, 17246), (374, 17270), (475, 17462), (497, 17498), (498, 17501), (502, 17513), (503, 17516), (517, 17558), (518, 17561), (522, 17570), (544, 17624), (567, 17663), (571, 17669), (575, 17675),

Gene: AngryOrchard\_21 Start: 15399, Stop: 16271, Start Num: 103

Candidate Starts for AngryOrchard\_21:

(Start: 103 @15399 has 85 MA's), (121, 15438), (165, 15525), (198, 15594), (246, 15672), (322, 15810), (392, 15906), (486, 16035), (496, 16053), (518, 16122), (587, 16260),

Gene: AnnaL29\_30 Start: 21011, Stop: 22024, Start Num: 97

Candidate Starts for AnnaL29\_30:

(Start: 97 @21011 has 272 MA's), (110, 21029), (152, 21104), (167, 21140), (183, 21179), (261, 21320), (296, 21386), (320, 21425), (322, 21428), (344, 21473), (430, 21659), (446, 21692), (518, 21881),

Gene: Annihilator\_17 Start: 15468, Stop: 16640, Start Num: 30

Candidate Starts for Annihilator\_17:

(6, 15135), (Start: 30 @15468 has 217 MA's), (61, 15588), (75, 15606), (Start: 105 @15651 has 2 MA's), (110, 15657), (142, 15720), (161, 15756), (192, 15825), (195, 15828), (206, 15849), (241, 15903), (262, 15948), (280, 15978), (337, 16080), (344, 16092), (352, 16104), (358, 16122), (451, 16287), (471, 16317), (479, 16335), (487, 16359), (534, 16479), (584, 16569), (597, 16602),

Gene: Anon\_27 Start: 18753, Stop: 19730, Start Num: 100

Candidate Starts for Anon\_27:

(Start: 100 @18753 has 20 MA's), (121, 18795), (156, 18852), (163, 18867), (165, 18873), (167, 18876), (210, 18963), (286, 19110), (370, 19260), (518, 19587), (544, 19647), (565, 19677),

Gene: Anselm\_27 Start: 19280, Stop: 20296, Start Num: 97

Candidate Starts for Anselm\_27:

(Start: 97 @19280 has 272 MA's), (142, 19355), (152, 19373), (167, 19409), (183, 19448), (296, 19655), (320, 19694), (322, 19697), (446, 19964), (486, 20066), (514, 20141), (518, 20153), (565, 20243),

Gene: Anthony\_26 Start: 17668, Stop: 18678, Start Num: 97

Candidate Starts for Anthony\_26:

(Start: 97 @17668 has 272 MA's), (152, 17761), (167, 17797), (261, 17977), (296, 18043), (320, 18082), (322, 18085), (382, 18220), (446, 18346), (483, 18439), (486, 18448), (518, 18535), (528, 18559), (542, 18592), (565, 18625),

Gene: Antsirabe\_17 Start: 15810, Stop: 16985, Start Num: 30

Candidate Starts for Antsirabe\_17:

(4, 15441), (6, 15501), (Start: 30 @15810 has 217 MA's), (75, 15951), (110, 16002), (144, 16068), (145, 16071), (157, 16092), (161, 16101), (192, 16170), (195, 16173), (207, 16197), (238, 16242), (241, 16248), (262, 16293), (315, 16383), (344, 16437), (368, 16497), (437, 16605), (471, 16662), (487, 16704), (490, 16710), (518, 16782), (527, 16800), (567, 16878), (569, 16881), (580, 16899), (597, 16947), (599, 16953),

Gene: Aphelion\_47 Start: 28709, Stop: 29590, Start Num: 72

Candidate Starts for Aphelion\_47:

(Start: 72 @28709 has 12 MA's), (106, 28757), (119, 28784), (160, 28856), (187, 28922), (206, 28952), (282, 29060), (337, 29153), (352, 29177), (357, 29192), (427, 29288), (471, 29336), (552, 29516), (573, 29552),

Gene: Apiary\_44 Start: 30416, Stop: 31342, Start Num: 73

Candidate Starts for Apiary\_44:

(Start: 73 @30416 has 5 MA's), (Start: 105 @30452 has 2 MA's), (167, 30569), (183, 30608), (195, 30626), (241, 30677), (292, 30776), (338, 30851), (343, 30860), (377, 30935), (387, 30956), (471, 31094), (487, 31130), (504, 31169), (524, 31211), (559, 31274), (576, 31307),

Gene: Apocalypse\_22 Start: 15988, Stop: 17124, Start Num: 30

Candidate Starts for Apocalypse\_22:

(Start: 30 @15988 has 217 MA's), (61, 16105), (119, 16195), (132, 16216), (144, 16237), (159, 16264), (256, 16453), (292, 16519), (340, 16600), (371, 16675), (389, 16690), (471, 16801), (487, 16843), (524, 16936), (533, 16960), (584, 17053), (599, 17092), (601, 17110),

Gene: AppleCloud\_20 Start: 15445, Stop: 16317, Start Num: 103

Candidate Starts for AppleCloud\_20:

(Start: 103 @15445 has 85 MA's), (121, 15484), (165, 15571), (198, 15640), (246, 15718), (258, 15745), (322, 15856), (392, 15952), (486, 16081), (496, 16099), (518, 16168), (587, 16306),

Gene: Applecrisp\_21 Start: 16530, Stop: 17666, Start Num: 30

Candidate Starts for Applecrisp\_21:

(Start: 30 @16530 has 217 MA's), (61, 16647), (Start: 97 @16698 has 272 MA's), (159, 16806), (207, 16908), (209, 16911), (262, 17007), (292, 17061), (330, 17127), (337, 17139), (487, 17385), (488, 17388), (584, 17595), (599, 17634), (601, 17652),

Gene: Appletree2\_17 Start: 15800, Stop: 16699, Start Num: 80

Candidate Starts for Appletree2\_17:

(58, 15764), (59, 15767), (Start: 80 @15800 has 9 MA's), (Start: 93 @15818 has 72 MA's), (111, 15842), (127, 15872), (136, 15887), (154, 15920), (235, 16064), (274, 16145), (320, 16220), (322, 16223), (324, 16229), (347, 16274), (360, 16301), (385, 16334), (390, 16340), (415, 16373), (421, 16382), (455, 16409), (501, 16529), (518, 16577), (531, 16604), (563, 16643), (567, 16649), (585, 16688),

Gene: Apricot\_18 Start: 15047, Stop: 15973, Start Num: 97

Candidate Starts for Apricot\_18:

(Start: 97 @15047 has 272 MA's), (Start: 102 @15053 has 6 MA's), (121, 15083), (152, 15143), (163, 15167), (171, 15182), (176, 15197), (180, 15206), (185, 15218), (203, 15239), (214, 15257), (220, 15269), (244, 15314), (273, 15368), (276, 15371), (277, 15374), (285, 15386), (306, 15416), (316, 15434), (352, 15488), (356, 15500), (358, 15506), (374, 15527), (405, 15575), (410, 15593), (415, 15599), (424, 15614), (426, 15617), (502, 15770), (503, 15773), (505, 15779), (518, 15812), (527, 15830), (538, 15863), (571, 15914), (579, 15929), (592, 15965),

Gene: Aragog\_23 Start: 18754, Stop: 19767, Start Num: 103

Candidate Starts for Aragog\_23:

(Start: 103 @18754 has 85 MA's), (152, 18850), (165, 18883), (167, 18886), (183, 18925), (210, 18973), (296, 19126), (308, 19144), (322, 19168), (342, 19210), (481, 19522), (518, 19624), (529, 19651), (565, 19714),

Gene: ArcherNM\_29 Start: 20956, Stop: 21969, Start Num: 97

Candidate Starts for ArcherNM\_29:



(Start: 97 @20956 has 272 MA's), (152, 21049), (167, 21085), (183, 21124), (296, 21331), (320, 21370), (322, 21373), (344, 21418), (430, 21604), (446, 21637), (518, 21826),

Gene: Archetta\_23 Start: 18467, Stop: 19480, Start Num: 103

Candidate Starts for Archetta\_23:

(Start: 103 @18467 has 85 MA's), (152, 18563), (165, 18596), (167, 18599), (183, 18638), (210, 18686), (296, 18839), (308, 18857), (322, 18881), (342, 18923), (481, 19235), (518, 19337), (529, 19364),

Gene: ArchiDore\_18 Start: 15181, Stop: 16242, Start Num: 60

Candidate Starts for ArchiDore\_18:

(Start: 60 @15181 has 18 MA's), (119, 15274), (144, 15316), (167, 15364), (207, 15442), (239, 15502), (253, 15532), (264, 15556), (265, 15562), (309, 15634), (313, 15643), (315, 15646), (321, 15655), (345, 15697), (402, 15796), (438, 15865), (452, 15892), (463, 15913), (567, 16138), (598, 16210), (599, 16213),

Gene: Archie\_17 Start: 16290, Stop: 17204, Start Num: 93

Candidate Starts for Archie\_17:

(Start: 93 @16290 has 72 MA's), (111, 16314), (127, 16344), (167, 16425), (318, 16695), (320, 16698), (322, 16701), (363, 16788), (385, 16812), (390, 16818), (455, 16887), (464, 16905), (472, 16923), (473, 16926), (518, 17055), (531, 17082), (535, 17094), (585, 17184), (591, 17196),

Gene: Archimedes\_15 Start: 13707, Stop: 14570, Start Num: 72

Candidate Starts for Archimedes\_15:

(Start: 65 @13698 has 6 MA's), (Start: 72 @13707 has 12 MA's), (114, 13767), (190, 13914), (206, 13941), (244, 13983), (280, 14052), (301, 14088), (355, 14178), (401, 14235), (402, 14238), (471, 14325), (488, 14361), (504, 14391), (508, 14400),

Gene: Archis\_19 Start: 16004, Stop: 16864, Start Num: 70

Candidate Starts for Archis\_19:

(Start: 65 @15998 has 6 MA's), (Start: 70 @16004 has 27 MA's), (Start: 84 @16019 has 1 MA's), (163, 16160), (203, 16241), (252, 16298), (255, 16307), (274, 16340), (340, 16448), (400, 16532), (454, 16604), (523, 16733), (533, 16760), (541, 16775),

Gene: Arianna\_18 Start: 16553, Stop: 17428, Start Num: 90

Candidate Starts for Arianna\_18:

(Start: 87 @16550 has 10 MA's), (Start: 90 @16553 has 2 MA's), (136, 16637), (201, 16775), (363, 17063),

Gene: Arissanae\_26 Start: 18593, Stop: 19615, Start Num: 97

Candidate Starts for Arissanae\_26:

(Start: 97 @18593 has 272 MA's), (108, 18608), (110, 18611), (152, 18686), (277, 18938), (296, 18968), (322, 19010), (391, 19160), (410, 19205), (433, 19256), (435, 19262), (486, 19385), (518, 19472),

Gene: Aroostook\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Aroostook\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Arri\_33 Start: 25616, Stop: 26560, Start Num: 83

Candidate Starts for Arri\_33:

(Start: 83 @25616 has 29 MA's), (142, 25721), (173, 25790), (175, 25796), (185, 25820), (196, 25835), (415, 26195), (424, 26210), (440, 26228), (486, 26330), (504, 26372), (516, 26408), (563, 26504), (588, 26555),

Gene: Artemis2UCLA\_30 Start: 18860, Stop: 19876, Start Num: 97

Candidate Starts for Artemis2UCLA\_30:

(Start: 97 @18860 has 272 MA's), (110, 18878), (127, 18914), (152, 18953), (201, 19058), (296, 19235), (320, 19274), (322, 19277), (361, 19364), (368, 19385), (430, 19511), (464, 19583), (518, 19733), (522, 19742), (565, 19823),

Gene: Arti\_40 Start: 28866, Stop: 29807, Start Num: 76

Candidate Starts for Arti\_40:

(Start: 76 @28866 has 24 MA's), (130, 28953), (167, 29028), (198, 29094), (241, 29136), (269, 29193), (387, 29406), (406, 29433), (471, 29544), (524, 29676), (576, 29772),

Gene: Asapag\_19 Start: 15508, Stop: 16431, Start Num: 99

Candidate Starts for Asapag\_19:

(Start: 99 @15508 has 15 MA's), (Start: 102 @15511 has 6 MA's), (111, 15523), (121, 15541), (145, 15586), (163, 15625), (180, 15664), (203, 15697), (206, 15703), (244, 15772), (273, 15826), (276, 15829), (277, 15832), (285, 15844), (306, 15874), (316, 15892), (352, 15946), (356, 15958), (358, 15964), (374, 15985), (405, 16033), (415, 16057), (424, 16072), (426, 16075), (445, 16096), (502, 16228), (503, 16231), (505, 16237), (518, 16270), (527, 16288), (538, 16321), (571, 16372), (579, 16387), (592, 16423),

Gene: Asayake\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Asayake\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Ashertheman\_34 Start: 28975, Stop: 29931, Start Num: 78

Candidate Starts for Ashertheman\_34:

(Start: 78 @28975 has 51 MA's), (175, 29161), (180, 29173), (185, 29185), (196, 29200), (206, 29212), (227, 29239), (233, 29254), (248, 29281), (299, 29371), (322, 29407), (356, 29467), (365, 29491), (384, 29503), (415, 29563), (471, 29653), (512, 29767), (516, 29779), (542, 29845), (554, 29860), (569, 29884), (576, 29896),

Gene: Astro\_23 Start: 17636, Stop: 18658, Start Num: 103

Candidate Starts for Astro\_23:

(Start: 103 @17636 has 85 MA's), (163, 17759), (165, 17765), (201, 17837), (261, 17942), (271, 17969), (322, 18059), (413, 18260), (429, 18290), (430, 18293), (514, 18503), (529, 18542), (555, 18590), (565, 18605),

Gene: Atiba\_22 Start: 15980, Stop: 17116, Start Num: 30

Candidate Starts for Atiba\_22:

(Start: 30 @15980 has 217 MA's), (61, 16097), (119, 16187), (132, 16208), (144, 16229), (159, 16256), (292, 16511), (340, 16592), (371, 16667), (389, 16682), (471, 16793), (487, 16835), (524, 16928), (533, 16952), (584, 17045), (599, 17084), (601, 17102),

Gene: AuntGwenStacy\_23 Start: 18613, Stop: 19611, Start Num: 52

Candidate Starts for AuntGwenStacy\_23:

(Start: 52 @18613 has 5 MA's), (Start: 97 @18679 has 272 MA's), (142, 18769), (145, 18775), (169, 18823), (190, 18871), (206, 18898), (222, 18925), (223, 18928), (244, 18949), (269, 19000), (297, 19051), (305, 19060), (322, 19087), (358, 19162), (366, 19186), (454, 19276), (471, 19300), (472, 19303), (487, 19339), (509, 19393), (512, 19402), (529, 19444), (530, 19447), (580, 19528), (582, 19537), (599, 19582),

Gene: Auspice\_27 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for Auspice\_27:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: AvadaKedavra\_17 Start: 15865, Stop: 16746, Start Num: 93

Candidate Starts for AvadaKedavra\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: Avani\_18 Start: 12813, Stop: 13742, Start Num: 92

Candidate Starts for Avani\_18:

(Start: 92 @12813 has 38 MA's), (128, 12873), (152, 12924), (203, 13023), (206, 13029), (217, 13044), (285, 13164), (298, 13182), (341, 13248), (348, 13260), (373, 13305), (402, 13344), (405, 13350), (415, 13374), (418, 13377), (419, 13380), (424, 13389), (426, 13392), (468, 13458), (475, 13479), (476, 13482), (490, 13518), (502, 13545), (503, 13548), (518, 13587), (527, 13605), (528, 13611), (542, 13647), (547, 13653), (562, 13677), (567, 13683), (571, 13689),

Gene: Avocado\_17 Start: 15733, Stop: 16914, Start Num: 31

Candidate Starts for Avocado\_17:

(Start: 31 @15733 has 2 MA's), (61, 15862), (75, 15880), (110, 15931), (119, 15955), (144, 15997), (145, 16000), (157, 16021), (161, 16030), (175, 16066), (195, 16102), (197, 16108), (207, 16126), (241, 16177), (315, 16312), (344, 16366), (368, 16426), (471, 16591), (487, 16633), (518, 16711), (567, 16807), (569, 16810), (597, 16876),

Gene: Avrafan\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Avrafan\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Axym\_17 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for Axym\_17:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441, 15394), (462, 15439), (475, 15466), (481, 15484), (502, 15535), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Ayotoya\_21 Start: 17079, Stop: 18140, Start Num: 60

Candidate Starts for Ayotoya\_21:

(Start: 60 @17079 has 18 MA's), (Start: 94 @17124 has 30 MA's), (111, 17154), (167, 17262), (245, 17412), (265, 17460), (315, 17544), (321, 17553), (345, 17595), (443, 17772), (479, 17841), (547,

18003), (567, 18036), (598, 18108), (599, 18111),

Gene: Azira\_19 Start: 15745, Stop: 16710, Start Num: 97

Candidate Starts for Azira\_19:

(Start: 97 @15745 has 272 MA's), (125, 15790), (142, 15826), (152, 15847), (163, 15874), (185, 15928), (240, 16009), (244, 16018), (246, 16021), (279, 16090), (306, 16138), (320, 16162), (358, 16228), (365, 16243), (397, 16282), (475, 16438), (502, 16504), (503, 16507), (504, 16510), (513, 16537), (516, 16546), (527, 16570), (538, 16603), (549, 16621), (575, 16666), (587, 16696), (589, 16702),

Gene: Aziz\_31 Start: 22046, Stop: 22957, Start Num: 91

Candidate Starts for Aziz\_31:

(Start: 91 @22046 has 19 MA's), (Start: 96 @22055 has 14 MA's), (127, 22109), (145, 22145), (147, 22148), (157, 22166), (163, 22181), (167, 22190), (198, 22250), (201, 22253), (320, 22478), (322, 22481), (336, 22511), (390, 22598), (483, 22739), (501, 22787), (513, 22820), (583, 22943),

Gene: Azula\_20 Start: 16105, Stop: 16965, Start Num: 68

Candidate Starts for Azula\_20:

(Start: 68 @16105 has 24 MA's), (Start: 84 @16120 has 1 MA's), (143, 16222), (163, 16261), (203, 16342), (266, 16426), (274, 16441), (340, 16549), (400, 16633), (451, 16699), (454, 16705), (481, 16744), (523, 16834), (541, 16876),

Gene: AzulaCat\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for AzulaCat\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: BABullseye\_30 Start: 18959, Stop: 19972, Start Num: 97

Candidate Starts for BABullseye\_30:

(Start: 97 @18959 has 272 MA's), (127, 19013), (152, 19052), (201, 19157), (277, 19304), (296, 19334), (320, 19373), (322, 19376), (344, 19421), (368, 19481), (464, 19679), (518, 19829), (522, 19838),

Gene: BBQValindra\_18 Start: 15702, Stop: 16631, Start Num: 94

Candidate Starts for BBQValindra\_18:

(22, 15468), (39, 15567), (79, 15681), (Start: 94 @15702 has 30 MA's), (Start: 102 @15711 has 6 MA's), (128, 15753), (Start: 134 @15765 has 1 MA's), (250, 15987), (289, 16056), (296, 16062), (302, 16071), (306, 16077), (323, 16107), (344, 16137), (358, 16167), (360, 16173), (405, 16236), (415, 16260), (450, 16317), (462, 16338), (490, 16404), (518, 16473), (573, 16578), (587, 16611),

Gene: BEEST\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for BEEST\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: BENtherdunthat\_19 Start: 15508, Stop: 16431, Start Num: 99

Candidate Starts for BENtherdunthat\_19:

(Start: 99 @15508 has 15 MA's), (Start: 102 @15511 has 6 MA's), (111, 15523), (121, 15541), (145, 15586), (163, 15625), (180, 15664), (203, 15697), (206, 15703), (244, 15772), (273, 15826), (276, 15829), (277, 15832), (285, 15844), (306, 15874), (316, 15892), (352, 15946), (356, 15958), (358,

15964), (374, 15985), (405, 16033), (415, 16057), (424, 16072), (426, 16075), (445, 16096), (502, 16228), (503, 16231), (505, 16237), (518, 16270), (527, 16288), (538, 16321), (571, 16372), (579, 16387), (592, 16423),

Gene: BGlluviae\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for BGlluviae\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: BPs\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for BPs\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: BQuat\_17 Start: 15468, Stop: 16640, Start Num: 30

Candidate Starts for BQuat\_17:

(6, 15135), (Start: 30 @15468 has 217 MA's), (61, 15588), (75, 15606), (Start: 105 @15651 has 2 MA's), (110, 15657), (142, 15720), (161, 15756), (192, 15825), (195, 15828), (206, 15849), (241, 15903), (262, 15948), (280, 15978), (337, 16080), (344, 16092), (352, 16104), (358, 16122), (451, 16287), (471, 16317), (479, 16335), (487, 16359), (534, 16479), (584, 16569), (597, 16602),

Gene: BabyBack\_29 Start: 20784, Stop: 21794, Start Num: 97

Candidate Starts for BabyBack\_29:

(Start: 97 @20784 has 272 MA's), (152, 20877), (167, 20913), (183, 20952), (296, 21159), (320, 21198), (322, 21201), (486, 21564), (518, 21651), (528, 21675),

Gene: BabyMoney\_20 Start: 17148, Stop: 18008, Start Num: 70

Candidate Starts for BabyMoney\_20:

(Start: 70 @17148 has 27 MA's), (74, 17154), (98, 17190), (101, 17193), (185, 17361), (196, 17376), (203, 17388), (271, 17484), (274, 17487), (278, 17496), (285, 17508), (292, 17523), (363, 17652), (469, 17772), (481, 17793), (488, 17814), (502, 17844), (543, 17934),

Gene: Bachita\_49 Start: 29142, Stop: 30023, Start Num: 72

Candidate Starts for Bachita\_49:

(Start: 72 @29142 has 12 MA's), (106, 29190), (119, 29217), (160, 29289), (187, 29355), (206, 29385), (282, 29493), (337, 29586), (352, 29610), (357, 29625), (427, 29721), (471, 29769), (552, 29949), (573, 29985),

Gene: Bachome\_27 Start: 19727, Stop: 20749, Start Num: 97

Candidate Starts for Bachome\_27:

(Start: 97 @19727 has 272 MA's), (127, 19784), (163, 19859), (232, 19988), (261, 20048), (293, 20108), (296, 20114), (322, 20156), (344, 20201), (347, 20207), (382, 20291), (402, 20324), (518, 20606), (522, 20615), (528, 20630), (565, 20696),

Gene: BackstagePass\_18 Start: 15842, Stop: 16771, Start Num: 94

Candidate Starts for BackstagePass\_18:

(Start: 94 @15842 has 30 MA's), (Start: 102 @15851 has 6 MA's), (128, 15893), (Start: 134 @15905 has 1 MA's), (203, 16043), (250, 16127), (289, 16196), (296, 16202), (302, 16211), (306, 16217), (323, 16247), (344, 16277), (358, 16307), (360, 16313), (405, 16376), (415, 16400), (450, 16457), (462, 16478), (490, 16544), (518, 16613), (587, 16751),

Gene: Bactobuster\_28 Start: 20771, Stop: 21787, Start Num: 97

Candidate Starts for Bactobuster\_28:

(Start: 97 @20771 has 272 MA's), (142, 20846), (152, 20864), (183, 20939), (261, 21080), (274, 21110), (296, 21146), (322, 21188), (362, 21278), (376, 21314), (382, 21329), (446, 21455), (481, 21542), (518, 21644), (528, 21668),

Gene: Baddon\_33 Start: 29772, Stop: 30728, Start Num: 78

Candidate Starts for Baddon\_33:

(Start: 78 @29772 has 51 MA's), (163, 29928), (175, 29958), (180, 29970), (181, 29973), (185, 29982), (196, 29997), (206, 30009), (299, 30168), (322, 30204), (356, 30264), (384, 30300), (415, 30360), (471, 30450), (504, 30540), (512, 30564), (516, 30576), (542, 30642), (554, 30657), (569, 30681), (576, 30693),

Gene: Baehexic\_28 Start: 19662, Stop: 20678, Start Num: 97

Candidate Starts for Baehexic\_28:

(Start: 97 @19662 has 272 MA's), (142, 19737), (152, 19755), (167, 19791), (183, 19830), (277, 20007), (296, 20037), (320, 20076), (322, 20079), (518, 20535), (528, 20559),

Gene: BaghaKamala\_22 Start: 15980, Stop: 17116, Start Num: 30

Candidate Starts for BaghaKamala\_22:

(Start: 30 @15980 has 217 MA's), (61, 16097), (119, 16187), (132, 16208), (144, 16229), (159, 16256), (292, 16511), (340, 16592), (371, 16667), (389, 16682), (471, 16793), (487, 16835), (524, 16928), (533, 16952), (584, 17045), (599, 17084), (601, 17102),

Gene: Bakery\_31 Start: 24839, Stop: 25771, Start Num: 83

Candidate Starts for Bakery\_31:

(Start: 83 @24839 has 29 MA's), (142, 24935), (173, 25004), (175, 25010), (180, 25022), (181, 25025), (185, 25034), (196, 25049), (299, 25223), (322, 25259), (402, 25376), (415, 25406), (486, 25541), (502, 25577), (512, 25607), (516, 25619), (549, 25694), (563, 25715),

Gene: Banquo\_25 Start: 16992, Stop: 17822, Start Num: 122

Candidate Starts for Banquo\_25:

(Start: 120 @16989 has 6 MA's), (Start: 122 @16992 has 5 MA's), (139, 17007), (153, 17037), (158, 17046), (168, 17070), (229, 17184), (230, 17190), (237, 17202), (243, 17214), (297, 17313), (350, 17400), (359, 17424), (409, 17508), (426, 17532), (427, 17535), (460, 17571), (502, 17652), (529, 17718), (540, 17742), (549, 17754), (551, 17757),

Gene: Bantam\_29 Start: 26180, Stop: 27064, Start Num: 68

Candidate Starts for Bantam\_29:

(Start: 68 @26180 has 24 MA's), (88, 26201), (160, 26327), (163, 26336), (242, 26456), (268, 26507), (274, 26516), (292, 26552), (337, 26624), (341, 26630), (427, 26759), (471, 26807), (504, 26882), (523, 26930),

Gene: Baoshan\_16 Start: 15899, Stop: 16813, Start Num: 93

Candidate Starts for Baoshan\_16:

(Start: 93 @15899 has 72 MA's), (111, 15923), (127, 15953), (167, 16034), (189, 16079), (318, 16304), (320, 16307), (322, 16310), (336, 16340), (363, 16397), (390, 16427), (455, 16496), (464, 16514), (493, 16589), (498, 16601), (518, 16664), (531, 16691), (567, 16754), (585, 16793), (591, 16805),

Gene: Barb\_32 Start: 25634, Stop: 26578, Start Num: 83

Candidate Starts for Barb\_32:

(Start: 83 @25634 has 29 MA's), (142, 25739), (173, 25808), (175, 25814), (185, 25838), (196, 25853), (415, 26213), (424, 26228), (440, 26246), (486, 26348), (504, 26390), (516, 26426), (563, 26522), (588, 26573),

Gene: Barco\_18 Start: 15787, Stop: 16653, Start Num: 65

Candidate Starts for Barco\_18:

(Start: 65 @15787 has 6 MA's), (Start: 70 @15793 has 27 MA's), (163, 15949), (203, 16030), (274, 16129), (340, 16237), (400, 16321), (454, 16393), (523, 16522), (533, 16549), (541, 16564),

Gene: Barkley26\_17 Start: 15480, Stop: 16652, Start Num: 30

Candidate Starts for Barkley26\_17:

(6, 15147), (Start: 30 @15480 has 217 MA's), (61, 15600), (75, 15618), (Start: 105 @15663 has 2 MA's), (110, 15669), (142, 15732), (161, 15768), (192, 15837), (195, 15840), (206, 15861), (241, 15915), (262, 15960), (280, 15990), (337, 16092), (344, 16104), (352, 16116), (358, 16134), (451, 16299), (471, 16329), (479, 16347), (487, 16371), (528, 16473), (534, 16491), (584, 16581), (597, 16614),

Gene: BarrelRoll\_22 Start: 16003, Stop: 17139, Start Num: 30

Candidate Starts for BarrelRoll\_22:

(Start: 30 @16003 has 217 MA's), (61, 16120), (119, 16210), (132, 16231), (144, 16252), (159, 16279), (292, 16534), (340, 16615), (371, 16690), (389, 16705), (471, 16816), (487, 16858), (524, 16951), (533, 16975), (584, 17068), (599, 17107), (601, 17125),

Gene: Barsten\_34 Start: 29324, Stop: 30280, Start Num: 78

Candidate Starts for Barsten\_34:

(Start: 78 @29324 has 51 MA's), (175, 29510), (180, 29522), (196, 29549), (211, 29570), (248, 29630), (297, 29717), (299, 29720), (322, 29756), (343, 29789), (352, 29804), (356, 29816), (376, 29846), (384, 29852), (415, 29912), (471, 30002), (504, 30092), (512, 30116), (516, 30128), (542, 30194), (576, 30245),

Gene: Battleship\_30 Start: 18234, Stop: 19211, Start Num: 100

Candidate Starts for Battleship\_30:

(Start: 100 @18234 has 20 MA's), (163, 18348), (165, 18354), (167, 18357), (286, 18591), (430, 18858), (461, 18912), (518, 19068),

Gene: Baudelaire\_17 Start: 15428, Stop: 16309, Start Num: 93

Candidate Starts for Baudelaire\_17:

(Start: 68 @15389 has 24 MA's), (Start: 77 @15404 has 5 MA's), (Start: 93 @15428 has 72 MA's), (111, 15452), (136, 15497), (142, 15512), (154, 15530), (189, 15608), (277, 15761), (282, 15770), (322, 15833), (385, 15944), (390, 15950), (394, 15956), (421, 15992), (455, 16019), (467, 16043), (474, 16061), (476, 16070), (477, 16073), (493, 16112), (501, 16139), (518, 16187), (529, 16208), (585, 16298),

Gene: Baumdotcom\_33 Start: 28596, Stop: 29552, Start Num: 78

Candidate Starts for Baumdotcom\_33:

(Start: 78 @28596 has 51 MA's), (175, 28782), (180, 28794), (185, 28806), (196, 28821), (206, 28833), (227, 28860), (233, 28875), (248, 28902), (299, 28992), (322, 29028), (356, 29088), (365, 29112), (384, 29124), (415, 29184), (471, 29274), (512, 29388), (516, 29400), (542, 29466), (554, 29481), (569, 29505), (576, 29517),

Gene: Bavilard\_17 Start: 15254, Stop: 16210, Start Num: 97

Candidate Starts for Bavilard\_17:

(Start: 97 @15254 has 272 MA's), (125, 15299), (152, 15356), (163, 15383), (185, 15437), (206, 15464), (240, 15515), (241, 15518), (244, 15524), (246, 15527), (273, 15581), (281, 15596), (306, 15641), (320, 15665), (333, 15680), (358, 15731), (415, 15827), (503, 16013), (513, 16043), (516, 16052), (527, 16076), (538, 16109), (587, 16196), (589, 16202),

Gene: Bazzle\_17 Start: 16039, Stop: 16953, Start Num: 93

Candidate Starts for Bazzle\_17:

(Start: 93 @16039 has 72 MA's), (111, 16063), (127, 16093), (189, 16219), (318, 16444), (320, 16447), (322, 16450), (363, 16537), (385, 16561), (390, 16567), (455, 16636), (464, 16654), (472, 16672), (473, 16675), (518, 16804), (531, 16831), (535, 16843), (585, 16933), (591, 16945),

Gene: BearBQ\_18 Start: 16477, Stop: 17403, Start Num: 92

Candidate Starts for BearBQ\_18:

(Start: 90 @16474 has 2 MA's), (Start: 92 @16477 has 38 MA's), (126, 16534), (174, 16636), (178, 16648), (195, 16672), (203, 16681), (204, 16684), (206, 16687), (247, 16750), (272, 16783), (287, 16804), (339, 16879), (346, 16891), (358, 16915), (376, 16942), (379, 16945), (400, 16975), (426, 17029), (439, 17053), (475, 17134), (490, 17176), (493, 17179), (497, 17188), (498, 17191), (502, 17203), (503, 17206), (507, 17218), (511, 17230), (518, 17251), (522, 17260), (527, 17269), (544, 17314), (547, 17317), (571, 17359), (575, 17365),

Gene: BeeGee\_19 Start: 16625, Stop: 17533, Start Num: 92

Candidate Starts for BeeGee\_19:

(Start: 92 @16625 has 38 MA's), (126, 16682), (190, 16817), (203, 16832), (204, 16835), (236, 16886), (316, 16994), (346, 17042), (358, 17066), (372, 17084), (374, 17090), (400, 17126), (475, 17282), (493, 17309), (498, 17321), (503, 17336), (518, 17381), (529, 17408), (544, 17444), (547, 17447), (567, 17483), (571, 17489), (575, 17495),

Gene: Beelzebub\_53 Start: 26710, Stop: 27672, Start Num: 94

Candidate Starts for Beelzebub\_53:

(Start: 94 @26710 has 30 MA's), (163, 26842), (173, 26866), (178, 26875), (181, 26881), (184, 26890), (201, 26914), (206, 26923), (213, 26935), (271, 27061), (312, 27142), (322, 27157), (324, 27163), (385, 27271), (476, 27397), (478, 27403), (536, 27553), (539, 27559), (548, 27571), (550, 27574), (593, 27661), (594, 27664), (596, 27667),

Gene: Beemo\_28 Start: 20561, Stop: 21574, Start Num: 97

Candidate Starts for Beemo\_28:

(Start: 97 @20561 has 272 MA's), (110, 20579), (142, 20636), (152, 20654), (167, 20690), (261, 20870), (277, 20906), (296, 20936), (322, 20978), (397, 21137), (464, 21281), (486, 21344), (514, 21419), (518, 21431), (528, 21455),

Gene: Beezoo\_22 Start: 16027, Stop: 17163, Start Num: 30

Candidate Starts for Beezoo\_22:

(Start: 30 @16027 has 217 MA's), (61, 16144), (119, 16234), (132, 16255), (144, 16276), (159, 16303), (292, 16558), (340, 16639), (371, 16714), (389, 16729), (471, 16840), (487, 16882), (524, 16975), (533, 16999), (584, 17092), (599, 17131), (601, 17149),

Gene: Begonia\_19 Start: 16271, Stop: 17131, Start Num: 70

Candidate Starts for Begonia\_19:

(Start: 65 @16265 has 6 MA's), (Start: 70 @16271 has 27 MA's), (163, 16427), (203, 16508), (274, 16607), (340, 16715), (400, 16799), (454, 16871), (523, 17000), (541, 17042),

Gene: Belenaria\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Belenaria\_22:



(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: Bella96\_22 Start: 15947, Stop: 17083, Start Num: 30

Candidate Starts for Bella96\_22:

(Start: 30 @15947 has 217 MA's), (61, 16064), (119, 16154), (132, 16175), (144, 16196), (159, 16223), (262, 16424), (292, 16478), (340, 16559), (371, 16634), (389, 16649), (487, 16802), (524, 16895), (533, 16919), (584, 17012), (599, 17051), (601, 17069),

Gene: Belladonna\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Belladonna\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Bellis\_18 Start: 16492, Stop: 17382, Start Num: 93

Candidate Starts for Bellis\_18:

(Start: 93 @16492 has 72 MA's), (111, 16516), (136, 16561), (142, 16576), (154, 16597), (201, 16693), (277, 16828), (282, 16837), (320, 16897), (322, 16900), (324, 16906), (360, 16978), (385, 17011), (455, 17086), (477, 17140), (484, 17161), (503, 17212), (518, 17254), (585, 17365), (587, 17368),

Gene: Belphegor\_32 Start: 29032, Stop: 30018, Start Num: 64

Candidate Starts for Belphegor\_32:

(Start: 64 @29032 has 25 MA's), (161, 29191), (186, 29251), (240, 29347), (241, 29350), (296, 29458), (311, 29479), (363, 29581), (396, 29617), (506, 29809), (515, 29833), (517, 29839), (523, 29854), (544, 29905), (564, 29938), (566, 29941), (598, 30007),

Gene: Benedict\_23 Start: 17968, Stop: 18981, Start Num: 103

Candidate Starts for Benedict\_23:

(Start: 103 @17968 has 85 MA's), (165, 18097), (167, 18100), (183, 18139), (261, 18274), (274, 18304), (293, 18334), (296, 18340), (308, 18358), (322, 18382), (342, 18424), (518, 18838), (565, 18928),

Gene: BengiVuitton\_28 Start: 19613, Stop: 20623, Start Num: 97

Candidate Starts for BengiVuitton\_28:

(Start: 97 @19613 has 272 MA's), (152, 19706), (167, 19742), (183, 19781), (296, 19988), (320, 20027), (322, 20030), (430, 20258), (446, 20291), (486, 20393), (497, 20414), (514, 20468), (518, 20480), (565, 20570),

Gene: Benvolio\_27 Start: 19279, Stop: 20295, Start Num: 97

Candidate Starts for Benvolio\_27:

(Start: 97 @19279 has 272 MA's), (142, 19354), (152, 19372), (167, 19408), (183, 19447), (296, 19654), (320, 19693), (322, 19696), (486, 20065), (514, 20140), (518, 20152),

Gene: Bern\_24 Start: 15975, Stop: 17111, Start Num: 30

Candidate Starts for Bern\_24:

(Start: 30 @15975 has 217 MA's), (61, 16092), (132, 16203), (144, 16224), (159, 16251), (262, 16452), (292, 16506), (340, 16587), (371, 16662), (389, 16677), (471, 16788), (487, 16830), (524, 16923), (533, 16947), (584, 17040), (599, 17079), (601, 17097),

Gene: Bernal13\_18 Start: 16018, Stop: 16983, Start Num: 87

Candidate Starts for Bernal13\_18:

(Start: 87 @16018 has 10 MA's), (107, 16045), (116, 16063), (208, 16240), (210, 16243), (246, 16318), (277, 16384), (290, 16411), (320, 16468), (324, 16477), (477, 16714), (485, 16738), (522, 16837), (529, 16858), (537, 16879), (562, 16918), (567, 16927),

Gene: BetterKatz\_21 Start: 16552, Stop: 17613, Start Num: 60

Candidate Starts for BetterKatz\_21:

(Start: 60 @16552 has 18 MA's), (Start: 94 @16597 has 30 MA's), (111, 16627), (167, 16735), (245, 16885), (265, 16933), (315, 17017), (321, 17026), (345, 17068), (443, 17245), (459, 17278), (479, 17314), (567, 17509), (598, 17581), (599, 17584),

Gene: BiPauneto\_43 Start: 28641, Stop: 29561, Start Num: 81

Candidate Starts for BiPauneto\_43:

(Start: 81 @28641 has 8 MA's), (130, 28722), (154, 28767), (183, 28836), (292, 29004), (343, 29088), (364, 29139), (387, 29172), (499, 29370), (505, 29388), (524, 29430), (573, 29520), (576, 29526), (583, 29547),

Gene: BiancaTri92\_29 Start: 20966, Stop: 21976, Start Num: 97

Candidate Starts for BiancaTri92\_29:

(Start: 97 @20966 has 272 MA's), (142, 21041), (152, 21059), (167, 21095), (183, 21134), (277, 21311), (296, 21341), (320, 21380), (322, 21383), (430, 21611), (486, 21746), (514, 21821), (518, 21833), (565, 21923),

Gene: Bibwit\_33 Start: 29511, Stop: 30467, Start Num: 78

Candidate Starts for Bibwit\_33:

(Start: 78 @29511 has 51 MA's), (175, 29697), (180, 29709), (196, 29736), (299, 29907), (322, 29943), (343, 29976), (352, 29991), (356, 30003), (376, 30033), (384, 30039), (415, 30099), (471, 30189), (504, 30279), (512, 30303), (516, 30315), (542, 30381), (576, 30432),

Gene: BigCheese\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for BigCheese\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: BigChungus\_16 Start: 14508, Stop: 15464, Start Num: 97

Candidate Starts for BigChungus\_16:

(Start: 97 @14508 has 272 MA's), (125, 14553), (152, 14610), (163, 14637), (185, 14691), (206, 14718), (240, 14769), (241, 14772), (244, 14778), (246, 14781), (273, 14835), (281, 14850), (306, 14895), (320, 14919), (358, 14985), (415, 15081), (503, 15267), (513, 15297), (516, 15306), (527, 15330), (538, 15363), (587, 15450), (589, 15456),

Gene: Biglebops\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Biglebops\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: BillDoor\_19 Start: 14397, Stop: 15368, Start Num: 97

Candidate Starts for BillDoor\_19:

(Start: 97 @14397 has 272 MA's), (125, 14442), (136, 14463), (142, 14478), (152, 14499), (173, 14550), (185, 14580), (206, 14607), (240, 14658), (244, 14667), (246, 14670), (273, 14724), (279, 14736), (306, 14784), (358, 14874), (384, 14925), (402, 14955), (415, 14985), (426, 15003), (475, 15099), (481, 15117), (502, 15168), (503, 15171), (513, 15201), (516, 15210), (522, 15225), (547,

15282), (578, 15330), (587, 15354), (589, 15360),

Gene: Bipper\_23 Start: 18745, Stop: 19743, Start Num: 52

Candidate Starts for Bipper\_23:

(Start: 52 @18745 has 5 MA's), (Start: 97 @18811 has 272 MA's), (Start: 103 @18820 has 85 MA's), (132, 18883), (142, 18901), (145, 18907), (206, 19030), (222, 19057), (223, 19060), (244, 19081), (297, 19183), (305, 19192), (322, 19219), (358, 19294), (401, 19336), (412, 19363), (454, 19408), (471, 19432), (472, 19435), (490, 19477), (509, 19525), (512, 19534), (529, 19576), (534, 19588), (571, 19645), (599, 19714),

Gene: Birdsong\_18 Start: 15370, Stop: 16296, Start Num: 92

Candidate Starts for Birdsong\_18:

(Start: 90 @15367 has 2 MA's), (Start: 92 @15370 has 38 MA's), (126, 15427), (174, 15529), (178, 15541), (195, 15565), (203, 15574), (204, 15577), (206, 15580), (247, 15643), (272, 15676), (287, 15697), (302, 15712), (339, 15772), (346, 15784), (358, 15808), (376, 15835), (379, 15838), (400, 15868), (439, 15946), (475, 16027), (490, 16069), (493, 16072), (497, 16081), (498, 16084), (502, 16096), (503, 16099), (507, 16111), (511, 16123), (518, 16144), (522, 16153), (527, 16162), (544, 16207), (547, 16210), (551, 16216), (571, 16252), (575, 16258),

Gene: Biskit\_18 Start: 14412, Stop: 15383, Start Num: 97

Candidate Starts for Biskit\_18:

(Start: 97 @14412 has 272 MA's), (125, 14457), (136, 14478), (163, 14541), (173, 14565), (185, 14595), (240, 14673), (244, 14682), (246, 14685), (279, 14751), (306, 14799), (334, 14841), (352, 14871), (358, 14889), (384, 14940), (415, 15000), (424, 15015), (426, 15018), (441, 15042), (475, 15114), (481, 15132), (502, 15183), (503, 15186), (513, 15216), (516, 15225), (522, 15240), (547, 15297), (578, 15345), (587, 15369), (589, 15375),

Gene: Bizzy\_34 Start: 28919, Stop: 29875, Start Num: 78

Candidate Starts for Bizzy\_34:

(Start: 78 @28919 has 51 MA's), (163, 29075), (175, 29105), (180, 29117), (185, 29129), (196, 29144), (206, 29156), (299, 29315), (322, 29351), (356, 29411), (384, 29447), (415, 29507), (471, 29597), (504, 29687), (512, 29711), (516, 29723), (542, 29789), (554, 29804), (569, 29828), (576, 29840),

Gene: Blackbeetle\_49 Start: 25756, Stop: 26718, Start Num: 94

Candidate Starts for Blackbeetle\_49:

(Start: 94 @25756 has 30 MA's), (163, 25888), (173, 25912), (178, 25921), (181, 25927), (184, 25936), (201, 25960), (206, 25969), (213, 25981), (216, 25993), (271, 26107), (312, 26188), (322, 26203), (324, 26209), (385, 26317), (476, 26443), (478, 26449), (536, 26599), (539, 26605), (548, 26617), (550, 26620), (593, 26707), (594, 26710), (596, 26713),

Gene: Blarby\_19 Start: 13331, Stop: 14263, Start Num: 92

Candidate Starts for Blarby\_19:

(Start: 92 @13331 has 38 MA's), (152, 13442), (203, 13541), (206, 13547), (217, 13562), (241, 13604), (285, 13682), (298, 13700), (341, 13766), (373, 13823), (402, 13862), (415, 13892), (424, 13907), (426, 13910), (445, 13931), (468, 13976), (475, 13997), (476, 14000), (490, 14036), (502, 14063), (503, 14066), (518, 14105), (527, 14123), (542, 14165), (562, 14195), (563, 14198), (567, 14204), (571, 14210),

Gene: BlessJoy\_30 Start: 18958, Stop: 19974, Start Num: 97

Candidate Starts for BlessJoy\_30:

(Start: 97 @18958 has 272 MA's), (110, 18976), (127, 19012), (152, 19051), (201, 19156), (296, 19333), (320, 19372), (322, 19375), (361, 19462), (368, 19483), (430, 19609), (464, 19681), (518, 19831), (522, 19840), (565, 19921),

Gene: BlingBling\_18 Start: 15793, Stop: 16653, Start Num: 70

Candidate Starts for BlingBling\_18:

(Start: 65 @15787 has 6 MA's), (Start: 70 @15793 has 27 MA's), (163, 15949), (203, 16030), (274, 16129), (340, 16237), (400, 16321), (454, 16393), (523, 16522), (533, 16549), (541, 16564),

Gene: Blinn1\_30 Start: 19032, Stop: 20045, Start Num: 97

Candidate Starts for Blinn1\_30:

(Start: 97 @19032 has 272 MA's), (127, 19086), (152, 19125), (167, 19161), (201, 19230), (277, 19377), (296, 19407), (320, 19446), (322, 19449), (344, 19494), (368, 19554), (430, 19680), (464, 19752), (518, 19902), (522, 19911),

Gene: Blino\_18 Start: 15761, Stop: 16621, Start Num: 70

Candidate Starts for Blino\_18:

(Start: 65 @15755 has 6 MA's), (Start: 70 @15761 has 27 MA's), (163, 15917), (203, 15998), (274, 16097), (340, 16205), (400, 16289), (451, 16355), (454, 16361), (523, 16490), (541, 16532),

Gene: Blizzard\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Blizzard\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Blondies\_17 Start: 14395, Stop: 15366, Start Num: 97

Candidate Starts for Blondies\_17:

(Start: 97 @14395 has 272 MA's), (125, 14440), (136, 14461), (163, 14524), (173, 14548), (185, 14578), (240, 14656), (244, 14665), (246, 14668), (279, 14734), (306, 14782), (334, 14824), (352, 14854), (358, 14872), (384, 14923), (415, 14983), (424, 14998), (426, 15001), (441, 15025), (475, 15097), (481, 15115), (502, 15166), (503, 15169), (513, 15199), (516, 15208), (522, 15223), (547, 15280), (578, 15328), (587, 15352), (589, 15358),

Gene: Blue7\_30 Start: 18950, Stop: 19966, Start Num: 97

Candidate Starts for Blue7\_30:

(Start: 97 @18950 has 272 MA's), (110, 18968), (127, 19004), (152, 19043), (201, 19148), (296, 19325), (320, 19364), (322, 19367), (361, 19454), (368, 19475), (430, 19601), (464, 19673), (518, 19823), (522, 19832), (565, 19913),

Gene: BlueNGold\_99 Start: 59080, Stop: 60015, Start Num: 77

Candidate Starts for BlueNGold\_99:

(Start: 77 @59080 has 5 MA's), (Start: 89 @59095 has 1 MA's), (Start: 93 @59101 has 72 MA's), (Start: 96 @59107 has 14 MA's), (157, 59224), (159, 59227), (178, 59278), (200, 59314), (274, 59449), (291, 59485), (311, 59515), (472, 59767), (490, 59812), (503, 59842), (505, 59848), (517, 59875), (533, 59914), (572, 59983),

Gene: Blueberry\_20 Start: 16105, Stop: 16965, Start Num: 68

Candidate Starts for Blueberry\_20:

(Start: 68 @16105 has 24 MA's), (Start: 84 @16120 has 1 MA's), (143, 16222), (163, 16261), (203, 16342), (266, 16426), (274, 16441), (340, 16549), (400, 16633), (451, 16699), (454, 16705), (481, 16744), (523, 16834), (541, 16876),

Gene: Bluefalcon\_22 Start: 18724, Stop: 19737, Start Num: 103

Candidate Starts for Bluefalcon\_22:

(Start: 103 @18724 has 85 MA's), (152, 18820), (165, 18853), (167, 18856), (183, 18895), (210, 18943), (296, 19096), (308, 19114), (322, 19138), (342, 19180), (481, 19492), (518, 19594), (529, 19621),

Gene: BobBob\_31 Start: 28792, Stop: 29748, Start Num: 78

Candidate Starts for BobBob\_31:

(Start: 78 @28792 has 51 MA's), (175, 28978), (180, 28990), (196, 29017), (211, 29038), (248, 29098), (299, 29188), (322, 29224), (343, 29257), (352, 29272), (356, 29284), (376, 29314), (384, 29320), (415, 29380), (471, 29470), (504, 29560), (512, 29584), (516, 29596), (542, 29662), (554, 29677), (569, 29701), (576, 29713), (588, 29743),

Gene: BobSwaget\_30 Start: 20811, Stop: 21821, Start Num: 97

Candidate Starts for BobSwaget\_30:

(Start: 97 @20811 has 272 MA's), (152, 20904), (167, 20940), (183, 20979), (296, 21186), (320, 21225), (322, 21228), (344, 21273), (382, 21363), (430, 21456), (446, 21489), (486, 21591), (514, 21666), (518, 21678), (565, 21768),

Gene: BobbyDazzler\_22 Start: 15525, Stop: 16397, Start Num: 103

Candidate Starts for BobbyDazzler\_22:

(Start: 103 @15525 has 85 MA's), (121, 15564), (163, 15645), (165, 15651), (198, 15720), (246, 15798), (258, 15825), (322, 15936), (392, 16032), (486, 16161), (496, 16179), (518, 16248), (587, 16386),

Gene: Bobquesha\_24 Start: 17234, Stop: 18367, Start Num: 30

Candidate Starts for Bobquesha\_24:

(Start: 30 @17234 has 217 MA's), (37, 17252), (Start: 51 @17324 has 2 MA's), (61, 17354), (119, 17444), (125, 17453), (144, 17486), (157, 17510), (207, 17615), (292, 17768), (334, 17837), (337, 17843), (427, 17996), (451, 18014), (471, 18044), (487, 18086), (488, 18089), (580, 18281), (584, 18296), (599, 18335), (601, 18353),

Gene: BobsGarage\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for BobsGarage\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Bock\_21 Start: 16302, Stop: 17363, Start Num: 60

Candidate Starts for Bock\_21:

(Start: 60 @16302 has 18 MA's), (Start: 94 @16347 has 30 MA's), (111, 16377), (161, 16470), (167, 16485), (245, 16635), (265, 16683), (315, 16767), (321, 16776), (345, 16818), (443, 16995), (459, 17028), (479, 17064), (567, 17259), (598, 17331), (599, 17334),

Gene: BogosyJay\_28 Start: 20290, Stop: 21312, Start Num: 97

Candidate Starts for BogosyJay\_28:

(Start: 97 @20290 has 272 MA's), (110, 20308), (142, 20365), (152, 20383), (167, 20419), (261, 20599), (277, 20635), (296, 20665), (322, 20707), (397, 20866), (433, 20953), (518, 21169), (528, 21193),

Gene: Boiiii\_22 Start: 16053, Stop: 17189, Start Num: 30

Candidate Starts for Boiiii\_22:

(Start: 30 @16053 has 217 MA's), (61, 16170), (119, 16260), (132, 16281), (144, 16302), (159, 16329), (292, 16584), (340, 16665), (371, 16740), (389, 16755), (471, 16866), (487, 16908), (524, 17001), (533, 17025), (584, 17118), (599, 17157), (601, 17175),

Gene: Boilgate\_19 Start: 16429, Stop: 17568, Start Num: 28

Candidate Starts for Boilgate\_19:

(Start: 28 @16429 has 1 MA's), (37, 16453), (Start: 51 @16525 has 2 MA's), (61, 16555), (Start: 63 @16561 has 2 MA's), (Start: 105 @16618 has 2 MA's), (142, 16684), (144, 16687), (157, 16711), (164, 16729), (180, 16768), (203, 16807), (206, 16813), (224, 16846), (262, 16915), (292, 16969), (323, 17017), (333, 17035), (334, 17038), (337, 17044), (454, 17221), (471, 17245), (487, 17287), (488, 17290), (502, 17320), (509, 17341), (524, 17380), (529, 17392), (530, 17395), (580, 17482), (584, 17497), (599, 17536), (601, 17554),

Gene: Bonamassa\_23 Start: 18648, Stop: 19661, Start Num: 103

Candidate Starts for Bonamassa\_23:

(Start: 103 @18648 has 85 MA's), (152, 18744), (165, 18777), (167, 18780), (261, 18954), (293, 19014), (296, 19020), (308, 19038), (322, 19062), (342, 19104), (481, 19416), (518, 19518), (565, 19608),

Gene: Bonanza\_22 Start: 15454, Stop: 16326, Start Num: 103

Candidate Starts for Bonanza\_22:

(Start: 103 @15454 has 85 MA's), (121, 15493), (163, 15574), (165, 15580), (198, 15649), (246, 15727), (258, 15754), (322, 15865), (392, 15961), (486, 16090), (496, 16108), (518, 16177), (587, 16315),

Gene: Bongo\_27 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for Bongo\_27:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: Bonum\_43 Start: 29225, Stop: 30142, Start Num: 78

Candidate Starts for Bonum\_43:

(Start: 78 @29225 has 51 MA's), (130, 29306), (148, 29342), (241, 29489), (364, 29723), (383, 29750), (414, 29801), (471, 29894), (524, 30011), (576, 30107), (579, 30113), (583, 30128),

Gene: Boohoo\_29 Start: 18122, Stop: 19099, Start Num: 100

Candidate Starts for Boohoo\_29:

(Start: 100 @18122 has 20 MA's), (163, 18236), (165, 18242), (167, 18245), (286, 18479), (430, 18746), (461, 18800), (518, 18956),

Gene: Boopy\_100 Start: 59092, Stop: 60027, Start Num: 77

Candidate Starts for Boopy\_100:

(Start: 77 @59092 has 5 MA's), (Start: 89 @59107 has 1 MA's), (Start: 93 @59113 has 72 MA's), (Start: 96 @59119 has 14 MA's), (157, 59236), (159, 59239), (178, 59290), (200, 59326), (274, 59461), (291, 59497), (311, 59527), (472, 59779), (490, 59824), (503, 59854), (505, 59860), (517, 59887), (533, 59926), (572, 59995),

Gene: BoostSeason\_18 Start: 13915, Stop: 15042, Start Num: 34

Candidate Starts for BoostSeason\_18:

(Start: 34 @13915 has 10 MA's), (37, 13924), (61, 14026), (119, 14116), (144, 14158), (159, 14185), (203, 14278), (206, 14284), (244, 14347), (262, 14386), (292, 14440), (337, 14518), (361, 14569), (369, 14593), (427, 14671), (451, 14689), (471, 14719), (487, 14761), (488, 14764), (533, 14878), (580, 14956), (584, 14971), (599, 15010), (601, 15028),

Gene: BotCity\_20 Start: 15506, Stop: 16429, Start Num: 99

Candidate Starts for BotCity\_20:

(Start: 99 @15506 has 15 MA's), (Start: 102 @15509 has 6 MA's), (111, 15521), (121, 15539), (145, 15584), (163, 15623), (180, 15662), (203, 15695), (206, 15701), (244, 15770), (273, 15824), (276, 15827), (277, 15830), (285, 15842), (306, 15872), (316, 15890), (352, 15944), (356, 15956), (358, 15962), (374, 15983), (405, 16031), (415, 16055), (424, 16070), (426, 16073), (445, 16094), (502, 16226), (503, 16229), (505, 16235), (518, 16268), (527, 16286), (538, 16319), (571, 16370), (579, 16385), (592, 16421),

Gene: BourbonZero\_17 Start: 16488, Stop: 17378, Start Num: 93

Candidate Starts for BourbonZero\_17:

(Start: 93 @16488 has 72 MA's), (111, 16512), (136, 16557), (142, 16572), (154, 16593), (201, 16689), (206, 16698), (277, 16824), (282, 16833), (320, 16893), (322, 16896), (324, 16902), (360, 16974), (385, 17007), (394, 17019), (455, 17082), (484, 17157), (503, 17208), (518, 17250), (585, 17361), (587, 17364),

Gene: Bowser\_18 Start: 15695, Stop: 16621, Start Num: 94

Candidate Starts for Bowser\_18:

(14, 15356), (18, 15431), (79, 15677), (Start: 94 @15695 has 30 MA's), (Start: 102 @15704 has 6 MA's), (128, 15746), (Start: 134 @15758 has 1 MA's), (250, 15980), (276, 16025), (289, 16049), (296, 16055), (302, 16064), (306, 16070), (323, 16100), (344, 16130), (358, 16160), (360, 16166), (404, 16226), (405, 16229), (415, 16253), (450, 16310), (462, 16331), (490, 16397), (518, 16466), (539, 16520), (587, 16604),

Gene: Bowtie\_27 Start: 19736, Stop: 20758, Start Num: 97

Candidate Starts for Bowtie\_27:

(Start: 97 @19736 has 272 MA's), (127, 19793), (163, 19868), (232, 19997), (261, 20057), (293, 20117), (296, 20123), (322, 20165), (344, 20210), (347, 20216), (382, 20300), (402, 20333), (518, 20615), (522, 20624), (528, 20639), (565, 20705),

Gene: Bradissa\_19 Start: 16808, Stop: 17716, Start Num: 92

Candidate Starts for Bradissa\_19:

(Start: 92 @16808 has 38 MA's), (126, 16865), (203, 17015), (204, 17018), (236, 17069), (287, 17138), (316, 17177), (346, 17225), (358, 17249), (374, 17273), (475, 17465), (493, 17492), (497, 17501), (498, 17504), (503, 17519), (517, 17561), (518, 17564), (529, 17591), (544, 17627), (554, 17639), (571, 17672), (575, 17678),

Gene: Bradman\_26 Start: 18067, Stop: 19077, Start Num: 97

Candidate Starts for Bradman\_26:

(Start: 97 @18067 has 272 MA's), (127, 18121), (142, 18142), (152, 18160), (183, 18235), (296, 18442), (320, 18481), (322, 18484), (344, 18529), (430, 18712), (446, 18745), (486, 18847), (518, 18934), (565, 19024),

Gene: Bradshaw\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Bradshaw\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: BrainDrainer\_18 Start: 15831, Stop: 16718, Start Num: 93

Candidate Starts for BrainDrainer\_18:

(Start: 93 @15831 has 72 MA's), (111, 15855), (125, 15882), (127, 15885), (136, 15900), (154, 15933), (201, 16029), (277, 16164), (282, 16173), (320, 16233), (322, 16236), (360, 16314), (378, 16329), (390, 16353), (415, 16386), (455, 16422), (467, 16446), (474, 16464), (476, 16473), (493, 16515),

(501, 16542), (518, 16590), (531, 16617), (585, 16701),

Gene: Brandonk123\_35 Start: 29858, Stop: 30814, Start Num: 78

Candidate Starts for Brandonk123\_35:

(Start: 78 @29858 has 51 MA's), (175, 30044), (180, 30056), (196, 30083), (211, 30104), (248, 30164), (299, 30254), (322, 30290), (343, 30323), (352, 30338), (356, 30350), (376, 30380), (384, 30386), (415, 30446), (471, 30536), (504, 30626), (512, 30650), (516, 30662), (542, 30728), (569, 30767), (576, 30779),

Gene: Braxoaddie\_44 Start: 30405, Stop: 31331, Start Num: 73

Candidate Starts for Braxoaddie\_44:

(Start: 73 @30405 has 5 MA's), (Start: 105 @30441 has 2 MA's), (167, 30558), (183, 30597), (195, 30615), (241, 30666), (292, 30765), (338, 30840), (343, 30849), (377, 30924), (387, 30945), (471, 31083), (487, 31119), (504, 31158), (524, 31200), (559, 31263), (576, 31296),

Gene: Breezona\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Breezona\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Bricole\_27 Start: 21443, Stop: 22354, Start Num: 91

Candidate Starts for Bricole\_27:

(Start: 91 @21443 has 19 MA's), (147, 21545), (157, 21563), (163, 21578), (201, 21650), (206, 21659), (252, 21737), (318, 21872), (320, 21875), (322, 21878), (356, 21947), (385, 21989), (390, 21995), (483, 22136), (493, 22157), (498, 22169), (561, 22292), (567, 22304),

Gene: BritBrat\_19 Start: 16661, Stop: 17569, Start Num: 92

Candidate Starts for BritBrat\_19:

(Start: 92 @16661 has 38 MA's), (126, 16718), (190, 16853), (203, 16868), (204, 16871), (236, 16922), (316, 17030), (346, 17078), (358, 17102), (372, 17120), (374, 17126), (400, 17162), (475, 17318), (493, 17345), (498, 17357), (503, 17372), (518, 17417), (527, 17435), (529, 17444), (544, 17480), (547, 17483), (567, 17519), (571, 17525), (575, 17531),

Gene: Bromden\_18 Start: 16160, Stop: 17047, Start Num: 93

Candidate Starts for Bromden\_18:

(Start: 93 @16160 has 72 MA's), (111, 16184), (125, 16211), (127, 16214), (136, 16229), (154, 16262), (201, 16358), (277, 16493), (282, 16502), (322, 16565), (360, 16643), (378, 16658), (390, 16682), (455, 16751), (467, 16775), (474, 16793), (477, 16805), (501, 16871), (518, 16919), (531, 16946), (585, 17030),

Gene: BruceB\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for BruceB\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: BrutonGaster\_35 Start: 25054, Stop: 25935, Start Num: 72

Candidate Starts for BrutonGaster\_35:

(53, 25015), (59, 25036), (Start: 72 @25054 has 12 MA's), (106, 25102), (160, 25201), (244, 25333), (305, 25444), (337, 25498), (352, 25522), (357, 25537), (427, 25633), (471, 25681), (481, 25699), (541, 25846), (571, 25894), (573, 25897),



Gene: Bryce\_22 Start: 15454, Stop: 16326, Start Num: 103

Candidate Starts for Bryce\_22:

(Start: 103 @15454 has 85 MA's), (121, 15493), (163, 15574), (165, 15580), (198, 15649), (246, 15727), (258, 15754), (322, 15865), (392, 15961), (486, 16090), (496, 16108), (514, 16165), (518, 16177), (587, 16315),

Gene: Bryler\_21 Start: 15211, Stop: 16350, Start Num: 30

Candidate Starts for Bryler\_21:

(Start: 30 @15211 has 217 MA's), (61, 15331), (119, 15421), (159, 15490), (262, 15691), (389, 15916), (426, 15976), (451, 15997), (487, 16069), (488, 16072), (490, 16075), (524, 16162), (533, 16186), (580, 16264), (584, 16279), (599, 16318), (601, 16336),

Gene: Brylie\_21 Start: 16293, Stop: 17354, Start Num: 60

Candidate Starts for Brylie\_21:

(Start: 60 @16293 has 18 MA's), (Start: 94 @16338 has 30 MA's), (111, 16368), (167, 16476), (245, 16626), (265, 16674), (315, 16758), (321, 16767), (345, 16809), (443, 16986), (459, 17019), (479, 17055), (567, 17250), (598, 17322), (599, 17325),

Gene: Bud\_27 Start: 19742, Stop: 20764, Start Num: 97

Candidate Starts for Bud\_27:

(Start: 97 @19742 has 272 MA's), (127, 19799), (163, 19874), (232, 20003), (261, 20063), (293, 20123), (296, 20129), (322, 20171), (344, 20216), (347, 20222), (382, 20306), (402, 20339), (518, 20621), (522, 20630), (528, 20645), (565, 20711),

Gene: Budski\_19 Start: 15501, Stop: 16424, Start Num: 99

Candidate Starts for Budski\_19:

(Start: 99 @15501 has 15 MA's), (Start: 102 @15504 has 6 MA's), (111, 15516), (121, 15534), (145, 15579), (163, 15618), (180, 15657), (203, 15690), (206, 15696), (244, 15765), (273, 15819), (276, 15822), (277, 15825), (285, 15837), (298, 15855), (302, 15861), (306, 15867), (316, 15885), (352, 15939), (356, 15951), (358, 15957), (374, 15978), (405, 16026), (410, 16044), (415, 16050), (424, 16065), (426, 16068), (502, 16221), (503, 16224), (505, 16230), (518, 16263), (527, 16281), (538, 16314), (571, 16365), (579, 16380), (592, 16416),

Gene: Buggaboo\_41 Start: 29704, Stop: 30621, Start Num: 78

Candidate Starts for Buggaboo\_41:

(Start: 78 @29704 has 51 MA's), (130, 29785), (148, 29821), (190, 29911), (241, 29968), (364, 30202), (383, 30229), (414, 30280), (471, 30373), (524, 30490), (576, 30586), (579, 30592), (583, 30607),

Gene: Buggy\_29 Start: 19683, Stop: 20699, Start Num: 97

Candidate Starts for Buggy\_29:

(Start: 97 @19683 has 272 MA's), (142, 19758), (152, 19776), (167, 19812), (183, 19851), (296, 20058), (320, 20097), (322, 20100), (361, 20187), (446, 20367), (486, 20469), (514, 20544), (518, 20556),

Gene: Bunker\_18 Start: 15822, Stop: 16751, Start Num: 94

Candidate Starts for Bunker\_18:

(20, 15585), (79, 15801), (Start: 94 @15822 has 30 MA's), (Start: 102 @15831 has 6 MA's), (128, 15873), (Start: 134 @15885 has 1 MA's), (250, 16107), (276, 16152), (289, 16176), (296, 16182), (302, 16191), (306, 16197), (323, 16227), (344, 16257), (358, 16287), (360, 16293), (405, 16356), (415, 16380), (450, 16437), (462, 16458), (490, 16524), (518, 16593), (587, 16731),

Gene: Burnsey\_17 Start: 14765, Stop: 15736, Start Num: 97

Candidate Starts for Burnsey\_17:

(Start: 97 @14765 has 272 MA's), (125, 14810), (136, 14831), (163, 14894), (173, 14918), (185, 14948), (214, 14987), (240, 15026), (244, 15035), (246, 15038), (279, 15104), (306, 15152), (334, 15194), (358, 15242), (384, 15293), (415, 15353), (424, 15368), (426, 15371), (437, 15389), (441, 15395), (462, 15440), (475, 15467), (481, 15485), (503, 15539), (513, 15569), (516, 15578), (522, 15593), (547, 15650), (578, 15698), (587, 15722), (589, 15728),

Gene: Button\_18 Start: 13831, Stop: 14790, Start Num: 97

Candidate Starts for Button\_18:

(Start: 97 @13831 has 272 MA's), (127, 13879), (128, 13882), (163, 13960), (209, 14047), (244, 14101), (281, 14173), (293, 14197), (306, 14218), (358, 14308), (372, 14323), (380, 14338), (415, 14410), (462, 14497), (502, 14590), (503, 14593), (513, 14623), (516, 14632), (527, 14656), (538, 14689), (542, 14698), (547, 14704), (579, 14755), (587, 14776), (589, 14782),

Gene: Buttrmlkdreams\_17 Start: 14394, Stop: 15365, Start Num: 97

Candidate Starts for Buttrmlkdreams\_17:

(Start: 97 @14394 has 272 MA's), (125, 14439), (136, 14460), (163, 14523), (173, 14547), (185, 14577), (240, 14655), (244, 14664), (246, 14667), (279, 14733), (306, 14781), (334, 14823), (352, 14853), (358, 14871), (384, 14922), (415, 14982), (424, 14997), (426, 15000), (441, 15024), (475, 15096), (481, 15114), (502, 15165), (503, 15168), (513, 15198), (516, 15207), (522, 15222), (547, 15279), (578, 15327), (587, 15351), (589, 15357),

Gene: C3\_25 Start: 19185, Stop: 20195, Start Num: 97

Candidate Starts for C3\_25:

(Start: 97 @19185 has 272 MA's), (127, 19239), (142, 19260), (152, 19278), (240, 19449), (296, 19560), (320, 19599), (322, 19602), (344, 19647), (382, 19737), (481, 19950), (486, 19965), (514, 20040), (518, 20052), (528, 20076), (565, 20142),

Gene: C3PO\_30 Start: 27616, Stop: 28482, Start Num: 66

Candidate Starts for C3PO\_30:

(Start: 66 @27616 has 8 MA's), (85, 27640), (113, 27685), (142, 27745), (162, 27784), (209, 27880), (316, 28042), (335, 28075), (383, 28150), (402, 28174), (481, 28249), (507, 28315), (524, 28351), (534, 28378), (569, 28435),

Gene: CLED96\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for CLED96\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: CRB1\_27 Start: 19176, Stop: 20186, Start Num: 97

Candidate Starts for CRB1\_27:

(Start: 97 @19176 has 272 MA's), (127, 19230), (152, 19269), (183, 19344), (261, 19485), (296, 19551), (320, 19590), (322, 19593), (430, 19821), (486, 19956), (497, 19977), (514, 20031), (518, 20043), (565, 20133),

Gene: CREW\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for CREW\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Cafasso\_18 Start: 15643, Stop: 16551, Start Num: 93

Candidate Starts for Cafasso\_18:

(8, 15190), (Start: 93 @15643 has 72 MA's), (110, 15670), (125, 15703), (174, 15805), (185, 15832), (201, 15856), (261, 15958), (277, 15991), (292, 16021), (318, 16057), (322, 16063), (325, 16072), (361, 16150), (385, 16180), (390, 16186), (399, 16201), (472, 16306), (498, 16372), (533, 16471), (563, 16504), (581, 16540),

Gene: Cain\_21 Start: 15199, Stop: 16338, Start Num: 30

Candidate Starts for Cain\_21:

(Start: 30 @15199 has 217 MA's), (61, 15319), (119, 15409), (159, 15478), (262, 15679), (389, 15904), (426, 15964), (451, 15985), (487, 16057), (488, 16060), (490, 16063), (524, 16150), (533, 16174), (580, 16252), (584, 16267), (599, 16306), (601, 16324),

Gene: CallaLilly\_23 Start: 15974, Stop: 17110, Start Num: 30

Candidate Starts for CallaLilly\_23:

(Start: 30 @15974 has 217 MA's), (61, 16091), (119, 16181), (132, 16202), (144, 16223), (159, 16250), (292, 16505), (340, 16586), (371, 16661), (389, 16676), (471, 16787), (487, 16829), (524, 16922), (533, 16946), (584, 17039), (599, 17078), (601, 17096),

Gene: Calm\_17 Start: 15861, Stop: 16760, Start Num: 80

Candidate Starts for Calm\_17:

(Start: 80 @15861 has 9 MA's), (Start: 93 @15879 has 72 MA's), (111, 15903), (127, 15933), (136, 15948), (154, 15981), (235, 16125), (274, 16206), (320, 16281), (322, 16284), (324, 16290), (347, 16335), (360, 16362), (385, 16395), (390, 16401), (415, 16434), (421, 16443), (455, 16470), (501, 16590), (518, 16638), (563, 16704), (567, 16710), (585, 16749),

Gene: Cambiare\_18 Start: 16198, Stop: 17379, Start Num: 31

Candidate Starts for Cambiare\_18:

(Start: 31 @16198 has 2 MA's), (61, 16327), (75, 16345), (110, 16396), (119, 16420), (144, 16462), (145, 16465), (157, 16486), (161, 16495), (175, 16531), (195, 16567), (197, 16573), (207, 16591), (241, 16642), (315, 16777), (344, 16831), (368, 16891), (471, 17056), (487, 17098), (518, 17176), (567, 17272), (569, 17275), (597, 17341),

Gene: Camri\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Camri\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Candra\_30 Start: 19002, Stop: 20015, Start Num: 97

Candidate Starts for Candra\_30:

(Start: 97 @19002 has 272 MA's), (127, 19056), (152, 19095), (201, 19200), (277, 19347), (296, 19377), (320, 19416), (322, 19419), (344, 19464), (368, 19524), (464, 19722), (518, 19872), (522, 19881), (565, 19962),

Gene: CanesSauce\_17 Start: 14430, Stop: 15401, Start Num: 97

Candidate Starts for CanesSauce\_17:

(Start: 97 @14430 has 272 MA's), (125, 14475), (136, 14496), (142, 14511), (152, 14532), (173, 14583), (185, 14613), (206, 14640), (240, 14691), (244, 14700), (246, 14703), (273, 14757), (279, 14769), (306, 14817), (322, 14844), (358, 14907), (384, 14958), (402, 14988), (415, 15018), (426, 15036), (475, 15132), (481, 15150), (502, 15201), (503, 15204), (513, 15234), (516, 15243), (522, 15258), (547, 15315), (578, 15363), (587, 15387), (589, 15393),

Gene: Caprice\_46 Start: 25826, Stop: 26788, Start Num: 94

Candidate Starts for Caprice\_46:

(Start: 94 @25826 has 30 MA's), (163, 25958), (173, 25982), (178, 25991), (181, 25997), (184, 26006), (201, 26030), (206, 26039), (213, 26051), (271, 26177), (312, 26258), (322, 26273), (324, 26279), (385, 26387), (476, 26513), (478, 26519), (506, 26594), (536, 26669), (539, 26675), (548, 26687), (550, 26690), (593, 26777), (594, 26780), (596, 26783),

Gene: Capricorn\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Capricorn\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: CaptainKirk2\_18 Start: 15817, Stop: 16677, Start Num: 70

Candidate Starts for CaptainKirk2\_18:

(Start: 65 @15811 has 6 MA's), (Start: 70 @15817 has 27 MA's), (163, 15973), (203, 16054), (274, 16153), (340, 16261), (400, 16345), (451, 16411), (481, 16456), (523, 16546), (541, 16588),

Gene: Caraxes\_26 Start: 17822, Stop: 18838, Start Num: 97

Candidate Starts for Caraxes\_26:

(Start: 97 @17822 has 272 MA's), (149, 17915), (156, 17930), (167, 17957), (296, 18203), (320, 18242), (322, 18245), (344, 18290), (382, 18380), (430, 18473), (446, 18506), (486, 18608), (506, 18659), (514, 18683), (518, 18695), (528, 18719), (565, 18785),

Gene: Cardigan\_46 Start: 29891, Stop: 30787, Start Num: 63

Candidate Starts for Cardigan\_46:

(Start: 63 @29891 has 2 MA's), (119, 29978), (157, 30044), (163, 30059), (271, 30236), (305, 30293), (337, 30347), (352, 30371), (417, 30470), (427, 30488), (471, 30536), (481, 30554), (490, 30578), (571, 30746),

Gene: CarolAnn\_18 Start: 15760, Stop: 16620, Start Num: 70

Candidate Starts for CarolAnn\_18:

(Start: 65 @15754 has 6 MA's), (Start: 70 @15760 has 27 MA's), (163, 15916), (203, 15997), (274, 16096), (340, 16204), (400, 16288), (451, 16354), (454, 16360), (523, 16489), (541, 16531),

Gene: Carsonalex\_18 Start: 14822, Stop: 15793, Start Num: 97

Candidate Starts for Carsonalex\_18:

(Start: 97 @14822 has 272 MA's), (125, 14867), (136, 14888), (163, 14951), (173, 14975), (185, 15005), (214, 15044), (240, 15083), (244, 15092), (246, 15095), (279, 15161), (306, 15209), (334, 15251), (358, 15299), (384, 15350), (415, 15410), (424, 15425), (426, 15428), (437, 15446), (441, 15452), (462, 15497), (475, 15524), (481, 15542), (502, 15593), (503, 15596), (513, 15626), (516, 15635), (522, 15650), (547, 15707), (578, 15755), (587, 15779), (589, 15785),

Gene: CaseJules\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for CaseJules\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Cashline\_19 Start: 16485, Stop: 17393, Start Num: 92

Candidate Starts for Cashline\_19:

(Start: 92 @16485 has 38 MA's), (126, 16542), (190, 16677), (203, 16692), (204, 16695), (236, 16746), (316, 16854), (358, 16926), (374, 16950), (400, 16986), (475, 17142), (493, 17169), (498, 17181), (503, 17196), (518, 17241), (527, 17259), (529, 17268), (544, 17304), (547, 17307), (567, 17343), (571, 17349), (575, 17355),

Gene: CassieYates\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for CassieYates\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Catalina\_28 Start: 20528, Stop: 21541, Start Num: 97

Candidate Starts for Catalina\_28:

(Start: 97 @20528 has 272 MA's), (110, 20546), (142, 20603), (152, 20621), (167, 20657), (261, 20837), (277, 20873), (296, 20903), (322, 20945), (397, 21104), (464, 21248), (486, 21311), (514, 21386), (518, 21398), (528, 21422),

Gene: Catfish\_21 Start: 17616, Stop: 18467, Start Num: 120

Candidate Starts for Catfish\_21:

(Start: 120 @17616 has 6 MA's), (Start: 122 @17619 has 5 MA's), (135, 17640), (153, 17676), (168, 17709), (205, 17778), (229, 17823), (243, 17853), (322, 17988), (336, 18015), (350, 18039), (358, 18060), (427, 18180), (481, 18246), (483, 18252), (577, 18447),

Gene: Cedasite\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Cedasite\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Centaur\_29 Start: 19640, Stop: 20656, Start Num: 97

Candidate Starts for Centaur\_29:

(Start: 97 @19640 has 272 MA's), (142, 19715), (152, 19733), (167, 19769), (183, 19808), (277, 19985), (296, 20015), (320, 20054), (322, 20057), (518, 20513), (528, 20537),

Gene: ChadMasterC\_34 Start: 30723, Stop: 31679, Start Num: 78

Candidate Starts for ChadMasterC\_34:

(Start: 78 @30723 has 51 MA's), (175, 30909), (180, 30921), (196, 30948), (211, 30969), (248, 31029), (297, 31116), (299, 31119), (322, 31155), (343, 31188), (352, 31203), (356, 31215), (376, 31245), (384, 31251), (415, 31311), (471, 31401), (504, 31491), (512, 31515), (516, 31527), (542, 31593), (569, 31632), (576, 31644),

Gene: Chadwick\_24 Start: 17936, Stop: 18949, Start Num: 103

Candidate Starts for Chadwick\_24:

(Start: 103 @17936 has 85 MA's), (152, 18032), (165, 18065), (167, 18068), (183, 18107), (261, 18242), (274, 18272), (293, 18302), (296, 18308), (308, 18326), (322, 18350), (342, 18392), (518, 18806), (565, 18896),

Gene: Chance64\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Chance64\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241,

15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Chancellor\_23 Start: 17500, Stop: 18633, Start Num: 30

Candidate Starts for Chancellor\_23:

(Start: 30 @17500 has 217 MA's), (37, 17518), (Start: 51 @17590 has 2 MA's), (61, 17620), (119, 17710), (144, 17752), (157, 17776), (207, 17881), (292, 18034), (334, 18103), (337, 18109), (427, 18262), (451, 18280), (471, 18310), (487, 18352), (488, 18355), (584, 18562), (599, 18601), (601, 18619),

Gene: Changeling\_29 Start: 21010, Stop: 22023, Start Num: 97

Candidate Starts for Changeling\_29:

(Start: 97 @21010 has 272 MA's), (152, 21103), (167, 21139), (183, 21178), (296, 21385), (320, 21424), (322, 21427), (344, 21472), (430, 21658), (446, 21691), (464, 21730), (518, 21880),

Gene: Chargerpower\_27 Start: 18273, Stop: 19295, Start Num: 97

Candidate Starts for Chargerpower\_27:

(Start: 97 @18273 has 272 MA's), (110, 18291), (152, 18366), (167, 18402), (183, 18441), (232, 18522), (261, 18582), (296, 18648), (322, 18690), (421, 18900), (433, 18936), (518, 19152), (522, 19161), (565, 19242),

Gene: Charm\_27 Start: 18681, Stop: 19703, Start Num: 97

Candidate Starts for Charm\_27:

(Start: 97 @18681 has 272 MA's), (110, 18699), (127, 18735), (152, 18774), (261, 18990), (277, 19026), (296, 19056), (322, 19098), (344, 19143), (391, 19248), (427, 19320), (433, 19344), (435, 19350), (514, 19548), (518, 19560), (522, 19569), (528, 19584), (565, 19650),

Gene: Charming\_34 Start: 29358, Stop: 30314, Start Num: 78

Candidate Starts for Charming\_34:

(Start: 78 @29358 has 51 MA's), (175, 29544), (180, 29556), (196, 29583), (211, 29604), (248, 29664), (299, 29754), (322, 29790), (343, 29823), (352, 29838), (356, 29850), (376, 29880), (384, 29886), (415, 29946), (471, 30036), (504, 30126), (512, 30150), (516, 30162), (542, 30228), (554, 30243), (569, 30267), (576, 30279), (588, 30309),

Gene: Chartreuse\_30 Start: 18913, Stop: 19926, Start Num: 97

Candidate Starts for Chartreuse\_30:

(Start: 97 @18913 has 272 MA's), (127, 18967), (152, 19006), (201, 19111), (277, 19258), (296, 19288), (320, 19327), (322, 19330), (344, 19375), (368, 19435), (464, 19633), (518, 19783), (522, 19792),

Gene: Chaser\_17 Start: 15760, Stop: 16647, Start Num: 93

Candidate Starts for Chaser\_17:

(Start: 93 @15760 has 72 MA's), (111, 15784), (125, 15811), (127, 15814), (136, 15829), (154, 15862), (201, 15958), (277, 16093), (282, 16102), (320, 16162), (322, 16165), (360, 16243), (378, 16258), (390, 16282), (421, 16324), (455, 16351), (467, 16375), (474, 16393), (493, 16444), (501, 16471), (518, 16519), (531, 16546), (585, 16630),

Gene: Chavito\_22 Start: 15385, Stop: 16524, Start Num: 30

Candidate Starts for Chavito\_22:

(Start: 30 @15385 has 217 MA's), (61, 15505), (119, 15595), (159, 15664), (206, 15763), (207, 15766), (262, 15865), (292, 15919), (340, 16000), (371, 16075), (389, 16090), (471, 16201), (487, 16243), (509, 16297), (524, 16336), (533, 16360), (569, 16420), (580, 16438), (584, 16453), (599, 16492), (601, 16510),

Gene: Che12\_29 Start: 18081, Stop: 19091, Start Num: 97

Candidate Starts for Che12\_29:

(Start: 97 @18081 has 272 MA's), (152, 18174), (167, 18210), (280, 18432), (296, 18456), (320, 18495), (322, 18498), (382, 18633), (430, 18726), (518, 18948), (528, 18972), (565, 19038),

Gene: Che9d\_18 Start: 12821, Stop: 13750, Start Num: 92

Candidate Starts for Che9d\_18:

(Start: 92 @12821 has 38 MA's), (128, 12881), (152, 12932), (203, 13031), (206, 13037), (217, 13052), (285, 13172), (341, 13256), (348, 13268), (373, 13313), (402, 13352), (405, 13358), (415, 13382), (418, 13385), (419, 13388), (468, 13466), (475, 13487), (476, 13490), (490, 13526), (502, 13553), (503, 13556), (518, 13595), (527, 13613), (528, 13619), (542, 13655), (547, 13661), (562, 13685), (567, 13691), (571, 13697),

Gene: CheeseTouch\_19 Start: 15504, Stop: 16424, Start Num: 102

Candidate Starts for CheeseTouch\_19:

(Start: 99 @15501 has 15 MA's), (Start: 102 @15504 has 6 MA's), (111, 15516), (121, 15534), (145, 15579), (163, 15618), (180, 15657), (203, 15690), (206, 15696), (244, 15765), (276, 15822), (277, 15825), (285, 15837), (302, 15861), (306, 15867), (316, 15885), (352, 15939), (356, 15951), (358, 15957), (374, 15978), (405, 16026), (410, 16044), (415, 16050), (424, 16065), (426, 16068), (502, 16221), (503, 16224), (505, 16230), (518, 16263), (538, 16314), (571, 16365), (579, 16380), (592, 16416),

Gene: CheetoDust\_22 Start: 16028, Stop: 17164, Start Num: 30

Candidate Starts for CheetoDust\_22:

(Start: 30 @16028 has 217 MA's), (61, 16145), (119, 16235), (132, 16256), (144, 16277), (159, 16304), (292, 16559), (340, 16640), (371, 16715), (389, 16730), (471, 16841), (487, 16883), (524, 16976), (533, 17000), (584, 17093), (599, 17132), (601, 17150),

Gene: Cheetobro\_23 Start: 17497, Stop: 18630, Start Num: 30

Candidate Starts for Cheetobro\_23:

(Start: 30 @17497 has 217 MA's), (37, 17515), (Start: 51 @17587 has 2 MA's), (61, 17617), (119, 17707), (144, 17749), (157, 17773), (207, 17878), (292, 18031), (334, 18100), (337, 18106), (427, 18259), (451, 18277), (471, 18307), (487, 18349), (488, 18352), (584, 18559), (599, 18598), (601, 18616),

Gene: CherryCola\_34 Start: 25854, Stop: 26798, Start Num: 83

Candidate Starts for CherryCola\_34:

(Start: 83 @25854 has 29 MA's), (142, 25959), (173, 26028), (175, 26034), (185, 26058), (196, 26073), (415, 26433), (424, 26448), (440, 26466), (486, 26568), (504, 26610), (516, 26646), (563, 26742), (588, 26793),

Gene: Cherrybomb426\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Cherrybomb426\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: CherryonLim\_18 Start: 15217, Stop: 16173, Start Num: 97

Candidate Starts for CherryonLim\_18:

(Start: 97 @15217 has 272 MA's), (125, 15262), (163, 15346), (185, 15400), (206, 15427), (240, 15478), (241, 15481), (244, 15487), (246, 15490), (281, 15559), (306, 15604), (320, 15628), (358,

15694), (415, 15790), (494, 15952), (502, 15973), (503, 15976), (513, 16006), (516, 16015), (538, 16072), (587, 16159), (589, 16165),

Gene: ChewyVIII\_55 Start: 37234, Stop: 38175, Start Num: 71

Candidate Starts for ChewyVIII\_55:

(Start: 71 @37234 has 1 MA's), (138, 37336), (195, 37456), (206, 37477), (241, 37507), (260, 37546), (295, 37612), (359, 37726), (412, 37828), (428, 37855), (524, 38038), (544, 38086), (567, 38125), (571, 38131),

Gene: Chickadee\_31 Start: 26548, Stop: 27525, Start Num: 64

Candidate Starts for Chickadee\_31:

(Start: 64 @26548 has 25 MA's), (79, 26560), (Start: 96 @26587 has 14 MA's), (119, 26635), (121, 26638), (151, 26689), (186, 26767), (240, 26863), (277, 26935), (352, 27064), (363, 27097), (396, 27133), (504, 27319), (517, 27349), (529, 27376), (544, 27412), (564, 27445), (598, 27514),

Gene: ChickenTender\_19 Start: 14814, Stop: 15800, Start Num: 97

Candidate Starts for ChickenTender\_19:

(Start: 97 @14814 has 272 MA's), (111, 14835), (125, 14859), (136, 14880), (142, 14895), (173, 14967), (185, 14997), (240, 15075), (244, 15084), (246, 15087), (273, 15141), (279, 15153), (306, 15201), (316, 15219), (334, 15243), (358, 15291), (384, 15357), (415, 15417), (424, 15432), (426, 15435), (441, 15459), (475, 15531), (481, 15549), (502, 15600), (503, 15603), (513, 15633), (516, 15642), (522, 15657), (547, 15714), (578, 15762), (587, 15786), (589, 15792),

Gene: ChipMunk\_29 Start: 19587, Stop: 20603, Start Num: 97

Candidate Starts for ChipMunk\_29:

(Start: 97 @19587 has 272 MA's), (142, 19662), (152, 19680), (167, 19716), (183, 19755), (296, 19962), (320, 20001), (322, 20004), (361, 20091), (446, 20271), (486, 20373), (514, 20448), (518, 20460),

Gene: ChocoMunchkin\_17 Start: 14430, Stop: 15401, Start Num: 97

Candidate Starts for ChocoMunchkin\_17:

(Start: 97 @14430 has 272 MA's), (125, 14475), (136, 14496), (142, 14511), (152, 14532), (173, 14583), (185, 14613), (206, 14640), (240, 14691), (244, 14700), (246, 14703), (273, 14757), (279, 14769), (306, 14817), (322, 14844), (358, 14907), (384, 14958), (402, 14988), (415, 15018), (426, 15036), (475, 15132), (481, 15150), (502, 15201), (503, 15204), (513, 15234), (516, 15243), (522, 15258), (547, 15315), (578, 15363), (587, 15387), (589, 15393),

Gene: Chop\_21 Start: 16827, Stop: 17888, Start Num: 60

Candidate Starts for Chop\_21:

(Start: 60 @16827 has 18 MA's), (Start: 94 @16872 has 30 MA's), (111, 16902), (167, 17010), (245, 17160), (265, 17208), (315, 17292), (321, 17301), (345, 17343), (443, 17520), (479, 17589), (547, 17751), (567, 17784), (598, 17856), (599, 17859),

Gene: Chris\_21 Start: 15243, Stop: 16379, Start Num: 30

Candidate Starts for Chris\_21:

(Start: 30 @15243 has 217 MA's), (61, 15360), (75, 15378), (132, 15471), (159, 15519), (262, 15720), (322, 15819), (330, 15840), (369, 15927), (389, 15945), (427, 16008), (454, 16032), (471, 16056), (487, 16098), (488, 16101), (509, 16152), (524, 16191), (584, 16308), (595, 16335), (599, 16347), (601, 16365),

Gene: CicholasNage\_17 Start: 15849, Stop: 16748, Start Num: 80

Candidate Starts for CicholasNage\_17:



(Start: 80 @15849 has 9 MA's), (Start: 93 @15867 has 72 MA's), (111, 15891), (127, 15921), (136, 15936), (154, 15969), (235, 16113), (274, 16194), (320, 16269), (322, 16272), (324, 16278), (347, 16323), (360, 16350), (385, 16383), (390, 16389), (415, 16422), (421, 16431), (455, 16458), (501, 16578), (518, 16626), (563, 16692), (567, 16698), (585, 16737),

Gene: ClamChowder\_32 Start: 25634, Stop: 26578, Start Num: 83

Candidate Starts for ClamChowder\_32:

(Start: 83 @25634 has 29 MA's), (142, 25739), (173, 25808), (175, 25814), (185, 25838), (196, 25853), (415, 26213), (424, 26228), (440, 26246), (486, 26348), (504, 26390), (516, 26426), (563, 26522), (588, 26573),

Gene: Clarkson\_50 Start: 26438, Stop: 27400, Start Num: 94

Candidate Starts for Clarkson\_50:

(Start: 94 @26438 has 30 MA's), (163, 26570), (173, 26594), (178, 26603), (181, 26609), (184, 26618), (201, 26642), (206, 26651), (213, 26663), (216, 26675), (271, 26789), (312, 26870), (322, 26885), (324, 26891), (385, 26999), (476, 27125), (478, 27131), (506, 27206), (536, 27281), (539, 27287), (548, 27299), (550, 27302), (593, 27389), (594, 27392), (596, 27395),

Gene: Claus\_17 Start: 16055, Stop: 16969, Start Num: 93

Candidate Starts for Claus\_17:

(Start: 93 @16055 has 72 MA's), (111, 16079), (127, 16109), (167, 16190), (189, 16235), (318, 16460), (320, 16463), (322, 16466), (336, 16496), (363, 16553), (390, 16583), (455, 16652), (464, 16670), (493, 16745), (498, 16757), (518, 16820), (531, 16847), (567, 16910), (585, 16949), (591, 16961),

Gene: Clautastrophe\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for Clautastrophe\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: Cleo\_17 Start: 15020, Stop: 15991, Start Num: 97

Candidate Starts for Cleo\_17:

(54, 14945), (Start: 97 @15020 has 272 MA's), (125, 15065), (163, 15149), (185, 15203), (228, 15260), (240, 15284), (244, 15293), (246, 15296), (273, 15353), (306, 15413), (316, 15431), (358, 15503), (365, 15524), (475, 15719), (503, 15788), (504, 15791), (513, 15818), (516, 15827), (527, 15851), (538, 15884), (549, 15902), (575, 15947), (587, 15977),

Gene: Clipper\_24 Start: 16028, Stop: 17164, Start Num: 30

Candidate Starts for Clipper\_24:

(Start: 30 @16028 has 217 MA's), (61, 16145), (119, 16235), (132, 16256), (144, 16277), (159, 16304), (292, 16559), (340, 16640), (371, 16715), (389, 16730), (471, 16841), (487, 16883), (524, 16976), (533, 17000), (584, 17093), (599, 17132), (601, 17150),

Gene: CloudWang3\_30 Start: 18960, Stop: 19976, Start Num: 97

Candidate Starts for CloudWang3\_30:

(Start: 97 @18960 has 272 MA's), (110, 18978), (127, 19014), (152, 19053), (201, 19158), (296, 19335), (320, 19374), (322, 19377), (361, 19464), (368, 19485), (430, 19611), (464, 19683), (518, 19833), (522, 19842), (565, 19923),

Gene: Clown\_34 Start: 27669, Stop: 28601, Start Num: 83

Candidate Starts for Clown\_34:

(Start: 83 @27669 has 29 MA's), (Start: 90 @27678 has 2 MA's), (123, 27726), (142, 27765), (163, 27810), (175, 27840), (185, 27864), (196, 27879), (233, 27936), (299, 28053), (301, 28056), (415, 28236), (486, 28371), (502, 28407), (504, 28413), (516, 28449), (539, 28509), (542, 28515), (549, 28524), (563, 28545),

Gene: ClubL\_47 Start: 28631, Stop: 29512, Start Num: 72

Candidate Starts for ClubL\_47:

(Start: 72 @28631 has 12 MA's), (106, 28679), (119, 28706), (160, 28778), (187, 28844), (206, 28874), (282, 28982), (337, 29075), (352, 29099), (357, 29114), (427, 29210), (471, 29258), (552, 29438), (573, 29474),

Gene: CoffeeBean\_44 Start: 30363, Stop: 31289, Start Num: 73

Candidate Starts for CoffeeBean\_44:

(Start: 73 @30363 has 5 MA's), (Start: 105 @30399 has 2 MA's), (167, 30516), (183, 30555), (195, 30573), (241, 30624), (292, 30723), (338, 30798), (343, 30807), (377, 30882), (387, 30903), (471, 31041), (487, 31077), (504, 31116), (524, 31158), (559, 31221), (576, 31254),

Gene: Coleslaw\_17 Start: 15468, Stop: 16640, Start Num: 30

Candidate Starts for Coleslaw\_17:

(6, 15135), (Start: 30 @15468 has 217 MA's), (61, 15588), (75, 15606), (Start: 105 @15651 has 2 MA's), (110, 15657), (142, 15720), (161, 15756), (192, 15825), (195, 15828), (206, 15849), (241, 15903), (262, 15948), (280, 15978), (337, 16080), (344, 16092), (352, 16104), (358, 16122), (451, 16287), (471, 16317), (479, 16335), (487, 16359), (534, 16479), (584, 16569), (597, 16602),

Gene: Colin\_31 Start: 20885, Stop: 21898, Start Num: 97

Candidate Starts for Colin\_31:

(Start: 97 @20885 has 272 MA's), (110, 20903), (142, 20960), (152, 20978), (167, 21014), (183, 21053), (296, 21260), (320, 21299), (322, 21302), (344, 21347), (368, 21407), (382, 21440), (429, 21530), (430, 21533), (446, 21566), (518, 21755), (522, 21764),

Gene: Collard\_20 Start: 16380, Stop: 17510, Start Num: 36

Candidate Starts for Collard\_20:

(Start: 36 @16380 has 22 MA's), (Start: 105 @16554 has 2 MA's), (142, 16620), (144, 16623), (159, 16650), (206, 16749), (262, 16851), (292, 16905), (312, 16935), (330, 16971), (333, 16974), (337, 16983), (369, 17058), (371, 17061), (405, 17097), (427, 17139), (451, 17157), (454, 17163), (471, 17187), (472, 17190), (487, 17229), (584, 17439), (599, 17478), (601, 17496),

Gene: Colleen\_18 Start: 16550, Stop: 17428, Start Num: 87

Candidate Starts for Colleen\_18:

(Start: 87 @16550 has 10 MA's), (Start: 90 @16553 has 2 MA's), (136, 16637), (201, 16775), (363, 17063),

Gene: Commandaria\_42 Start: 30197, Stop: 31138, Start Num: 78

Candidate Starts for Commandaria\_42:

(Start: 78 @30197 has 51 MA's), (130, 30284), (145, 30314), (167, 30359), (241, 30467), (343, 30650), (383, 30731), (387, 30737), (406, 30764), (514, 30980), (524, 31007), (576, 31103),

Gene: Confidence\_19 Start: 16655, Stop: 17563, Start Num: 92

Candidate Starts for Confidence\_19:

(Start: 92 @16655 has 38 MA's), (126, 16712), (190, 16847), (203, 16862), (204, 16865), (236, 16916), (316, 17024), (346, 17072), (358, 17096), (372, 17114), (374, 17120), (400, 17156), (475, 17312), (493, 17339), (498, 17351), (503, 17366), (518, 17411), (529, 17438), (544, 17474), (547, 17477), (567, 17513), (571, 17519), (575, 17525),

Gene: Conquerage\_28 Start: 20557, Stop: 21570, Start Num: 97

Candidate Starts for Conquerage\_28:

(Start: 97 @20557 has 272 MA's), (110, 20575), (142, 20632), (152, 20650), (167, 20686), (261, 20866), (277, 20902), (296, 20932), (322, 20974), (397, 21133), (464, 21277), (486, 21340), (514, 21415), (518, 21427), (528, 21451),

Gene: Conspiracy\_23 Start: 18474, Stop: 19487, Start Num: 103

Candidate Starts for Conspiracy\_23:

(Start: 103 @18474 has 85 MA's), (152, 18570), (165, 18603), (167, 18606), (183, 18645), (210, 18693), (296, 18846), (308, 18864), (322, 18888), (342, 18930), (481, 19242), (518, 19344), (529, 19371),

Gene: Coog\_23 Start: 18617, Stop: 19630, Start Num: 103

Candidate Starts for Coog\_23:

(Start: 103 @18617 has 85 MA's), (152, 18713), (165, 18746), (167, 18749), (183, 18788), (261, 18923), (293, 18983), (296, 18989), (308, 19007), (322, 19031), (342, 19073), (481, 19385), (518, 19487), (529, 19514), (565, 19577),

Gene: Cookiedough\_30 Start: 18959, Stop: 19972, Start Num: 97

Candidate Starts for Cookiedough\_30:

(Start: 97 @18959 has 272 MA's), (127, 19013), (152, 19052), (201, 19157), (277, 19304), (296, 19334), (320, 19373), (322, 19376), (344, 19421), (368, 19481), (464, 19679), (518, 19829), (522, 19838),

Gene: Corazon\_47 Start: 26391, Stop: 27353, Start Num: 94

Candidate Starts for Corazon\_47:

(Start: 94 @26391 has 30 MA's), (163, 26523), (173, 26547), (178, 26556), (181, 26562), (184, 26571), (201, 26595), (206, 26604), (213, 26616), (216, 26628), (271, 26742), (312, 26823), (322, 26838), (324, 26844), (385, 26952), (476, 27078), (478, 27084), (506, 27159), (536, 27234), (539, 27240), (548, 27252), (550, 27255), (593, 27342), (594, 27345), (596, 27348),

Gene: Coriander\_18 Start: 16561, Stop: 17508, Start Num: 94

Candidate Starts for Coriander\_18:

(Start: 94 @16561 has 30 MA's), (195, 16756), (244, 16837), (250, 16849), (289, 16921), (296, 16927), (306, 16942), (358, 17032), (360, 17038), (405, 17101), (415, 17125), (418, 17128), (419, 17131), (442, 17167), (475, 17236), (490, 17278), (502, 17305), (518, 17347), (519, 17350), (524, 17362), (565, 17437), (590, 17491),

Gene: CosmicSans\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for CosmicSans\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: CoveyB\_33 Start: 25434, Stop: 26378, Start Num: 83

Candidate Starts for CoveyB\_33:

(Start: 83 @25434 has 29 MA's), (142, 25539), (173, 25608), (175, 25614), (185, 25638), (196, 25653), (415, 26013), (424, 26028), (440, 26046), (486, 26148), (504, 26190), (516, 26226), (563, 26322), (588, 26373),

Gene: Cozz\_17 Start: 14765, Stop: 15736, Start Num: 97

Candidate Starts for Cozz\_17:

(Start: 97 @14765 has 272 MA's), (125, 14810), (136, 14831), (163, 14894), (173, 14918), (185, 14948), (214, 14987), (240, 15026), (244, 15035), (246, 15038), (279, 15104), (306, 15152), (334, 15194), (358, 15242), (384, 15293), (415, 15353), (424, 15368), (426, 15371), (437, 15389), (441, 15395), (462, 15440), (475, 15467), (481, 15485), (503, 15539), (513, 15569), (516, 15578), (522, 15593), (547, 15650), (578, 15698), (587, 15722), (589, 15728),

Gene: Cracklewink\_23 Start: 18745, Stop: 19743, Start Num: 52

Candidate Starts for Cracklewink\_23:

(Start: 52 @18745 has 5 MA's), (Start: 97 @18811 has 272 MA's), (Start: 103 @18820 has 85 MA's), (132, 18883), (142, 18901), (145, 18907), (206, 19030), (222, 19057), (223, 19060), (244, 19081), (297, 19183), (305, 19192), (322, 19219), (358, 19294), (401, 19336), (412, 19363), (471, 19432), (472, 19435), (490, 19477), (509, 19525), (512, 19534), (529, 19576), (534, 19588), (571, 19645), (599, 19714),

Gene: Crater\_17 Start: 15047, Stop: 15973, Start Num: 97

Candidate Starts for Crater\_17:

(Start: 97 @15047 has 272 MA's), (Start: 102 @15053 has 6 MA's), (121, 15083), (152, 15143), (163, 15167), (171, 15182), (176, 15197), (180, 15206), (185, 15218), (203, 15239), (214, 15257), (220, 15269), (244, 15314), (273, 15368), (276, 15371), (277, 15374), (285, 15386), (306, 15416), (316, 15434), (352, 15488), (356, 15500), (358, 15506), (374, 15527), (405, 15575), (410, 15593), (415, 15599), (424, 15614), (426, 15617), (502, 15770), (503, 15773), (505, 15779), (518, 15812), (527, 15830), (538, 15863), (571, 15914), (579, 15929), (592, 15965),

Gene: Crespo\_17 Start: 15478, Stop: 16650, Start Num: 30

Candidate Starts for Crespo\_17:

(6, 15145), (Start: 30 @15478 has 217 MA's), (61, 15598), (75, 15616), (Start: 105 @15661 has 2 MA's), (110, 15667), (142, 15730), (161, 15766), (192, 15835), (195, 15838), (206, 15859), (241, 15913), (262, 15958), (280, 15988), (337, 16090), (344, 16102), (352, 16114), (358, 16132), (451, 16297), (471, 16327), (479, 16345), (487, 16369), (534, 16489), (584, 16579), (597, 16612),

Gene: CrimD\_22 Start: 15989, Stop: 17125, Start Num: 30

Candidate Starts for CrimD\_22:

(Start: 30 @15989 has 217 MA's), (61, 16106), (119, 16196), (132, 16217), (144, 16238), (159, 16265), (292, 16520), (340, 16601), (371, 16676), (389, 16691), (471, 16802), (487, 16844), (524, 16937), (533, 16961), (584, 17054), (599, 17093), (601, 17111),

Gene: Crossroads\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Crossroads\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Crucio\_27 Start: 19105, Stop: 20121, Start Num: 97

Candidate Starts for Crucio\_27:

(Start: 97 @19105 has 272 MA's), (142, 19180), (152, 19198), (167, 19234), (183, 19273), (296, 19480), (320, 19519), (322, 19522), (446, 19789), (486, 19891), (514, 19966), (518, 19978), (565, 20068),

Gene: Cruella\_30 Start: 27616, Stop: 28482, Start Num: 66

Candidate Starts for Cruella\_30:

(Start: 66 @27616 has 8 MA's), (85, 27640), (113, 27685), (142, 27745), (162, 27784), (209, 27880), (316, 28042), (335, 28075), (383, 28150), (402, 28174), (481, 28249), (507, 28315), (524, 28351), (534, 28378), (569, 28435),

Gene: Cuco\_23 Start: 18647, Stop: 19660, Start Num: 103

Candidate Starts for Cuco\_23:

(Start: 103 @18647 has 85 MA's), (152, 18743), (165, 18776), (167, 18779), (183, 18818), (261, 18953), (293, 19013), (296, 19019), (308, 19037), (322, 19061), (342, 19103), (481, 19415), (518, 19517), (565, 19607),

Gene: Cucurbita\_49 Start: 30001, Stop: 30882, Start Num: 72

Candidate Starts for Cucurbita\_49:

(Start: 72 @30001 has 12 MA's), (106, 30049), (119, 30076), (160, 30148), (187, 30214), (206, 30244), (282, 30352), (337, 30445), (352, 30469), (357, 30484), (427, 30580), (471, 30628), (552, 30808), (573, 30844),

Gene: Culver\_47 Start: 28434, Stop: 29321, Start Num: 68

Candidate Starts for Culver\_47:

(Start: 68 @28434 has 24 MA's), (Start: 72 @28440 has 12 MA's), (106, 28488), (119, 28515), (160, 28587), (187, 28653), (206, 28683), (282, 28791), (337, 28884), (352, 28908), (357, 28923), (427, 29019), (471, 29067), (552, 29247), (573, 29283),

Gene: Curiosium\_23 Start: 15737, Stop: 16873, Start Num: 30

Candidate Starts for Curiosium\_23:

(Start: 30 @15737 has 217 MA's), (61, 15854), (132, 15965), (159, 16013), (292, 16268), (295, 16274), (340, 16349), (389, 16439), (471, 16550), (487, 16592), (524, 16685), (533, 16709), (584, 16802), (599, 16841), (601, 16859),

Gene: D29\_27 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for D29\_27:

(Start: 97 @19042 has 272 MA's), (127, 19096), (142, 19117), (152, 19135), (240, 19306), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: D32\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for D32\_30:

(Start: 97 @19042 has 272 MA's), (127, 19096), (142, 19117), (152, 19135), (240, 19306), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: DBQu4n\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for DBQu4n\_30:

(Start: 97 @19042 has 272 MA's), (142, 19117), (152, 19135), (240, 19306), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: DHan\_17 Start: 15991, Stop: 16905, Start Num: 93

Candidate Starts for DHan\_17:

(Start: 93 @15991 has 72 MA's), (111, 16015), (127, 16045), (167, 16126), (189, 16171), (318, 16396), (320, 16399), (322, 16402), (336, 16432), (363, 16489), (390, 16519), (455, 16588), (464, 16606), (493, 16681), (498, 16693), (518, 16756), (531, 16783), (567, 16846), (585, 16885), (591, 16897),

Gene: DMoney\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for DMoney\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241,

15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: DNAIII\_0017 Start: 15486, Stop: 16658, Start Num: 30

Candidate Starts for DNAIII\_0017:

(6, 15153), (Start: 30 @15486 has 217 MA's), (61, 15606), (75, 15624), (Start: 105 @15669 has 2 MA's), (110, 15675), (142, 15738), (161, 15774), (192, 15843), (195, 15846), (206, 15867), (241, 15921), (262, 15966), (280, 15996), (337, 16098), (344, 16110), (352, 16122), (358, 16140), (451, 16305), (471, 16335), (479, 16353), (487, 16377), (534, 16497), (584, 16587), (597, 16620),

Gene: DS6A\_20 Start: 16001, Stop: 16972, Start Num: 67

Candidate Starts for DS6A\_20:

(Start: 67 @16001 has 1 MA's), (110, 16064), (163, 16178), (164, 16181), (192, 16241), (206, 16259), (224, 16286), (296, 16415), (298, 16418), (305, 16427), (323, 16460), (373, 16538), (375, 16541), (415, 16613), (493, 16760), (494, 16763), (497, 16769), (502, 16784), (507, 16799), (539, 16880), (565, 16919), (573, 16931),

Gene: DaVinci\_30 Start: 18967, Stop: 19980, Start Num: 97

Candidate Starts for DaVinci\_30:

(Start: 97 @18967 has 272 MA's), (127, 19021), (152, 19060), (201, 19165), (277, 19312), (296, 19342), (320, 19381), (322, 19384), (344, 19429), (368, 19489), (464, 19687), (518, 19837), (522, 19846),

Gene: Dadosky\_20 Start: 16302, Stop: 17432, Start Num: 36

Candidate Starts for Dadosky\_20:

(Start: 36 @16302 has 22 MA's), (Start: 105 @16476 has 2 MA's), (142, 16542), (159, 16572), (206, 16671), (262, 16773), (292, 16827), (312, 16857), (330, 16893), (333, 16896), (337, 16905), (369, 16980), (371, 16983), (398, 17004), (405, 17019), (427, 17061), (451, 17079), (454, 17085), (471, 17109), (472, 17112), (487, 17151), (528, 17253), (584, 17361), (599, 17400), (601, 17418),

Gene: Daegal\_22 Start: 16606, Stop: 17700, Start Num: 55

Candidate Starts for Daegal\_22:

(Start: 55 @16606 has 22 MA's), (57, 16615), (119, 16711), (125, 16720), (131, 16729), (159, 16780), (161, 16786), (209, 16882), (221, 16900), (253, 16969), (257, 16978), (265, 16999), (267, 17005), (270, 17011), (273, 17014), (315, 17086), (317, 17089), (402, 17245), (431, 17296), (438, 17314), (473, 17386), (481, 17404), (514, 17488), (524, 17515), (527, 17518), (542, 17554), (555, 17572), (580, 17614), (584, 17629), (586, 17632), (597, 17662), (599, 17668),

Gene: Dalilpop\_45 Start: 31200, Stop: 32117, Start Num: 76

Candidate Starts for Dalilpop\_45:

(2, 30261), (Start: 76 @31200 has 24 MA's), (130, 31278), (206, 31431), (292, 31560), (331, 31623), (387, 31731), (524, 31986), (563, 32061), (576, 32082),

Gene: Dalmatian\_27 Start: 19252, Stop: 20268, Start Num: 97

Candidate Starts for Dalmatian\_27:

(Start: 97 @19252 has 272 MA's), (142, 19327), (152, 19345), (167, 19381), (183, 19420), (296, 19627), (320, 19666), (322, 19669), (446, 19936), (486, 20038), (514, 20113), (518, 20125), (565, 20215), (567, 20218),

Gene: Dalmuri\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Dalmuri\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999),

(533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: DanBing\_16 Start: 15895, Stop: 16809, Start Num: 93

Candidate Starts for DanBing\_16:

(Start: 93 @15895 has 72 MA's), (111, 15919), (127, 15949), (167, 16030), (189, 16075), (318, 16300), (320, 16303), (322, 16306), (336, 16336), (363, 16393), (390, 16423), (455, 16492), (464, 16510), (493, 16585), (498, 16597), (518, 16660), (531, 16687), (567, 16750), (585, 16789), (591, 16801),

Gene: Danforth\_22 Start: 17615, Stop: 18637, Start Num: 103

Candidate Starts for Danforth\_22:

(Start: 103 @17615 has 85 MA's), (163, 17738), (165, 17744), (201, 17816), (261, 17921), (271, 17948), (322, 18038), (413, 18239), (429, 18269), (430, 18272), (514, 18482), (529, 18521), (555, 18569), (565, 18584),

Gene: Danyall\_32 Start: 25434, Stop: 26378, Start Num: 83

Candidate Starts for Danyall\_32:

(Start: 83 @25434 has 29 MA's), (142, 25539), (173, 25608), (175, 25614), (185, 25638), (196, 25653), (415, 26013), (424, 26028), (440, 26046), (486, 26148), (504, 26190), (516, 26226), (563, 26322), (588, 26373),

Gene: Dardanus\_23 Start: 15835, Stop: 16677, Start Num: 120

Candidate Starts for Dardanus\_23:

(Start: 120 @15835 has 6 MA's), (Start: 122 @15838 has 5 MA's), (132, 15850), (153, 15886), (166, 15916), (168, 15919), (193, 15967), (212, 16000), (237, 16051), (243, 16063), (249, 16075), (322, 16198), (344, 16240), (350, 16249), (357, 16267), (358, 16270), (391, 16318), (393, 16321), (402, 16342), (427, 16390), (460, 16426), (499, 16498), (500, 16501), (502, 16507), (540, 16597), (551, 16612), (572, 16648),

Gene: Daredevil\_28 Start: 24544, Stop: 25425, Start Num: 68

Candidate Starts for Daredevil\_28:

(Start: 68 @24544 has 24 MA's), (119, 24619), (155, 24682), (160, 24691), (163, 24700), (242, 24820), (274, 24880), (337, 24988), (427, 25123), (471, 25171), (504, 25246), (523, 25294), (545, 25342), (552, 25351),

Gene: Darionha\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Darionha\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Darrell\_29 Start: 20724, Stop: 21746, Start Num: 97

Candidate Starts for Darrell\_29:

(Start: 97 @20724 has 272 MA's), (110, 20742), (121, 20769), (142, 20799), (152, 20817), (261, 21033), (277, 21069), (296, 21099), (322, 21141), (391, 21291), (397, 21300), (433, 21387), (464, 21453), (514, 21591), (518, 21603), (522, 21612), (528, 21627),

Gene: DARTH\_P\_21 Start: 16442, Stop: 17578, Start Num: 30

Candidate Starts for DARTH\_P\_21:

(Start: 30 @16442 has 217 MA's), (61, 16559), (75, 16577), (Start: 97 @16610 has 272 MA's), (119, 16649), (159, 16718), (206, 16817), (209, 16823), (262, 16919), (292, 16973), (330, 17039), (337, 17051), (427, 17207), (454, 17231), (487, 17297), (488, 17300), (490, 17303), (524, 17390), (584, 17507), (599, 17546), (601, 17564),

Gene: DARTHPhader\_28 Start: 20722, Stop: 21738, Start Num: 97

Candidate Starts for DARTHPhader\_28:

(Start: 97 @20722 has 272 MA's), (142, 20797), (152, 20815), (167, 20851), (183, 20890), (296, 21097), (320, 21136), (322, 21139), (382, 21280), (421, 21352), (518, 21595),

Gene: Dartin\_22 Start: 15375, Stop: 16514, Start Num: 30

Candidate Starts for Dartin\_22:

(Start: 30 @15375 has 217 MA's), (61, 15495), (119, 15585), (159, 15654), (206, 15753), (207, 15756), (262, 15855), (292, 15909), (340, 15990), (371, 16065), (389, 16080), (454, 16167), (471, 16191), (487, 16233), (488, 16236), (509, 16287), (524, 16326), (569, 16410), (580, 16428), (584, 16443), (599, 16482), (601, 16500),

Gene: Darwin\_33 Start: 27301, Stop: 28167, Start Num: 66

Candidate Starts for Darwin\_33:

(Start: 66 @27301 has 8 MA's), (85, 27325), (113, 27370), (142, 27430), (162, 27469), (209, 27565), (316, 27727), (335, 27760), (383, 27835), (402, 27859), (507, 28000), (524, 28036), (534, 28063), (569, 28120),

Gene: DatBoi\_30 Start: 26971, Stop: 27855, Start Num: 68

Candidate Starts for DatBoi\_30:

(Start: 68 @26971 has 24 MA's), (88, 26992), (119, 27046), (242, 27247), (268, 27298), (274, 27307), (292, 27343), (337, 27415), (341, 27421), (427, 27550), (471, 27598), (504, 27673), (523, 27721),

Gene: Deby\_22 Start: 15985, Stop: 17121, Start Num: 30

Candidate Starts for Deby\_22:

(Start: 30 @15985 has 217 MA's), (61, 16102), (119, 16192), (132, 16213), (144, 16234), (159, 16261), (292, 16516), (340, 16597), (371, 16672), (389, 16687), (471, 16798), (487, 16840), (524, 16933), (533, 16957), (584, 17050), (599, 17089), (601, 17107),

Gene: DeepSoil15\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for DeepSoil15\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: DekHockey33\_29 Start: 18241, Stop: 19218, Start Num: 100

Candidate Starts for DekHockey33\_29:

(Start: 100 @18241 has 20 MA's), (163, 18355), (165, 18361), (167, 18364), (286, 18598), (430, 18865), (461, 18919), (518, 19075),

Gene: DelRio\_22 Start: 17301, Stop: 18362, Start Num: 60

Candidate Starts for DelRio\_22:

(Start: 60 @17301 has 18 MA's), (Start: 94 @17346 has 30 MA's), (111, 17376), (167, 17484), (245, 17634), (265, 17682), (315, 17766), (321, 17775), (345, 17817), (443, 17994), (479, 18063), (567, 18258), (598, 18330), (599, 18333),

Gene: Delian\_18 Start: 15817, Stop: 16677, Start Num: 70

Candidate Starts for Delian\_18:

(Start: 65 @15811 has 6 MA's), (Start: 70 @15817 has 27 MA's), (163, 15973), (203, 16054), (274, 16153), (340, 16261), (400, 16345), (451, 16411), (481, 16456), (523, 16546), (541, 16588),



Gene: Deloris\_28 Start: 19613, Stop: 20623, Start Num: 97

Candidate Starts for Deloris\_28:

(Start: 97 @19613 has 272 MA's), (152, 19706), (167, 19742), (183, 19781), (296, 19988), (320, 20027), (322, 20030), (430, 20258), (446, 20291), (486, 20393), (497, 20414), (514, 20468), (518, 20480), (565, 20570),

Gene: Delrey21\_33 Start: 29967, Stop: 30944, Start Num: 64

Candidate Starts for Delrey21\_33:

(Start: 64 @29967 has 25 MA's), (119, 30054), (142, 30090), (161, 30126), (240, 30282), (241, 30285), (277, 30354), (312, 30417), (318, 30426), (363, 30516), (391, 30549), (396, 30552), (490, 30705), (507, 30747), (517, 30768), (529, 30795), (536, 30816), (540, 30825), (544, 30831), (564, 30864), (566, 30867), (588, 30912), (591, 30921), (598, 30933),

Gene: Demsculpinboyz\_18 Start: 12806, Stop: 13735, Start Num: 92

Candidate Starts for Demsculpinboyz\_18:

(Start: 92 @12806 has 38 MA's), (128, 12866), (152, 12917), (203, 13016), (206, 13022), (217, 13037), (285, 13157), (298, 13175), (341, 13241), (348, 13253), (373, 13298), (402, 13337), (405, 13343), (415, 13367), (418, 13370), (419, 13373), (468, 13451), (475, 13472), (476, 13475), (490, 13511), (502, 13538), (503, 13541), (518, 13580), (527, 13598), (528, 13604), (542, 13640), (547, 13646), (562, 13670), (567, 13676), (571, 13682),

Gene: Derg\_29 Start: 28515, Stop: 29471, Start Num: 78

Candidate Starts for Derg\_29:

(Start: 78 @28515 has 51 MA's), (163, 28671), (175, 28701), (180, 28713), (181, 28716), (185, 28725), (196, 28740), (206, 28752), (299, 28911), (322, 28947), (356, 29007), (384, 29043), (415, 29103), (471, 29193), (504, 29283), (512, 29307), (516, 29319), (542, 29385), (554, 29400), (569, 29424), (576, 29436),

Gene: Devera\_22 Start: 16032, Stop: 17168, Start Num: 30

Candidate Starts for Devera\_22:

(Start: 30 @16032 has 217 MA's), (61, 16149), (132, 16260), (144, 16281), (159, 16308), (207, 16410), (292, 16563), (340, 16644), (363, 16698), (371, 16719), (389, 16734), (471, 16845), (487, 16887), (524, 16980), (533, 17004), (584, 17097), (599, 17136), (601, 17154),

Gene: Dewey\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Dewey\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Dxdert\_32 Start: 26991, Stop: 27968, Start Num: 64

Candidate Starts for Dxdert\_32:

(Start: 64 @26991 has 25 MA's), (79, 27003), (Start: 96 @27030 has 14 MA's), (119, 27078), (121, 27081), (151, 27132), (186, 27210), (240, 27306), (255, 27339), (277, 27378), (352, 27507), (363, 27540), (396, 27576), (504, 27762), (517, 27792), (529, 27819), (544, 27855), (564, 27888), (598, 27957),

Gene: Dignity\_29 Start: 19628, Stop: 20644, Start Num: 97

Candidate Starts for Dignity\_29:

(Start: 97 @19628 has 272 MA's), (142, 19703), (152, 19721), (167, 19757), (183, 19796), (296, 20003), (320, 20042), (322, 20045), (361, 20132), (446, 20312), (486, 20414), (514, 20489), (518, 20501),

Gene: Diminimus\_28 Start: 21456, Stop: 22367, Start Num: 91

Candidate Starts for Diminimus\_28:

(Start: 91 @21456 has 19 MA's), (147, 21558), (157, 21576), (163, 21591), (201, 21663), (206, 21672), (252, 21750), (318, 21885), (320, 21888), (322, 21891), (356, 21960), (385, 22002), (390, 22008), (483, 22149), (493, 22170), (498, 22182), (561, 22305), (567, 22317),

Gene: Dinger\_22 Start: 15450, Stop: 16322, Start Num: 103

Candidate Starts for Dinger\_22:

(Start: 103 @15450 has 85 MA's), (121, 15489), (165, 15576), (198, 15645), (246, 15723), (322, 15861), (486, 16086), (496, 16104), (518, 16173), (587, 16311),

Gene: DinoDaryn\_23 Start: 15864, Stop: 16697, Start Num: 120

Candidate Starts for DinoDaryn\_23:

(Start: 120 @15864 has 6 MA's), (Start: 122 @15867 has 5 MA's), (139, 15882), (158, 15921), (166, 15942), (168, 15945), (243, 16089), (350, 16275), (402, 16362), (460, 16446), (502, 16527), (538, 16611), (540, 16617), (549, 16629), (551, 16632), (564, 16656),

Gene: DirkDirk\_17 Start: 15858, Stop: 16739, Start Num: 93

Candidate Starts for DirkDirk\_17:

(58, 15804), (59, 15807), (Start: 80 @15840 has 9 MA's), (Start: 93 @15858 has 72 MA's), (111, 15882), (127, 15912), (136, 15927), (154, 15960), (235, 16104), (274, 16185), (320, 16260), (322, 16263), (324, 16269), (347, 16314), (360, 16341), (385, 16374), (390, 16380), (415, 16413), (421, 16422), (455, 16449), (501, 16569), (518, 16617), (531, 16644), (563, 16683), (567, 16689), (585, 16728),

Gene: DirtyBoi\_19 Start: 16014, Stop: 16961, Start Num: 94

Candidate Starts for DirtyBoi\_19:

(Start: 94 @16014 has 30 MA's), (195, 16209), (244, 16290), (250, 16302), (289, 16374), (296, 16380), (306, 16395), (344, 16455), (358, 16485), (360, 16491), (405, 16554), (415, 16578), (418, 16581), (442, 16620), (475, 16689), (490, 16731), (502, 16758), (518, 16800), (519, 16803), (524, 16815), (547, 16866), (565, 16890),

Gene: Discoknowium\_23 Start: 18763, Stop: 19776, Start Num: 103

Candidate Starts for Discoknowium\_23:

(Start: 103 @18763 has 85 MA's), (152, 18859), (165, 18892), (167, 18895), (183, 18934), (210, 18982), (296, 19135), (308, 19153), (322, 19177), (342, 19219), (481, 19531), (518, 19633), (529, 19660), (565, 19723),

Gene: DismalFunk\_18 Start: 13889, Stop: 15016, Start Num: 34

Candidate Starts for DismalFunk\_18:

(Start: 34 @13889 has 10 MA's), (37, 13898), (61, 14000), (119, 14090), (144, 14132), (145, 14135), (159, 14159), (206, 14258), (244, 14321), (262, 14360), (292, 14414), (330, 14480), (337, 14492), (361, 14543), (369, 14567), (427, 14645), (451, 14663), (471, 14693), (474, 14702), (487, 14735), (488, 14738), (533, 14852), (580, 14930), (584, 14945), (599, 14984), (601, 15002),

Gene: DismalStressor\_18 Start: 13889, Stop: 15016, Start Num: 34

Candidate Starts for DismalStressor\_18:

(Start: 34 @13889 has 10 MA's), (37, 13898), (61, 14000), (119, 14090), (144, 14132), (145, 14135), (159, 14159), (206, 14258), (244, 14321), (262, 14360), (292, 14414), (330, 14480), (337, 14492),

(361, 14543), (369, 14567), (427, 14645), (451, 14663), (471, 14693), (474, 14702), (487, 14735), (488, 14738), (533, 14852), (580, 14930), (584, 14945), (599, 14984), (601, 15002),

Gene: Dixon\_23 Start: 17634, Stop: 18656, Start Num: 103

Candidate Starts for Dixon\_23:

(Start: 103 @17634 has 85 MA's), (163, 17757), (165, 17763), (201, 17835), (261, 17940), (271, 17967), (322, 18057), (413, 18258), (429, 18288), (430, 18291), (514, 18501), (529, 18540), (555, 18588), (565, 18603),

Gene: Dmitri\_18 Start: 16558, Stop: 17505, Start Num: 94

Candidate Starts for Dmitri\_18:

(Start: 94 @16558 has 30 MA's), (195, 16753), (244, 16834), (250, 16846), (289, 16918), (296, 16924), (306, 16939), (344, 16999), (358, 17029), (360, 17035), (405, 17098), (415, 17122), (418, 17125), (442, 17164), (475, 17233), (490, 17275), (518, 17344), (519, 17347), (524, 17359), (547, 17410), (565, 17434), (589, 17485), (590, 17488),

Gene: DoctorFroggo\_33 Start: 29967, Stop: 30944, Start Num: 64

Candidate Starts for DoctorFroggo\_33:

(Start: 64 @29967 has 25 MA's), (119, 30054), (142, 30090), (161, 30126), (240, 30282), (241, 30285), (277, 30354), (312, 30417), (318, 30426), (363, 30516), (391, 30549), (396, 30552), (490, 30705), (507, 30747), (517, 30768), (529, 30795), (536, 30816), (540, 30825), (544, 30831), (564, 30864), (566, 30867), (588, 30912), (591, 30921), (598, 30933),

Gene: Dogfish\_20 Start: 17321, Stop: 18181, Start Num: 70

Candidate Starts for Dogfish\_20:

(16, 17051), (Start: 70 @17321 has 27 MA's), (74, 17327), (98, 17363), (101, 17366), (183, 17528), (185, 17534), (196, 17549), (203, 17561), (271, 17657), (274, 17660), (278, 17669), (285, 17681), (292, 17696), (363, 17825), (453, 17921), (469, 17945), (481, 17966), (488, 17987), (502, 18017), (519, 18053), (543, 18107),

Gene: Doggs\_17 Start: 16261, Stop: 17208, Start Num: 94

Candidate Starts for Doggs\_17:

(Start: 94 @16261 has 30 MA's), (195, 16456), (244, 16537), (250, 16549), (289, 16621), (296, 16627), (306, 16642), (344, 16702), (358, 16732), (360, 16738), (405, 16801), (415, 16825), (418, 16828), (442, 16867), (475, 16936), (490, 16978), (502, 17005), (513, 17038), (518, 17047), (519, 17050), (524, 17062), (547, 17113), (565, 17137), (589, 17188), (590, 17191),

Gene: Dole\_22 Start: 16034, Stop: 17170, Start Num: 30

Candidate Starts for Dole\_22:

(Start: 30 @16034 has 217 MA's), (61, 16151), (132, 16262), (144, 16283), (159, 16310), (207, 16412), (292, 16565), (340, 16646), (363, 16700), (371, 16721), (389, 16736), (471, 16847), (487, 16889), (524, 16982), (533, 17006), (584, 17099), (599, 17138), (601, 17156),

Gene: DonkeyMan\_17 Start: 14102, Stop: 14944, Start Num: 96

Candidate Starts for DonkeyMan\_17:

(9, 13646), (13, 13724), (Start: 36 @13922 has 22 MA's), (Start: 72 @14063 has 12 MA's), (Start: 96 @14102 has 14 MA's), (132, 14171), (150, 14201), (162, 14222), (175, 14255), (197, 14297), (198, 14300), (300, 14441), (337, 14507), (425, 14639), (484, 14714), (509, 14768), (524, 14810), (559, 14876), (579, 14915),

Gene: Dorothea\_30 Start: 18967, Stop: 19980, Start Num: 97

Candidate Starts for Dorothea\_30:

(Start: 97 @18967 has 272 MA's), (127, 19021), (152, 19060), (201, 19165), (277, 19312), (296, 19342), (320, 19381), (322, 19384), (344, 19429), (368, 19489), (464, 19687), (518, 19837), (522, 19846),

Gene: Douge\_17 Start: 15701, Stop: 16588, Start Num: 93

Candidate Starts for Douge\_17:

(Start: 93 @15701 has 72 MA's), (111, 15725), (125, 15752), (127, 15755), (136, 15770), (154, 15803), (201, 15899), (277, 16034), (282, 16043), (320, 16103), (322, 16106), (360, 16184), (378, 16199), (390, 16223), (455, 16292), (467, 16316), (474, 16334), (493, 16385), (501, 16412), (518, 16460), (531, 16487), (585, 16571),

Gene: Doughnut\_18 Start: 13918, Stop: 15036, Start Num: 37

Candidate Starts for Doughnut\_18:

(Start: 34 @13909 has 10 MA's), (37, 13918), (61, 14020), (119, 14110), (144, 14152), (159, 14179), (203, 14272), (206, 14278), (244, 14341), (262, 14380), (292, 14434), (337, 14512), (361, 14563), (369, 14587), (427, 14665), (451, 14683), (471, 14713), (487, 14755), (488, 14758), (533, 14872), (580, 14950), (584, 14965), (599, 15004), (601, 15022),

Gene: Douzhi\_17 Start: 15692, Stop: 16579, Start Num: 93

Candidate Starts for Douzhi\_17:

(Start: 93 @15692 has 72 MA's), (111, 15716), (125, 15743), (127, 15746), (136, 15761), (154, 15794), (201, 15890), (277, 16025), (282, 16034), (320, 16094), (322, 16097), (360, 16175), (378, 16190), (390, 16214), (415, 16247), (455, 16283), (467, 16307), (474, 16325), (476, 16334), (493, 16376), (501, 16403), (518, 16451), (531, 16478), (585, 16562),

Gene: DrHayes\_22 Start: 15965, Stop: 17101, Start Num: 30

Candidate Starts for DrHayes\_22:

(Start: 30 @15965 has 217 MA's), (61, 16082), (119, 16172), (132, 16193), (144, 16214), (159, 16241), (262, 16442), (292, 16496), (295, 16502), (340, 16577), (371, 16652), (389, 16667), (487, 16820), (524, 16913), (533, 16937), (584, 17030), (599, 17069), (601, 17087),

Gene: DrSeegs\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for DrSeegs\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Drake55\_29 Start: 19657, Stop: 20673, Start Num: 97

Candidate Starts for Drake55\_29:

(Start: 97 @19657 has 272 MA's), (142, 19732), (152, 19750), (167, 19786), (183, 19825), (277, 20002), (296, 20032), (320, 20071), (322, 20074), (518, 20530), (528, 20554),

Gene: Dre3\_17 Start: 14967, Stop: 15938, Start Num: 97

Candidate Starts for Dre3\_17:

(54, 14892), (Start: 97 @14967 has 272 MA's), (125, 15012), (163, 15096), (185, 15150), (228, 15207), (240, 15231), (244, 15240), (246, 15243), (273, 15300), (306, 15360), (316, 15378), (358, 15450), (365, 15471), (415, 15552), (475, 15666), (503, 15735), (504, 15738), (513, 15765), (516, 15774), (527, 15798), (538, 15831), (549, 15849), (575, 15894), (587, 15924),

Gene: DreamTeam1\_27 Start: 18680, Stop: 19702, Start Num: 97

Candidate Starts for DreamTeam1\_27:

(Start: 97 @18680 has 272 MA's), (110, 18698), (127, 18734), (152, 18773), (261, 18989), (277, 19025), (296, 19055), (322, 19097), (344, 19142), (391, 19247), (427, 19319), (433, 19343), (435,

19349), (514, 19547), (518, 19559), (522, 19568), (528, 19583), (565, 19649),

Gene: Dublin\_22 Start: 18616, Stop: 19629, Start Num: 103

Candidate Starts for Dublin\_22:

(Start: 103 @18616 has 85 MA's), (152, 18712), (165, 18745), (167, 18748), (183, 18787), (261, 18922), (293, 18982), (296, 18988), (308, 19006), (322, 19030), (342, 19072), (481, 19384), (518, 19486), (529, 19513), (565, 19576),

Gene: DudeLittle\_27 Start: 19254, Stop: 20270, Start Num: 97

Candidate Starts for DudeLittle\_27:

(Start: 97 @19254 has 272 MA's), (142, 19329), (152, 19347), (167, 19383), (183, 19422), (296, 19629), (320, 19668), (322, 19671), (446, 19938), (486, 20040), (514, 20115), (518, 20127), (565, 20217), (567, 20220),

Gene: Dulcita\_28 Start: 21456, Stop: 22367, Start Num: 91

Candidate Starts for Dulcita\_28:

(Start: 91 @21456 has 19 MA's), (147, 21558), (157, 21576), (163, 21591), (201, 21663), (206, 21672), (252, 21750), (318, 21885), (320, 21888), (322, 21891), (356, 21960), (385, 22002), (390, 22008), (483, 22149), (493, 22170), (498, 22182), (561, 22305), (567, 22317),

Gene: DumpsterDude\_18 Start: 15153, Stop: 16214, Start Num: 60

Candidate Starts for DumpsterDude\_18:

(Start: 60 @15153 has 18 MA's), (119, 15246), (144, 15288), (167, 15336), (207, 15414), (253, 15504), (265, 15534), (309, 15606), (313, 15615), (315, 15618), (321, 15627), (345, 15669), (402, 15768), (438, 15837), (567, 16110), (598, 16182), (599, 16185),

Gene: DuncansLeg\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for DuncansLeg\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (206, 16700), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: Duplo\_30 Start: 19080, Stop: 20090, Start Num: 97

Candidate Starts for Duplo\_30:

(Start: 97 @19080 has 272 MA's), (142, 19155), (152, 19173), (240, 19344), (296, 19455), (320, 19494), (322, 19497), (344, 19542), (486, 19860), (514, 19935), (518, 19947), (528, 19971), (565, 20037),

Gene: Durfee\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Durfee\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Dusty\_45 Start: 28440, Stop: 29321, Start Num: 72

Candidate Starts for Dusty\_45:

(Start: 68 @28434 has 24 MA's), (Start: 72 @28440 has 12 MA's), (106, 28488), (119, 28515), (160, 28587), (206, 28683), (282, 28791), (337, 28884), (352, 28908), (357, 28923), (427, 29019), (471, 29067), (552, 29247), (573, 29283),

Gene: DyoEdafos\_18 Start: 15909, Stop: 16796, Start Num: 93

Candidate Starts for DyoEdafos\_18:

(Start: 93 @15909 has 72 MA's), (111, 15933), (125, 15960), (127, 15963), (136, 15978), (154, 16011), (201, 16107), (277, 16242), (282, 16251), (320, 16311), (322, 16314), (360, 16392), (378, 16407), (390, 16431), (455, 16500), (467, 16524), (501, 16620), (518, 16668), (531, 16695), (563, 16734), (585, 16779),

Gene: ECartman\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for ECartman\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: EMoore\_30 Start: 28525, Stop: 29511, Start Num: 64

Candidate Starts for EMoore\_30:

(Start: 64 @28525 has 25 MA's), (161, 28684), (186, 28744), (205, 28774), (235, 28831), (240, 28840), (277, 28912), (296, 28951), (311, 28972), (323, 28990), (363, 29074), (371, 29095), (396, 29110), (470, 29215), (471, 29218), (502, 29290), (506, 29302), (515, 29326), (517, 29332), (523, 29347), (530, 29365), (544, 29398), (564, 29431), (566, 29434), (598, 29500),

Gene: EMSquaredA\_19 Start: 16661, Stop: 17569, Start Num: 92

Candidate Starts for EMSquaredA\_19:

(Start: 92 @16661 has 38 MA's), (126, 16718), (190, 16853), (203, 16868), (204, 16871), (236, 16922), (316, 17030), (346, 17078), (358, 17102), (372, 17120), (374, 17126), (400, 17162), (475, 17318), (493, 17345), (498, 17357), (503, 17372), (518, 17417), (527, 17435), (529, 17444), (544, 17480), (547, 17483), (567, 17519), (571, 17525), (575, 17531),

Gene: EZMoney23\_31 Start: 21135, Stop: 22148, Start Num: 97

Candidate Starts for EZMoney23\_31:

(Start: 97 @21135 has 272 MA's), (152, 21228), (167, 21264), (183, 21303), (296, 21510), (320, 21549), (322, 21552), (344, 21597), (368, 21657), (430, 21783), (446, 21816), (518, 22005), (528, 22029),

Gene: EagleEye\_29 Start: 19925, Stop: 20941, Start Num: 97

Candidate Starts for EagleEye\_29:

(Start: 97 @19925 has 272 MA's), (110, 19943), (152, 20018), (183, 20093), (225, 20156), (296, 20300), (320, 20339), (322, 20342), (361, 20429), (476, 20681), (481, 20696), (497, 20732), (518, 20798), (527, 20816), (528, 20822),

Gene: Ebony\_27 Start: 19779, Stop: 20801, Start Num: 97

Candidate Starts for Ebony\_27:

(Start: 97 @19779 has 272 MA's), (127, 19836), (163, 19911), (232, 20040), (261, 20100), (293, 20160), (296, 20166), (322, 20208), (344, 20253), (347, 20259), (382, 20343), (402, 20376), (518, 20658), (522, 20667), (528, 20682), (565, 20748),

Gene: Echild\_27 Start: 19279, Stop: 20295, Start Num: 97

Candidate Starts for Echild\_27:

(Start: 97 @19279 has 272 MA's), (142, 19354), (152, 19372), (167, 19408), (183, 19447), (296, 19654), (320, 19693), (322, 19696), (486, 20065), (514, 20140), (518, 20152),

Gene: Ecliptus\_23 Start: 17506, Stop: 18432, Start Num: 92

Candidate Starts for Ecliptus\_23:

(Start: 90 @17503 has 2 MA's), (Start: 92 @17506 has 38 MA's), (126, 17563), (174, 17665), (178, 17677), (195, 17701), (203, 17710), (204, 17713), (206, 17716), (247, 17779), (272, 17812), (287,

17833), (302, 17848), (339, 17908), (346, 17920), (358, 17944), (376, 17971), (379, 17974), (400, 18004), (439, 18082), (475, 18163), (490, 18205), (493, 18208), (497, 18217), (498, 18220), (502, 18232), (503, 18235), (507, 18247), (511, 18259), (518, 18280), (522, 18289), (527, 18298), (544, 18343), (547, 18346), (551, 18352), (571, 18388), (575, 18394),

Gene: EdmundFerry\_30 Start: 26577, Stop: 27554, Start Num: 64

Candidate Starts for EdmundFerry\_30:

(Start: 64 @26577 has 25 MA's), (79, 26589), (Start: 96 @26616 has 14 MA's), (119, 26664), (121, 26667), (151, 26718), (186, 26796), (240, 26892), (277, 26964), (352, 27093), (363, 27126), (396, 27162), (504, 27348), (517, 27378), (529, 27405), (544, 27441), (564, 27474), (598, 27543),

Gene: EdogawaKiddo\_26 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for EdogawaKiddo\_26:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: Edugator\_19 Start: 16302, Stop: 17432, Start Num: 36

Candidate Starts for Edugator\_19:

(Start: 36 @16302 has 22 MA's), (Start: 105 @16476 has 2 MA's), (142, 16542), (159, 16572), (206, 16671), (262, 16773), (292, 16827), (312, 16857), (330, 16893), (333, 16896), (337, 16905), (369, 16980), (371, 16983), (405, 17019), (427, 17061), (451, 17079), (454, 17085), (471, 17109), (472, 17112), (487, 17151), (528, 17253), (584, 17361), (599, 17400), (601, 17418),

Gene: Efra2\_22 Start: 15227, Stop: 16363, Start Num: 30

Candidate Starts for Efra2\_22:

(Start: 30 @15227 has 217 MA's), (61, 15344), (119, 15434), (132, 15455), (159, 15503), (292, 15758), (340, 15839), (371, 15914), (389, 15929), (471, 16040), (487, 16082), (518, 16160), (524, 16175), (533, 16199), (584, 16292), (599, 16331), (601, 16349),

Gene: Egi03\_32 Start: 25124, Stop: 26056, Start Num: 83

Candidate Starts for Egi03\_32:

(Start: 83 @25124 has 29 MA's), (142, 25220), (173, 25289), (175, 25295), (185, 25319), (196, 25334), (322, 25544), (374, 25622), (405, 25667), (415, 25691), (445, 25730), (486, 25826), (504, 25868), (516, 25904), (528, 25934), (549, 25979), (563, 26000), (588, 26051),

Gene: Eidsmoe\_28 Start: 20557, Stop: 21570, Start Num: 97

Candidate Starts for Eidsmoe\_28:

(Start: 97 @20557 has 272 MA's), (110, 20575), (142, 20632), (152, 20650), (167, 20686), (261, 20866), (277, 20902), (296, 20932), (322, 20974), (397, 21133), (464, 21277), (486, 21340), (514, 21415), (518, 21427), (528, 21451),

Gene: Ein37\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Ein37\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Ekdilam\_19 Start: 16204, Stop: 17340, Start Num: 30

Candidate Starts for Ekdilam\_19:

(Start: 30 @16204 has 217 MA's), (61, 16321), (75, 16339), (Start: 97 @16372 has 272 MA's), (119, 16411), (159, 16480), (206, 16579), (209, 16585), (292, 16735), (330, 16801), (337, 16813), (427, 16969), (454, 16993), (472, 17020), (487, 17059), (488, 17062), (524, 17152), (584, 17269), (599, 17308), (601, 17326),

Gene: EITiger69\_23 Start: 17966, Stop: 18979, Start Num: 103

Candidate Starts for EITiger69\_23:

(Start: 103 @17966 has 85 MA's), (165, 18095), (167, 18098), (183, 18137), (261, 18272), (274, 18302), (293, 18332), (296, 18338), (308, 18356), (322, 18380), (342, 18422), (421, 18593), (518, 18836), (565, 18926),

Gene: Elephantoon\_28 Start: 20168, Stop: 21190, Start Num: 97

Candidate Starts for Elephantoon\_28:

(Start: 97 @20168 has 272 MA's), (110, 20186), (121, 20213), (142, 20243), (152, 20261), (167, 20297), (261, 20477), (277, 20513), (296, 20543), (322, 20585), (391, 20735), (397, 20744), (433, 20831), (464, 20897), (514, 21035), (518, 21047), (522, 21056), (528, 21071),

Gene: Elinal\_18 Start: 14465, Stop: 15421, Start Num: 97

Candidate Starts for Elinal\_18:

(Start: 97 @14465 has 272 MA's), (125, 14510), (152, 14567), (163, 14594), (185, 14648), (206, 14675), (240, 14726), (241, 14729), (244, 14735), (246, 14738), (273, 14792), (281, 14807), (305, 14849), (306, 14852), (320, 14876), (333, 14891), (358, 14942), (415, 15038), (503, 15224), (513, 15254), (516, 15263), (527, 15287), (538, 15320), (587, 15407), (589, 15413),

Gene: Elliott\_17 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for Elliott\_17:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441, 15394), (462, 15439), (475, 15466), (481, 15484), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Ellie\_19 Start: 16200, Stop: 17336, Start Num: 30

Candidate Starts for Ellie\_19:

(Start: 30 @16200 has 217 MA's), (61, 16317), (Start: 97 @16368 has 272 MA's), (159, 16476), (207, 16578), (209, 16581), (262, 16677), (292, 16731), (330, 16797), (337, 16809), (487, 17055), (488, 17058), (584, 17265), (599, 17304), (601, 17322),

Gene: Ellson\_18 Start: 16498, Stop: 17388, Start Num: 93

Candidate Starts for Ellson\_18:

(Start: 93 @16498 has 72 MA's), (111, 16522), (136, 16567), (142, 16582), (154, 16603), (201, 16699), (206, 16708), (277, 16834), (282, 16843), (320, 16903), (322, 16906), (324, 16912), (360, 16984), (385, 17017), (394, 17029), (455, 17092), (484, 17167), (503, 17218), (518, 17260), (585, 17371), (587, 17374),

Gene: Emalyn\_16 Start: 14065, Stop: 15036, Start Num: 97

Candidate Starts for Emalyn\_16:

(Start: 97 @14065 has 272 MA's), (125, 14110), (136, 14131), (152, 14167), (185, 14248), (240, 14326), (244, 14335), (246, 14338), (273, 14392), (279, 14404), (306, 14452), (334, 14494), (358, 14542), (384, 14593), (402, 14623), (415, 14653), (424, 14668), (426, 14671), (475, 14767), (481, 14785), (503, 14839), (504, 14842), (513, 14869), (516, 14878), (522, 14893), (547, 14950), (578, 14998), (587, 15022), (589, 15028),



Gene: Emerson\_22 Start: 16011, Stop: 17147, Start Num: 30

Candidate Starts for Emerson\_22:

(Start: 30 @16011 has 217 MA's), (61, 16128), (119, 16218), (132, 16239), (144, 16260), (159, 16287), (292, 16542), (340, 16623), (371, 16698), (389, 16713), (471, 16824), (487, 16866), (524, 16959), (533, 16983), (584, 17076), (599, 17115), (601, 17133),

Gene: EmiRose\_16 Start: 13050, Stop: 13937, Start Num: 118

Candidate Starts for EmiRose\_16:

(Start: 118 @13050 has 1 MA's), (129, 13068), (161, 13137), (206, 13227), (210, 13236), (233, 13269), (241, 13284), (326, 13440), (328, 13443), (332, 13449), (453, 13608), (471, 13638), (480, 13668), (484, 13680), (524, 13794), (526, 13800),

Gene: Emianna\_40 Start: 29879, Stop: 30820, Start Num: 76

Candidate Starts for Emianna\_40:

(Start: 76 @29879 has 24 MA's), (130, 29966), (167, 30041), (198, 30107), (241, 30149), (269, 30206), (387, 30419), (406, 30446), (471, 30557), (524, 30689), (576, 30785),

Gene: EmyBug\_28 Start: 20557, Stop: 21570, Start Num: 97

Candidate Starts for EmyBug\_28:

(Start: 97 @20557 has 272 MA's), (110, 20575), (142, 20632), (152, 20650), (167, 20686), (261, 20866), (277, 20902), (296, 20932), (322, 20974), (397, 21133), (464, 21277), (486, 21340), (514, 21415), (518, 21427), (528, 21451),

Gene: EnalisNailo\_19 Start: 16810, Stop: 17718, Start Num: 92

Candidate Starts for EnalisNailo\_19:

(Start: 92 @16810 has 38 MA's), (126, 16867), (203, 17017), (204, 17020), (236, 17071), (287, 17140), (316, 17179), (346, 17227), (358, 17251), (374, 17275), (475, 17467), (493, 17494), (497, 17503), (498, 17506), (503, 17521), (517, 17563), (518, 17566), (529, 17593), (544, 17629), (554, 17641), (571, 17674), (575, 17680),

Gene: Enceladus\_17 Start: 15859, Stop: 16740, Start Num: 93

Candidate Starts for Enceladus\_17:

(58, 15805), (59, 15808), (Start: 80 @15841 has 9 MA's), (Start: 93 @15859 has 72 MA's), (111, 15883), (127, 15913), (136, 15928), (154, 15961), (235, 16105), (274, 16186), (320, 16261), (322, 16264), (324, 16270), (347, 16315), (360, 16342), (385, 16375), (390, 16381), (415, 16414), (421, 16423), (455, 16450), (501, 16570), (518, 16618), (531, 16645), (563, 16684), (567, 16690), (585, 16729),

Gene: Engineer\_48 Start: 28657, Stop: 29538, Start Num: 72

Candidate Starts for Engineer\_48:

(Start: 68 @28651 has 24 MA's), (Start: 72 @28657 has 12 MA's), (106, 28705), (119, 28732), (160, 28804), (187, 28870), (206, 28900), (282, 29008), (337, 29101), (352, 29125), (357, 29140), (427, 29236), (471, 29284), (552, 29464), (573, 29500),

Gene: Enkosi\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Enkosi\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: Ennea\_46 Start: 30548, Stop: 31465, Start Num: 76

Candidate Starts for Ennea\_46:

(Start: 76 @30548 has 24 MA's), (130, 30626), (167, 30701), (241, 30809), (285, 30893), (383, 31073), (387, 31079), (505, 31295), (524, 31334), (563, 31409), (576, 31430), (583, 31451),

Gene: Eponine\_23 Start: 17390, Stop: 18523, Start Num: 30

Candidate Starts for Eponine\_23:

(Start: 30 @17390 has 217 MA's), (Start: 51 @17480 has 2 MA's), (61, 17510), (119, 17600), (144, 17642), (145, 17645), (151, 17657), (334, 17993), (337, 17999), (369, 18074), (427, 18152), (449, 18167), (471, 18200), (487, 18242), (488, 18245), (527, 18338), (584, 18452), (599, 18491), (601, 18509),

Gene: Epsocamisio\_29 Start: 18119, Stop: 19096, Start Num: 100

Candidate Starts for Epsocamisio\_29:

(Start: 100 @18119 has 20 MA's), (163, 18233), (165, 18239), (167, 18242), (286, 18476), (430, 18743), (461, 18797), (518, 18953),

Gene: Equemioh13\_29 Start: 19643, Stop: 20659, Start Num: 97

Candidate Starts for Equemioh13\_29:

(Start: 97 @19643 has 272 MA's), (142, 19718), (152, 19736), (167, 19772), (183, 19811), (277, 19988), (296, 20018), (320, 20057), (322, 20060), (518, 20516), (528, 20540),

Gene: EricB\_30 Start: 18959, Stop: 19972, Start Num: 97

Candidate Starts for EricB\_30:

(Start: 97 @18959 has 272 MA's), (127, 19013), (152, 19052), (201, 19157), (277, 19304), (296, 19334), (320, 19373), (322, 19376), (344, 19421), (368, 19481), (464, 19679), (518, 19829), (522, 19838),

Gene: Erik\_22 Start: 15479, Stop: 16351, Start Num: 103

Candidate Starts for Erik\_22:

(Start: 103 @15479 has 85 MA's), (121, 15518), (163, 15599), (165, 15605), (198, 15674), (246, 15752), (261, 15785), (274, 15812), (322, 15890), (392, 15986), (486, 16115), (496, 16133), (514, 16190), (518, 16202), (534, 16244), (587, 16340),

Gene: Espica\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Espica\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: Estes\_32 Start: 22177, Stop: 23088, Start Num: 91

Candidate Starts for Estes\_32:

(Start: 91 @22177 has 19 MA's), (Start: 96 @22186 has 14 MA's), (127, 22240), (145, 22276), (147, 22279), (157, 22297), (163, 22312), (198, 22381), (201, 22384), (320, 22609), (322, 22612), (336, 22642), (385, 22723), (390, 22729), (498, 22903), (501, 22918), (513, 22951), (583, 23074),

Gene: Et2Brutus\_26 Start: 19739, Stop: 20761, Start Num: 97

Candidate Starts for Et2Brutus\_26:

(Start: 97 @19739 has 272 MA's), (127, 19796), (163, 19871), (232, 20000), (261, 20060), (293, 20120), (296, 20126), (322, 20168), (344, 20213), (347, 20219), (382, 20303), (402, 20336), (518, 20618), (522, 20627), (528, 20642), (565, 20708),

Gene: Evamon\_30 Start: 24920, Stop: 25864, Start Num: 83

Candidate Starts for Evamon\_30:

(Start: 83 @24920 has 29 MA's), (142, 25025), (173, 25094), (175, 25100), (185, 25124), (196, 25139), (415, 25499), (424, 25514), (440, 25532), (486, 25634), (504, 25676), (516, 25712), (549, 25787), (563, 25808), (588, 25859),

Gene: Evanesce\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Evanesce\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: EvilGenius\_29 Start: 19596, Stop: 20612, Start Num: 97

Candidate Starts for EvilGenius\_29:

(Start: 97 @19596 has 272 MA's), (142, 19671), (152, 19689), (167, 19725), (183, 19764), (296, 19971), (320, 20010), (322, 20013), (361, 20100), (446, 20280), (486, 20382), (514, 20457), (518, 20469),

Gene: Ewald\_21 Start: 17595, Stop: 18455, Start Num: 70

Candidate Starts for Ewald\_21:

(Start: 70 @17595 has 27 MA's), (74, 17601), (Start: 82 @17613 has 1 MA's), (98, 17637), (101, 17640), (185, 17808), (196, 17823), (203, 17835), (271, 17931), (274, 17934), (278, 17943), (285, 17955), (292, 17970), (363, 18099), (469, 18219), (481, 18240), (488, 18261), (543, 18381),

Gene: Expelliarmus\_22 Start: 17601, Stop: 18623, Start Num: 103

Candidate Starts for Expelliarmus\_22:

(Start: 103 @17601 has 85 MA's), (163, 17724), (165, 17730), (201, 17802), (261, 17907), (271, 17934), (322, 18024), (413, 18225), (429, 18255), (430, 18258), (514, 18468), (529, 18507), (555, 18555), (565, 18570),

Gene: ExplosioNervosa\_28 Start: 20560, Stop: 21573, Start Num: 97

Candidate Starts for ExplosioNervosa\_28:

(Start: 97 @20560 has 272 MA's), (110, 20578), (142, 20635), (152, 20653), (167, 20689), (261, 20869), (277, 20905), (296, 20935), (322, 20977), (397, 21136), (464, 21280), (486, 21343), (514, 21418), (518, 21430), (528, 21454),

Gene: Eyes\_18 Start: 15709, Stop: 16635, Start Num: 94

Candidate Starts for Eyes\_18:

(15, 15391), (26, 15490), (39, 15577), (79, 15691), (Start: 94 @15709 has 30 MA's), (Start: 102 @15718 has 6 MA's), (128, 15760), (Start: 134 @15772 has 1 MA's), (250, 15994), (276, 16039), (289, 16063), (296, 16069), (302, 16078), (306, 16084), (323, 16114), (344, 16144), (358, 16174), (360, 16180), (374, 16195), (404, 16240), (405, 16243), (415, 16267), (450, 16324), (462, 16345), (490, 16411), (518, 16480), (539, 16534), (587, 16618),

Gene: FF47\_20 Start: 14818, Stop: 15930, Start Num: 35

Candidate Starts for FF47\_20:

(Start: 35 @14818 has 4 MA's), (40, 14866), (Start: 99 @14974 has 15 MA's), (Start: 105 @14983 has 2 MA's), (145, 15052), (160, 15079), (238, 15226), (293, 15334), (337, 15409), (342, 15418), (359, 15454), (405, 15523), (427, 15565), (474, 15619), (500, 15676), (542, 15781), (547, 15787), (597, 15892),

Gene: Fairfaxidum\_18 Start: 15961, Stop: 16821, Start Num: 68

Candidate Starts for Fairfaxidum\_18:

(Start: 68 @15961 has 24 MA's), (Start: 84 @15976 has 1 MA's), (104, 16006), (117, 16027), (163, 16117), (203, 16198), (337, 16402), (340, 16405), (481, 16600), (523, 16690), (541, 16732), (571, 16780), (575, 16786),

Gene: Faith1\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Faith1\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Faiyaz\_23 Start: 18613, Stop: 19611, Start Num: 52

Candidate Starts for Faiyaz\_23:

(Start: 52 @18613 has 5 MA's), (Start: 97 @18679 has 272 MA's), (142, 18769), (145, 18775), (169, 18823), (190, 18871), (206, 18898), (222, 18925), (223, 18928), (244, 18949), (269, 19000), (297, 19051), (305, 19060), (322, 19087), (358, 19162), (366, 19186), (454, 19276), (471, 19300), (472, 19303), (487, 19339), (509, 19393), (512, 19402), (529, 19444), (530, 19447), (580, 19528), (582, 19537), (599, 19582),

Gene: Fameo\_27 Start: 19223, Stop: 20239, Start Num: 97

Candidate Starts for Fameo\_27:

(Start: 97 @19223 has 272 MA's), (142, 19298), (152, 19316), (167, 19352), (183, 19391), (296, 19598), (320, 19637), (322, 19640), (446, 19907), (486, 20009), (514, 20084), (518, 20096), (565, 20186),

Gene: Farewell\_15 Start: 15126, Stop: 16142, Start Num: 72

Candidate Starts for Farewell\_15:

(Start: 72 @15126 has 12 MA's), (Start: 77 @15135 has 5 MA's), (Start: 96 @15165 has 14 MA's), (137, 15234), (146, 15255), (206, 15375), (210, 15384), (246, 15471), (277, 15537), (322, 15624), (324, 15630), (363, 15714), (385, 15738), (388, 15741), (503, 15939), (508, 15951), (522, 15990), (537, 16017), (546, 16032), (591, 16122),

Gene: FarmResident\_17 Start: 15745, Stop: 16632, Start Num: 93

Candidate Starts for FarmResident\_17:

(Start: 93 @15745 has 72 MA's), (111, 15769), (125, 15796), (127, 15799), (136, 15814), (154, 15847), (201, 15943), (277, 16078), (282, 16087), (320, 16147), (322, 16150), (360, 16228), (378, 16243), (390, 16267), (455, 16336), (467, 16360), (474, 16378), (493, 16429), (501, 16456), (518, 16504), (531, 16531), (585, 16615),

Gene: Fayely\_28 Start: 20560, Stop: 21573, Start Num: 97

Candidate Starts for Fayely\_28:

(Start: 97 @20560 has 272 MA's), (110, 20578), (142, 20635), (152, 20653), (167, 20689), (261, 20869), (277, 20905), (296, 20935), (322, 20977), (397, 21136), (464, 21280), (486, 21343), (514, 21418), (518, 21430), (528, 21454),

Gene: Feastonyeet\_16 Start: 14508, Stop: 15464, Start Num: 97

Candidate Starts for Feastonyeet\_16:

(Start: 97 @14508 has 272 MA's), (125, 14553), (152, 14610), (163, 14637), (185, 14691), (206, 14718), (240, 14769), (241, 14772), (244, 14778), (246, 14781), (273, 14835), (281, 14850), (306, 14895), (320, 14919), (358, 14985), (415, 15081), (503, 15267), (513, 15297), (516, 15306), (527, 15330), (538, 15363), (587, 15450), (589, 15456),

Gene: Fefferhead\_21 Start: 16367, Stop: 17503, Start Num: 30

Candidate Starts for Fefferhead\_21:

(Start: 30 @16367 has 217 MA's), (61, 16484), (Start: 97 @16535 has 272 MA's), (159, 16643), (207, 16745), (209, 16748), (262, 16844), (292, 16898), (330, 16964), (337, 16976), (487, 17222), (488, 17225), (584, 17432), (599, 17471), (601, 17489),

Gene: FeliMaine\_51 Start: 26439, Stop: 27401, Start Num: 94

Candidate Starts for FeliMaine\_51:

(Start: 94 @26439 has 30 MA's), (163, 26571), (173, 26595), (178, 26604), (181, 26610), (184, 26619), (201, 26643), (206, 26652), (213, 26664), (216, 26676), (271, 26790), (312, 26871), (322, 26886), (324, 26892), (385, 27000), (476, 27126), (478, 27132), (506, 27207), (536, 27282), (539, 27288), (548, 27300), (550, 27303), (593, 27390), (594, 27393), (596, 27396),

Gene: Fenry\_17 Start: 15512, Stop: 16372, Start Num: 68

Candidate Starts for Fenry\_17:

(Start: 68 @15512 has 24 MA's), (163, 15668), (203, 15749), (252, 15806), (274, 15848), (340, 15956), (400, 16040), (451, 16106), (454, 16112), (481, 16151), (523, 16241), (541, 16283),

Gene: Feyre\_20 Start: 16241, Stop: 17371, Start Num: 36

Candidate Starts for Feyre\_20:

(Start: 36 @16241 has 22 MA's), (144, 16484), (159, 16511), (206, 16610), (262, 16712), (292, 16766), (312, 16796), (330, 16832), (333, 16835), (337, 16844), (369, 16919), (371, 16922), (405, 16958), (427, 17000), (451, 17018), (454, 17024), (471, 17048), (472, 17051), (474, 17057), (487, 17090), (584, 17300), (599, 17339), (601, 17357),

Gene: Fibonacci\_27 Start: 19733, Stop: 20755, Start Num: 97

Candidate Starts for Fibonacci\_27:

(Start: 97 @19733 has 272 MA's), (127, 19790), (163, 19865), (232, 19994), (261, 20054), (293, 20114), (296, 20120), (322, 20162), (344, 20207), (347, 20213), (382, 20297), (402, 20330), (518, 20612), (522, 20621), (528, 20636), (565, 20702),

Gene: Findley\_18 Start: 13892, Stop: 15019, Start Num: 34

Candidate Starts for Findley\_18:

(Start: 34 @13892 has 10 MA's), (37, 13901), (61, 14003), (119, 14093), (144, 14135), (145, 14138), (159, 14162), (206, 14261), (244, 14324), (262, 14363), (292, 14417), (330, 14483), (337, 14495), (361, 14546), (369, 14570), (427, 14648), (451, 14666), (471, 14696), (474, 14705), (487, 14738), (488, 14741), (533, 14855), (580, 14933), (584, 14948), (599, 14987), (601, 15005),

Gene: Finemlucis\_17 Start: 16080, Stop: 16994, Start Num: 93

Candidate Starts for Finemlucis\_17:

(Start: 93 @16080 has 72 MA's), (111, 16104), (127, 16134), (189, 16260), (235, 16332), (318, 16485), (320, 16488), (322, 16491), (336, 16521), (363, 16578), (385, 16602), (390, 16608), (455, 16677), (464, 16695), (473, 16716), (498, 16782), (518, 16845), (585, 16974), (591, 16986),

Gene: Finnry\_18 Start: 16494, Stop: 17384, Start Num: 93

Candidate Starts for Finnry\_18:

(Start: 93 @16494 has 72 MA's), (111, 16518), (136, 16563), (142, 16578), (154, 16599), (201, 16695), (277, 16830), (282, 16839), (320, 16899), (322, 16902), (324, 16908), (360, 16980), (385, 17013), (455, 17088), (477, 17142), (484, 17163), (503, 17214), (518, 17256), (585, 17367), (587, 17370),

Gene: Fionnbharth\_23 Start: 17490, Stop: 18623, Start Num: 30

Candidate Starts for Fionnbharth\_23:

(Start: 30 @17490 has 217 MA's), (37, 17508), (Start: 51 @17580 has 2 MA's), (61, 17610), (119, 17700), (144, 17742), (157, 17766), (207, 17871), (334, 18093), (337, 18099), (426, 18249), (427, 18252), (451, 18270), (471, 18300), (487, 18342), (488, 18345), (509, 18396), (580, 18537), (584,

18552), (599, 18591), (601, 18609),

Gene: Fireball\_31 Start: 25055, Stop: 25987, Start Num: 83

Candidate Starts for Fireball\_31:

(Start: 83 @25055 has 29 MA's), (142, 25151), (173, 25220), (175, 25226), (185, 25250), (196, 25265), (209, 25283), (322, 25475), (374, 25553), (405, 25598), (415, 25622), (445, 25661), (486, 25757), (504, 25799), (516, 25835), (528, 25865), (549, 25910), (563, 25931), (588, 25982),

Gene: FiringLine\_27 Start: 19105, Stop: 20121, Start Num: 97

Candidate Starts for FiringLine\_27:

(Start: 97 @19105 has 272 MA's), (142, 19180), (152, 19198), (167, 19234), (183, 19273), (296, 19480), (320, 19519), (322, 19522), (446, 19789), (486, 19891), (514, 19966), (518, 19978), (565, 20068),

Gene: First\_0027 Start: 19219, Stop: 20229, Start Num: 97

Candidate Starts for First\_0027:

(Start: 97 @19219 has 272 MA's), (127, 19273), (152, 19312), (183, 19387), (261, 19528), (296, 19594), (320, 19633), (322, 19636), (430, 19864), (446, 19897), (486, 19999), (497, 20020), (514, 20074), (518, 20086), (565, 20176),

Gene: Fitzgerald\_32 Start: 29941, Stop: 30897, Start Num: 78

Candidate Starts for Fitzgerald\_32:

(Start: 78 @29941 has 51 MA's), (175, 30127), (180, 30139), (196, 30166), (211, 30187), (248, 30247), (299, 30337), (322, 30373), (343, 30406), (352, 30421), (356, 30433), (376, 30463), (384, 30469), (415, 30529), (471, 30619), (504, 30709), (512, 30733), (516, 30745), (542, 30811), (554, 30826), (569, 30850), (576, 30862), (588, 30892),

Gene: FlagStaff\_17 Start: 15628, Stop: 16848, Start Num: 25

Candidate Starts for FlagStaff\_17:

(5, 15304), (Start: 25 @15628 has 1 MA's), (Start: 30 @15664 has 217 MA's), (61, 15790), (110, 15850), (119, 15874), (144, 15916), (145, 15919), (195, 16021), (207, 16045), (218, 16060), (219, 16066), (238, 16105), (241, 16111), (322, 16255), (329, 16273), (341, 16294), (344, 16300), (356, 16324), (368, 16360), (471, 16525), (487, 16567), (490, 16573), (569, 16744), (597, 16810),

Gene: Flapper\_44 Start: 30267, Stop: 31184, Start Num: 76

Candidate Starts for Flapper\_44:

(Start: 76 @30267 has 24 MA's), (130, 30345), (206, 30498), (292, 30627), (387, 30798), (524, 31053), (563, 31128), (576, 31149),

Gene: Flare16\_27 Start: 19201, Stop: 20217, Start Num: 97

Candidate Starts for Flare16\_27:

(Start: 97 @19201 has 272 MA's), (142, 19276), (152, 19294), (167, 19330), (183, 19369), (277, 19546), (296, 19576), (320, 19615), (322, 19618), (518, 20074), (528, 20098),

Gene: Flatwoods\_34 Start: 28876, Stop: 29832, Start Num: 78

Candidate Starts for Flatwoods\_34:

(Start: 78 @28876 has 51 MA's), (163, 29032), (175, 29062), (180, 29074), (185, 29086), (196, 29101), (206, 29113), (299, 29272), (322, 29308), (356, 29368), (365, 29392), (384, 29404), (415, 29464), (471, 29554), (504, 29644), (512, 29668), (516, 29680), (542, 29746), (554, 29761), (569, 29785), (576, 29797),

Gene: Flaverint\_27 Start: 19730, Stop: 20752, Start Num: 97

Candidate Starts for Flaverint\_27:

(Start: 97 @19730 has 272 MA's), (127, 19787), (163, 19862), (232, 19991), (261, 20051), (293, 20111), (296, 20117), (322, 20159), (344, 20204), (347, 20210), (382, 20294), (402, 20327), (518, 20609), (522, 20618), (528, 20633), (565, 20699),

Gene: Float294\_42 Start: 29990, Stop: 30907, Start Num: 76

Candidate Starts for Float294\_42:

(Start: 76 @29990 has 24 MA's), (130, 30068), (167, 30143), (241, 30251), (285, 30335), (383, 30515), (387, 30521), (505, 30737), (524, 30776), (563, 30851), (571, 30863), (576, 30872), (583, 30893),

Gene: Floral\_19 Start: 16661, Stop: 17569, Start Num: 92

Candidate Starts for Floral\_19:

(Start: 92 @16661 has 38 MA's), (126, 16718), (190, 16853), (203, 16868), (204, 16871), (236, 16922), (316, 17030), (346, 17078), (358, 17102), (372, 17120), (374, 17126), (400, 17162), (475, 17318), (493, 17345), (498, 17357), (503, 17372), (518, 17417), (527, 17435), (529, 17444), (544, 17480), (547, 17483), (567, 17519), (571, 17525), (575, 17531),

Gene: ForGetIt\_23 Start: 18499, Stop: 19512, Start Num: 103

Candidate Starts for ForGetIt\_23:

(Start: 103 @18499 has 85 MA's), (152, 18595), (165, 18628), (167, 18631), (183, 18670), (210, 18718), (296, 18871), (308, 18889), (322, 18913), (342, 18955), (481, 19267), (518, 19369), (529, 19396),

Gene: Forge\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Forge\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Forza\_100 Start: 59008, Stop: 59943, Start Num: 77

Candidate Starts for Forza\_100:

(Start: 77 @59008 has 5 MA's), (Start: 89 @59023 has 1 MA's), (Start: 93 @59029 has 72 MA's), (Start: 96 @59035 has 14 MA's), (157, 59152), (159, 59155), (178, 59206), (200, 59242), (274, 59377), (291, 59413), (311, 59443), (472, 59695), (490, 59740), (503, 59770), (505, 59776), (517, 59803), (533, 59842), (572, 59911),

Gene: Fosterous\_32 Start: 29783, Stop: 30739, Start Num: 78

Candidate Starts for Fosterous\_32:

(Start: 78 @29783 has 51 MA's), (175, 29969), (180, 29981), (196, 30008), (211, 30029), (248, 30089), (297, 30176), (299, 30179), (322, 30215), (343, 30248), (352, 30263), (356, 30275), (376, 30305), (384, 30311), (415, 30371), (471, 30461), (504, 30551), (512, 30575), (516, 30587), (542, 30653), (554, 30668), (569, 30692), (576, 30704), (588, 30734),

Gene: Foxboro\_41 Start: 30385, Stop: 31326, Start Num: 76

Candidate Starts for Foxboro\_41:

(Start: 76 @30385 has 24 MA's), (130, 30472), (167, 30547), (198, 30613), (241, 30655), (269, 30712), (387, 30925), (406, 30952), (471, 31063), (524, 31195), (576, 31291),

Gene: Francois\_21 Start: 16316, Stop: 17377, Start Num: 60

Candidate Starts for Francois\_21:

(Start: 60 @16316 has 18 MA's), (Start: 94 @16361 has 30 MA's), (111, 16391), (167, 16499), (245, 16649), (265, 16697), (315, 16781), (321, 16790), (345, 16832), (459, 17042), (479, 17078), (567,

17273), (598, 17345), (599, 17348),

Gene: FreakyGoo\_27 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for FreakyGoo\_27:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: Fribs8\_18 Start: 15556, Stop: 16521, Start Num: 97

Candidate Starts for Fribs8\_18:

(Start: 97 @15556 has 272 MA's), (125, 15601), (152, 15658), (163, 15685), (185, 15739), (240, 15820), (244, 15829), (246, 15832), (279, 15901), (306, 15949), (316, 15967), (358, 16039), (365, 16054), (402, 16105), (404, 16108), (475, 16249), (503, 16318), (504, 16321), (513, 16348), (516, 16357), (527, 16381), (538, 16414), (542, 16423), (549, 16432), (575, 16477), (587, 16507), (589, 16513),

Gene: Frickyeah\_19 Start: 15508, Stop: 16431, Start Num: 99

Candidate Starts for Frickyeah\_19:

(Start: 99 @15508 has 15 MA's), (Start: 102 @15511 has 6 MA's), (111, 15523), (121, 15541), (145, 15586), (163, 15625), (180, 15664), (203, 15697), (206, 15703), (244, 15772), (273, 15826), (276, 15829), (277, 15832), (285, 15844), (306, 15874), (316, 15892), (352, 15946), (356, 15958), (358, 15964), (374, 15985), (405, 16033), (415, 16057), (424, 16072), (426, 16075), (445, 16096), (502, 16228), (503, 16231), (505, 16237), (518, 16270), (527, 16288), (538, 16321), (571, 16372), (579, 16387), (592, 16423),

Gene: Frizzle\_16 Start: 13493, Stop: 14353, Start Num: 70

Candidate Starts for Frizzle\_16:

(Start: 65 @13487 has 6 MA's), (Start: 70 @13493 has 27 MA's), (Start: 96 @13520 has 14 MA's), (98, 13523), (183, 13682), (209, 13727), (211, 13730), (280, 13832), (289, 13850), (355, 13958), (488, 14144), (490, 14147), (522, 14219), (556, 14285), (576, 14321),

Gene: Frokostdame\_18 Start: 15774, Stop: 16619, Start Num: 84

Candidate Starts for Frokostdame\_18:

(Start: 68 @15759 has 24 MA's), (Start: 84 @15774 has 1 MA's), (143, 15876), (163, 15915), (203, 15996), (266, 16080), (274, 16095), (340, 16203), (400, 16287), (451, 16353), (454, 16359), (481, 16398), (523, 16488), (541, 16530),

Gene: Frosty24\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Frosty24\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Fryberger\_52 Start: 26990, Stop: 27934, Start Num: 92

Candidate Starts for Fryberger\_52:

(Start: 90 @26987 has 2 MA's), (Start: 92 @26990 has 38 MA's), (157, 27110), (206, 27206), (265, 27308), (305, 27374), (316, 27395), (320, 27401), (348, 27452), (358, 27476), (415, 27569), (445, 27608), (494, 27719), (497, 27725), (499, 27734), (502, 27740), (513, 27773), (516, 27782), (519, 27791), (527, 27806), (565, 27881), (573, 27893), (579, 27905), (587, 27926),

Gene: FuegoCuervo\_36 Start: 28328, Stop: 29284, Start Num: 78

Candidate Starts for FuegoCuervo\_36:



(Start: 78 @28328 has 51 MA's), (175, 28514), (180, 28526), (196, 28553), (211, 28574), (248, 28634), (297, 28721), (299, 28724), (322, 28760), (343, 28793), (352, 28808), (356, 28820), (376, 28850), (384, 28856), (415, 28916), (471, 29006), (504, 29096), (512, 29120), (516, 29132), (542, 29198), (554, 29213), (569, 29237), (576, 29249), (588, 29279),

Gene: Fugax\_32 Start: 25634, Stop: 26578, Start Num: 83

Candidate Starts for Fugax\_32:

(Start: 83 @25634 has 29 MA's), (142, 25739), (173, 25808), (175, 25814), (185, 25838), (196, 25853), (415, 26213), (424, 26228), (440, 26246), (486, 26348), (504, 26390), (516, 26426), (563, 26522), (588, 26573),

Gene: Fury\_49 Start: 29757, Stop: 30677, Start Num: 76

Candidate Starts for Fury\_49:

(Start: 76 @29757 has 24 MA's), (130, 29838), (167, 29913), (190, 29964), (269, 30078), (383, 30285), (524, 30546), (559, 30609), (576, 30642),

Gene: GAL1\_19 Start: 16068, Stop: 16979, Start Num: 101

Candidate Starts for GAL1\_19:

(101, 16068), (156, 16173), (165, 16197), (167, 16200), (169, 16203), (175, 16221), (190, 16248), (203, 16263), (219, 16290), (231, 16302), (236, 16314), (247, 16332), (254, 16347), (259, 16356), (263, 16365), (306, 16419), (323, 16449), (346, 16485), (349, 16491), (351, 16494), (355, 16500), (372, 16527), (374, 16533), (400, 16569), (402, 16575), (426, 16623), (445, 16653), (465, 16701), (471, 16710), (475, 16725), (490, 16749), (498, 16764), (503, 16779), (507, 16791), (518, 16824), (522, 16833), (544, 16887), (547, 16890),

Gene: GEazy\_18 Start: 15730, Stop: 16650, Start Num: 102

Candidate Starts for GEazy\_18:

(79, 15700), (Start: 94 @15721 has 30 MA's), (Start: 102 @15730 has 6 MA's), (128, 15772), (250, 16006), (276, 16051), (289, 16075), (296, 16081), (302, 16090), (306, 16096), (323, 16126), (344, 16156), (358, 16186), (360, 16192), (405, 16255), (415, 16279), (450, 16336), (490, 16423), (518, 16492), (573, 16597), (587, 16630),

Gene: GMA2\_29 Start: 30651, Stop: 31595, Start Num: 64

Candidate Starts for GMA2\_29:

(Start: 64 @30651 has 25 MA's), (Start: 93 @30681 has 72 MA's), (Start: 96 @30687 has 14 MA's), (107, 30702), (126, 30750), (159, 30807), (194, 30882), (205, 30903), (226, 30942), (274, 31029), (291, 31065), (298, 31077), (305, 31086), (311, 31095), (344, 31152), (473, 31350), (490, 31392), (505, 31428), (517, 31455), (519, 31461), (533, 31494), (544, 31518), (572, 31563),

Gene: GRU1\_30 Start: 22167, Stop: 23084, Start Num: 76

Candidate Starts for GRU1\_30:

(Start: 76 @22167 has 24 MA's), (130, 22245), (206, 22398), (285, 22512), (292, 22527), (331, 22590), (387, 22698), (524, 22953), (563, 23028), (576, 23049),

Gene: GTE2\_15 Start: 14148, Stop: 15074, Start Num: 125

Candidate Starts for GTE2\_15:

(Start: 97 @14103 has 272 MA's), (125, 14148), (136, 14169), (152, 14205), (173, 14256), (185, 14286), (240, 14364), (244, 14373), (246, 14376), (273, 14430), (279, 14442), (306, 14490), (334, 14532), (358, 14580), (384, 14631), (402, 14661), (415, 14691), (424, 14706), (426, 14709), (475, 14805), (481, 14823), (502, 14874), (503, 14877), (513, 14907), (516, 14916), (522, 14931), (547, 14988), (578, 15036), (587, 15060), (589, 15066),

Gene: GTE5\_31 Start: 23122, Stop: 24039, Start Num: 76

Candidate Starts for GTE5\_31:

(Start: 76 @23122 has 24 MA's), (130, 23200), (206, 23353), (292, 23482), (387, 23653), (481, 23809), (524, 23908), (563, 23983), (576, 24004),

Gene: GTE6\_31 Start: 27069, Stop: 28046, Start Num: 64

Candidate Starts for GTE6\_31:

(Start: 64 @27069 has 25 MA's), (79, 27081), (Start: 96 @27108 has 14 MA's), (119, 27156), (151, 27210), (186, 27288), (240, 27384), (255, 27417), (277, 27456), (352, 27585), (363, 27618), (396, 27654), (504, 27840), (517, 27870), (544, 27933), (564, 27966), (598, 28035),

Gene: GTE8\_29 Start: 23138, Stop: 24079, Start Num: 76

Candidate Starts for GTE8\_29:

(Start: 76 @23138 has 24 MA's), (130, 23225), (167, 23300), (241, 23408), (260, 23447), (331, 23570), (387, 23678), (471, 23816), (524, 23948), (576, 24044),

Gene: Gabriela\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Gabriela\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Gaea\_33 Start: 28524, Stop: 29480, Start Num: 78

Candidate Starts for Gaea\_33:

(Start: 78 @28524 has 51 MA's), (163, 28680), (175, 28710), (180, 28722), (185, 28734), (196, 28749), (206, 28761), (299, 28920), (322, 28956), (356, 29016), (365, 29040), (384, 29052), (415, 29112), (471, 29202), (487, 29253), (504, 29292), (512, 29316), (516, 29328), (542, 29394), (554, 29409), (565, 29427), (569, 29433), (576, 29445),

Gene: Gaia\_13 Start: 13325, Stop: 14437, Start Num: 41

Candidate Starts for Gaia\_13:

(Start: 41 @13325 has 2 MA's), (42, 13328), (Start: 95 @13421 has 1 MA's), (Start: 99 @13427 has 15 MA's), (125, 13472), (142, 13502), (157, 13529), (159, 13532), (161, 13538), (167, 13553), (169, 13556), (203, 13625), (206, 13631), (244, 13709), (274, 13766), (292, 13802), (330, 13868), (337, 13880), (381, 13982), (382, 13985), (396, 14012), (427, 14075), (487, 14156), (490, 14162), (512, 14219), (524, 14249), (530, 14264), (542, 14288), (547, 14294), (580, 14351), (601, 14423),

Gene: Gail\_26 Start: 18165, Stop: 19187, Start Num: 97

Candidate Starts for Gail\_26:

(Start: 97 @18165 has 272 MA's), (110, 18183), (127, 18219), (142, 18240), (152, 18258), (208, 18378), (277, 18510), (296, 18540), (320, 18579), (322, 18582), (344, 18627), (421, 18792), (433, 18828), (464, 18894), (518, 19044), (528, 19068),

Gene: Galadriel\_34 Start: 30272, Stop: 31228, Start Num: 78

Candidate Starts for Galadriel\_34:

(Start: 78 @30272 has 51 MA's), (175, 30458), (180, 30470), (196, 30497), (211, 30518), (248, 30578), (297, 30665), (299, 30668), (322, 30704), (343, 30737), (352, 30752), (356, 30764), (376, 30794), (384, 30800), (415, 30860), (471, 30950), (504, 31040), (512, 31064), (516, 31076), (542, 31142), (569, 31181), (576, 31193), (588, 31223),

Gene: Gambino\_20 Start: 16105, Stop: 16965, Start Num: 68

Candidate Starts for Gambino\_20:

(Start: 68 @16105 has 24 MA's), (Start: 84 @16120 has 1 MA's), (143, 16222), (163, 16261), (203, 16342), (266, 16426), (274, 16441), (340, 16549), (400, 16633), (451, 16699), (454, 16705), (481,

16744), (523, 16834), (541, 16876),

Gene: Gancho\_20 Start: 16036, Stop: 17130, Start Num: 55

Candidate Starts for Gancho\_20:

(Start: 55 @16036 has 22 MA's), (57, 16045), (119, 16141), (125, 16150), (131, 16159), (159, 16210), (161, 16216), (206, 16306), (209, 16312), (221, 16330), (253, 16399), (257, 16408), (265, 16429), (267, 16435), (270, 16441), (273, 16444), (315, 16516), (317, 16519), (402, 16675), (438, 16744), (473, 16816), (481, 16834), (503, 16888), (514, 16918), (524, 16945), (527, 16948), (542, 16984), (547, 16990), (555, 17002), (580, 17044), (584, 17059), (586, 17062), (597, 17092),

Gene: Ganymede\_23 Start: 16031, Stop: 17167, Start Num: 30

Candidate Starts for Ganymede\_23:

(Start: 30 @16031 has 217 MA's), (61, 16148), (119, 16238), (132, 16259), (144, 16280), (159, 16307), (292, 16562), (340, 16643), (371, 16718), (389, 16733), (471, 16844), (487, 16886), (524, 16979), (533, 17003), (584, 17096), (599, 17135), (601, 17153),

Gene: Garak\_31 Start: 18964, Stop: 19980, Start Num: 97

Candidate Starts for Garak\_31:

(Start: 97 @18964 has 272 MA's), (127, 19018), (152, 19057), (201, 19162), (277, 19309), (296, 19339), (320, 19378), (322, 19381), (361, 19468), (368, 19489), (430, 19615), (464, 19687), (518, 19837), (522, 19846), (565, 19927),

Gene: Gardann\_17 Start: 16079, Stop: 16993, Start Num: 93

Candidate Starts for Gardann\_17:

(Start: 93 @16079 has 72 MA's), (111, 16103), (127, 16133), (189, 16259), (235, 16331), (318, 16484), (320, 16487), (322, 16490), (336, 16520), (363, 16577), (385, 16601), (390, 16607), (455, 16676), (464, 16694), (473, 16715), (493, 16769), (498, 16781), (518, 16844), (585, 16973), (591, 16985),

Gene: GardenSalsa\_31 Start: 22001, Stop: 22912, Start Num: 91

Candidate Starts for GardenSalsa\_31:

(Start: 91 @22001 has 19 MA's), (Start: 96 @22010 has 14 MA's), (127, 22064), (145, 22100), (147, 22103), (157, 22121), (163, 22136), (198, 22205), (201, 22208), (320, 22433), (322, 22436), (336, 22466), (390, 22553), (476, 22673), (498, 22727), (501, 22742), (513, 22775), (583, 22898),

Gene: Gattaca\_48 Start: 25618, Stop: 26580, Start Num: 94

Candidate Starts for Gattaca\_48:

(Start: 94 @25618 has 30 MA's), (163, 25750), (173, 25774), (178, 25783), (181, 25789), (184, 25798), (201, 25822), (206, 25831), (213, 25843), (271, 25969), (312, 26050), (322, 26065), (324, 26071), (385, 26179), (476, 26305), (478, 26311), (506, 26386), (536, 26461), (539, 26467), (548, 26479), (550, 26482), (593, 26569), (594, 26572), (596, 26575),

Gene: GaugeLDP\_29 Start: 20459, Stop: 21469, Start Num: 97

Candidate Starts for GaugeLDP\_29:

(Start: 97 @20459 has 272 MA's), (152, 20552), (167, 20588), (183, 20627), (296, 20834), (320, 20873), (322, 20876), (486, 21239), (518, 21326), (528, 21350),

Gene: Geeche\_46 Start: 28531, Stop: 29412, Start Num: 72

Candidate Starts for Geeche\_46:

(Start: 72 @28531 has 12 MA's), (106, 28579), (119, 28606), (160, 28678), (187, 28744), (206, 28774), (282, 28882), (337, 28975), (352, 28999), (357, 29014), (427, 29110), (471, 29158), (552, 29338), (573, 29374),

Gene: GenevaB15\_31 Start: 22046, Stop: 22957, Start Num: 91

Candidate Starts for GenevaB15\_31:

(Start: 91 @22046 has 19 MA's), (Start: 96 @22055 has 14 MA's), (127, 22109), (145, 22145), (147, 22148), (157, 22166), (163, 22181), (167, 22190), (198, 22250), (201, 22253), (320, 22478), (322, 22481), (336, 22511), (390, 22598), (483, 22739), (501, 22787), (513, 22820), (583, 22943),

Gene: Gengar\_20 Start: 16348, Stop: 17478, Start Num: 36

Candidate Starts for Gengar\_20:

(Start: 36 @16348 has 22 MA's), (Start: 105 @16522 has 2 MA's), (142, 16588), (144, 16591), (159, 16618), (206, 16717), (262, 16819), (292, 16873), (312, 16903), (330, 16939), (333, 16942), (337, 16951), (369, 17026), (371, 17029), (405, 17065), (427, 17107), (451, 17125), (454, 17131), (471, 17155), (472, 17158), (474, 17164), (487, 17197), (584, 17407), (599, 17446), (601, 17464),

Gene: Geodirt\_31 Start: 29258, Stop: 30214, Start Num: 78

Candidate Starts for Geodirt\_31:

(Start: 78 @29258 has 51 MA's), (175, 29444), (180, 29456), (196, 29483), (211, 29504), (248, 29564), (299, 29654), (322, 29690), (343, 29723), (352, 29738), (356, 29750), (376, 29780), (384, 29786), (415, 29846), (471, 29936), (504, 30026), (512, 30050), (516, 30062), (542, 30128), (554, 30143), (569, 30167), (576, 30179),

Gene: George\_22 Start: 18648, Stop: 19661, Start Num: 103

Candidate Starts for George\_22:

(Start: 103 @18648 has 85 MA's), (152, 18744), (165, 18777), (167, 18780), (183, 18819), (261, 18954), (293, 19014), (296, 19020), (308, 19038), (322, 19062), (342, 19104), (481, 19416), (518, 19518), (565, 19608),

Gene: Georgie2\_28 Start: 19096, Stop: 20112, Start Num: 97

Candidate Starts for Georgie2\_28:

(Start: 97 @19096 has 272 MA's), (142, 19171), (152, 19189), (167, 19225), (183, 19264), (296, 19471), (320, 19510), (322, 19513), (446, 19780), (486, 19882), (514, 19957), (518, 19969), (565, 20059),

Gene: Geraldini\_22 Start: 16027, Stop: 17163, Start Num: 30

Candidate Starts for Geraldini\_22:

(Start: 30 @16027 has 217 MA's), (61, 16144), (119, 16234), (132, 16255), (144, 16276), (159, 16303), (292, 16558), (340, 16639), (371, 16714), (389, 16729), (471, 16840), (474, 16849), (487, 16882), (524, 16975), (533, 16999), (584, 17092), (599, 17131), (601, 17149),

Gene: Getalong\_20 Start: 16305, Stop: 17228, Start Num: 99

Candidate Starts for Getalong\_20:

(Start: 99 @16305 has 15 MA's), (Start: 102 @16308 has 6 MA's), (111, 16320), (121, 16338), (145, 16383), (163, 16422), (180, 16461), (203, 16494), (206, 16500), (244, 16569), (273, 16623), (276, 16626), (277, 16629), (285, 16641), (302, 16665), (306, 16671), (316, 16689), (352, 16743), (356, 16755), (358, 16761), (374, 16782), (404, 16827), (405, 16830), (410, 16848), (415, 16854), (424, 16869), (426, 16872), (502, 17025), (503, 17028), (505, 17034), (518, 17067), (527, 17085), (538, 17118), (571, 17169), (579, 17184), (592, 17220),

Gene: Gezellig\_31 Start: 25052, Stop: 25996, Start Num: 83

Candidate Starts for Gezellig\_31:

(Start: 83 @25052 has 29 MA's), (142, 25157), (173, 25226), (175, 25232), (185, 25256), (196, 25271), (415, 25631), (424, 25646), (440, 25664), (486, 25766), (504, 25808), (516, 25844), (563, 25940), (588, 25991),

Gene: Ghobes\_15 Start: 13491, Stop: 14351, Start Num: 70

Candidate Starts for Ghobes\_15:

(Start: 65 @13485 has 6 MA's), (Start: 70 @13491 has 27 MA's), (Start: 96 @13518 has 14 MA's), (98, 13521), (209, 13725), (211, 13728), (241, 13755), (280, 13830), (289, 13848), (355, 13956), (488, 14142), (490, 14145), (522, 14217), (556, 14283), (576, 14319), (585, 14343),

Gene: Ghoulboy\_23 Start: 18814, Stop: 19827, Start Num: 103

Candidate Starts for Ghoulboy\_23:

(Start: 103 @18814 has 85 MA's), (152, 18910), (165, 18943), (167, 18946), (183, 18985), (210, 19033), (296, 19186), (308, 19204), (322, 19228), (342, 19270), (481, 19582), (518, 19684), (529, 19711),

Gene: GiKK\_20 Start: 14134, Stop: 15093, Start Num: 97

Candidate Starts for GiKK\_20:

(Start: 97 @14134 has 272 MA's), (127, 14182), (128, 14185), (163, 14263), (241, 14398), (244, 14404), (281, 14476), (293, 14500), (306, 14521), (358, 14611), (372, 14626), (380, 14641), (415, 14713), (462, 14800), (503, 14896), (513, 14926), (516, 14935), (527, 14959), (538, 14992), (542, 15001), (547, 15007), (579, 15058), (587, 15079), (589, 15085),

Gene: Gibbous\_17 Start: 14967, Stop: 15938, Start Num: 97

Candidate Starts for Gibbous\_17:

(54, 14892), (Start: 97 @14967 has 272 MA's), (125, 15012), (163, 15096), (185, 15150), (228, 15207), (240, 15231), (244, 15240), (246, 15243), (273, 15300), (306, 15360), (316, 15378), (358, 15450), (365, 15471), (415, 15552), (475, 15666), (503, 15735), (504, 15738), (513, 15765), (516, 15774), (527, 15798), (538, 15831), (549, 15849), (575, 15894), (587, 15924),

Gene: Gideon\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Gideon\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Gilberta\_27 Start: 19727, Stop: 20749, Start Num: 97

Candidate Starts for Gilberta\_27:

(Start: 97 @19727 has 272 MA's), (127, 19784), (163, 19859), (232, 19988), (261, 20048), (293, 20108), (296, 20114), (322, 20156), (344, 20201), (347, 20207), (382, 20291), (402, 20324), (518, 20606), (522, 20615), (528, 20630), (565, 20696),

Gene: Giles\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Giles\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Gladiator\_30 Start: 18950, Stop: 19966, Start Num: 97

Candidate Starts for Gladiator\_30:

(Start: 97 @18950 has 272 MA's), (110, 18968), (127, 19004), (152, 19043), (201, 19148), (296, 19325), (320, 19364), (322, 19367), (361, 19454), (368, 19475), (430, 19601), (464, 19673), (518, 19823), (522, 19832), (565, 19913),

Gene: Glaske16\_28 Start: 21456, Stop: 22367, Start Num: 91

Candidate Starts for Glaske16\_28:

(Start: 91 @21456 has 19 MA's), (147, 21558), (157, 21576), (163, 21591), (201, 21663), (206, 21672), (252, 21750), (318, 21885), (320, 21888), (322, 21891), (356, 21960), (385, 22002), (390, 22008), (483, 22149), (493, 22170), (498, 22182), (561, 22305), (567, 22317),

Gene: GodonK\_88 Start: 51377, Stop: 52333, Start Num: 62

Candidate Starts for GodonK\_88:

(Start: 62 @51377 has 2 MA's), (Start: 93 @51416 has 72 MA's), (147, 51521), (159, 51542), (178, 51593), (182, 51599), (202, 51632), (291, 51800), (311, 51830), (415, 52010), (457, 52064), (473, 52085), (481, 52103), (490, 52127), (502, 52154), (503, 52157), (505, 52163), (517, 52190), (527, 52208), (568, 52292), (572, 52298), (574, 52301),

Gene: Goib\_22 Start: 15642, Stop: 16475, Start Num: 120

Candidate Starts for Goib\_22:

(Start: 120 @15642 has 6 MA's), (Start: 122 @15645 has 5 MA's), (139, 15660), (158, 15699), (166, 15720), (168, 15723), (243, 15867), (350, 16053), (391, 16122), (460, 16224), (502, 16305), (503, 16308), (538, 16389), (540, 16395), (549, 16407), (551, 16410), (564, 16434),

Gene: GoldHunter\_18 Start: 14765, Stop: 15736, Start Num: 97

Candidate Starts for GoldHunter\_18:

(Start: 97 @14765 has 272 MA's), (125, 14810), (136, 14831), (163, 14894), (173, 14918), (185, 14948), (214, 14987), (240, 15026), (244, 15035), (246, 15038), (279, 15104), (306, 15152), (334, 15194), (358, 15242), (384, 15293), (415, 15353), (424, 15368), (426, 15371), (437, 15389), (441, 15395), (462, 15440), (475, 15467), (481, 15485), (503, 15539), (513, 15569), (516, 15578), (522, 15593), (547, 15650), (578, 15698), (587, 15722), (589, 15728),

Gene: GoldenAsh\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for GoldenAsh\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Gollum\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Gollum\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (486, 16116), (496, 16134), (518, 16203), (587, 16341),

Gene: Gomashi\_17 Start: 15478, Stop: 16650, Start Num: 30

Candidate Starts for Gomashi\_17:

(6, 15145), (Start: 30 @15478 has 217 MA's), (61, 15598), (75, 15616), (Start: 105 @15661 has 2 MA's), (110, 15667), (142, 15730), (161, 15766), (192, 15835), (195, 15838), (206, 15859), (241, 15913), (262, 15958), (280, 15988), (337, 16090), (344, 16102), (352, 16114), (358, 16132), (451, 16297), (471, 16327), (479, 16345), (487, 16369), (534, 16489), (584, 16579), (597, 16612),

Gene: GoongGoong\_48 Start: 25658, Stop: 26620, Start Num: 94

Candidate Starts for GoongGoong\_48:

(Start: 94 @25658 has 30 MA's), (163, 25790), (173, 25814), (178, 25823), (181, 25829), (184, 25838), (201, 25862), (206, 25871), (213, 25883), (271, 26009), (312, 26090), (322, 26105), (324, 26111), (385, 26219), (476, 26345), (478, 26351), (536, 26501), (539, 26507), (548, 26519), (550, 26522), (593, 26609), (594, 26612), (596, 26615),

Gene: GrandSlam\_21 Start: 16827, Stop: 17888, Start Num: 60

Candidate Starts for GrandSlam\_21:

(Start: 60 @16827 has 18 MA's), (Start: 94 @16872 has 30 MA's), (111, 16902), (167, 17010), (245, 17160), (265, 17208), (315, 17292), (321, 17301), (345, 17343), (443, 17520), (479, 17589), (547, 17751), (567, 17784), (598, 17856), (599, 17859),

Gene: Gratitude\_28 Start: 19643, Stop: 20659, Start Num: 97

Candidate Starts for Gratitude\_28:

(Start: 97 @19643 has 272 MA's), (142, 19718), (152, 19736), (167, 19772), (183, 19811), (277, 19988), (296, 20018), (320, 20057), (322, 20060), (518, 20516), (528, 20540),

Gene: Gravaillia\_21 Start: 16042, Stop: 17136, Start Num: 55

Candidate Starts for Gravaillia\_21:

(Start: 55 @16042 has 22 MA's), (57, 16051), (119, 16147), (125, 16156), (131, 16165), (159, 16216), (161, 16222), (206, 16312), (209, 16318), (221, 16336), (253, 16405), (257, 16414), (265, 16435), (267, 16441), (270, 16447), (273, 16450), (315, 16522), (317, 16525), (402, 16681), (438, 16750), (473, 16822), (481, 16840), (503, 16894), (514, 16924), (524, 16951), (527, 16954), (542, 16990), (547, 16996), (555, 17008), (580, 17050), (584, 17065), (586, 17068), (597, 17098),

Gene: GreedyLawyer\_30 Start: 18966, Stop: 19979, Start Num: 97

Candidate Starts for GreedyLawyer\_30:

(Start: 97 @18966 has 272 MA's), (127, 19020), (152, 19059), (201, 19164), (277, 19311), (296, 19341), (320, 19380), (322, 19383), (344, 19428), (368, 19488), (464, 19686), (518, 19836), (522, 19845),

Gene: Grizzly\_17 Start: 15480, Stop: 16652, Start Num: 30

Candidate Starts for Grizzly\_17:

(6, 15147), (Start: 30 @15480 has 217 MA's), (61, 15600), (75, 15618), (Start: 105 @15663 has 2 MA's), (110, 15669), (142, 15732), (161, 15768), (192, 15837), (195, 15840), (206, 15861), (241, 15915), (262, 15960), (280, 15990), (337, 16092), (344, 16104), (352, 16116), (451, 16299), (471, 16329), (479, 16347), (487, 16371), (528, 16473), (534, 16491), (584, 16581), (597, 16614),

Gene: GrootJr\_42 Start: 29261, Stop: 30202, Start Num: 76

Candidate Starts for GrootJr\_42:

(Start: 76 @29261 has 24 MA's), (130, 29348), (167, 29423), (198, 29489), (241, 29531), (269, 29588), (387, 29801), (406, 29828), (471, 29939), (524, 30071), (576, 30167),

Gene: Groundhog\_22 Start: 17602, Stop: 18624, Start Num: 103

Candidate Starts for Groundhog\_22:

(Start: 103 @17602 has 85 MA's), (163, 17725), (165, 17731), (201, 17803), (261, 17908), (271, 17935), (322, 18025), (376, 18145), (413, 18226), (429, 18256), (430, 18259), (514, 18469), (529, 18508), (555, 18556), (565, 18571),

Gene: Gruunaga\_30 Start: 18950, Stop: 19966, Start Num: 97

Candidate Starts for Gruunaga\_30:

(Start: 97 @18950 has 272 MA's), (110, 18968), (127, 19004), (152, 19043), (201, 19148), (296, 19325), (320, 19364), (322, 19367), (361, 19454), (368, 19475), (430, 19601), (464, 19673), (518, 19823), (522, 19832), (565, 19913),

Gene: Gspu1\_19 Start: 14904, Stop: 15749, Start Num: 122

Candidate Starts for Gspu1\_19:

(Start: 120 @14901 has 6 MA's), (Start: 122 @14904 has 5 MA's), (139, 14928), (153, 14958), (166, 14988), (168, 14991), (170, 14994), (191, 15036), (230, 15111), (234, 15117), (322, 15270), (350, 15321), (371, 15378), (406, 15423), (486, 15543), (487, 15546), (528, 15642), (549, 15681), (551,

15684), (572, 15720),

Gene: Guacamole\_18 Start: 15791, Stop: 16657, Start Num: 65

Candidate Starts for Guacamole\_18:

(Start: 65 @15791 has 6 MA's), (Start: 70 @15797 has 27 MA's), (163, 15953), (203, 16034), (274, 16133), (340, 16241), (400, 16325), (454, 16397), (523, 16526), (533, 16553), (541, 16568),

Gene: Guanica15\_22 Start: 15243, Stop: 16379, Start Num: 30

Candidate Starts for Guanica15\_22:

(Start: 30 @15243 has 217 MA's), (61, 15360), (119, 15450), (132, 15471), (159, 15519), (292, 15774), (340, 15855), (371, 15930), (389, 15945), (471, 16056), (487, 16098), (518, 16176), (524, 16191), (533, 16215), (584, 16308), (599, 16347), (601, 16365),

Gene: Guey18\_57 Start: 28183, Stop: 29127, Start Num: 92

Candidate Starts for Guey18\_57:

(Start: 92 @28183 has 38 MA's), (157, 28303), (206, 28399), (265, 28501), (305, 28567), (316, 28588), (320, 28594), (348, 28645), (358, 28669), (415, 28762), (445, 28801), (494, 28912), (497, 28918), (499, 28927), (502, 28933), (513, 28966), (516, 28975), (519, 28984), (527, 28999), (565, 29074), (573, 29086), (579, 29098), (587, 29119),

Gene: Guillsminger\_20 Start: 16323, Stop: 17453, Start Num: 36

Candidate Starts for Guillsminger\_20:

(Start: 36 @16323 has 22 MA's), (142, 16563), (144, 16566), (159, 16593), (206, 16692), (262, 16794), (292, 16848), (312, 16878), (330, 16914), (333, 16917), (337, 16926), (369, 17001), (371, 17004), (427, 17082), (451, 17100), (454, 17106), (471, 17130), (472, 17133), (474, 17139), (487, 17172), (584, 17382), (599, 17421), (601, 17439),

Gene: Gustav\_17 Start: 14305, Stop: 15132, Start Num: 96

Candidate Starts for Gustav\_17:

(Start: 96 @14305 has 14 MA's), (119, 14350), (132, 14374), (141, 14383), (167, 14437), (246, 14554), (273, 14605), (275, 14608), (304, 14653), (330, 14701), (337, 14713), (389, 14782), (405, 14797), (471, 14890), (502, 14938), (507, 14953), (509, 14959), (511, 14965), (514, 14974), (519, 14989), (528, 15010), (529, 15013), (550, 15046), (557, 15055),

Gene: Gustavo\_33 Start: 28679, Stop: 29635, Start Num: 78

Candidate Starts for Gustavo\_33:

(Start: 78 @28679 has 51 MA's), (157, 28820), (175, 28865), (180, 28877), (185, 28889), (196, 28904), (206, 28916), (227, 28943), (233, 28958), (248, 28985), (299, 29075), (322, 29111), (356, 29171), (384, 29207), (415, 29267), (471, 29357), (504, 29447), (512, 29471), (516, 29483), (542, 29549), (554, 29564), (569, 29588), (576, 29600),

Gene: GuuelaD\_17 Start: 16108, Stop: 17022, Start Num: 93

Candidate Starts for GuuelaD\_17:

(Start: 93 @16108 has 72 MA's), (111, 16132), (127, 16162), (318, 16513), (320, 16516), (322, 16519), (336, 16549), (363, 16606), (385, 16630), (390, 16636), (455, 16705), (464, 16723), (473, 16744), (498, 16810), (517, 16870), (518, 16873), (585, 17002), (591, 17014),

Gene: GuyFagieri\_44 Start: 30280, Stop: 31170, Start Num: 105

Candidate Starts for GuyFagieri\_44:

(50, 30193), (Start: 71 @30241 has 1 MA's), (Start: 105 @30280 has 2 MA's), (167, 30397), (183, 30436), (195, 30454), (241, 30505), (292, 30604), (338, 30679), (343, 30688), (451, 30892), (471, 30922), (487, 30958), (504, 30997), (524, 31039), (559, 31102), (563, 31114), (576, 31135),



Gene: HH92\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for HH92\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Hadrien\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Hadrien\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Hafay\_17 Start: 16107, Stop: 17021, Start Num: 93

Candidate Starts for Hafay\_17:

(Start: 93 @16107 has 72 MA's), (127, 16161), (189, 16287), (235, 16359), (318, 16512), (320, 16515), (322, 16518), (336, 16548), (363, 16605), (385, 16629), (390, 16635), (455, 16704), (464, 16722), (473, 16743), (493, 16797), (498, 16809), (518, 16872), (585, 17001), (591, 17013),

Gene: Hail\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Hail\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Halena\_17 Start: 15866, Stop: 16747, Start Num: 93

Candidate Starts for Halena\_17:

(58, 15812), (Start: 80 @15848 has 9 MA's), (Start: 93 @15866 has 72 MA's), (111, 15890), (127, 15920), (136, 15935), (154, 15968), (235, 16112), (320, 16268), (322, 16271), (324, 16277), (347, 16322), (360, 16349), (390, 16388), (415, 16421), (421, 16430), (455, 16457), (501, 16577), (518, 16625), (531, 16652), (563, 16691), (567, 16697), (585, 16736),

Gene: Halo\_17 Start: 15472, Stop: 16644, Start Num: 30

Candidate Starts for Halo\_17:

(6, 15139), (Start: 30 @15472 has 217 MA's), (61, 15592), (75, 15610), (Start: 105 @15655 has 2 MA's), (110, 15661), (142, 15724), (161, 15760), (192, 15829), (195, 15832), (206, 15853), (241, 15907), (262, 15952), (280, 15982), (337, 16084), (344, 16096), (352, 16108), (358, 16126), (451, 16291), (471, 16321), (479, 16339), (487, 16363), (534, 16483), (584, 16573), (597, 16606),

Gene: Halo3\_31 Start: 25345, Stop: 26289, Start Num: 83

Candidate Starts for Halo3\_31:

(Start: 83 @25345 has 29 MA's), (142, 25450), (173, 25519), (175, 25525), (185, 25549), (196, 25564), (415, 25924), (424, 25939), (440, 25957), (486, 26059), (504, 26101), (516, 26137), (563, 26233), (588, 26284),

Gene: Hammer\_30 Start: 18965, Stop: 19981, Start Num: 97

Candidate Starts for Hammer\_30:

(Start: 97 @18965 has 272 MA's), (110, 18983), (127, 19019), (152, 19058), (201, 19163), (296, 19340), (320, 19379), (322, 19382), (361, 19469), (368, 19490), (430, 19616), (464, 19688), (518, 19838), (522, 19847), (565, 19928),

Gene: Hammy\_21 Start: 16436, Stop: 17572, Start Num: 30

Candidate Starts for Hammy\_21:

(Start: 30 @16436 has 217 MA's), (61, 16553), (75, 16571), (Start: 97 @16604 has 272 MA's), (119, 16643), (159, 16712), (206, 16811), (209, 16817), (262, 16913), (292, 16967), (330, 17033), (337, 17045), (427, 17201), (454, 17225), (487, 17291), (488, 17294), (490, 17297), (524, 17384), (584, 17501), (599, 17540), (601, 17558),

Gene: Hamood\_21 Start: 16827, Stop: 17888, Start Num: 60

Candidate Starts for Hamood\_21:

(Start: 60 @16827 has 18 MA's), (Start: 94 @16872 has 30 MA's), (111, 16902), (167, 17010), (245, 17160), (265, 17208), (315, 17292), (321, 17301), (345, 17343), (443, 17520), (479, 17589), (547, 17751), (567, 17784), (598, 17856), (599, 17859),

Gene: HannahD\_18 Start: 15721, Stop: 16650, Start Num: 94

Candidate Starts for HannahD\_18:

(79, 15700), (Start: 94 @15721 has 30 MA's), (Start: 102 @15730 has 6 MA's), (128, 15772), (250, 16006), (276, 16051), (289, 16075), (296, 16081), (302, 16090), (306, 16096), (323, 16126), (344, 16156), (358, 16186), (360, 16192), (405, 16255), (415, 16279), (450, 16336), (490, 16423), (518, 16492), (573, 16597), (587, 16630),

Gene: Hanray\_27 Start: 20531, Stop: 21544, Start Num: 97

Candidate Starts for Hanray\_27:

(Start: 97 @20531 has 272 MA's), (110, 20549), (142, 20606), (152, 20624), (167, 20660), (261, 20840), (277, 20876), (296, 20906), (322, 20948), (397, 21107), (464, 21251), (486, 21314), (514, 21389), (518, 21401), (528, 21425),

Gene: Hans\_34 Start: 28153, Stop: 29139, Start Num: 64

Candidate Starts for Hans\_34:

(Start: 64 @28153 has 25 MA's), (142, 28276), (161, 28312), (186, 28372), (240, 28468), (296, 28579), (311, 28600), (363, 28702), (396, 28738), (515, 28954), (517, 28960), (523, 28975), (529, 28990), (544, 29026), (564, 29059), (566, 29062), (598, 29128),

Gene: Harlequin\_22 Start: 15430, Stop: 16302, Start Num: 103

Candidate Starts for Harlequin\_22:

(Start: 103 @15430 has 85 MA's), (121, 15469), (163, 15550), (165, 15556), (198, 15625), (246, 15703), (258, 15730), (322, 15841), (392, 15937), (486, 16066), (496, 16084), (514, 16141), (518, 16153), (587, 16291),

Gene: HarryHoudini\_29 Start: 19660, Stop: 20676, Start Num: 97

Candidate Starts for HarryHoudini\_29:

(Start: 97 @19660 has 272 MA's), (142, 19735), (152, 19753), (167, 19789), (183, 19828), (261, 19969), (296, 20035), (320, 20074), (322, 20077), (518, 20533), (528, 20557),

Gene: Hedwig\_19 Start: 16010, Stop: 16957, Start Num: 94

Candidate Starts for Hedwig\_19:

(Start: 94 @16010 has 30 MA's), (244, 16286), (250, 16298), (289, 16370), (296, 16376), (306, 16391), (344, 16451), (358, 16481), (360, 16487), (405, 16550), (415, 16574), (418, 16577), (442, 16616), (475, 16685), (490, 16727), (502, 16754), (518, 16796), (519, 16799), (524, 16811), (547, 16862), (565, 16886), (590, 16940),

Gene: HedwigODU\_22 Start: 16020, Stop: 17156, Start Num: 30

Candidate Starts for HedwigODU\_22:

(Start: 30 @16020 has 217 MA's), (61, 16137), (119, 16227), (132, 16248), (144, 16269), (159, 16296), (292, 16551), (340, 16632), (371, 16707), (389, 16722), (471, 16833), (487, 16875), (524, 16968), (533, 16992), (584, 17085), (599, 17124), (601, 17142),

Gene: Heffalump\_29 Start: 21031, Stop: 22041, Start Num: 97

Candidate Starts for Heffalump\_29:

(Start: 97 @21031 has 272 MA's), (142, 21106), (152, 21124), (167, 21160), (183, 21199), (296, 21406), (320, 21445), (322, 21448), (486, 21811), (514, 21886), (518, 21898), (565, 21988),

Gene: Heftyboy\_20 Start: 16471, Stop: 17601, Start Num: 36

Candidate Starts for Heftyboy\_20:

(Start: 36 @16471 has 22 MA's), (Start: 105 @16645 has 2 MA's), (142, 16711), (144, 16714), (159, 16741), (206, 16840), (262, 16942), (292, 16996), (312, 17026), (330, 17062), (333, 17065), (337, 17074), (369, 17149), (371, 17152), (405, 17188), (427, 17230), (451, 17248), (454, 17254), (471, 17278), (472, 17281), (474, 17287), (487, 17320), (584, 17530), (599, 17569), (601, 17587),

Gene: Heinz\_18 Start: 14187, Stop: 15035, Start Num: 96

Candidate Starts for Heinz\_18:

(9, 13731), (Start: 36 @14007 has 22 MA's), (Start: 72 @14148 has 12 MA's), (Start: 96 @14187 has 14 MA's), (132, 14256), (150, 14286), (162, 14307), (175, 14340), (198, 14385), (279, 14499), (300, 14532), (304, 14538), (329, 14583), (337, 14598), (420, 14721), (425, 14730), (458, 14769), (483, 14802), (509, 14859), (524, 14901), (528, 14910), (557, 14961), (559, 14967), (579, 15006),

Gene: Helmet\_31 Start: 18964, Stop: 19980, Start Num: 97

Candidate Starts for Helmet\_31:

(Start: 97 @18964 has 272 MA's), (127, 19018), (152, 19057), (201, 19162), (277, 19309), (296, 19339), (320, 19378), (322, 19381), (361, 19468), (368, 19489), (430, 19615), (464, 19687), (518, 19837), (522, 19846), (565, 19927),

Gene: Herbertwm\_24 Start: 17773, Stop: 18798, Start Num: 97

Candidate Starts for Herbertwm\_24:

(Start: 97 @17773 has 272 MA's), (110, 17791), (142, 17848), (152, 17866), (167, 17902), (183, 17941), (261, 18082), (296, 18148), (322, 18190), (362, 18280), (391, 18343), (433, 18439), (514, 18643), (518, 18655), (528, 18679), (565, 18745), (571, 18754),

Gene: Hexamo\_30 Start: 18932, Stop: 19948, Start Num: 97

Candidate Starts for Hexamo\_30:

(Start: 97 @18932 has 272 MA's), (110, 18950), (127, 18986), (152, 19025), (201, 19130), (296, 19307), (320, 19346), (322, 19349), (361, 19436), (368, 19457), (430, 19583), (464, 19655), (518, 19805), (522, 19814), (565, 19895),

Gene: Hexbug\_19 Start: 14820, Stop: 15779, Start Num: 97

Candidate Starts for Hexbug\_19:

(54, 14745), (Start: 97 @14820 has 272 MA's), (111, 14841), (128, 14871), (163, 14949), (244, 15090), (293, 15186), (306, 15207), (334, 15249), (358, 15297), (372, 15312), (401, 15366), (415, 15399), (503, 15582), (504, 15585), (513, 15612), (516, 15621), (518, 15627), (527, 15645), (538, 15678), (542, 15687), (547, 15693), (587, 15765), (589, 15771),

Gene: Hibiscus\_17 Start: 14141, Stop: 14983, Start Num: 96

Candidate Starts for Hibiscus\_17:

(Start: 72 @14102 has 12 MA's), (Start: 96 @14141 has 14 MA's), (132, 14210), (150, 14240), (162, 14261), (175, 14294), (197, 14336), (198, 14339), (337, 14546), (425, 14678), (483, 14750), (509, 14807), (524, 14849), (528, 14858), (557, 14909), (559, 14915), (579, 14954),

Gene: Hilltopfarm\_23 Start: 18643, Stop: 19641, Start Num: 52

Candidate Starts for Hilltopfarm\_23:

(Start: 52 @18643 has 5 MA's), (Start: 97 @18709 has 272 MA's), (142, 18799), (145, 18805), (169, 18853), (190, 18901), (206, 18928), (222, 18955), (223, 18958), (244, 18979), (269, 19030), (297, 19081), (305, 19090), (322, 19117), (358, 19192), (366, 19216), (454, 19306), (471, 19330), (472, 19333), (487, 19369), (509, 19423), (512, 19432), (529, 19474), (530, 19477), (580, 19558), (582, 19567), (599, 19612),

Gene: HippoPololi\_19 Start: 15627, Stop: 16592, Start Num: 97

Candidate Starts for HippoPololi\_19:

(Start: 97 @15627 has 272 MA's), (125, 15672), (152, 15729), (163, 15756), (185, 15810), (240, 15891), (244, 15900), (246, 15903), (273, 15960), (306, 16020), (316, 16038), (358, 16110), (365, 16125), (402, 16176), (404, 16179), (462, 16293), (475, 16320), (503, 16389), (504, 16392), (513, 16419), (516, 16428), (527, 16452), (538, 16485), (549, 16503), (575, 16548), (587, 16578),

Gene: Hiro\_22 Start: 15736, Stop: 16608, Start Num: 103

Candidate Starts for Hiro\_22:

(Start: 103 @15736 has 85 MA's), (121, 15775), (165, 15862), (198, 15931), (246, 16009), (258, 16036), (322, 16147), (392, 16243), (486, 16372), (496, 16390), (518, 16459), (587, 16597),

Gene: Hitter\_18 Start: 15793, Stop: 16653, Start Num: 70

Candidate Starts for Hitter\_18:

(Start: 65 @15787 has 6 MA's), (Start: 70 @15793 has 27 MA's), (163, 15949), (203, 16030), (274, 16129), (340, 16237), (400, 16321), (451, 16387), (481, 16432), (523, 16522), (541, 16564),

Gene: Horex\_27 Start: 20531, Stop: 21544, Start Num: 97

Candidate Starts for Horex\_27:

(Start: 97 @20531 has 272 MA's), (110, 20549), (142, 20606), (152, 20624), (167, 20660), (261, 20840), (277, 20876), (296, 20906), (322, 20948), (397, 21107), (464, 21251), (486, 21314), (514, 21389), (518, 21401), (528, 21425),

Gene: Holliday\_19 Start: 15504, Stop: 16424, Start Num: 102

Candidate Starts for Holliday\_19:

(Start: 99 @15501 has 15 MA's), (Start: 102 @15504 has 6 MA's), (111, 15516), (121, 15534), (145, 15579), (163, 15618), (180, 15657), (203, 15690), (206, 15696), (244, 15765), (273, 15819), (276, 15822), (277, 15825), (285, 15837), (298, 15855), (302, 15861), (306, 15867), (316, 15885), (352, 15939), (356, 15951), (358, 15957), (374, 15978), (405, 16026), (410, 16044), (415, 16050), (424, 16065), (426, 16068), (502, 16221), (503, 16224), (505, 16230), (518, 16263), (527, 16281), (538, 16314), (571, 16365), (579, 16380), (592, 16416),

Gene: Homura\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Homura\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Hoot\_30 Start: 18945, Stop: 19958, Start Num: 97

Candidate Starts for Hoot\_30:

(Start: 97 @18945 has 272 MA's), (127, 18999), (152, 19038), (201, 19143), (277, 19290), (296, 19320), (320, 19359), (322, 19362), (344, 19407), (368, 19467), (464, 19665), (518, 19815), (522, 19824),

Gene: Hope\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Hope\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Horseradish\_18 Start: 14308, Stop: 15279, Start Num: 97

Candidate Starts for Horseradish\_18:

(Start: 97 @14308 has 272 MA's), (125, 14353), (136, 14374), (142, 14389), (163, 14437), (173, 14461), (185, 14491), (240, 14569), (244, 14578), (246, 14581), (279, 14647), (306, 14695), (334, 14737), (358, 14785), (384, 14836), (415, 14896), (424, 14911), (426, 14914), (441, 14938), (475, 15010), (481, 15028), (502, 15079), (503, 15082), (513, 15112), (516, 15121), (522, 15136), (538, 15178), (547, 15193), (578, 15241), (587, 15265), (589, 15271),

Gene: HortumSL17\_28 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for HortumSL17\_28:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: Horus\_19 Start: 15514, Stop: 16437, Start Num: 99

Candidate Starts for Horus\_19:

(Start: 99 @15514 has 15 MA's), (Start: 102 @15517 has 6 MA's), (111, 15529), (121, 15547), (145, 15592), (163, 15631), (180, 15670), (203, 15703), (206, 15709), (244, 15778), (273, 15832), (276, 15835), (277, 15838), (285, 15850), (302, 15874), (306, 15880), (316, 15898), (352, 15952), (356, 15964), (358, 15970), (374, 15991), (404, 16036), (405, 16039), (410, 16057), (415, 16063), (424, 16078), (426, 16081), (502, 16234), (503, 16237), (505, 16243), (518, 16276), (527, 16294), (538, 16327), (571, 16378), (579, 16393), (592, 16429),

Gene: Hotshotbaby7\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Hotshotbaby7\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: HubbaBubba\_38 Start: 25653, Stop: 26573, Start Num: 81

Candidate Starts for HubbaBubba\_38:

(Start: 81 @25653 has 8 MA's), (130, 25734), (154, 25779), (183, 25848), (292, 26016), (343, 26100), (364, 26151), (443, 26274), (499, 26382), (505, 26400), (524, 26442), (532, 26463), (573, 26532), (576, 26538), (583, 26559),

Gene: Huffy\_23 Start: 15864, Stop: 16697, Start Num: 120

Candidate Starts for Huffy\_23:

(Start: 120 @15864 has 6 MA's), (Start: 122 @15867 has 5 MA's), (139, 15882), (158, 15921), (166, 15942), (168, 15945), (243, 16089), (350, 16275), (402, 16362), (460, 16446), (502, 16527), (538, 16611), (540, 16617), (549, 16629), (551, 16632), (564, 16656),

Gene: HuhtaEnerson15\_23 Start: 18648, Stop: 19661, Start Num: 103

Candidate Starts for HuhtaEnerson15\_23:

(Start: 103 @18648 has 85 MA's), (152, 18744), (165, 18777), (167, 18780), (183, 18819), (261, 18954), (293, 19014), (296, 19020), (308, 19038), (322, 19062), (342, 19104), (481, 19416), (518, 19518), (565, 19608),

Gene: Huphlepuuff\_51 Start: 26243, Stop: 27205, Start Num: 94

Candidate Starts for Huphlepuuff\_51:

(Start: 94 @26243 has 30 MA's), (163, 26375), (173, 26399), (178, 26408), (181, 26414), (184, 26423), (201, 26447), (206, 26456), (213, 26468), (216, 26480), (271, 26594), (312, 26675), (322, 26690), (324, 26696), (385, 26804), (476, 26930), (478, 26936), (506, 27011), (536, 27086), (539, 27092), (548, 27104), (550, 27107), (593, 27194), (594, 27197), (596, 27200),

Gene: Hurricane\_21 Start: 16451, Stop: 17587, Start Num: 30

Candidate Starts for Hurricane\_21:

(Start: 30 @16451 has 217 MA's), (61, 16574), (Start: 105 @16637 has 2 MA's), (110, 16643), (125, 16673), (144, 16706), (195, 16811), (206, 16832), (244, 16895), (262, 16934), (280, 16964), (330, 17051), (352, 17087), (451, 17234), (471, 17264), (474, 17273), (487, 17306), (488, 17309), (490, 17312), (524, 17399), (571, 17486), (597, 17549), (599, 17555),

Gene: Hutc2\_27 Start: 19733, Stop: 20755, Start Num: 97

Candidate Starts for Hutc2\_27:

(Start: 97 @19733 has 272 MA's), (127, 19790), (163, 19865), (232, 19994), (261, 20054), (293, 20114), (296, 20120), (322, 20162), (344, 20207), (347, 20213), (382, 20297), (402, 20330), (518, 20612), (522, 20621), (528, 20636), (565, 20702),

Gene: Hyperbowlee\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Hyperbowlee\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: IDyn\_41 Start: 27049, Stop: 27969, Start Num: 81

Candidate Starts for IDyn\_41:

(Start: 81 @27049 has 8 MA's), (130, 27130), (154, 27175), (183, 27244), (292, 27412), (343, 27496), (364, 27547), (387, 27580), (443, 27670), (499, 27778), (524, 27838), (573, 27928), (576, 27934), (583, 27955),

Gene: IPhane7\_27 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for IPhane7\_27:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: Ibrahim\_18 Start: 16018, Stop: 16983, Start Num: 87

Candidate Starts for Ibrahim\_18:

(Start: 87 @16018 has 10 MA's), (107, 16045), (116, 16063), (208, 16240), (210, 16243), (246, 16318), (277, 16384), (290, 16411), (320, 16468), (324, 16477), (477, 16714), (485, 16738), (522, 16837), (529, 16858), (537, 16879), (562, 16918), (567, 16927),

Gene: IdentityCrisis\_16 Start: 12920, Stop: 14107, Start Num: 23

Candidate Starts for IdentityCrisis\_16:

(Start: 23 @12920 has 1 MA's), (32, 12968), (33, 12971), (43, 13034), (47, 13055), (Start: 78 @13130 has 51 MA's), (123, 13205), (172, 13313), (175, 13325), (177, 13328), (188, 13352), (203, 13373), (232, 13418), (271, 13499), (283, 13520), (288, 13529), (304, 13544), (307, 13550), (336, 13595), (337, 13598), (351, 13622), (353, 13625), (405, 13721), (475, 13853), (497, 13889), (498, 13892), (503, 13907), (529, 13979), (542, 14012), (547, 14018), (551, 14024), (554, 14027), (587, 14096),

Gene: Illumine\_22 Start: 16034, Stop: 17170, Start Num: 30

Candidate Starts for Illumine\_22:

(Start: 30 @16034 has 217 MA's), (61, 16151), (132, 16262), (144, 16283), (159, 16310), (207, 16412), (292, 16565), (340, 16646), (363, 16700), (371, 16721), (389, 16736), (471, 16847), (487, 16889), (524, 16982), (533, 17006), (584, 17099), (599, 17138), (601, 17156),

Gene: Indra\_30 Start: 18965, Stop: 19981, Start Num: 97

Candidate Starts for Indra\_30:

(Start: 97 @18965 has 272 MA's), (127, 19019), (152, 19058), (201, 19163), (277, 19310), (296, 19340), (320, 19379), (322, 19382), (361, 19469), (368, 19490), (430, 19616), (464, 19688), (518, 19838), (522, 19847), (565, 19928),

Gene: Inky\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Inky\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Insomnia\_27 Start: 19788, Stop: 20810, Start Num: 97

Candidate Starts for Insomnia\_27:

(Start: 97 @19788 has 272 MA's), (127, 19845), (163, 19920), (232, 20049), (261, 20109), (293, 20169), (296, 20175), (322, 20217), (344, 20262), (347, 20268), (382, 20352), (402, 20385), (518, 20667), (522, 20676), (528, 20691), (565, 20757),

Gene: Inspectinfecti\_33 Start: 28515, Stop: 29501, Start Num: 64

Candidate Starts for Inspectinfecti\_33:

(Start: 64 @28515 has 25 MA's), (142, 28638), (161, 28674), (186, 28734), (240, 28830), (296, 28941), (311, 28962), (363, 29064), (396, 29100), (515, 29316), (517, 29322), (523, 29337), (529, 29352), (544, 29388), (564, 29421), (566, 29424), (598, 29490),

Gene: InvictusManeo\_20 Start: 16423, Stop: 17553, Start Num: 36

Candidate Starts for InvictusManeo\_20:

(Start: 36 @16423 has 22 MA's), (Start: 105 @16597 has 2 MA's), (142, 16663), (144, 16666), (159, 16693), (206, 16792), (262, 16894), (292, 16948), (312, 16978), (330, 17014), (333, 17017), (337, 17026), (369, 17101), (371, 17104), (405, 17140), (427, 17182), (451, 17200), (454, 17206), (471, 17230), (472, 17233), (487, 17272), (584, 17482), (599, 17521), (601, 17539),

Gene: IronMan\_29 Start: 20734, Stop: 21750, Start Num: 97

Candidate Starts for IronMan\_29:

(Start: 97 @20734 has 272 MA's), (142, 20809), (152, 20827), (183, 20902), (261, 21043), (274, 21073), (296, 21109), (322, 21151), (362, 21241), (382, 21292), (446, 21418), (481, 21505), (518, 21607), (528, 21631),

Gene: Isiphiwo\_30 Start: 18957, Stop: 19970, Start Num: 97

Candidate Starts for Isiphiwo\_30:

(Start: 97 @18957 has 272 MA's), (127, 19011), (152, 19050), (201, 19155), (277, 19302), (296, 19332), (320, 19371), (322, 19374), (344, 19419), (368, 19479), (464, 19677), (518, 19827), (522,

19836),

Gene: Itos\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Itos\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Iwokeuplikedis\_28 Start: 18928, Stop: 19938, Start Num: 97

Candidate Starts for Iwokeuplikedis\_28:

(Start: 97 @18928 has 272 MA's), (142, 19003), (152, 19021), (183, 19096), (296, 19303), (322, 19345), (344, 19390), (382, 19480), (430, 19573), (486, 19708), (514, 19783), (518, 19795),

Gene: Izel\_26 Start: 21456, Stop: 22367, Start Num: 91

Candidate Starts for Izel\_26:

(Start: 91 @21456 has 19 MA's), (147, 21558), (157, 21576), (163, 21591), (201, 21663), (206, 21672), (252, 21750), (318, 21885), (320, 21888), (322, 21891), (356, 21960), (385, 22002), (390, 22008), (483, 22149), (493, 22170), (498, 22182), (561, 22305), (567, 22317),

Gene: JAWS\_22 Start: 16005, Stop: 17141, Start Num: 30

Candidate Starts for JAWS\_22:

(Start: 30 @16005 has 217 MA's), (61, 16122), (119, 16212), (132, 16233), (144, 16254), (159, 16281), (292, 16536), (340, 16617), (371, 16692), (389, 16707), (471, 16818), (487, 16860), (524, 16953), (533, 16977), (584, 17070), (599, 17109), (601, 17127),

Gene: JF1\_23 Start: 17489, Stop: 18622, Start Num: 30

Candidate Starts for JF1\_23:

(Start: 30 @17489 has 217 MA's), (37, 17507), (Start: 51 @17579 has 2 MA's), (61, 17609), (119, 17699), (144, 17741), (157, 17765), (207, 17870), (334, 18092), (337, 18098), (426, 18248), (427, 18251), (451, 18269), (471, 18299), (487, 18341), (488, 18344), (509, 18395), (580, 18536), (584, 18551), (599, 18590), (601, 18608),

Gene: JKSyngboy\_31 Start: 29254, Stop: 30210, Start Num: 78

Candidate Starts for JKSyngboy\_31:

(Start: 78 @29254 has 51 MA's), (163, 29410), (175, 29440), (180, 29452), (185, 29464), (196, 29479), (206, 29491), (233, 29533), (297, 29647), (299, 29650), (322, 29686), (356, 29746), (365, 29770), (384, 29782), (415, 29842), (471, 29932), (504, 30022), (512, 30046), (516, 30058), (542, 30124), (554, 30139), (569, 30163), (576, 30175),

Gene: JSwag\_29 Start: 18105, Stop: 19082, Start Num: 100

Candidate Starts for JSwag\_29:

(Start: 100 @18105 has 20 MA's), (163, 18219), (165, 18225), (167, 18228), (286, 18462), (430, 18729), (461, 18783), (518, 18939),

Gene: Jaan\_30 Start: 21123, Stop: 22139, Start Num: 97

Candidate Starts for Jaan\_30:

(Start: 97 @21123 has 272 MA's), (142, 21198), (152, 21216), (183, 21291), (261, 21432), (274, 21462), (296, 21498), (322, 21540), (362, 21630), (376, 21666), (382, 21681), (446, 21807), (481, 21894), (518, 21996), (528, 22020),

Gene: Jabbawokkie\_20 Start: 13336, Stop: 14265, Start Num: 92

Candidate Starts for Jabbawokkie\_20:



(Start: 92 @13336 has 38 MA's), (128, 13396), (152, 13447), (203, 13546), (206, 13552), (217, 13567), (285, 13687), (298, 13705), (341, 13771), (348, 13783), (373, 13828), (402, 13867), (405, 13873), (415, 13897), (418, 13900), (419, 13903), (424, 13912), (426, 13915), (468, 13981), (475, 14002), (476, 14005), (490, 14041), (502, 14068), (503, 14071), (518, 14110), (527, 14128), (528, 14134), (542, 14170), (547, 14176), (562, 14200), (567, 14206), (571, 14212),

Gene: Jabberwocky\_32 Start: 30402, Stop: 31358, Start Num: 78

Candidate Starts for Jabberwocky\_32:

(Start: 78 @30402 has 51 MA's), (175, 30588), (180, 30600), (196, 30627), (211, 30648), (248, 30708), (297, 30795), (299, 30798), (322, 30834), (343, 30867), (352, 30882), (356, 30894), (376, 30924), (384, 30930), (415, 30990), (471, 31080), (504, 31170), (512, 31194), (516, 31206), (542, 31272), (576, 31323),

Gene: Jabiru\_23 Start: 18016, Stop: 19029, Start Num: 103

Candidate Starts for Jabiru\_23:

(Start: 103 @18016 has 85 MA's), (152, 18112), (165, 18145), (167, 18148), (183, 18187), (261, 18322), (274, 18352), (293, 18382), (296, 18388), (308, 18406), (322, 18430), (342, 18472), (421, 18643), (518, 18886), (565, 18976),

Gene: Jabith\_27 Start: 19788, Stop: 20810, Start Num: 97

Candidate Starts for Jabith\_27:

(Start: 97 @19788 has 272 MA's), (127, 19845), (163, 19920), (232, 20049), (261, 20109), (293, 20169), (296, 20175), (322, 20217), (344, 20262), (347, 20268), (382, 20352), (402, 20385), (518, 20667), (522, 20676), (528, 20691), (565, 20757),

Gene: Jablanski\_19 Start: 16772, Stop: 17680, Start Num: 92

Candidate Starts for Jablanski\_19:

(Start: 92 @16772 has 38 MA's), (126, 16829), (190, 16964), (203, 16979), (204, 16982), (236, 17033), (316, 17141), (346, 17189), (358, 17213), (372, 17231), (374, 17237), (400, 17273), (475, 17429), (493, 17456), (498, 17468), (503, 17483), (518, 17528), (527, 17546), (529, 17555), (544, 17591), (547, 17594), (567, 17630), (571, 17636), (575, 17642),

Gene: JacoRen57\_16 Start: 14312, Stop: 15445, Start Num: 35

Candidate Starts for JacoRen57\_16:

(Start: 35 @14312 has 4 MA's), (40, 14360), (Start: 87 @14465 has 10 MA's), (Start: 103 @14489 has 85 MA's), (Start: 105 @14492 has 2 MA's), (157, 14582), (160, 14588), (218, 14702), (223, 14711), (322, 14891), (337, 14924), (342, 14933), (414, 15062), (422, 15074), (427, 15083), (471, 15128), (474, 15137), (488, 15170), (499, 15191), (502, 15200), (524, 15260), (542, 15299), (547, 15305), (561, 15329), (597, 15410),

Gene: Jalammah\_20 Start: 16587, Stop: 17447, Start Num: 68

Candidate Starts for Jalammah\_20:

(Start: 68 @16587 has 24 MA's), (163, 16743), (203, 16824), (252, 16881), (255, 16890), (274, 16923), (340, 17031), (400, 17115), (451, 17181), (454, 17187), (523, 17316), (541, 17358),

Gene: Jambalaya\_30 Start: 24699, Stop: 25643, Start Num: 83

Candidate Starts for Jambalaya\_30:

(Start: 83 @24699 has 29 MA's), (142, 24804), (173, 24873), (175, 24879), (185, 24903), (196, 24918), (415, 25278), (424, 25293), (440, 25311), (486, 25413), (504, 25455), (516, 25491), (563, 25587), (588, 25638),

Gene: Jamzy\_20 Start: 14144, Stop: 15103, Start Num: 97

Candidate Starts for Jamzy\_20:

(Start: 97 @14144 has 272 MA's), (127, 14192), (128, 14195), (163, 14273), (241, 14408), (244, 14414), (279, 14483), (281, 14486), (293, 14510), (306, 14531), (333, 14570), (358, 14621), (415, 14723), (462, 14810), (503, 14906), (513, 14936), (516, 14945), (527, 14969), (538, 15002), (542, 15011), (547, 15017), (579, 15068), (587, 15089), (589, 15095),

Gene: Jane\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Jane\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Jarvi\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Jarvi\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: JasperJr\_18 Start: 15797, Stop: 16657, Start Num: 70

Candidate Starts for JasperJr\_18:

(Start: 65 @15791 has 6 MA's), (Start: 70 @15797 has 27 MA's), (163, 15953), (203, 16034), (274, 16133), (340, 16241), (400, 16325), (454, 16397), (523, 16526), (533, 16553), (541, 16568),

Gene: Jayhawk\_22 Start: 16018, Stop: 17154, Start Num: 30

Candidate Starts for Jayhawk\_22:

(Start: 30 @16018 has 217 MA's), (61, 16135), (119, 16225), (132, 16246), (144, 16267), (159, 16294), (292, 16549), (340, 16630), (371, 16705), (389, 16720), (471, 16831), (487, 16873), (524, 16966), (533, 16990), (584, 17083), (599, 17122), (601, 17140),

Gene: Jeckyll\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Jeckyll\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Jeeves\_26 Start: 18193, Stop: 19215, Start Num: 97

Candidate Starts for Jeeves\_26:

(Start: 97 @18193 has 272 MA's), (110, 18211), (127, 18247), (142, 18268), (152, 18286), (208, 18406), (277, 18538), (296, 18568), (320, 18607), (322, 18610), (344, 18655), (433, 18856), (435, 18862), (464, 18922), (518, 19072), (528, 19096),

Gene: Jeffabunny\_30 Start: 18984, Stop: 20000, Start Num: 97

Candidate Starts for Jeffabunny\_30:

(Start: 97 @18984 has 272 MA's), (110, 19002), (127, 19038), (152, 19077), (201, 19182), (296, 19359), (320, 19398), (322, 19401), (361, 19488), (368, 19509), (430, 19635), (464, 19707), (518, 19857), (522, 19866), (565, 19947),

Gene: Jerm\_29 Start: 19620, Stop: 20636, Start Num: 97

Candidate Starts for Jerm\_29:

(Start: 97 @19620 has 272 MA's), (142, 19695), (152, 19713), (167, 19749), (183, 19788), (296, 19995), (320, 20034), (322, 20037), (361, 20124), (446, 20304), (486, 20406), (514, 20481), (518, 20493),

Gene: Jester\_22 Start: 15424, Stop: 16296, Start Num: 103

Candidate Starts for Jester\_22:

(Start: 103 @15424 has 85 MA's), (121, 15463), (165, 15550), (198, 15619), (246, 15697), (258, 15724), (322, 15835), (392, 15931), (486, 16060), (496, 16078), (518, 16147), (587, 16285),

Gene: JewelBug\_30 Start: 18971, Stop: 19984, Start Num: 97

Candidate Starts for JewelBug\_30:

(Start: 97 @18971 has 272 MA's), (127, 19025), (152, 19064), (201, 19169), (277, 19316), (296, 19346), (320, 19385), (322, 19388), (344, 19433), (368, 19493), (464, 19691), (518, 19841), (522, 19850),

Gene: Jiawan\_27 Start: 20563, Stop: 21576, Start Num: 97

Candidate Starts for Jiawan\_27:

(Start: 97 @20563 has 272 MA's), (110, 20581), (142, 20638), (152, 20656), (167, 20692), (261, 20872), (277, 20908), (296, 20938), (322, 20980), (397, 21139), (464, 21283), (486, 21346), (514, 21421), (518, 21433), (528, 21457),

Gene: Jifall16\_39 Start: 29533, Stop: 30474, Start Num: 76

Candidate Starts for Jifall16\_39:

(Start: 76 @29533 has 24 MA's), (130, 29620), (167, 29695), (198, 29761), (241, 29803), (269, 29860), (387, 30073), (406, 30100), (471, 30211), (524, 30343), (576, 30439),

Gene: Jobypre\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for Jobypre\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: JoeDirt\_17 Start: 15839, Stop: 16738, Start Num: 80

Candidate Starts for JoeDirt\_17:

(58, 15803), (59, 15806), (Start: 80 @15839 has 9 MA's), (Start: 93 @15857 has 72 MA's), (111, 15881), (127, 15911), (136, 15926), (154, 15959), (235, 16103), (274, 16184), (320, 16259), (322, 16262), (324, 16268), (347, 16313), (360, 16340), (385, 16373), (390, 16379), (415, 16412), (421, 16421), (455, 16448), (501, 16568), (518, 16616), (531, 16643), (563, 16682), (567, 16688), (585, 16727),

Gene: JoieB\_50 Start: 26435, Stop: 27397, Start Num: 94

Candidate Starts for JoieB\_50:

(Start: 94 @26435 has 30 MA's), (163, 26567), (173, 26591), (178, 26600), (181, 26606), (184, 26615), (201, 26639), (206, 26648), (213, 26660), (271, 26786), (312, 26867), (322, 26882), (324, 26888), (385, 26996), (476, 27122), (478, 27128), (536, 27278), (539, 27284), (548, 27296), (550, 27299), (593, 27386), (594, 27389), (596, 27392),

Gene: Jojo24\_17 Start: 14138, Stop: 14980, Start Num: 96

Candidate Starts for Jojo24\_17:

(Start: 72 @14099 has 12 MA's), (Start: 96 @14138 has 14 MA's), (132, 14207), (150, 14237), (162, 14258), (175, 14291), (197, 14333), (198, 14336), (337, 14543), (425, 14675), (509, 14804), (524, 14846), (557, 14906), (559, 14912), (579, 14951),

Gene: Jolene\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Jolene\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Jolie2\_17 Start: 14787, Stop: 15974, Start Num: 30

Candidate Starts for Jolie2\_17:

(1, 13731), (6, 14433), (Start: 30 @14787 has 217 MA's), (Start: 51 @14886 has 2 MA's), (75, 14934), (Start: 105 @14979 has 2 MA's), (110, 14985), (119, 15009), (161, 15084), (192, 15153), (195, 15156), (207, 15180), (238, 15231), (241, 15237), (262, 15282), (344, 15426), (361, 15465), (368, 15486), (436, 15591), (490, 15699), (528, 15795), (584, 15903), (597, 15936), (599, 15942),

Gene: JonJames\_46 Start: 32084, Stop: 32980, Start Num: 63

Candidate Starts for JonJames\_46:

(Start: 63 @32084 has 2 MA's), (119, 32171), (157, 32237), (163, 32252), (165, 32258), (271, 32429), (305, 32486), (337, 32540), (352, 32564), (417, 32663), (427, 32681), (471, 32729), (481, 32747), (490, 32771), (571, 32939),

Gene: Jonghyun\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Jonghyun\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: JorRay\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for JorRay\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Jordennis\_30 Start: 18956, Stop: 19969, Start Num: 97

Candidate Starts for Jordennis\_30:

(Start: 97 @18956 has 272 MA's), (127, 19010), (152, 19049), (201, 19154), (277, 19301), (296, 19331), (320, 19370), (322, 19373), (344, 19418), (368, 19478), (464, 19676), (518, 19826), (522, 19835),

Gene: Joselito\_27 Start: 19736, Stop: 20758, Start Num: 97

Candidate Starts for Joselito\_27:

(Start: 97 @19736 has 272 MA's), (127, 19793), (163, 19868), (232, 19997), (261, 20057), (293, 20117), (296, 20123), (322, 20165), (344, 20210), (347, 20216), (382, 20300), (402, 20333), (518, 20615), (522, 20624), (528, 20639), (565, 20705),

Gene: JoshKayV\_29 Start: 19590, Stop: 20606, Start Num: 97

Candidate Starts for JoshKayV\_29:

(Start: 97 @19590 has 272 MA's), (142, 19665), (152, 19683), (167, 19719), (183, 19758), (296, 19965), (320, 20004), (322, 20007), (361, 20094), (446, 20274), (486, 20376), (514, 20451), (518, 20463),

Gene: Journey13\_25 Start: 18317, Stop: 19327, Start Num: 97

Candidate Starts for Journey13\_25:

(Start: 97 @18317 has 272 MA's), (142, 18392), (152, 18410), (167, 18446), (183, 18485), (277, 18662), (296, 18692), (322, 18734), (344, 18779), (382, 18869), (430, 18962), (486, 19097), (518, 19184),

Gene: Jovo\_23 Start: 18755, Stop: 19768, Start Num: 103

Candidate Starts for Jovo\_23:

(Start: 103 @18755 has 85 MA's), (152, 18851), (165, 18884), (167, 18887), (183, 18926), (210, 18974), (296, 19127), (308, 19145), (322, 19169), (342, 19211), (481, 19523), (518, 19625), (529, 19652),

Gene: Joy99\_22 Start: 15980, Stop: 17116, Start Num: 30

Candidate Starts for Joy99\_22:

(Start: 30 @15980 has 217 MA's), (61, 16097), (119, 16187), (132, 16208), (144, 16229), (159, 16256), (292, 16511), (340, 16592), (371, 16667), (389, 16682), (471, 16793), (487, 16835), (524, 16928), (533, 16952), (584, 17045), (599, 17084), (601, 17102),

Gene: Jsquared\_26 Start: 18082, Stop: 19092, Start Num: 97

Candidate Starts for Jsquared\_26:

(Start: 97 @18082 has 272 MA's), (127, 18136), (142, 18157), (152, 18175), (183, 18250), (296, 18457), (320, 18496), (322, 18499), (344, 18544), (430, 18727), (486, 18862), (518, 18949),

Gene: JuJu\_18 Start: 15718, Stop: 16578, Start Num: 68

Candidate Starts for JuJu\_18:

(Start: 68 @15718 has 24 MA's), (Start: 84 @15733 has 1 MA's), (163, 15874), (203, 15955), (340, 16162), (400, 16246), (451, 16312), (481, 16357), (523, 16447), (533, 16474), (541, 16489),

Gene: Jubie\_18 Start: 16491, Stop: 17381, Start Num: 93

Candidate Starts for Jubie\_18:

(Start: 93 @16491 has 72 MA's), (111, 16515), (136, 16560), (142, 16575), (154, 16596), (201, 16692), (277, 16827), (282, 16836), (320, 16896), (322, 16899), (324, 16905), (360, 16977), (385, 17010), (394, 17022), (455, 17085), (477, 17139), (484, 17160), (503, 17211), (518, 17253), (585, 17364), (587, 17367),

Gene: Juliette\_23 Start: 17390, Stop: 18523, Start Num: 30

Candidate Starts for Juliette\_23:

(Start: 30 @17390 has 217 MA's), (Start: 51 @17480 has 2 MA's), (61, 17510), (119, 17600), (144, 17642), (145, 17645), (151, 17657), (334, 17993), (337, 17999), (369, 18074), (427, 18152), (449, 18167), (471, 18200), (487, 18242), (488, 18245), (527, 18338), (584, 18452), (599, 18491), (601, 18509),

Gene: JustASigh\_17 Start: 15253, Stop: 16359, Start Num: 51

Candidate Starts for JustASigh\_17:

(Start: 51 @15253 has 2 MA's), (Start: 55 @15268 has 22 MA's), (74, 15298), (Start: 77 @15301 has 5 MA's), (132, 15397), (157, 15442), (159, 15445), (161, 15451), (167, 15466), (212, 15550), (267, 15670), (303, 15727), (313, 15742), (347, 15805), (391, 15886), (402, 15904), (473, 16045), (529, 16186), (530, 16189), (542, 16213), (567, 16252), (580, 16273), (586, 16291),

Gene: Kabluna\_43 Start: 28640, Stop: 29557, Start Num: 78

Candidate Starts for Kabluna\_43:

(Start: 78 @28640 has 51 MA's), (130, 28721), (148, 28757), (241, 28904), (364, 29138), (383, 29165), (471, 29309), (524, 29426), (576, 29522), (579, 29528), (583, 29543),

Gene: Kahlid\_17 Start: 16079, Stop: 16993, Start Num: 93

Candidate Starts for Kahlid\_17:

(Start: 93 @16079 has 72 MA's), (111, 16103), (127, 16133), (189, 16259), (235, 16331), (318, 16484), (320, 16487), (322, 16490), (336, 16520), (363, 16577), (385, 16601), (390, 16607), (455, 16676), (464, 16694), (473, 16715), (493, 16769), (498, 16781), (518, 16844), (585, 16973), (591, 16985),

Gene: Kalpine\_30 Start: 20976, Stop: 21989, Start Num: 97

Candidate Starts for Kalpine\_30:

(Start: 97 @20976 has 272 MA's), (110, 20994), (142, 21051), (152, 21069), (167, 21105), (183, 21144), (296, 21351), (320, 21390), (322, 21393), (344, 21438), (368, 21498), (391, 21543), (430, 21624), (446, 21657), (518, 21846), (522, 21855), (528, 21870),

Gene: Kamaru\_19 Start: 15501, Stop: 16424, Start Num: 99

Candidate Starts for Kamaru\_19:

(Start: 99 @15501 has 15 MA's), (Start: 102 @15504 has 6 MA's), (111, 15516), (121, 15534), (145, 15579), (163, 15618), (180, 15657), (203, 15690), (206, 15696), (244, 15765), (273, 15819), (276, 15822), (277, 15825), (285, 15837), (298, 15855), (302, 15861), (306, 15867), (316, 15885), (352, 15939), (356, 15951), (358, 15957), (374, 15978), (405, 16026), (410, 16044), (415, 16050), (424, 16065), (426, 16068), (502, 16221), (503, 16224), (505, 16230), (518, 16263), (527, 16281), (538, 16314), (571, 16365), (579, 16380), (592, 16416),

Gene: Kamashten\_33 Start: 29854, Stop: 30810, Start Num: 78

Candidate Starts for Kamashten\_33:

(Start: 78 @29854 has 51 MA's), (175, 30040), (180, 30052), (196, 30079), (211, 30100), (248, 30160), (297, 30247), (299, 30250), (322, 30286), (343, 30319), (352, 30334), (356, 30346), (376, 30376), (384, 30382), (415, 30442), (471, 30532), (504, 30622), (512, 30646), (516, 30658), (542, 30724), (554, 30739), (569, 30763), (576, 30775),

Gene: KappaFarmDelta\_18 Start: 15961, Stop: 16821, Start Num: 70

Candidate Starts for KappaFarmDelta\_18:

(Start: 65 @15955 has 6 MA's), (Start: 70 @15961 has 27 MA's), (117, 16027), (163, 16117), (203, 16198), (340, 16405), (400, 16489), (451, 16555), (454, 16561), (523, 16690), (533, 16717), (541, 16732),

Gene: Kareem\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Kareem\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Kasen3\_17 Start: 15478, Stop: 16650, Start Num: 30

Candidate Starts for Kasen3\_17:

(6, 15145), (Start: 30 @15478 has 217 MA's), (61, 15598), (75, 15616), (Start: 105 @15661 has 2 MA's), (110, 15667), (142, 15730), (161, 15766), (192, 15835), (195, 15838), (206, 15859), (241, 15913), (262, 15958), (280, 15988), (337, 16090), (344, 16102), (352, 16114), (358, 16132), (451, 16297), (471, 16327), (479, 16345), (487, 16369), (534, 16489), (584, 16579), (597, 16612),

Gene: KatherineG\_29 Start: 18241, Stop: 19218, Start Num: 100

Candidate Starts for KatherineG\_29:

(Start: 100 @18241 has 20 MA's), (163, 18355), (165, 18361), (167, 18364), (286, 18598), (430, 18865), (461, 18919), (518, 19075),

Gene: KayGee\_17 Start: 14465, Stop: 15421, Start Num: 97

Candidate Starts for KayGee\_17:

(Start: 97 @14465 has 272 MA's), (125, 14510), (152, 14567), (163, 14594), (185, 14648), (206, 14675), (240, 14726), (241, 14729), (244, 14735), (246, 14738), (273, 14792), (281, 14807), (305, 14849), (306, 14852), (320, 14876), (333, 14891), (358, 14942), (415, 15038), (503, 15224), (513, 15254), (516, 15263), (527, 15287), (538, 15320), (587, 15407), (589, 15413),

Gene: Kazan\_30 Start: 18972, Stop: 19985, Start Num: 97

Candidate Starts for Kazan\_30:

(Start: 97 @18972 has 272 MA's), (127, 19026), (152, 19065), (201, 19170), (277, 19317), (296, 19347), (320, 19386), (322, 19389), (344, 19434), (368, 19494), (464, 19692), (518, 19842), (522, 19851),

Gene: Keelan\_50 Start: 26977, Stop: 27921, Start Num: 92

Candidate Starts for Keelan\_50:

(Start: 92 @26977 has 38 MA's), (157, 27097), (203, 27187), (241, 27247), (273, 27307), (289, 27334), (305, 27361), (316, 27382), (320, 27388), (341, 27427), (348, 27439), (415, 27556), (418, 27559), (445, 27595), (494, 27706), (499, 27721), (513, 27760), (516, 27769), (519, 27778), (527, 27793), (565, 27868), (587, 27913),

Gene: Keitabear\_34 Start: 31219, Stop: 32175, Start Num: 78

Candidate Starts for Keitabear\_34:

(Start: 78 @31219 has 51 MA's), (175, 31405), (180, 31417), (196, 31444), (299, 31615), (322, 31651), (343, 31684), (352, 31699), (356, 31711), (376, 31741), (384, 31747), (415, 31807), (471, 31897), (504, 31987), (512, 32011), (516, 32023), (542, 32089), (554, 32104), (576, 32140),

Gene: Kenna\_18 Start: 15508, Stop: 16431, Start Num: 99

Candidate Starts for Kenna\_18:

(Start: 99 @15508 has 15 MA's), (Start: 102 @15511 has 6 MA's), (111, 15523), (121, 15541), (145, 15586), (163, 15625), (180, 15664), (203, 15697), (206, 15703), (244, 15772), (273, 15826), (276, 15829), (277, 15832), (285, 15844), (298, 15862), (302, 15868), (306, 15874), (316, 15892), (352, 15946), (356, 15958), (358, 15964), (374, 15985), (405, 16033), (410, 16051), (415, 16057), (424, 16072), (426, 16075), (502, 16228), (503, 16231), (505, 16237), (518, 16270), (527, 16288), (538, 16321), (571, 16372), (579, 16387), (592, 16423),

Gene: Kerberos\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for Kerberos\_30:

(Start: 97 @19042 has 272 MA's), (142, 19117), (152, 19135), (240, 19306), (274, 19381), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: Keshu\_21 Start: 16443, Stop: 17579, Start Num: 30

Candidate Starts for Keshu\_21:

(Start: 30 @16443 has 217 MA's), (61, 16566), (Start: 105 @16629 has 2 MA's), (110, 16635), (125, 16665), (144, 16698), (195, 16803), (206, 16824), (209, 16830), (244, 16887), (262, 16926), (280, 16956), (292, 16980), (330, 17043), (352, 17079), (451, 17226), (471, 17256), (474, 17265), (487, 17298), (488, 17301), (490, 17304), (524, 17391), (571, 17478), (597, 17541), (599, 17547),

Gene: Kewpiedoll\_33 Start: 29261, Stop: 30217, Start Num: 78

Candidate Starts for Kewpiedoll\_33:

(Start: 78 @29261 has 51 MA's), (175, 29447), (180, 29459), (196, 29486), (211, 29507), (248, 29567), (299, 29657), (322, 29693), (343, 29726), (352, 29741), (356, 29753), (376, 29783), (384, 29789), (415, 29849), (471, 29939), (504, 30029), (512, 30053), (516, 30065), (542, 30131), (554, 30146), (569, 30170), (576, 30182),

Gene: Keziacharles14\_26 Start: 18620, Stop: 19642, Start Num: 97

Candidate Starts for Keziacharles14\_26:

(Start: 97 @18620 has 272 MA's), (127, 18674), (152, 18713), (232, 18869), (261, 18929), (277, 18965), (296, 18995), (316, 19028), (322, 19037), (344, 19082), (391, 19187), (433, 19283), (514, 19487), (518, 19499), (522, 19508), (528, 19523), (565, 19589),

Gene: KiSi\_21 Start: 15189, Stop: 16325, Start Num: 30

Candidate Starts for KiSi\_21:

(Start: 30 @15189 has 217 MA's), (61, 15306), (75, 15324), (132, 15417), (159, 15465), (262, 15666), (292, 15720), (322, 15765), (330, 15786), (358, 15840), (369, 15873), (389, 15891), (427, 15954), (487, 16044), (488, 16047), (509, 16098), (524, 16137), (584, 16254), (599, 16293), (601, 16311),

Gene: KidneyBean\_40 Start: 29657, Stop: 30598, Start Num: 76

Candidate Starts for KidneyBean\_40:

(Start: 76 @29657 has 24 MA's), (130, 29744), (167, 29819), (198, 29885), (241, 29927), (269, 29984), (387, 30197), (406, 30224), (471, 30335), (524, 30467), (576, 30563),

Gene: Kiko\_19 Start: 15761, Stop: 16708, Start Num: 94

Candidate Starts for Kiko\_19:

(Start: 94 @15761 has 30 MA's), (110, 15779), (195, 15956), (244, 16037), (250, 16049), (276, 16094), (289, 16121), (296, 16127), (306, 16142), (344, 16202), (358, 16232), (360, 16238), (405, 16301), (475, 16436), (490, 16478), (502, 16505), (518, 16547), (519, 16550), (524, 16562), (539, 16601), (547, 16613), (565, 16637), (589, 16688),

Gene: Kimchi1738\_30 Start: 26704, Stop: 27570, Start Num: 66

Candidate Starts for Kimchi1738\_30:

(Start: 66 @26704 has 8 MA's), (85, 26728), (113, 26773), (142, 26833), (209, 26968), (316, 27130), (335, 27163), (383, 27238), (402, 27262), (481, 27337), (507, 27403), (524, 27439), (534, 27466), (569, 27523),

Gene: KimmyK\_32 Start: 25634, Stop: 26578, Start Num: 83

Candidate Starts for KimmyK\_32:

(Start: 83 @25634 has 29 MA's), (142, 25739), (173, 25808), (175, 25814), (185, 25838), (196, 25853), (415, 26213), (424, 26228), (440, 26246), (486, 26348), (504, 26390), (516, 26426), (563, 26522), (588, 26573),

Gene: Kinbote\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Kinbote\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: KingCyrus\_29 Start: 19587, Stop: 20603, Start Num: 97

Candidate Starts for KingCyrus\_29:

(Start: 97 @19587 has 272 MA's), (142, 19662), (152, 19680), (167, 19716), (183, 19755), (296, 19962), (320, 20001), (322, 20004), (361, 20091), (446, 20271), (486, 20373), (514, 20448), (518, 20460),

Gene: Kingsolomon\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for Kingsolomon\_18:



(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: Kinmap\_27 Start: 18591, Stop: 19607, Start Num: 97

Candidate Starts for Kinmap\_27:

(Start: 97 @18591 has 272 MA's), (142, 18666), (152, 18684), (167, 18720), (296, 18966), (322, 19008), (361, 19095), (368, 19116), (395, 19167), (421, 19221), (514, 19452), (528, 19488),

Gene: Kipper29\_30 Start: 18966, Stop: 19979, Start Num: 97

Candidate Starts for Kipper29\_30:

(Start: 97 @18966 has 272 MA's), (127, 19020), (152, 19059), (201, 19164), (277, 19311), (296, 19341), (320, 19380), (322, 19383), (344, 19428), (368, 19488), (464, 19686), (518, 19836), (522, 19845),

Gene: KirDoubleO7\_16 Start: 16499, Stop: 17389, Start Num: 93

Candidate Starts for KirDoubleO7\_16:

(Start: 93 @16499 has 72 MA's), (111, 16523), (136, 16568), (142, 16583), (154, 16604), (201, 16700), (206, 16709), (277, 16835), (282, 16844), (320, 16904), (322, 16907), (324, 16913), (360, 16985), (385, 17018), (394, 17030), (455, 17093), (484, 17168), (503, 17219), (518, 17261), (585, 17372), (587, 17375),

Gene: KleverKiS\_27 Start: 21440, Stop: 22351, Start Num: 91

Candidate Starts for KleverKiS\_27:

(Start: 91 @21440 has 19 MA's), (147, 21542), (157, 21560), (163, 21575), (201, 21647), (252, 21734), (318, 21869), (320, 21872), (322, 21875), (356, 21944), (385, 21986), (390, 21992), (483, 22133), (493, 22154), (498, 22166), (561, 22289), (567, 22301),

Gene: Koduck\_27 Start: 18322, Stop: 19332, Start Num: 97

Candidate Starts for Koduck\_27:

(Start: 97 @18322 has 272 MA's), (127, 18376), (142, 18397), (152, 18415), (183, 18490), (296, 18697), (320, 18736), (322, 18739), (430, 18967), (486, 19102), (514, 19177), (518, 19189),

Gene: Koko\_30 Start: 19301, Stop: 20317, Start Num: 97

Candidate Starts for Koko\_30:

(Start: 97 @19301 has 272 MA's), (110, 19319), (127, 19355), (152, 19394), (167, 19430), (201, 19499), (296, 19676), (320, 19715), (322, 19718), (361, 19805), (368, 19826), (430, 19952), (464, 20024), (518, 20174), (522, 20183), (565, 20264),

Gene: Kratio\_19 Start: 16054, Stop: 17184, Start Num: 36

Candidate Starts for Kratio\_19:

(Start: 36 @16054 has 22 MA's), (Start: 105 @16228 has 2 MA's), (142, 16294), (144, 16297), (159, 16324), (206, 16423), (262, 16525), (292, 16579), (312, 16609), (330, 16645), (333, 16648), (337, 16657), (369, 16732), (371, 16735), (405, 16771), (427, 16813), (451, 16831), (454, 16837), (471, 16861), (472, 16864), (487, 16903), (529, 17008), (584, 17113), (599, 17152), (601, 17170),

Gene: Kraw\_24 Start: 17413, Stop: 18546, Start Num: 30

Candidate Starts for Kraw\_24:

(Start: 30 @17413 has 217 MA's), (37, 17431), (Start: 51 @17503 has 2 MA's), (61, 17533), (119, 17623), (144, 17665), (157, 17689), (207, 17794), (334, 18016), (337, 18022), (426, 18172), (427, 18175), (451, 18193), (471, 18223), (487, 18265), (488, 18268), (509, 18319), (580, 18460), (584, 18475), (599, 18514), (601, 18532),

Gene: Krishelle\_22 Start: 15751, Stop: 16623, Start Num: 103

Candidate Starts for Krishelle\_22:

(Start: 103 @15751 has 85 MA's), (121, 15790), (165, 15877), (198, 15946), (246, 16024), (258, 16051), (322, 16162), (392, 16258), (486, 16387), (496, 16405), (518, 16474), (587, 16612),

Gene: Kroos\_34 Start: 29432, Stop: 30388, Start Num: 78

Candidate Starts for Kroos\_34:

(Start: 78 @29432 has 51 MA's), (163, 29588), (175, 29618), (180, 29630), (185, 29642), (196, 29657), (206, 29669), (299, 29828), (322, 29864), (356, 29924), (384, 29960), (415, 30020), (471, 30110), (504, 30200), (512, 30224), (516, 30236), (542, 30302), (554, 30317), (569, 30341), (576, 30353),

Gene: Kropertea\_17 Start: 15715, Stop: 16602, Start Num: 93

Candidate Starts for Kropertea\_17:

(Start: 93 @15715 has 72 MA's), (111, 15739), (125, 15766), (127, 15769), (136, 15784), (154, 15817), (201, 15913), (277, 16048), (282, 16057), (320, 16117), (322, 16120), (360, 16198), (378, 16213), (390, 16237), (455, 16306), (467, 16330), (477, 16360), (501, 16426), (518, 16474), (531, 16501), (585, 16585),

Gene: Krueger\_21 Start: 15170, Stop: 16309, Start Num: 30

Candidate Starts for Krueger\_21:

(Start: 30 @15170 has 217 MA's), (61, 15290), (119, 15380), (159, 15449), (262, 15650), (340, 15785), (341, 15788), (389, 15875), (426, 15935), (451, 15956), (471, 15986), (487, 16028), (488, 16031), (490, 16034), (524, 16121), (533, 16145), (580, 16223), (584, 16238), (599, 16277), (601, 16295),

Gene: Krypton555\_18 Start: 16428, Stop: 17318, Start Num: 93

Candidate Starts for Krypton555\_18:

(Start: 93 @16428 has 72 MA's), (111, 16452), (136, 16497), (142, 16512), (154, 16533), (201, 16629), (277, 16764), (282, 16773), (320, 16833), (322, 16836), (324, 16842), (360, 16914), (385, 16947), (394, 16959), (455, 17022), (477, 17076), (484, 17097), (503, 17148), (518, 17190), (585, 17301), (587, 17304),

Gene: Kudrefre\_26 Start: 20872, Stop: 21783, Start Num: 93

Candidate Starts for Kudrefre\_26:

(Start: 93 @20872 has 72 MA's), (104, 20887), (258, 21178), (260, 21181), (308, 21280), (318, 21298), (322, 21304), (333, 21328), (385, 21415), (390, 21421), (419, 21469), (475, 21547), (476, 21550), (497, 21601), (514, 21655), (531, 21697), (562, 21733), (563, 21736), (573, 21751),

Gene: Kumao\_27 Start: 20552, Stop: 21469, Start Num: 86

Candidate Starts for Kumao\_27:

(Start: 86 @20552 has 1 MA's), (116, 20600), (142, 20651), (163, 20693), (171, 20708), (183, 20735), (201, 20765), (277, 20906), (318, 20987), (320, 20990), (322, 20993), (324, 20999), (385, 21104), (390, 21110), (493, 21272), (503, 21305), (513, 21332), (533, 21380), (567, 21419), (583, 21455),

Gene: Kurt\_40 Start: 29894, Stop: 30835, Start Num: 76

Candidate Starts for Kurt\_40:

(Start: 76 @29894 has 24 MA's), (130, 29981), (167, 30056), (198, 30122), (241, 30164), (269, 30221), (387, 30434), (406, 30461), (471, 30572), (524, 30704), (576, 30800),

Gene: Kuwabara\_18 Start: 15067, Stop: 15990, Start Num: 92

Candidate Starts for Kuwabara\_18:

(Start: 90 @15064 has 2 MA's), (Start: 92 @15067 has 38 MA's), (126, 15124), (174, 15226), (178, 15238), (195, 15262), (203, 15271), (204, 15274), (206, 15277), (247, 15340), (272, 15373), (302,

15409), (339, 15469), (346, 15481), (358, 15505), (374, 15529), (376, 15532), (379, 15535), (475, 15721), (490, 15763), (493, 15766), (497, 15775), (498, 15778), (502, 15790), (503, 15793), (507, 15805), (511, 15817), (518, 15838), (522, 15847), (527, 15856), (544, 15901), (547, 15904), (551, 15910), (571, 15946), (575, 15952),

Gene: Kwekel\_31 Start: 26508, Stop: 27485, Start Num: 64

Candidate Starts for Kwekel\_31:

(Start: 64 @26508 has 25 MA's), (79, 26520), (Start: 93 @26541 has 72 MA's), (Start: 96 @26547 has 14 MA's), (116, 26586), (119, 26595), (142, 26631), (151, 26649), (157, 26658), (186, 26727), (240, 26823), (255, 26856), (352, 27024), (363, 27057), (396, 27093), (449, 27168), (502, 27273), (504, 27279), (517, 27309), (529, 27336), (544, 27372), (564, 27405), (598, 27474),

Gene: Kwobi\_34 Start: 29418, Stop: 30374, Start Num: 78

Candidate Starts for Kwobi\_34:

(Start: 78 @29418 has 51 MA's), (163, 29574), (175, 29604), (180, 29616), (185, 29628), (196, 29643), (206, 29655), (299, 29814), (322, 29850), (356, 29910), (384, 29946), (415, 30006), (471, 30096), (504, 30186), (512, 30210), (516, 30222), (542, 30288), (554, 30303), (569, 30327), (576, 30339),

Gene: L5\_27 Start: 18333, Stop: 19343, Start Num: 97

Candidate Starts for L5\_27:

(Start: 97 @18333 has 272 MA's), (127, 18387), (142, 18408), (152, 18426), (183, 18501), (296, 18708), (320, 18747), (322, 18750), (430, 18978), (486, 19113), (514, 19188), (518, 19200),

Gene: LadyBird\_27 Start: 19164, Stop: 20174, Start Num: 97

Candidate Starts for LadyBird\_27:

(Start: 97 @19164 has 272 MA's), (127, 19218), (152, 19257), (183, 19332), (261, 19473), (296, 19539), (320, 19578), (322, 19581), (430, 19809), (486, 19944), (497, 19965), (514, 20019), (518, 20031), (565, 20121),

Gene: Landor\_28 Start: 20775, Stop: 21791, Start Num: 97

Candidate Starts for Landor\_28:

(Start: 97 @20775 has 272 MA's), (142, 20850), (152, 20868), (183, 20943), (261, 21084), (274, 21114), (296, 21150), (322, 21192), (362, 21282), (376, 21318), (382, 21333), (446, 21459), (481, 21546), (518, 21648), (528, 21672),

Gene: Larenn\_28 Start: 19455, Stop: 20471, Start Num: 97

Candidate Starts for Larenn\_28:

(Start: 97 @19455 has 272 MA's), (142, 19530), (152, 19548), (167, 19584), (183, 19623), (261, 19764), (296, 19830), (320, 19869), (322, 19872), (430, 20106), (497, 20262), (518, 20328), (528, 20352),

Gene: Larva\_20 Start: 16169, Stop: 17299, Start Num: 36

Candidate Starts for Larva\_20:

(Start: 36 @16169 has 22 MA's), (Start: 105 @16343 has 2 MA's), (142, 16409), (159, 16439), (206, 16538), (262, 16640), (292, 16694), (312, 16724), (330, 16760), (333, 16763), (337, 16772), (369, 16847), (371, 16850), (405, 16886), (427, 16928), (451, 16946), (454, 16952), (471, 16976), (472, 16979), (487, 17018), (528, 17120), (584, 17228), (599, 17267), (601, 17285),

Gene: LastHope\_22 Start: 15314, Stop: 16450, Start Num: 30

Candidate Starts for LastHope\_22:

(Start: 30 @15314 has 217 MA's), (61, 15431), (132, 15542), (159, 15590), (207, 15692), (292, 15845), (340, 15926), (389, 16016), (471, 16127), (487, 16169), (524, 16262), (533, 16286), (584, 16379), (599, 16418), (601, 16436),

Gene: LastResort\_29 Start: 18122, Stop: 19099, Start Num: 100

Candidate Starts for LastResort\_29:

(Start: 100 @18122 has 20 MA's), (163, 18236), (165, 18242), (167, 18245), (286, 18479), (430, 18746), (461, 18800), (518, 18956),

Gene: LaterM\_22 Start: 15979, Stop: 17115, Start Num: 30

Candidate Starts for LaterM\_22:

(Start: 30 @15979 has 217 MA's), (61, 16096), (132, 16207), (144, 16228), (159, 16255), (207, 16357), (292, 16510), (340, 16591), (389, 16681), (471, 16792), (487, 16834), (524, 16927), (533, 16951), (584, 17044), (599, 17083), (601, 17101),

Gene: Lauer\_16 Start: 14514, Stop: 15470, Start Num: 97

Candidate Starts for Lauer\_16:

(Start: 97 @14514 has 272 MA's), (125, 14559), (152, 14616), (163, 14643), (185, 14697), (206, 14724), (240, 14775), (241, 14778), (244, 14784), (246, 14787), (273, 14841), (281, 14856), (306, 14901), (320, 14925), (333, 14940), (358, 14991), (415, 15087), (503, 15273), (513, 15303), (516, 15312), (538, 15369), (571, 15420), (587, 15456), (589, 15462),

Gene: LeBron\_17 Start: 15873, Stop: 16772, Start Num: 80

Candidate Starts for LeBron\_17:

(Start: 80 @15873 has 9 MA's), (Start: 93 @15891 has 72 MA's), (111, 15915), (127, 15945), (136, 15960), (154, 15993), (235, 16137), (274, 16218), (320, 16293), (322, 16296), (324, 16302), (347, 16347), (360, 16374), (385, 16407), (390, 16413), (415, 16446), (421, 16455), (455, 16482), (501, 16602), (518, 16650), (563, 16716), (567, 16722), (585, 16761),

Gene: LeMond\_21 Start: 15260, Stop: 16396, Start Num: 30

Candidate Starts for LeMond\_21:

(Start: 30 @15260 has 217 MA's), (61, 15377), (75, 15395), (Start: 105 @15440 has 2 MA's), (132, 15488), (159, 15536), (262, 15737), (292, 15791), (322, 15836), (330, 15857), (358, 15911), (369, 15944), (389, 15962), (427, 16025), (487, 16115), (488, 16118), (509, 16169), (524, 16208), (584, 16325), (599, 16364), (601, 16382),

Gene: Lea83\_22 Start: 16440, Stop: 17576, Start Num: 30

Candidate Starts for Lea83\_22:

(Start: 30 @16440 has 217 MA's), (61, 16563), (Start: 105 @16626 has 2 MA's), (110, 16632), (125, 16662), (195, 16800), (206, 16821), (209, 16827), (244, 16884), (262, 16923), (280, 16953), (330, 17040), (352, 17076), (451, 17223), (471, 17253), (474, 17262), (487, 17295), (488, 17298), (490, 17301), (524, 17388), (571, 17475), (597, 17538), (599, 17544),

Gene: Lebo14\_24 Start: 17506, Stop: 18639, Start Num: 30

Candidate Starts for Lebo14\_24:

(Start: 30 @17506 has 217 MA's), (37, 17524), (Start: 51 @17596 has 2 MA's), (61, 17626), (119, 17716), (144, 17758), (157, 17782), (207, 17887), (292, 18040), (334, 18109), (337, 18115), (427, 18268), (451, 18286), (471, 18316), (487, 18358), (488, 18361), (580, 18553), (584, 18568), (599, 18607), (601, 18625),

Gene: Lemuria\_17 Start: 14821, Stop: 16008, Start Num: 30

Candidate Starts for Lemuria\_17:

(Start: 30 @14821 has 217 MA's), (75, 14968), (Start: 105 @15013 has 2 MA's), (110, 15019), (157, 15109), (192, 15187), (195, 15190), (206, 15211), (207, 15214), (238, 15265), (241, 15271), (262, 15316), (344, 15460), (358, 15490), (369, 15523), (436, 15625), (454, 15661), (471, 15685), (490, 15733), (528, 15829), (577, 15916), (584, 15937), (597, 15970), (599, 15976),

Gene: Lennon\_34 Start: 31006, Stop: 31962, Start Num: 78

Candidate Starts for Lennon\_34:

(Start: 78 @31006 has 51 MA's), (175, 31192), (180, 31204), (196, 31231), (211, 31252), (248, 31312), (297, 31399), (299, 31402), (322, 31438), (343, 31471), (352, 31486), (356, 31498), (376, 31528), (384, 31534), (415, 31594), (471, 31684), (504, 31774), (512, 31798), (516, 31810), (542, 31876), (576, 31927), (588, 31957),

Gene: Leogania\_29 Start: 21323, Stop: 22333, Start Num: 97

Candidate Starts for Leogania\_29:

(Start: 97 @21323 has 272 MA's), (142, 21398), (152, 21416), (167, 21452), (183, 21491), (277, 21668), (296, 21698), (320, 21737), (322, 21740), (430, 21968), (486, 22103), (514, 22178), (518, 22190), (565, 22280),

Gene: Leonard\_32 Start: 28151, Stop: 29137, Start Num: 64

Candidate Starts for Leonard\_32:

(Start: 64 @28151 has 25 MA's), (142, 28274), (161, 28310), (186, 28370), (240, 28466), (296, 28577), (311, 28598), (363, 28700), (371, 28721), (396, 28736), (426, 28793), (471, 28844), (515, 28952), (517, 28958), (523, 28973), (530, 28991), (544, 29024), (564, 29057), (566, 29060), (598, 29126),

Gene: Leroy\_19 Start: 15515, Stop: 16438, Start Num: 99

Candidate Starts for Leroy\_19:

(Start: 99 @15515 has 15 MA's), (Start: 102 @15518 has 6 MA's), (111, 15530), (121, 15548), (145, 15593), (163, 15632), (180, 15671), (203, 15704), (206, 15710), (244, 15779), (276, 15836), (277, 15839), (285, 15851), (302, 15875), (306, 15881), (316, 15899), (352, 15953), (356, 15965), (358, 15971), (374, 15992), (405, 16040), (410, 16058), (415, 16064), (424, 16079), (426, 16082), (502, 16235), (503, 16238), (505, 16244), (518, 16277), (527, 16295), (538, 16328), (571, 16379), (579, 16394), (592, 16430),

Gene: Leston\_20 Start: 16453, Stop: 17583, Start Num: 36

Candidate Starts for Leston\_20:

(Start: 36 @16453 has 22 MA's), (142, 16693), (144, 16696), (159, 16723), (206, 16822), (262, 16924), (292, 16978), (312, 17008), (330, 17044), (333, 17047), (337, 17056), (369, 17131), (371, 17134), (427, 17212), (451, 17230), (454, 17236), (471, 17260), (472, 17263), (474, 17269), (487, 17302), (584, 17512), (599, 17551), (601, 17569),

Gene: Lev2\_23 Start: 18467, Stop: 19480, Start Num: 103

Candidate Starts for Lev2\_23:

(Start: 103 @18467 has 85 MA's), (152, 18563), (165, 18596), (167, 18599), (183, 18638), (210, 18686), (296, 18839), (308, 18857), (322, 18881), (342, 18923), (481, 19235), (518, 19337), (529, 19364), (565, 19427),

Gene: Leviathan\_29 Start: 19676, Stop: 20692, Start Num: 97

Candidate Starts for Leviathan\_29:

(Start: 97 @19676 has 272 MA's), (142, 19751), (152, 19769), (167, 19805), (183, 19844), (296, 20051), (320, 20090), (322, 20093), (361, 20180), (446, 20360), (486, 20462), (514, 20537), (518, 20549),

Gene: Lewan\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Lewan\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Liefie\_17 Start: 15476, Stop: 16648, Start Num: 30

Candidate Starts for Liefie\_17:

(6, 15143), (Start: 30 @15476 has 217 MA's), (61, 15596), (75, 15614), (Start: 105 @15659 has 2 MA's), (110, 15665), (142, 15728), (161, 15764), (192, 15833), (195, 15836), (206, 15857), (241, 15911), (262, 15956), (280, 15986), (337, 16088), (344, 16100), (358, 16130), (451, 16295), (471, 16325), (479, 16343), (487, 16367), (534, 16487), (584, 16577), (597, 16610),

Gene: LilDestine\_17 Start: 16073, Stop: 16987, Start Num: 93

Candidate Starts for LilDestine\_17:

(Start: 93 @16073 has 72 MA's), (111, 16097), (127, 16127), (189, 16253), (235, 16325), (318, 16478), (320, 16481), (322, 16484), (336, 16514), (363, 16571), (385, 16595), (390, 16601), (455, 16670), (464, 16688), (473, 16709), (498, 16775), (518, 16838), (585, 16967), (591, 16979),

Gene: LilHam\_31 Start: 28021, Stop: 28977, Start Num: 78

Candidate Starts for LilHam\_31:

(Start: 78 @28021 has 51 MA's), (175, 28207), (180, 28219), (185, 28231), (196, 28246), (206, 28258), (227, 28285), (233, 28300), (248, 28327), (299, 28417), (322, 28453), (356, 28513), (365, 28537), (384, 28549), (415, 28609), (471, 28699), (504, 28789), (512, 28813), (516, 28825), (542, 28891), (554, 28906), (569, 28930), (576, 28942),

Gene: LilHazelnut\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for LilHazelnut\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: LilPharaoh\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for LilPharaoh\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: LilSpotty\_16 Start: 13314, Stop: 14294, Start Num: 64

Candidate Starts for LilSpotty\_16:

(Start: 64 @13314 has 25 MA's), (110, 13371), (121, 13392), (142, 13434), (152, 13455), (163, 13479), (203, 13554), (285, 13695), (314, 13740), (323, 13755), (333, 13764), (358, 13815), (381, 13860), (424, 13941), (448, 13974), (471, 14016), (478, 14040), (493, 14073), (503, 14103), (504, 14106), (513, 14133), (516, 14142), (522, 14157), (527, 14166),

Gene: LilTurb\_29 Start: 19679, Stop: 20695, Start Num: 97

Candidate Starts for LilTurb\_29:

(Start: 97 @19679 has 272 MA's), (142, 19754), (152, 19772), (167, 19808), (183, 19847), (296, 20054), (320, 20093), (322, 20096), (361, 20183), (446, 20363), (486, 20465), (514, 20540), (518, 20552),

Gene: Lilas\_19 Start: 16810, Stop: 17718, Start Num: 92

Candidate Starts for Lilas\_19:

(Start: 92 @16810 has 38 MA's), (126, 16867), (203, 17017), (204, 17020), (236, 17071), (287, 17140), (316, 17179), (346, 17227), (358, 17251), (374, 17275), (475, 17467), (493, 17494), (497, 17503), (498, 17506), (503, 17521), (517, 17563), (518, 17566), (529, 17593), (544, 17629), (554, 17641),

(571, 17674), (575, 17680),

Gene: Lilbeanie\_29 Start: 23420, Stop: 24433, Start Num: 60

Candidate Starts for Lilbeanie\_29:

(Start: 60 @23420 has 18 MA's), (Start: 67 @23426 has 1 MA's), (Start: 96 @23471 has 14 MA's), (112, 23504), (161, 23594), (229, 23729), (240, 23750), (363, 23984), (396, 24020), (413, 24056), (473, 24143), (499, 24206), (504, 24221), (517, 24251), (558, 24332), (564, 24347), (566, 24350), (598, 24422),

Gene: Lilbit\_50 Start: 26439, Stop: 27401, Start Num: 94

Candidate Starts for Lilbit\_50:

(Start: 94 @26439 has 30 MA's), (163, 26571), (173, 26595), (178, 26604), (181, 26610), (184, 26619), (201, 26643), (206, 26652), (213, 26664), (216, 26676), (271, 26790), (312, 26871), (322, 26886), (324, 26892), (385, 27000), (476, 27126), (478, 27132), (506, 27207), (536, 27282), (539, 27288), (548, 27300), (550, 27303), (593, 27390), (594, 27393), (596, 27396),

Gene: Lilbunny\_30 Start: 18958, Stop: 19974, Start Num: 97

Candidate Starts for Lilbunny\_30:

(Start: 97 @18958 has 272 MA's), (110, 18976), (127, 19012), (152, 19051), (201, 19156), (296, 19333), (320, 19372), (322, 19375), (361, 19462), (368, 19483), (430, 19609), (464, 19681), (518, 19831), (522, 19840), (565, 19921),

Gene: LilhomieP\_26 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for LilhomieP\_26:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: Lilleskat\_26 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for Lilleskat\_26:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: Lillie\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Lillie\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: LindNT\_22 Start: 15985, Stop: 17121, Start Num: 30

Candidate Starts for LindNT\_22:

(Start: 30 @15985 has 217 MA's), (61, 16102), (119, 16192), (132, 16213), (144, 16234), (159, 16261), (292, 16516), (340, 16597), (371, 16672), (389, 16687), (471, 16798), (487, 16840), (524, 16933), (533, 16957), (584, 17050), (599, 17089), (601, 17107),

Gene: LionsBait\_28 Start: 20953, Stop: 21963, Start Num: 97

Candidate Starts for LionsBait\_28:

(Start: 97 @20953 has 272 MA's), (127, 21007), (142, 21028), (152, 21046), (183, 21121), (296, 21328), (322, 21370), (382, 21505), (430, 21598), (446, 21631), (486, 21733), (514, 21808), (518, 21820), (565, 21910),

Gene: LitninMcQueen\_19 Start: 15502, Stop: 16425, Start Num: 99

Candidate Starts for LitninMcQueen\_19:

(Start: 99 @15502 has 15 MA's), (Start: 102 @15505 has 6 MA's), (111, 15517), (121, 15535), (145, 15580), (163, 15619), (180, 15658), (203, 15691), (206, 15697), (244, 15766), (273, 15820), (276, 15823), (277, 15826), (285, 15838), (298, 15856), (302, 15862), (306, 15868), (316, 15886), (352, 15940), (356, 15952), (358, 15958), (374, 15979), (405, 16027), (410, 16045), (415, 16051), (424, 16066), (426, 16069), (502, 16222), (503, 16225), (505, 16231), (518, 16264), (527, 16282), (538, 16315), (571, 16366), (579, 16381), (592, 16417),

Gene: LittleCherry\_23 Start: 18649, Stop: 19662, Start Num: 103

Candidate Starts for LittleCherry\_23:

(Start: 103 @18649 has 85 MA's), (152, 18745), (165, 18778), (167, 18781), (261, 18955), (293, 19015), (296, 19021), (308, 19039), (322, 19063), (342, 19105), (481, 19417), (518, 19519), (565, 19609),

Gene: LittleLaf\_49 Start: 26168, Stop: 27130, Start Num: 94

Candidate Starts for LittleLaf\_49:

(Start: 94 @26168 has 30 MA's), (163, 26300), (173, 26324), (178, 26333), (181, 26339), (184, 26348), (201, 26372), (206, 26381), (213, 26393), (216, 26405), (271, 26519), (312, 26600), (322, 26615), (324, 26621), (385, 26729), (476, 26855), (478, 26861), (506, 26936), (536, 27011), (539, 27017), (548, 27029), (550, 27032), (593, 27119), (594, 27122), (596, 27125),

Gene: LiyuLake\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for LiyuLake\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (206, 16700), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: Llorens\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Llorens\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Loadrie\_17 Start: 16106, Stop: 17020, Start Num: 93

Candidate Starts for Loadrie\_17:

(Start: 93 @16106 has 72 MA's), (111, 16130), (127, 16160), (189, 16286), (235, 16358), (318, 16511), (320, 16514), (322, 16517), (336, 16547), (363, 16604), (385, 16628), (390, 16634), (455, 16703), (464, 16721), (473, 16742), (493, 16796), (498, 16808), (518, 16871), (585, 17000), (591, 17012),

Gene: Lokk\_30 Start: 20830, Stop: 21840, Start Num: 97

Candidate Starts for Lokk\_30:

(Start: 97 @20830 has 272 MA's), (152, 20923), (167, 20959), (183, 20998), (296, 21205), (320, 21244), (322, 21247), (344, 21292), (430, 21475), (446, 21508), (486, 21610), (514, 21685), (518, 21697), (565, 21787),

Gene: Lollipop1437\_45 Start: 30536, Stop: 31453, Start Num: 76

Candidate Starts for Lollipop1437\_45:

(Start: 76 @30536 has 24 MA's), (130, 30614), (167, 30689), (241, 30797), (285, 30881), (383, 31061), (387, 31067), (505, 31283), (524, 31322), (563, 31397), (576, 31418), (583, 31439),

Gene: Lolly9\_18 Start: 16308, Stop: 17198, Start Num: 93

Candidate Starts for Lolly9\_18:



(Start: 93 @16308 has 72 MA's), (111, 16332), (136, 16377), (142, 16392), (154, 16413), (201, 16509), (277, 16644), (282, 16653), (320, 16713), (322, 16716), (324, 16722), (360, 16794), (385, 16827), (394, 16839), (455, 16902), (476, 16953), (484, 16977), (503, 17028), (518, 17070), (585, 17181), (587, 17184),

Gene: LoneWolf\_28 Start: 20332, Stop: 21345, Start Num: 96

Candidate Starts for LoneWolf\_28:

(Start: 96 @20332 has 14 MA's), (110, 20350), (121, 20377), (142, 20407), (152, 20425), (167, 20461), (192, 20515), (261, 20641), (277, 20677), (296, 20707), (322, 20749), (397, 20908), (430, 20980), (464, 21052), (514, 21190), (518, 21202), (522, 21211), (528, 21226),

Gene: LonelyBoi\_19 Start: 16813, Stop: 17721, Start Num: 92

Candidate Starts for LonelyBoi\_19:

(Start: 92 @16813 has 38 MA's), (126, 16870), (190, 17005), (203, 17020), (204, 17023), (236, 17074), (316, 17182), (346, 17230), (358, 17254), (372, 17272), (374, 17278), (400, 17314), (475, 17470), (493, 17497), (498, 17509), (503, 17524), (518, 17569), (529, 17596), (544, 17632), (547, 17635), (567, 17671), (571, 17677), (575, 17683),

Gene: Looper\_30 Start: 18119, Stop: 19096, Start Num: 100

Candidate Starts for Looper\_30:

(Start: 100 @18119 has 20 MA's), (163, 18233), (165, 18239), (167, 18242), (286, 18476), (430, 18743), (461, 18797), (518, 18953),

Gene: Loser\_30 Start: 20932, Stop: 21945, Start Num: 97

Candidate Starts for Loser\_30:

(Start: 97 @20932 has 272 MA's), (110, 20950), (142, 21007), (152, 21025), (167, 21061), (183, 21100), (296, 21307), (320, 21346), (322, 21349), (344, 21394), (391, 21499), (430, 21580), (446, 21613), (481, 21700), (518, 21802), (522, 21811),

Gene: LouisV14\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for LouisV14\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Love\_37 Start: 30788, Stop: 31744, Start Num: 78

Candidate Starts for Love\_37:

(Start: 78 @30788 has 51 MA's), (175, 30974), (180, 30986), (196, 31013), (211, 31034), (248, 31094), (297, 31181), (299, 31184), (322, 31220), (343, 31253), (352, 31268), (356, 31280), (376, 31310), (384, 31316), (415, 31376), (471, 31466), (487, 31517), (504, 31556), (512, 31580), (516, 31592), (542, 31658), (569, 31697), (576, 31709), (588, 31739),

Gene: Lozinak\_47 Start: 28712, Stop: 29593, Start Num: 72

Candidate Starts for Lozinak\_47:

(Start: 68 @28706 has 24 MA's), (Start: 72 @28712 has 12 MA's), (106, 28760), (119, 28787), (160, 28859), (187, 28925), (206, 28955), (282, 29063), (337, 29156), (352, 29180), (357, 29195), (427, 29291), (471, 29339), (552, 29519), (573, 29555),

Gene: Luchador\_28 Start: 19388, Stop: 20410, Start Num: 97

Candidate Starts for Luchador\_28:

(Start: 97 @19388 has 272 MA's), (110, 19406), (127, 19442), (142, 19463), (152, 19481), (201, 19586), (208, 19601), (277, 19733), (293, 19757), (296, 19763), (320, 19802), (322, 19805), (344,

19850), (382, 19943), (421, 20015), (433, 20051), (435, 20057), (464, 20117), (518, 20267), (528, 20291),

Gene: Lucivia\_27 Start: 19785, Stop: 20807, Start Num: 97

Candidate Starts for Lucivia\_27:

(Start: 97 @19785 has 272 MA's), (127, 19842), (163, 19917), (232, 20046), (261, 20106), (293, 20166), (296, 20172), (322, 20214), (344, 20259), (347, 20265), (382, 20349), (402, 20382), (518, 20664), (522, 20673), (528, 20688), (565, 20754),

Gene: Lucky10\_17 Start: 14280, Stop: 15188, Start Num: 92

Candidate Starts for Lucky10\_17:

(Start: 92 @14280 has 38 MA's), (Start: 122 @14331 has 5 MA's), (178, 14451), (195, 14475), (204, 14487), (206, 14490), (247, 14553), (287, 14607), (339, 14682), (355, 14709), (372, 14736), (374, 14742), (376, 14745), (426, 14832), (475, 14937), (493, 14964), (497, 14973), (498, 14976), (502, 14988), (503, 14991), (518, 15036), (522, 15045), (567, 15138),

Gene: Lucyedi\_28 Start: 19862, Stop: 20878, Start Num: 97

Candidate Starts for Lucyedi\_28:

(Start: 97 @19862 has 272 MA's), (110, 19880), (152, 19955), (183, 20030), (225, 20093), (296, 20237), (320, 20276), (322, 20279), (361, 20366), (476, 20618), (481, 20633), (497, 20669), (518, 20735), (527, 20753), (528, 20759),

Gene: Luke\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Luke\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Lumos\_18 Start: 16487, Stop: 17377, Start Num: 93

Candidate Starts for Lumos\_18:

(Start: 93 @16487 has 72 MA's), (111, 16511), (136, 16556), (142, 16571), (154, 16592), (201, 16688), (277, 16823), (282, 16832), (320, 16892), (322, 16895), (324, 16901), (360, 16973), (385, 17006), (394, 17018), (455, 17081), (477, 17135), (484, 17156), (503, 17207), (518, 17249), (585, 17360), (587, 17363),

Gene: Luna22\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Luna22\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Lunahalos\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Lunahalos\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Lutum\_19 Start: 15511, Stop: 16431, Start Num: 102

Candidate Starts for Lutum\_19:

(Start: 99 @15508 has 15 MA's), (Start: 102 @15511 has 6 MA's), (111, 15523), (121, 15541), (145, 15586), (163, 15625), (180, 15664), (203, 15697), (206, 15703), (244, 15772), (273, 15826), (276, 15829), (277, 15832), (285, 15844), (298, 15862), (302, 15868), (306, 15874), (316, 15892), (352, 15946), (356, 15958), (358, 15964), (374, 15985), (405, 16033), (410, 16051), (415, 16057), (424, 16072), (426, 16075), (502, 16228), (503, 16231), (505, 16237), (518, 16270), (527, 16288), (538, 16321), (571, 16372), (579, 16387), (592, 16423),

Gene: Lysidious\_19 Start: 16311, Stop: 17177, Start Num: 65

Candidate Starts for Lysidious\_19:

(Start: 65 @16311 has 6 MA's), (Start: 70 @16317 has 27 MA's), (163, 16473), (203, 16554), (252, 16611), (255, 16620), (274, 16653), (340, 16761), (400, 16845), (451, 16911), (454, 16917), (523, 17046), (541, 17088),

Gene: MAckerman\_17 Start: 15865, Stop: 16746, Start Num: 93

Candidate Starts for MAckerman\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: MAnor\_17 Start: 14472, Stop: 15428, Start Num: 97

Candidate Starts for MAnor\_17:

(Start: 97 @14472 has 272 MA's), (125, 14517), (185, 14655), (206, 14682), (240, 14733), (241, 14736), (244, 14742), (246, 14745), (281, 14814), (306, 14859), (320, 14883), (333, 14898), (358, 14949), (415, 15045), (502, 15228), (503, 15231), (513, 15261), (516, 15270), (538, 15327), (571, 15378), (587, 15414), (589, 15420),

Gene: MOOREtheMARYer\_17 Start: 15720, Stop: 16898, Start Num: 30

Candidate Starts for MOOREtheMARYer\_17:

(Start: 25 @15684 has 1 MA's), (Start: 30 @15720 has 217 MA's), (75, 15864), (110, 15915), (144, 15981), (145, 15984), (161, 16014), (195, 16086), (238, 16155), (241, 16161), (315, 16296), (344, 16350), (368, 16410), (437, 16518), (451, 16545), (471, 16575), (487, 16617), (528, 16719), (567, 16791), (569, 16794), (580, 16812), (597, 16860),

Gene: MScarn\_19 Start: 14397, Stop: 15368, Start Num: 97

Candidate Starts for MScarn\_19:

(Start: 97 @14397 has 272 MA's), (125, 14442), (136, 14463), (163, 14526), (173, 14550), (185, 14580), (240, 14658), (244, 14667), (246, 14670), (279, 14736), (306, 14784), (334, 14826), (358, 14874), (384, 14925), (415, 14985), (424, 15000), (426, 15003), (441, 15027), (475, 15099), (481, 15117), (502, 15168), (503, 15171), (513, 15201), (516, 15210), (522, 15225), (547, 15282), (578, 15330), (587, 15354), (589, 15360),

Gene: MaCh\_27 Start: 19727, Stop: 20749, Start Num: 97

Candidate Starts for MaCh\_27:

(Start: 97 @19727 has 272 MA's), (127, 19784), (163, 19859), (232, 19988), (261, 20048), (293, 20108), (296, 20114), (322, 20156), (344, 20201), (347, 20207), (382, 20291), (402, 20324), (518, 20606), (522, 20615), (528, 20630), (565, 20696),

Gene: MaVan\_19 Start: 15745, Stop: 16710, Start Num: 97

Candidate Starts for MaVan\_19:

(Start: 97 @15745 has 272 MA's), (125, 15790), (142, 15826), (152, 15847), (163, 15874), (185, 15928), (240, 16009), (244, 16018), (246, 16021), (279, 16090), (306, 16138), (358, 16228), (365, 16243), (397, 16282), (475, 16438), (502, 16504), (503, 16507), (504, 16510), (513, 16537), (516,

16546), (527, 16570), (538, 16603), (549, 16621), (575, 16666), (587, 16696), (589, 16702),

Gene: Mabel\_27 Start: 19788, Stop: 20810, Start Num: 97

Candidate Starts for Mabel\_27:

(Start: 97 @19788 has 272 MA's), (127, 19845), (163, 19920), (232, 20049), (261, 20109), (293, 20169), (296, 20175), (322, 20217), (344, 20262), (347, 20268), (382, 20352), (402, 20385), (518, 20667), (522, 20676), (528, 20691), (565, 20757),

Gene: MacGully\_49 Start: 30719, Stop: 31612, Start Num: 105

Candidate Starts for MacGully\_49:

(50, 30635), (Start: 71 @30683 has 1 MA's), (Start: 105 @30719 has 2 MA's), (108, 30722), (190, 30890), (195, 30896), (276, 31013), (285, 31031), (292, 31046), (338, 31121), (364, 31181), (383, 31220), (387, 31226), (471, 31364), (499, 31424), (510, 31457), (524, 31481), (559, 31544), (576, 31577), (579, 31583),

Gene: MacKat\_23 Start: 16028, Stop: 17164, Start Num: 30

Candidate Starts for MacKat\_23:

(Start: 30 @16028 has 217 MA's), (61, 16145), (119, 16235), (132, 16256), (144, 16277), (159, 16304), (292, 16559), (340, 16640), (371, 16715), (389, 16730), (471, 16841), (487, 16883), (524, 16976), (533, 17000), (584, 17093), (599, 17132), (601, 17150),

Gene: MacnCheese\_22 Start: 16685, Stop: 17821, Start Num: 30

Candidate Starts for MacnCheese\_22:

(Start: 30 @16685 has 217 MA's), (61, 16808), (Start: 105 @16871 has 2 MA's), (110, 16877), (119, 16898), (125, 16907), (144, 16940), (195, 17045), (206, 17066), (262, 17168), (280, 17198), (292, 17222), (310, 17243), (330, 17285), (352, 17321), (451, 17468), (471, 17498), (474, 17507), (487, 17540), (488, 17543), (490, 17546), (524, 17633), (542, 17672), (571, 17720), (595, 17777), (597, 17783), (599, 17789),

Gene: Maco6\_18 Start: 14149, Stop: 15261, Start Num: 35

Candidate Starts for Maco6\_18:

(Start: 35 @14149 has 4 MA's), (40, 14197), (Start: 99 @14305 has 15 MA's), (Start: 105 @14314 has 2 MA's), (145, 14383), (151, 14395), (160, 14410), (238, 14557), (293, 14665), (337, 14740), (342, 14749), (359, 14785), (405, 14854), (427, 14896), (471, 14941), (474, 14950), (500, 15007), (542, 15112), (597, 15223),

Gene: MagicMan\_18 Start: 16039, Stop: 16965, Start Num: 94

Candidate Starts for MagicMan\_18:

(38, 15904), (39, 15907), (79, 16021), (Start: 94 @16039 has 30 MA's), (Start: 102 @16048 has 6 MA's), (128, 16090), (Start: 134 @16102 has 1 MA's), (250, 16324), (276, 16369), (289, 16393), (296, 16399), (302, 16408), (306, 16414), (323, 16444), (344, 16474), (358, 16504), (360, 16510), (404, 16570), (405, 16573), (415, 16597), (450, 16654), (462, 16675), (490, 16741), (518, 16810), (587, 16948),

Gene: Mahdia\_17 Start: 13987, Stop: 14814, Start Num: 96

Candidate Starts for Mahdia\_17:

(Start: 96 @13987 has 14 MA's), (119, 14032), (132, 14056), (167, 14119), (246, 14236), (275, 14290), (330, 14383), (337, 14395), (389, 14464), (411, 14497), (471, 14572), (502, 14620), (507, 14635), (511, 14647), (519, 14671), (521, 14674), (528, 14692), (529, 14695), (579, 14782), (583, 14797),

Gene: MajorMajor\_26 Start: 18067, Stop: 19077, Start Num: 97

Candidate Starts for MajorMajor\_26:

(Start: 97 @18067 has 272 MA's), (127, 18121), (142, 18142), (152, 18160), (183, 18235), (296, 18442), (320, 18481), (322, 18484), (344, 18529), (430, 18712), (446, 18745), (486, 18847), (518, 18934), (565, 19024),

Gene: MakCheese\_19 Start: 15000, Stop: 16061, Start Num: 61

Candidate Starts for MakCheese\_19:

(56, 14991), (61, 15000), (119, 15093), (144, 15135), (167, 15183), (253, 15351), (264, 15375), (265, 15381), (309, 15453), (313, 15462), (315, 15465), (321, 15474), (402, 15615), (416, 15642), (438, 15684), (463, 15732), (547, 15924), (549, 15927), (567, 15957), (582, 15987), (584, 15993), (598, 16029), (599, 16032),

Gene: Malachai\_19 Start: 16271, Stop: 17131, Start Num: 70

Candidate Starts for Malachai\_19:

(Start: 65 @16265 has 6 MA's), (Start: 70 @16271 has 27 MA's), (163, 16427), (203, 16508), (274, 16607), (340, 16715), (400, 16799), (454, 16871), (523, 17000), (541, 17042),

Gene: MalagasyRose\_23 Start: 15476, Stop: 16555, Start Num: 52

Candidate Starts for MalagasyRose\_23:

(Start: 52 @15476 has 5 MA's), (Start: 71 @15518 has 1 MA's), (Start: 90 @15542 has 2 MA's), (110, 15581), (145, 15650), (159, 15674), (161, 15680), (176, 15719), (207, 15776), (223, 15803), (225, 15809), (244, 15830), (246, 15833), (269, 15881), (280, 15899), (292, 15923), (294, 15926), (330, 15989), (337, 16001), (342, 16010), (346, 16016), (358, 16043), (359, 16046), (386, 16091), (412, 16133), (451, 16187), (460, 16205), (502, 16307), (509, 16328), (518, 16352), (569, 16454), (580, 16472), (584, 16487), (598, 16523),

Gene: Malec\_28 Start: 19460, Stop: 20476, Start Num: 97

Candidate Starts for Malec\_28:

(Start: 97 @19460 has 272 MA's), (142, 19535), (152, 19553), (167, 19589), (183, 19628), (261, 19769), (296, 19835), (320, 19874), (322, 19877), (430, 20111), (497, 20267), (518, 20333), (528, 20357),

Gene: Malibo\_19 Start: 15676, Stop: 16518, Start Num: 96

Candidate Starts for Malibo\_19:

(Start: 96 @15676 has 14 MA's), (132, 15745), (145, 15766), (164, 15802), (175, 15829), (180, 15841), (206, 15886), (246, 15925), (274, 15979), (304, 16024), (319, 16048), (367, 16153), (402, 16177), (416, 16207), (420, 16213), (458, 16255), (474, 16282), (483, 16288), (528, 16396), (548, 16438), (553, 16444), (559, 16456), (581, 16498),

Gene: Maliketh\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Maliketh\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Malisha\_20 Start: 17283, Stop: 18203, Start Num: 102

Candidate Starts for Malisha\_20:

(Start: 99 @17280 has 15 MA's), (Start: 102 @17283 has 6 MA's), (111, 17295), (121, 17313), (145, 17358), (152, 17373), (159, 17385), (163, 17397), (180, 17436), (203, 17469), (244, 17544), (273, 17598), (276, 17601), (277, 17604), (285, 17616), (298, 17634), (302, 17640), (306, 17646), (352, 17718), (356, 17730), (358, 17736), (374, 17757), (405, 17805), (415, 17829), (424, 17844), (426, 17847), (456, 17901), (502, 18000), (503, 18003), (505, 18009), (518, 18042), (524, 18057), (527, 18060), (539, 18096), (571, 18144),

Gene: Malthus\_24 Start: 17413, Stop: 18546, Start Num: 30

Candidate Starts for Malthus\_24:

(Start: 30 @17413 has 217 MA's), (37, 17431), (Start: 51 @17503 has 2 MA's), (61, 17533), (119, 17623), (144, 17665), (157, 17689), (207, 17794), (334, 18016), (337, 18022), (426, 18172), (427, 18175), (451, 18193), (471, 18223), (487, 18265), (488, 18268), (509, 18319), (580, 18460), (584, 18475), (599, 18514), (601, 18532),

Gene: Maminiaina\_28 Start: 20271, Stop: 21293, Start Num: 97

Candidate Starts for Maminiaina\_28:

(Start: 97 @20271 has 272 MA's), (110, 20289), (142, 20346), (152, 20364), (167, 20400), (261, 20580), (277, 20616), (296, 20646), (322, 20688), (397, 20847), (433, 20934), (447, 20961), (518, 21150), (528, 21174),

Gene: Marcoliusprime\_18 Start: 13889, Stop: 15016, Start Num: 34

Candidate Starts for Marcoliusprime\_18:

(Start: 34 @13889 has 10 MA's), (37, 13898), (61, 14000), (119, 14090), (144, 14132), (145, 14135), (159, 14159), (206, 14258), (244, 14321), (262, 14360), (292, 14414), (330, 14480), (337, 14492), (361, 14543), (369, 14567), (427, 14645), (451, 14663), (471, 14693), (474, 14702), (487, 14735), (488, 14738), (533, 14852), (580, 14930), (584, 14945), (599, 14984), (601, 15002),

Gene: Mareelih\_98 Start: 58510, Stop: 59445, Start Num: 77

Candidate Starts for Mareelih\_98:

(Start: 77 @58510 has 5 MA's), (Start: 89 @58525 has 1 MA's), (Start: 93 @58531 has 72 MA's), (Start: 96 @58537 has 14 MA's), (157, 58654), (159, 58657), (178, 58708), (200, 58744), (274, 58879), (291, 58915), (311, 58945), (472, 59197), (490, 59242), (503, 59272), (505, 59278), (517, 59305), (533, 59344), (572, 59413),

Gene: Margaret\_20 Start: 14513, Stop: 15472, Start Num: 97

Candidate Starts for Margaret\_20:

(54, 14438), (Start: 97 @14513 has 272 MA's), (111, 14534), (127, 14561), (128, 14564), (244, 14783), (273, 14840), (305, 14897), (306, 14900), (358, 14990), (401, 15059), (415, 15092), (494, 15251), (502, 15272), (503, 15275), (513, 15305), (516, 15314), (518, 15320), (527, 15338), (538, 15371), (542, 15380), (547, 15386), (579, 15437), (587, 15458), (589, 15464),

Gene: Marietta\_42 Start: 26965, Stop: 27885, Start Num: 81

Candidate Starts for Marietta\_42:

(Start: 81 @26965 has 8 MA's), (130, 27046), (154, 27091), (183, 27160), (269, 27286), (292, 27328), (343, 27412), (364, 27463), (387, 27496), (443, 27586), (499, 27694), (505, 27712), (524, 27754), (573, 27844), (576, 27850), (583, 27871),

Gene: MarkPhew\_22 Start: 15151, Stop: 16287, Start Num: 30

Candidate Starts for MarkPhew\_22:

(Start: 30 @15151 has 217 MA's), (61, 15268), (75, 15286), (119, 15358), (132, 15379), (159, 15427), (207, 15529), (209, 15532), (262, 15628), (322, 15727), (330, 15748), (369, 15835), (389, 15853), (427, 15916), (487, 16006), (488, 16009), (524, 16099), (584, 16216), (595, 16243), (599, 16255), (601, 16273),

Gene: Marmie\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Marmie\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451,

16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Marshawn\_23 Start: 15766, Stop: 16905, Start Num: 30

Candidate Starts for Marshawn\_23:

(27, 15754), (Start: 30 @15766 has 217 MA's), (61, 15886), (119, 15976), (159, 16045), (262, 16246), (292, 16300), (330, 16366), (337, 16378), (361, 16429), (454, 16558), (471, 16582), (487, 16624), (488, 16627), (490, 16630), (509, 16678), (524, 16717), (595, 16861), (599, 16873), (601, 16891),

Gene: Marteena\_19 Start: 16661, Stop: 17569, Start Num: 92

Candidate Starts for Marteena\_19:

(Start: 92 @16661 has 38 MA's), (126, 16718), (190, 16853), (203, 16868), (204, 16871), (236, 16922), (316, 17030), (346, 17078), (358, 17102), (372, 17120), (374, 17126), (400, 17162), (475, 17318), (493, 17345), (498, 17357), (503, 17372), (518, 17417), (527, 17435), (529, 17444), (544, 17480), (547, 17483), (567, 17519), (571, 17525), (575, 17531),

Gene: Marvin\_47 Start: 26438, Stop: 27400, Start Num: 94

Candidate Starts for Marvin\_47:

(Start: 94 @26438 has 30 MA's), (163, 26570), (173, 26594), (178, 26603), (181, 26609), (184, 26618), (201, 26642), (206, 26651), (213, 26663), (271, 26789), (312, 26870), (322, 26885), (324, 26891), (385, 26999), (476, 27125), (478, 27131), (536, 27281), (539, 27287), (548, 27299), (550, 27302), (593, 27389), (594, 27392), (596, 27395),

Gene: MarysWell\_22 Start: 18617, Stop: 19630, Start Num: 103

Candidate Starts for MarysWell\_22:

(Start: 103 @18617 has 85 MA's), (152, 18713), (165, 18746), (167, 18749), (183, 18788), (261, 18923), (293, 18983), (296, 18989), (308, 19007), (322, 19031), (342, 19073), (481, 19385), (518, 19487), (529, 19514), (565, 19577),

Gene: Maselop\_44 Start: 30439, Stop: 31365, Start Num: 73

Candidate Starts for Maselop\_44:

(Start: 73 @30439 has 5 MA's), (Start: 105 @30475 has 2 MA's), (167, 30592), (183, 30631), (195, 30649), (241, 30700), (292, 30799), (338, 30874), (343, 30883), (377, 30958), (387, 30979), (471, 31117), (487, 31153), (504, 31192), (524, 31234), (559, 31297), (576, 31330),

Gene: Mayweather\_18 Start: 15087, Stop: 16043, Start Num: 97

Candidate Starts for Mayweather\_18:

(Start: 97 @15087 has 272 MA's), (125, 15132), (163, 15216), (185, 15270), (206, 15297), (240, 15348), (241, 15351), (244, 15357), (246, 15360), (281, 15429), (306, 15474), (320, 15498), (358, 15564), (415, 15660), (502, 15843), (503, 15846), (513, 15876), (516, 15885), (538, 15942), (571, 15993), (587, 16029), (589, 16035),

Gene: McFly\_30 Start: 18966, Stop: 19979, Start Num: 97

Candidate Starts for McFly\_30:

(Start: 97 @18966 has 272 MA's), (127, 19020), (152, 19059), (201, 19164), (277, 19311), (296, 19341), (320, 19380), (322, 19383), (344, 19428), (368, 19488), (464, 19686), (518, 19836), (522, 19845),

Gene: McKinley\_36 Start: 30814, Stop: 31770, Start Num: 78

Candidate Starts for McKinley\_36:

(Start: 78 @30814 has 51 MA's), (175, 31000), (180, 31012), (196, 31039), (211, 31060), (248, 31120), (297, 31207), (299, 31210), (322, 31246), (343, 31279), (352, 31294), (356, 31306), (376, 31336), (384, 31342), (415, 31402), (471, 31492), (504, 31582), (512, 31606), (516, 31618), (542, 31684), (569, 31723), (576, 31735),

Gene: McMater\_22 Start: 15375, Stop: 16514, Start Num: 30

Candidate Starts for McMater\_22:

(Start: 30 @15375 has 217 MA's), (61, 15495), (119, 15585), (159, 15654), (206, 15753), (207, 15756), (262, 15855), (292, 15909), (340, 15990), (371, 16065), (389, 16080), (454, 16167), (471, 16191), (487, 16233), (488, 16236), (509, 16287), (524, 16326), (569, 16410), (580, 16428), (584, 16443), (599, 16482), (601, 16500),

Gene: Mdavu\_18 Start: 15542, Stop: 16684, Start Num: 30

Candidate Starts for Mdavu\_18:

(Start: 30 @15542 has 217 MA's), (61, 15665), (119, 15755), (159, 15824), (206, 15923), (207, 15926), (262, 16025), (340, 16160), (471, 16361), (487, 16403), (488, 16406), (524, 16496), (533, 16520), (584, 16613), (599, 16652), (601, 16670),

Gene: MeaningOfLife\_22 Start: 15987, Stop: 17123, Start Num: 30

Candidate Starts for MeaningOfLife\_22:

(Start: 30 @15987 has 217 MA's), (61, 16104), (119, 16194), (132, 16215), (144, 16236), (159, 16263), (292, 16518), (340, 16599), (371, 16674), (389, 16689), (471, 16800), (474, 16809), (487, 16842), (524, 16935), (533, 16959), (584, 17052), (599, 17091), (601, 17109),

Gene: Megsy\_22 Start: 15988, Stop: 17124, Start Num: 30

Candidate Starts for Megsy\_22:

(Start: 30 @15988 has 217 MA's), (61, 16105), (119, 16195), (132, 16216), (144, 16237), (159, 16264), (292, 16519), (340, 16600), (371, 16675), (389, 16690), (471, 16801), (487, 16843), (524, 16936), (529, 16948), (533, 16960), (584, 17053), (599, 17092), (601, 17110),

Gene: MelBins\_33 Start: 28300, Stop: 29286, Start Num: 64

Candidate Starts for MelBins\_33:

(Start: 64 @28300 has 25 MA's), (142, 28423), (161, 28459), (186, 28519), (240, 28615), (296, 28726), (311, 28747), (363, 28849), (396, 28885), (471, 28993), (515, 29101), (517, 29107), (523, 29122), (529, 29137), (544, 29173), (564, 29206), (566, 29209), (598, 29275),

Gene: Melba\_18 Start: 15787, Stop: 16653, Start Num: 65

Candidate Starts for Melba\_18:

(Start: 65 @15787 has 6 MA's), (Start: 70 @15793 has 27 MA's), (163, 15949), (203, 16030), (274, 16129), (340, 16237), (400, 16321), (454, 16393), (523, 16522), (533, 16549), (541, 16564),

Gene: Mellie\_17 Start: 15554, Stop: 16414, Start Num: 70

Candidate Starts for Mellie\_17:

(Start: 65 @15548 has 6 MA's), (Start: 70 @15554 has 27 MA's), (163, 15710), (203, 15791), (274, 15890), (340, 15998), (400, 16082), (451, 16148), (481, 16193), (523, 16283), (541, 16325),

Gene: Mendokysei\_17 Start: 15828, Stop: 16793, Start Num: 87

Candidate Starts for Mendokysei\_17:

(Start: 87 @15828 has 10 MA's), (107, 15855), (116, 15873), (210, 16053), (246, 16128), (290, 16221), (320, 16278), (324, 16287), (363, 16371), (485, 16548), (492, 16563), (503, 16596), (522, 16647), (537, 16689), (562, 16728), (567, 16737),

Gene: MerCougar\_41 Start: 29816, Stop: 30739, Start Num: 76

Candidate Starts for MerCougar\_41:

(Start: 76 @29816 has 24 MA's), (130, 29903), (148, 29939), (167, 29978), (383, 30347), (471, 30491), (524, 30608), (576, 30704), (579, 30710), (583, 30725),



Gene: Mercurio\_18 Start: 15481, Stop: 16668, Start Num: 30

Candidate Starts for Mercurio\_18:

(Start: 30 @15481 has 217 MA's), (75, 15628), (Start: 105 @15673 has 2 MA's), (110, 15679), (157, 15769), (192, 15847), (195, 15850), (206, 15871), (207, 15874), (238, 15925), (241, 15931), (262, 15976), (344, 16120), (358, 16150), (369, 16183), (436, 16285), (454, 16321), (471, 16345), (490, 16393), (528, 16489), (569, 16564), (584, 16597), (597, 16630), (599, 16636),

Gene: Meyran\_20 Start: 18053, Stop: 18913, Start Num: 70

Candidate Starts for Meyran\_20:

(Start: 70 @18053 has 27 MA's), (74, 18059), (98, 18095), (101, 18098), (185, 18266), (196, 18281), (203, 18293), (271, 18389), (274, 18392), (278, 18401), (285, 18413), (292, 18428), (363, 18557), (469, 18677), (481, 18698), (488, 18719), (502, 18749), (543, 18839),

Gene: Micasa\_23 Start: 18623, Stop: 19636, Start Num: 103

Candidate Starts for Micasa\_23:

(Start: 103 @18623 has 85 MA's), (152, 18719), (165, 18752), (167, 18755), (183, 18794), (261, 18929), (293, 18989), (296, 18995), (308, 19013), (322, 19037), (342, 19079), (481, 19391), (518, 19493), (565, 19583),

Gene: MiculUcigas\_27 Start: 19200, Stop: 20216, Start Num: 97

Candidate Starts for MiculUcigas\_27:

(Start: 97 @19200 has 272 MA's), (142, 19275), (152, 19293), (167, 19329), (183, 19368), (277, 19545), (296, 19575), (320, 19614), (322, 19617), (518, 20073), (528, 20097),

Gene: MicyPS\_16 Start: 16526, Stop: 17407, Start Num: 92

Candidate Starts for MicyPS\_16:

(Start: 92 @16526 has 38 MA's), (140, 16607), (201, 16739), (243, 16817), (249, 16829), (261, 16853), (308, 16934), (310, 16937), (324, 16964), (352, 17012), (359, 17033), (378, 17051), (390, 17075), (394, 17081), (474, 17168), (482, 17195), (528, 17315), (563, 17363), (567, 17369),

Gene: Midas2\_23 Start: 18617, Stop: 19630, Start Num: 103

Candidate Starts for Midas2\_23:

(Start: 103 @18617 has 85 MA's), (152, 18713), (165, 18746), (167, 18749), (183, 18788), (261, 18923), (293, 18983), (296, 18989), (308, 19007), (322, 19031), (342, 19073), (481, 19385), (518, 19487), (529, 19514), (565, 19577),

Gene: Miko\_30 Start: 20800, Stop: 21810, Start Num: 97

Candidate Starts for Miko\_30:

(Start: 97 @20800 has 272 MA's), (152, 20893), (167, 20929), (183, 20968), (296, 21175), (320, 21214), (322, 21217), (344, 21262), (430, 21445), (446, 21478), (486, 21580), (514, 21655), (518, 21667), (565, 21757),

Gene: Milcery\_23 Start: 18653, Stop: 19666, Start Num: 103

Candidate Starts for Milcery\_23:

(Start: 103 @18653 has 85 MA's), (152, 18749), (165, 18782), (167, 18785), (183, 18824), (261, 18959), (293, 19019), (296, 19025), (308, 19043), (322, 19067), (342, 19109), (481, 19421), (518, 19523), (565, 19613),

Gene: Miley16\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Miley16\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Milly\_18 Start: 13889, Stop: 15016, Start Num: 34

Candidate Starts for Milly\_18:

(Start: 34 @13889 has 10 MA's), (37, 13898), (61, 14000), (119, 14090), (144, 14132), (145, 14135), (159, 14159), (206, 14258), (244, 14321), (262, 14360), (292, 14414), (330, 14480), (337, 14492), (361, 14543), (369, 14567), (427, 14645), (451, 14663), (471, 14693), (474, 14702), (487, 14735), (488, 14738), (533, 14852), (580, 14930), (584, 14945), (599, 14984), (601, 15002),

Gene: MinecraftSteve\_30 Start: 18241, Stop: 19218, Start Num: 100

Candidate Starts for MinecraftSteve\_30:

(Start: 100 @18241 has 20 MA's), (163, 18355), (165, 18361), (167, 18364), (286, 18598), (430, 18865), (461, 18919), (518, 19075),

Gene: MiniLon\_18 Start: 16308, Stop: 17198, Start Num: 93

Candidate Starts for MiniLon\_18:

(Start: 93 @16308 has 72 MA's), (111, 16332), (136, 16377), (142, 16392), (154, 16413), (201, 16509), (277, 16644), (282, 16653), (320, 16713), (322, 16716), (324, 16722), (360, 16794), (385, 16827), (394, 16839), (455, 16902), (476, 16953), (484, 16977), (503, 17028), (518, 17070), (585, 17181), (587, 17184),

Gene: MiniMac\_18 Start: 16309, Stop: 17199, Start Num: 93

Candidate Starts for MiniMac\_18:

(Start: 93 @16309 has 72 MA's), (111, 16333), (136, 16378), (142, 16393), (154, 16414), (201, 16510), (277, 16645), (282, 16654), (320, 16714), (322, 16717), (324, 16723), (360, 16795), (385, 16828), (394, 16840), (455, 16903), (476, 16954), (484, 16978), (503, 17029), (518, 17071), (585, 17182), (587, 17185),

Gene: MintFen\_18 Start: 15793, Stop: 16653, Start Num: 70

Candidate Starts for MintFen\_18:

(Start: 65 @15787 has 6 MA's), (Start: 70 @15793 has 27 MA's), (163, 15949), (203, 16030), (274, 16129), (340, 16237), (400, 16321), (454, 16393), (523, 16522), (533, 16549), (541, 16564),

Gene: Miryou\_20 Start: 16308, Stop: 17438, Start Num: 36

Candidate Starts for Miryou\_20:

(Start: 36 @16308 has 22 MA's), (144, 16551), (159, 16578), (206, 16677), (262, 16779), (292, 16833), (312, 16863), (330, 16899), (333, 16902), (337, 16911), (369, 16986), (371, 16989), (405, 17025), (427, 17067), (451, 17085), (454, 17091), (471, 17115), (472, 17118), (474, 17124), (487, 17157), (584, 17367), (599, 17406), (601, 17424),

Gene: Miskis\_49 Start: 28475, Stop: 29356, Start Num: 72

Candidate Starts for Miskis\_49:

(Start: 68 @28469 has 24 MA's), (Start: 72 @28475 has 12 MA's), (106, 28523), (119, 28550), (160, 28622), (187, 28688), (206, 28718), (282, 28826), (337, 28919), (352, 28943), (357, 28958), (427, 29054), (471, 29102), (552, 29282), (573, 29318),

Gene: MissDaisy\_23 Start: 17255, Stop: 18388, Start Num: 30

Candidate Starts for MissDaisy\_23:

(Start: 30 @17255 has 217 MA's), (37, 17273), (Start: 51 @17345 has 2 MA's), (61, 17375), (119, 17465), (125, 17474), (144, 17507), (157, 17531), (207, 17636), (292, 17789), (334, 17858), (337, 17864), (427, 18017), (451, 18035), (471, 18065), (487, 18107), (488, 18110), (580, 18302), (584, 18317), (599, 18356), (601, 18374),

Gene: MissRona\_20 Start: 16105, Stop: 16965, Start Num: 68

Candidate Starts for MissRona\_20:

(Start: 68 @16105 has 24 MA's), (Start: 84 @16120 has 1 MA's), (143, 16222), (163, 16261), (203, 16342), (266, 16426), (274, 16441), (340, 16549), (400, 16633), (451, 16699), (454, 16705), (481, 16744), (523, 16834), (541, 16876),

Gene: MissWhite\_27 Start: 18271, Stop: 19281, Start Num: 97

Candidate Starts for MissWhite\_27:

(Start: 97 @18271 has 272 MA's), (152, 18364), (167, 18400), (183, 18439), (277, 18616), (296, 18646), (322, 18688), (344, 18733), (382, 18823), (430, 18916), (518, 19138),

Gene: Mitti\_23 Start: 17413, Stop: 18546, Start Num: 30

Candidate Starts for Mitti\_23:

(Start: 30 @17413 has 217 MA's), (37, 17431), (Start: 51 @17503 has 2 MA's), (61, 17533), (119, 17623), (144, 17665), (157, 17689), (207, 17794), (292, 17947), (334, 18016), (337, 18022), (427, 18175), (451, 18193), (471, 18223), (487, 18265), (488, 18268), (580, 18460), (584, 18475), (599, 18514), (601, 18532),

Gene: MkaliMitinis3\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for MkaliMitinis3\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: ModicumRichard\_18 Start: 15643, Stop: 16551, Start Num: 93

Candidate Starts for ModicumRichard\_18:

(8, 15190), (Start: 93 @15643 has 72 MA's), (110, 15670), (125, 15703), (174, 15805), (185, 15832), (201, 15856), (261, 15958), (277, 15991), (292, 16021), (318, 16057), (322, 16063), (325, 16072), (361, 16150), (385, 16180), (390, 16186), (399, 16201), (472, 16306), (498, 16372), (533, 16471), (560, 16498), (563, 16504), (581, 16540),

Gene: Mollymur\_30 Start: 27246, Stop: 28130, Start Num: 68

Candidate Starts for Mollymur\_30:

(45, 27171), (Start: 68 @27246 has 24 MA's), (88, 27267), (136, 27345), (160, 27393), (163, 27402), (206, 27489), (292, 27618), (337, 27690), (341, 27696), (427, 27825), (504, 27948), (512, 27969), (523, 27996),

Gene: Moonflower\_18 Start: 16305, Stop: 17252, Start Num: 94

Candidate Starts for Moonflower\_18:

(Start: 94 @16305 has 30 MA's), (195, 16500), (244, 16581), (289, 16665), (296, 16671), (306, 16686), (344, 16746), (358, 16776), (360, 16782), (405, 16845), (415, 16869), (419, 16875), (442, 16911), (475, 16980), (490, 17022), (502, 17049), (518, 17091), (519, 17094), (524, 17106), (547, 17157), (565, 17181), (587, 17226), (590, 17235),

Gene: MoontowerMania\_33 Start: 29628, Stop: 30584, Start Num: 78

Candidate Starts for MoontowerMania\_33:

(Start: 78 @29628 has 51 MA's), (175, 29814), (180, 29826), (181, 29829), (196, 29853), (211, 29874), (248, 29934), (297, 30021), (299, 30024), (322, 30060), (343, 30093), (352, 30108), (356, 30120), (376, 30150), (384, 30156), (415, 30216), (471, 30306), (504, 30396), (512, 30420), (516, 30432), (542, 30498), (569, 30537), (576, 30549), (588, 30579),

Gene: Moostard\_18 Start: 16493, Stop: 17383, Start Num: 93

Candidate Starts for Moostard\_18:

(Start: 93 @16493 has 72 MA's), (111, 16517), (136, 16562), (142, 16577), (154, 16598), (201, 16694), (277, 16829), (282, 16838), (320, 16898), (322, 16901), (324, 16907), (360, 16979), (385, 17012), (455, 17087), (477, 17141), (484, 17162), (503, 17213), (518, 17255), (585, 17366), (587, 17369),

Gene: Morgana\_18 Start: 15633, Stop: 16544, Start Num: 93

Candidate Starts for Morgana\_18:

(8, 15180), (Start: 93 @15633 has 72 MA's), (110, 15660), (125, 15693), (174, 15795), (185, 15822), (261, 15948), (277, 15981), (292, 16011), (318, 16047), (322, 16053), (325, 16062), (361, 16140), (390, 16176), (399, 16191), (498, 16365), (533, 16464), (560, 16491), (563, 16497),

Gene: Morkie\_17 Start: 14248, Stop: 15156, Start Num: 92

Candidate Starts for Morkie\_17:

(Start: 92 @14248 has 38 MA's), (Start: 122 @14299 has 5 MA's), (178, 14419), (195, 14443), (204, 14455), (206, 14458), (247, 14521), (339, 14650), (355, 14677), (372, 14704), (374, 14710), (376, 14713), (426, 14800), (475, 14905), (493, 14932), (497, 14941), (498, 14944), (503, 14959), (518, 15004), (522, 15013),

Gene: Morrissey\_18 Start: 15201, Stop: 16028, Start Num: 96

Candidate Starts for Morrissey\_18:

(Start: 96 @15201 has 14 MA's), (119, 15246), (132, 15270), (164, 15327), (167, 15333), (175, 15354), (195, 15390), (203, 15405), (273, 15501), (275, 15504), (330, 15597), (337, 15609), (389, 15678), (471, 15786), (502, 15834), (507, 15849), (511, 15861), (519, 15885), (529, 15909), (550, 15942), (557, 15951), (576, 15990), (579, 15996),

Gene: MortyNRick\_18 Start: 15370, Stop: 16296, Start Num: 92

Candidate Starts for MortyNRick\_18:

(Start: 90 @15367 has 2 MA's), (Start: 92 @15370 has 38 MA's), (126, 15427), (174, 15529), (178, 15541), (195, 15565), (203, 15574), (204, 15577), (206, 15580), (247, 15643), (272, 15676), (287, 15697), (302, 15712), (339, 15772), (346, 15784), (358, 15808), (376, 15835), (379, 15838), (400, 15868), (439, 15946), (475, 16027), (490, 16069), (493, 16072), (497, 16081), (498, 16084), (502, 16096), (503, 16099), (507, 16111), (511, 16123), (518, 16144), (522, 16153), (527, 16162), (544, 16207), (547, 16210), (551, 16216), (571, 16252), (575, 16258),

Gene: MosMoris\_47 Start: 25618, Stop: 26580, Start Num: 94

Candidate Starts for MosMoris\_47:

(Start: 94 @25618 has 30 MA's), (163, 25750), (173, 25774), (178, 25783), (181, 25789), (184, 25798), (201, 25822), (206, 25831), (213, 25843), (271, 25969), (312, 26050), (322, 26065), (324, 26071), (385, 26179), (476, 26305), (478, 26311), (506, 26386), (536, 26461), (539, 26467), (548, 26479), (550, 26482), (593, 26569), (594, 26572), (596, 26575),

Gene: Mowgli\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Mowgli\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: MrMagoo\_31 Start: 22001, Stop: 22912, Start Num: 91

Candidate Starts for MrMagoo\_31:

(Start: 91 @22001 has 19 MA's), (Start: 96 @22010 has 14 MA's), (127, 22064), (145, 22100), (147, 22103), (157, 22121), (163, 22136), (198, 22205), (201, 22208), (320, 22433), (322, 22436), (336, 22466), (390, 22553), (476, 22673), (498, 22727), (501, 22742), (513, 22775), (583, 22898),

Gene: MsGreen\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for MsGreen\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: Muddy\_20 Start: 15099, Stop: 16211, Start Num: 35

Candidate Starts for Muddy\_20:

(Start: 35 @15099 has 4 MA's), (40, 15147), (Start: 99 @15255 has 15 MA's), (Start: 105 @15264 has 2 MA's), (145, 15333), (160, 15360), (238, 15507), (293, 15615), (337, 15690), (342, 15699), (359, 15735), (405, 15804), (427, 15846), (471, 15891), (474, 15900), (500, 15957), (542, 16062), (597, 16173),

Gene: Mufasa\_18 Start: 13909, Stop: 15036, Start Num: 34

Candidate Starts for Mufasa\_18:

(Start: 34 @13909 has 10 MA's), (37, 13918), (61, 14020), (119, 14110), (144, 14152), (159, 14179), (203, 14272), (206, 14278), (244, 14341), (262, 14380), (292, 14434), (337, 14512), (361, 14563), (369, 14587), (427, 14665), (451, 14683), (471, 14713), (487, 14755), (488, 14758), (533, 14872), (580, 14950), (584, 14965), (599, 15004), (601, 15022),

Gene: Mulch\_21 Start: 16293, Stop: 17354, Start Num: 60

Candidate Starts for Mulch\_21:

(Start: 60 @16293 has 18 MA's), (Start: 94 @16338 has 30 MA's), (111, 16368), (167, 16476), (245, 16626), (265, 16674), (315, 16758), (321, 16767), (345, 16809), (443, 16986), (459, 17019), (479, 17055), (567, 17250), (598, 17322), (599, 17325),

Gene: Mulciber\_27 Start: 19730, Stop: 20752, Start Num: 97

Candidate Starts for Mulciber\_27:

(Start: 97 @19730 has 272 MA's), (127, 19787), (163, 19862), (232, 19991), (261, 20051), (293, 20111), (296, 20117), (322, 20159), (344, 20204), (347, 20210), (382, 20294), (402, 20327), (518, 20609), (522, 20618), (528, 20633), (565, 20699),

Gene: Munch\_27 Start: 19736, Stop: 20758, Start Num: 97

Candidate Starts for Munch\_27:

(Start: 97 @19736 has 272 MA's), (127, 19793), (163, 19868), (232, 19997), (261, 20057), (293, 20117), (296, 20123), (322, 20165), (344, 20210), (347, 20216), (382, 20300), (402, 20333), (518, 20615), (522, 20624), (528, 20639), (565, 20705),

Gene: MunkgeeRoachy\_17 Start: 14812, Stop: 15783, Start Num: 97

Candidate Starts for MunkgeeRoachy\_17:

(Start: 97 @14812 has 272 MA's), (125, 14857), (136, 14878), (163, 14941), (173, 14965), (185, 14995), (214, 15034), (240, 15073), (244, 15082), (246, 15085), (279, 15151), (306, 15199), (334, 15241), (358, 15289), (415, 15400), (424, 15415), (426, 15418), (437, 15436), (441, 15442), (462, 15487), (475, 15514), (481, 15532), (502, 15583), (503, 15586), (513, 15616), (516, 15625), (522, 15640), (539, 15685), (547, 15697), (578, 15745), (587, 15769), (589, 15775),

Gene: Murp\_18 Start: 15861, Stop: 16721, Start Num: 68

Candidate Starts for Murp\_18:

(Start: 68 @15861 has 24 MA's), (163, 16017), (203, 16098), (274, 16197), (340, 16305), (400, 16389), (451, 16455), (454, 16461), (523, 16590), (541, 16632),

Gene: Murucutumbu\_22 Start: 15969, Stop: 17105, Start Num: 30

Candidate Starts for Murucutumbu\_22:

(Start: 30 @15969 has 217 MA's), (61, 16086), (132, 16197), (144, 16218), (159, 16245), (207, 16347), (292, 16500), (340, 16581), (389, 16671), (471, 16782), (487, 16824), (524, 16917), (533, 16941), (584, 17034), (599, 17073), (601, 17091),

Gene: Mutzi\_32 Start: 25361, Stop: 26293, Start Num: 83

Candidate Starts for Mutzi\_32:

(Start: 83 @25361 has 29 MA's), (142, 25457), (173, 25526), (175, 25532), (180, 25544), (181, 25547), (185, 25556), (196, 25571), (299, 25745), (320, 25778), (322, 25781), (415, 25928), (486, 26063), (502, 26099), (516, 26141), (549, 26216), (563, 26237), (588, 26288),

Gene: Mynx\_22 Start: 16034, Stop: 17170, Start Num: 30

Candidate Starts for Mynx\_22:

(Start: 30 @16034 has 217 MA's), (61, 16151), (119, 16241), (132, 16262), (144, 16283), (159, 16310), (292, 16565), (340, 16646), (371, 16721), (389, 16736), (471, 16847), (487, 16889), (524, 16982), (533, 17006), (584, 17099), (599, 17138), (601, 17156),

Gene: Myxus\_28 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for Myxus\_28:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: NaSiaTalie\_27 Start: 19198, Stop: 20214, Start Num: 97

Candidate Starts for NaSiaTalie\_27:

(Start: 97 @19198 has 272 MA's), (142, 19273), (152, 19291), (167, 19327), (183, 19366), (277, 19543), (296, 19573), (320, 19612), (322, 19615), (518, 20071), (528, 20095),

Gene: Naca\_23 Start: 18502, Stop: 19515, Start Num: 103

Candidate Starts for Naca\_23:

(Start: 103 @18502 has 85 MA's), (152, 18598), (165, 18631), (167, 18634), (183, 18673), (261, 18808), (274, 18838), (293, 18868), (296, 18874), (308, 18892), (322, 18916), (342, 18958), (518, 19372), (565, 19462),

Gene: Nadeem\_21 Start: 16293, Stop: 17354, Start Num: 60

Candidate Starts for Nadeem\_21:

(Start: 60 @16293 has 18 MA's), (Start: 94 @16338 has 30 MA's), (111, 16368), (167, 16476), (245, 16626), (265, 16674), (315, 16758), (321, 16767), (345, 16809), (443, 16986), (459, 17019), (479, 17055), (567, 17250), (598, 17322), (599, 17325),

Gene: NadineRae\_40 Start: 26218, Stop: 27138, Start Num: 81

Candidate Starts for NadineRae\_40:

(Start: 81 @26218 has 8 MA's), (130, 26299), (154, 26344), (183, 26413), (269, 26539), (292, 26581), (343, 26665), (364, 26716), (387, 26749), (499, 26947), (505, 26965), (524, 27007), (576, 27103), (583, 27124),

Gene: Naiad\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Naiad\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: Nairb\_18 Start: 16018, Stop: 16983, Start Num: 87

Candidate Starts for Nairb\_18:

(Start: 87 @16018 has 10 MA's), (107, 16045), (116, 16063), (208, 16240), (210, 16243), (246, 16318), (277, 16384), (290, 16411), (320, 16468), (324, 16477), (477, 16714), (485, 16738), (522, 16837), (529, 16858), (537, 16879), (562, 16918), (567, 16927),

Gene: Naji\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for Naji\_30:

(Start: 97 @19042 has 272 MA's), (127, 19096), (142, 19117), (152, 19135), (240, 19306), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: Nancinator\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Nancinator\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: NancyRae\_21 Start: 16299, Stop: 17360, Start Num: 60

Candidate Starts for NancyRae\_21:

(Start: 60 @16299 has 18 MA's), (Start: 94 @16344 has 30 MA's), (111, 16374), (167, 16482), (245, 16632), (265, 16680), (315, 16764), (321, 16773), (345, 16815), (443, 16992), (459, 17025), (479, 17061), (567, 17256), (598, 17328), (599, 17331),

Gene: Nanosmite\_31 Start: 21873, Stop: 22784, Start Num: 91

Candidate Starts for Nanosmite\_31:

(Start: 91 @21873 has 19 MA's), (147, 21975), (157, 21993), (163, 22008), (198, 22077), (206, 22089), (252, 22167), (274, 22215), (320, 22305), (322, 22308), (356, 22377), (385, 22419), (464, 22512), (472, 22530), (483, 22566), (498, 22599), (513, 22647), (561, 22722), (567, 22734),

Gene: NatB6\_40 Start: 28930, Stop: 29871, Start Num: 76

Candidate Starts for NatB6\_40:

(Start: 76 @28930 has 24 MA's), (130, 29017), (167, 29092), (198, 29158), (241, 29200), (269, 29257), (387, 29470), (406, 29497), (471, 29608), (524, 29740), (576, 29836),

Gene: Natkenzie\_34 Start: 29777, Stop: 30754, Start Num: 64

Candidate Starts for Natkenzie\_34:

(Start: 64 @29777 has 25 MA's), (115, 29852), (119, 29864), (142, 29900), (161, 29936), (212, 30038), (240, 30092), (277, 30164), (312, 30227), (318, 30236), (352, 30293), (363, 30326), (391, 30359), (396, 30362), (426, 30419), (490, 30515), (504, 30548), (507, 30557), (517, 30578), (529, 30605), (536, 30626), (540, 30635), (544, 30641), (564, 30674), (566, 30677), (591, 30731), (598, 30743),

Gene: Natosaleda\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Natosaleda\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: NearlyHeadless\_23 Start: 17651, Stop: 18673, Start Num: 103

Candidate Starts for NearlyHeadless\_23:

(Start: 103 @17651 has 85 MA's), (163, 17774), (165, 17780), (201, 17852), (261, 17957), (271, 17984), (322, 18074), (413, 18275), (429, 18305), (430, 18308), (514, 18518), (529, 18557), (555, 18605), (565, 18620),

Gene: Nebkiss\_14 Start: 13326, Stop: 14438, Start Num: 41

Candidate Starts for Nebkiss\_14:

(Start: 41 @13326 has 2 MA's), (42, 13329), (Start: 95 @13422 has 1 MA's), (Start: 99 @13428 has 15 MA's), (125, 13473), (142, 13503), (157, 13530), (159, 13533), (161, 13539), (167, 13554), (169, 13557), (203, 13626), (206, 13632), (244, 13710), (274, 13767), (292, 13803), (330, 13869), (337, 13881), (381, 13983), (382, 13986), (396, 14013), (427, 14076), (487, 14157), (490, 14163), (512, 14220), (524, 14250), (530, 14265), (542, 14289), (547, 14295), (580, 14352), (601, 14424),

Gene: Nebulosus\_29 Start: 18119, Stop: 19096, Start Num: 100

Candidate Starts for Nebulosus\_29:

(Start: 100 @18119 has 20 MA's), (163, 18233), (165, 18239), (167, 18242), (286, 18476), (430, 18743), (461, 18797), (518, 18953),

Gene: Nedarya\_28 Start: 18765, Stop: 19742, Start Num: 99

Candidate Starts for Nedarya\_28:

(Start: 99 @18765 has 15 MA's), (165, 18885), (198, 18954), (201, 18957), (232, 19008), (286, 19122), (434, 19401), (518, 19599), (522, 19608), (565, 19689),

Gene: Neeharika16\_30 Start: 18959, Stop: 19972, Start Num: 97

Candidate Starts for Neeharika16\_30:

(Start: 97 @18959 has 272 MA's), (127, 19013), (152, 19052), (201, 19157), (277, 19304), (296, 19334), (320, 19373), (322, 19376), (344, 19421), (368, 19481), (464, 19679), (518, 19829), (522, 19838),

Gene: Neighly\_20 Start: 16168, Stop: 17298, Start Num: 36

Candidate Starts for Neighly\_20:

(Start: 36 @16168 has 22 MA's), (Start: 105 @16342 has 2 MA's), (142, 16408), (159, 16438), (206, 16537), (262, 16639), (292, 16693), (312, 16723), (330, 16759), (333, 16762), (337, 16771), (369, 16846), (371, 16849), (405, 16885), (427, 16927), (451, 16945), (454, 16951), (471, 16975), (472, 16978), (487, 17017), (528, 17119), (584, 17227), (599, 17266), (601, 17284),

Gene: Nergal\_21 Start: 15940, Stop: 17028, Start Num: 44

Candidate Starts for Nergal\_21:

(Start: 44 @15940 has 1 MA's), (48, 15961), (125, 16105), (142, 16135), (151, 16153), (159, 16165), (176, 16210), (207, 16267), (244, 16312), (330, 16471), (337, 16483), (346, 16498), (358, 16525), (386, 16573), (412, 16615), (429, 16645), (454, 16678), (460, 16690), (487, 16747), (503, 16783), (518, 16825), (533, 16864), (561, 16912), (569, 16927), (580, 16945), (597, 16993), (598, 16996),

Gene: Nette\_18 Start: 15837, Stop: 16802, Start Num: 87

Candidate Starts for Nette\_18:

(Start: 87 @15837 has 10 MA's), (107, 15864), (116, 15882), (210, 16062), (246, 16137), (290, 16230), (320, 16287), (324, 16296), (363, 16380), (485, 16557), (492, 16572), (503, 16605), (522, 16656), (537, 16698), (562, 16737), (567, 16746),

Gene: Netyap\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Netyap\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Neville\_27 Start: 22392, Stop: 23303, Start Num: 93

Candidate Starts for Neville\_27:



(Start: 82 @22377 has 1 MA's), (Start: 93 @22392 has 72 MA's), (127, 22449), (142, 22479), (180, 22557), (201, 22593), (244, 22668), (260, 22701), (277, 22737), (318, 22818), (320, 22821), (333, 22848), (336, 22854), (352, 22881), (390, 22941), (394, 22947), (476, 23070), (477, 23073), (484, 23094), (498, 23124), (499, 23133), (513, 23172), (514, 23175), (531, 23217), (546, 23232), (550, 23238), (563, 23256), (573, 23271),

Gene: Newrala\_30 Start: 18959, Stop: 19972, Start Num: 97

Candidate Starts for Newrala\_30:

(Start: 97 @18959 has 272 MA's), (127, 19013), (152, 19052), (201, 19157), (277, 19304), (296, 19334), (320, 19373), (322, 19376), (344, 19421), (368, 19481), (464, 19679), (518, 19829), (522, 19838),

Gene: Nibb\_21 Start: 15295, Stop: 16431, Start Num: 30

Candidate Starts for Nibb\_21:

(Start: 30 @15295 has 217 MA's), (61, 15412), (75, 15430), (119, 15502), (132, 15523), (159, 15571), (262, 15772), (322, 15871), (330, 15892), (369, 15979), (427, 16060), (487, 16150), (488, 16153), (524, 16243), (584, 16360), (595, 16387), (599, 16399), (601, 16417),

Gene: Nibbles\_19 Start: 15745, Stop: 16710, Start Num: 97

Candidate Starts for Nibbles\_19:

(Start: 97 @15745 has 272 MA's), (125, 15790), (142, 15826), (152, 15847), (163, 15874), (185, 15928), (228, 15985), (240, 16009), (244, 16018), (246, 16021), (279, 16090), (306, 16138), (358, 16228), (365, 16243), (397, 16282), (475, 16438), (502, 16504), (503, 16507), (504, 16510), (513, 16537), (516, 16546), (527, 16570), (538, 16603), (549, 16621), (575, 16666), (587, 16696), (589, 16702),

Gene: Nicholas\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for Nicholas\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: Nicholasp3\_17 Start: 16079, Stop: 16993, Start Num: 93

Candidate Starts for Nicholasp3\_17:

(Start: 93 @16079 has 72 MA's), (111, 16103), (127, 16133), (189, 16259), (235, 16331), (318, 16484), (320, 16487), (322, 16490), (336, 16520), (363, 16577), (385, 16601), (390, 16607), (455, 16676), (464, 16694), (473, 16715), (493, 16769), (498, 16781), (518, 16844), (585, 16973), (591, 16985),

Gene: NicoleTera\_31 Start: 21002, Stop: 22015, Start Num: 97

Candidate Starts for NicoleTera\_31:

(Start: 97 @21002 has 272 MA's), (110, 21020), (152, 21095), (167, 21131), (183, 21170), (296, 21377), (320, 21416), (322, 21419), (344, 21464), (368, 21524), (446, 21683), (518, 21872),

Gene: Nikao\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Nikao\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: Niklas\_22 Start: 15378, Stop: 16517, Start Num: 30

Candidate Starts for Niklas\_22:

(Start: 30 @15378 has 217 MA's), (61, 15498), (119, 15588), (159, 15657), (206, 15756), (207, 15759), (262, 15858), (292, 15912), (340, 15993), (371, 16068), (389, 16083), (454, 16170), (471, 16194), (487, 16236), (488, 16239), (509, 16290), (524, 16329), (569, 16413), (580, 16431), (584, 16446), (599, 16485), (601, 16503),

Gene: Nina\_18 Start: 15806, Stop: 16777, Start Num: 97

Candidate Starts for Nina\_18:

(Start: 97 @15806 has 272 MA's), (125, 15851), (136, 15872), (163, 15935), (173, 15959), (185, 15989), (214, 16028), (240, 16067), (244, 16076), (246, 16079), (279, 16145), (306, 16193), (334, 16235), (358, 16283), (384, 16334), (415, 16394), (424, 16409), (426, 16412), (437, 16430), (441, 16436), (462, 16481), (475, 16508), (481, 16526), (502, 16577), (503, 16580), (513, 16610), (516, 16619), (522, 16634), (547, 16691), (578, 16739), (587, 16763), (589, 16769),

Gene: NoShow\_17 Start: 14354, Stop: 15487, Start Num: 35

Candidate Starts for NoShow\_17:

(Start: 35 @14354 has 4 MA's), (40, 14402), (Start: 87 @14507 has 10 MA's), (Start: 103 @14531 has 85 MA's), (157, 14624), (223, 14753), (293, 14888), (330, 14954), (337, 14966), (342, 14975), (369, 15041), (412, 15101), (414, 15104), (427, 15125), (453, 15146), (471, 15170), (474, 15179), (488, 15212), (499, 15233), (561, 15371), (586, 15422), (597, 15452), (599, 15458),

Gene: Nodigi\_19 Start: 14799, Stop: 15758, Start Num: 97

Candidate Starts for Nodigi\_19:

(Start: 97 @14799 has 272 MA's), (111, 14820), (128, 14850), (244, 15069), (293, 15165), (306, 15186), (334, 15228), (358, 15276), (372, 15291), (401, 15345), (415, 15378), (503, 15561), (504, 15564), (513, 15591), (516, 15600), (518, 15606), (527, 15624), (538, 15657), (542, 15666), (547, 15672), (575, 15714), (579, 15723), (587, 15744), (589, 15750),

Gene: Nordenberg\_28 Start: 28984, Stop: 29940, Start Num: 78

Candidate Starts for Nordenberg\_28:

(Start: 78 @28984 has 51 MA's), (175, 29170), (180, 29182), (196, 29209), (211, 29230), (248, 29290), (299, 29380), (322, 29416), (343, 29449), (352, 29464), (356, 29476), (376, 29506), (384, 29512), (415, 29572), (471, 29662), (504, 29752), (512, 29776), (516, 29788), (542, 29854), (569, 29893), (576, 29905),

Gene: Norvs\_48 Start: 28708, Stop: 29595, Start Num: 68

Candidate Starts for Norvs\_48:

(Start: 68 @28708 has 24 MA's), (Start: 72 @28714 has 12 MA's), (106, 28762), (119, 28789), (160, 28861), (187, 28927), (206, 28957), (282, 29065), (337, 29158), (352, 29182), (357, 29197), (427, 29293), (471, 29341), (552, 29521), (573, 29557),

Gene: NosilaM\_43 Start: 29537, Stop: 30454, Start Num: 78

Candidate Starts for NosilaM\_43:

(Start: 78 @29537 has 51 MA's), (130, 29618), (148, 29654), (241, 29801), (364, 30035), (383, 30062), (471, 30206), (481, 30224), (524, 30323), (576, 30419), (579, 30425), (583, 30440),

Gene: NothingSpecial\_29 Start: 21202, Stop: 22212, Start Num: 97

Candidate Starts for NothingSpecial\_29:

(Start: 97 @21202 has 272 MA's), (152, 21295), (167, 21331), (183, 21370), (296, 21577), (320, 21616), (322, 21619), (344, 21664), (486, 21982), (514, 22057), (518, 22069), (528, 22093), (565, 22159),

Gene: November\_21 Start: 16335, Stop: 17471, Start Num: 30

Candidate Starts for November\_21:

(Start: 30 @16335 has 217 MA's), (61, 16452), (75, 16470), (Start: 97 @16503 has 272 MA's), (119, 16542), (159, 16611), (209, 16716), (262, 16812), (292, 16866), (330, 16932), (337, 16944), (427, 17100), (454, 17124), (487, 17190), (488, 17193), (490, 17196), (524, 17283), (584, 17400), (601, 17457),

Gene: NovumRegina\_40 Start: 29260, Stop: 30201, Start Num: 76

Candidate Starts for NovumRegina\_40:

(Start: 76 @29260 has 24 MA's), (130, 29347), (167, 29422), (198, 29488), (241, 29530), (269, 29587), (387, 29800), (406, 29827), (471, 29938), (524, 30070), (576, 30166),

Gene: Nubi\_30 Start: 24922, Stop: 25866, Start Num: 83

Candidate Starts for Nubi\_30:

(Start: 83 @24922 has 29 MA's), (142, 25027), (173, 25096), (175, 25102), (185, 25126), (196, 25141), (415, 25501), (424, 25516), (440, 25534), (486, 25636), (504, 25678), (516, 25714), (563, 25810), (588, 25861),

Gene: Nutello\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Nutello\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: Nyceirae\_22 Start: 17929, Stop: 18777, Start Num: 68

Candidate Starts for Nyceirae\_22:

(Start: 68 @17929 has 24 MA's), (Start: 84 @17938 has 1 MA's), (98, 17959), (101, 17962), (167, 18085), (196, 18145), (203, 18157), (271, 18253), (274, 18256), (292, 18292), (363, 18421), (469, 18541), (481, 18562), (502, 18613), (519, 18649), (543, 18703),

Gene: OBUpride\_21 Start: 16309, Stop: 17403, Start Num: 55

Candidate Starts for OBUpride\_21:

(Start: 55 @16309 has 22 MA's), (57, 16318), (119, 16414), (125, 16423), (131, 16432), (159, 16483), (161, 16489), (209, 16585), (221, 16603), (253, 16672), (257, 16681), (265, 16702), (267, 16708), (270, 16714), (273, 16717), (315, 16789), (317, 16792), (402, 16948), (431, 16999), (438, 17017), (473, 17089), (481, 17107), (514, 17191), (524, 17218), (527, 17221), (542, 17257), (555, 17275), (580, 17317), (584, 17332), (586, 17335), (597, 17365), (599, 17371),

Gene: ODay\_23 Start: 17611, Stop: 18537, Start Num: 92

Candidate Starts for ODay\_23:

(Start: 90 @17608 has 2 MA's), (Start: 92 @17611 has 38 MA's), (126, 17668), (174, 17770), (178, 17782), (195, 17806), (203, 17815), (204, 17818), (206, 17821), (247, 17884), (272, 17917), (287, 17938), (302, 17953), (339, 18013), (346, 18025), (358, 18049), (376, 18076), (379, 18079), (400, 18109), (426, 18163), (439, 18187), (475, 18268), (490, 18310), (493, 18313), (497, 18322), (498, 18325), (502, 18337), (503, 18340), (507, 18352), (511, 18364), (518, 18385), (522, 18394), (527, 18403), (547, 18451), (571, 18493), (575, 18499),

Gene: ObLaDi\_18 Start: 15622, Stop: 16530, Start Num: 93

Candidate Starts for ObLaDi\_18:

(Start: 93 @15622 has 72 MA's), (110, 15649), (125, 15682), (174, 15784), (185, 15811), (201, 15835), (277, 15970), (292, 16000), (318, 16036), (322, 16042), (325, 16051), (361, 16129), (385, 16159), (390, 16165), (399, 16180), (472, 16285), (498, 16351), (533, 16450), (560, 16477), (563, 16483), (581, 16519),

Gene: Obliviate\_17 Start: 15583, Stop: 16443, Start Num: 70

Candidate Starts for Obliviate\_17:

(Start: 65 @15577 has 6 MA's), (Start: 70 @15583 has 27 MA's), (163, 15739), (203, 15820), (274, 15919), (340, 16027), (400, 16111), (451, 16177), (481, 16222), (523, 16312), (541, 16354),

Gene: OctaviousRex\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for OctaviousRex\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Octobien14\_27 Start: 21830, Stop: 22741, Start Num: 93

Candidate Starts for Octobien14\_27:

(Start: 93 @21830 has 72 MA's), (104, 21845), (180, 21995), (201, 22031), (260, 22139), (308, 22238), (318, 22256), (322, 22262), (333, 22286), (390, 22379), (475, 22505), (477, 22511), (484, 22532), (497, 22559), (514, 22613), (531, 22655), (562, 22691), (573, 22709),

Gene: Odin\_26 Start: 17954, Stop: 18964, Start Num: 97

Candidate Starts for Odin\_26:

(Start: 97 @17954 has 272 MA's), (142, 18029), (152, 18047), (167, 18083), (296, 18329), (320, 18368), (322, 18371), (344, 18416), (382, 18506), (446, 18632), (486, 18734), (518, 18821), (528, 18845), (565, 18911),

Gene: OhShagHennessy\_17 Start: 15830, Stop: 16711, Start Num: 93

Candidate Starts for OhShagHennessy\_17:

(58, 15776), (59, 15779), (Start: 80 @15812 has 9 MA's), (Start: 93 @15830 has 72 MA's), (111, 15854), (127, 15884), (136, 15899), (154, 15932), (235, 16076), (274, 16157), (320, 16232), (322, 16235), (324, 16241), (347, 16286), (360, 16313), (385, 16346), (390, 16352), (415, 16385), (421, 16394), (455, 16421), (501, 16541), (518, 16589), (531, 16616), (563, 16655), (567, 16661), (585, 16700),

Gene: OkiRoe\_20 Start: 16324, Stop: 17454, Start Num: 36

Candidate Starts for OkiRoe\_20:

(Start: 36 @16324 has 22 MA's), (142, 16564), (144, 16567), (159, 16594), (206, 16693), (262, 16795), (292, 16849), (312, 16879), (330, 16915), (333, 16918), (337, 16927), (369, 17002), (371, 17005), (405, 17041), (427, 17083), (451, 17101), (454, 17107), (471, 17131), (472, 17134), (474, 17140), (487, 17173), (584, 17383), (599, 17422), (601, 17440),

Gene: Olga\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Olga\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: OmniCritical\_23 Start: 17398, Stop: 18531, Start Num: 30

Candidate Starts for OmniCritical\_23:

(Start: 30 @17398 has 217 MA's), (37, 17416), (Start: 51 @17488 has 2 MA's), (61, 17518), (119, 17608), (144, 17650), (157, 17674), (207, 17779), (292, 17932), (334, 18001), (337, 18007), (427, 18160), (451, 18178), (471, 18208), (487, 18250), (488, 18253), (580, 18445), (584, 18460), (599, 18499), (601, 18517),

Gene: Omnicron\_20 Start: 15090, Stop: 16220, Start Num: 36

Candidate Starts for Omnicron\_20:

(Start: 36 @15090 has 22 MA's), (75, 15219), (Start: 105 @15264 has 2 MA's), (142, 15330), (144, 15333), (159, 15360), (175, 15402), (206, 15459), (262, 15561), (292, 15615), (312, 15645), (330, 15681), (337, 15693), (361, 15744), (369, 15768), (402, 15801), (427, 15849), (454, 15873), (471, 15897), (472, 15900), (487, 15939), (584, 16149), (599, 16188), (601, 16206),

Gene: OneUp\_41 Start: 26148, Stop: 27029, Start Num: 70

Candidate Starts for OneUp\_41:

(19, 25920), (21, 25944), (24, 25953), (Start: 70 @26148 has 27 MA's), (106, 26196), (160, 26295), (165, 26310), (244, 26427), (305, 26538), (337, 26592), (352, 26616), (357, 26631), (426, 26724), (427, 26727), (449, 26742), (471, 26775), (541, 26940), (571, 26988), (573, 26991),

Gene: Onglai\_27 Start: 18861, Stop: 19874, Start Num: 97

Candidate Starts for Onglai\_27:

(Start: 97 @18861 has 272 MA's), (110, 18879), (142, 18936), (152, 18954), (167, 18990), (261, 19170), (277, 19206), (296, 19236), (322, 19278), (397, 19437), (464, 19581), (486, 19644), (514, 19719), (518, 19731), (528, 19755),

Gene: Oofda\_30 Start: 18093, Stop: 19070, Start Num: 100

Candidate Starts for Oofda\_30:

(Start: 100 @18093 has 20 MA's), (163, 18207), (165, 18213), (167, 18216), (286, 18450), (430, 18717), (461, 18771), (518, 18927),

Gene: Opie\_18 Start: 16062, Stop: 16988, Start Num: 94

Candidate Starts for Opie\_18:

(39, 15930), (79, 16044), (Start: 94 @16062 has 30 MA's), (Start: 102 @16071 has 6 MA's), (128, 16113), (Start: 134 @16125 has 1 MA's), (250, 16347), (276, 16392), (289, 16416), (296, 16422), (302, 16431), (306, 16437), (323, 16467), (344, 16497), (358, 16527), (360, 16533), (404, 16593), (405, 16596), (415, 16620), (450, 16677), (462, 16698), (518, 16833), (587, 16971),

Gene: Orange\_27 Start: 19736, Stop: 20758, Start Num: 97

Candidate Starts for Orange\_27:

(Start: 97 @19736 has 272 MA's), (127, 19793), (163, 19868), (232, 19997), (261, 20057), (293, 20117), (296, 20123), (322, 20165), (344, 20210), (347, 20216), (382, 20300), (402, 20333), (518, 20615), (522, 20624), (528, 20639), (565, 20705),

Gene: Orla\_19 Start: 14803, Stop: 15762, Start Num: 97

Candidate Starts for Orla\_19:

(54, 14728), (Start: 97 @14803 has 272 MA's), (111, 14824), (128, 14854), (244, 15073), (293, 15169), (306, 15190), (334, 15232), (358, 15280), (372, 15295), (401, 15349), (415, 15382), (503, 15565), (504, 15568), (513, 15595), (516, 15604), (518, 15610), (527, 15628), (538, 15661), (542, 15670), (547, 15676), (587, 15748), (589, 15754),

Gene: Oscar\_21 Start: 15261, Stop: 16397, Start Num: 30

Candidate Starts for Oscar\_21:

(Start: 30 @15261 has 217 MA's), (61, 15378), (75, 15396), (Start: 105 @15441 has 2 MA's), (132, 15489), (159, 15537), (262, 15738), (292, 15792), (322, 15837), (330, 15858), (358, 15912), (369, 15945), (389, 15963), (427, 16026), (487, 16116), (488, 16119), (509, 16170), (524, 16209), (584, 16326), (599, 16365), (601, 16383),

Gene: Outis\_41 Start: 29510, Stop: 30433, Start Num: 76

Candidate Starts for Outis\_41:

(Start: 76 @29510 has 24 MA's), (130, 29597), (148, 29633), (167, 29672), (383, 30041), (471, 30185), (524, 30302), (576, 30398), (579, 30404), (583, 30419),

Gene: P1201\_46 Start: 33556, Stop: 34458, Start Num: 66

Candidate Starts for P1201\_46:

(Start: 66 @33556 has 8 MA's), (142, 33685), (183, 33775), (187, 33784), (199, 33802), (335, 34015), (356, 34057), (402, 34132), (408, 34150), (409, 34153), (423, 34174), (488, 34246), (503, 34279), (524, 34327),

Gene: P3MA\_17 Start: 13196, Stop: 14293, Start Num: 46

Candidate Starts for P3MA\_17:

(Start: 46 @13196 has 1 MA's), (75, 13280), (110, 13331), (142, 13391), (144, 13394), (151, 13409), (175, 13463), (222, 13547), (266, 13640), (269, 13649), (337, 13769), (358, 13811), (371, 13847), (402, 13874), (427, 13922), (451, 13940), (460, 13958), (471, 13970), (472, 13973), (485, 14003), (487, 14006), (490, 14012), (514, 14072), (555, 14162), (565, 14183), (580, 14207), (584, 14222), (597, 14255), (599, 14261), (602, 14285),

Gene: PCoral7\_18 Start: 15883, Stop: 16743, Start Num: 68

Candidate Starts for PCoral7\_18:

(Start: 68 @15883 has 24 MA's), (Start: 84 @15898 has 1 MA's), (104, 15928), (117, 15949), (163, 16039), (203, 16120), (337, 16324), (340, 16327), (481, 16522), (523, 16612), (541, 16654), (571, 16702), (575, 16708),

Gene: PP\_36 Start: 24810, Stop: 25829, Start Num: 95

Candidate Starts for PP\_36:

(Start: 95 @24810 has 1 MA's), (142, 24888), (154, 24909), (167, 24942), (183, 24981), (201, 25011), (277, 25158), (296, 25188), (322, 25230), (402, 25404), (415, 25434), (481, 25584), (505, 25647), (514, 25674), (518, 25686), (528, 25710),

Gene: PSonyx\_16 Start: 16641, Stop: 17522, Start Num: 92

Candidate Starts for PSonyx\_16:

(Start: 92 @16641 has 38 MA's), (243, 16932), (249, 16944), (261, 16968), (310, 17052), (324, 17079), (336, 17103), (352, 17127), (359, 17148), (378, 17166), (394, 17196), (474, 17283), (482, 17310), (528, 17430), (533, 17445), (567, 17484),

Gene: PYPDinur\_17 Start: 15692, Stop: 16579, Start Num: 93

Candidate Starts for PYPDinur\_17:

(Start: 93 @15692 has 72 MA's), (111, 15716), (125, 15743), (127, 15746), (136, 15761), (154, 15794), (201, 15890), (277, 16025), (282, 16034), (320, 16094), (322, 16097), (360, 16175), (378, 16190), (390, 16214), (415, 16247), (455, 16283), (467, 16307), (474, 16325), (476, 16334), (493, 16376), (501, 16403), (518, 16451), (531, 16478), (585, 16562),

Gene: Pace1224\_17 Start: 15628, Stop: 16848, Start Num: 25

Candidate Starts for Pace1224\_17:

(5, 15304), (Start: 25 @15628 has 1 MA's), (Start: 30 @15664 has 217 MA's), (61, 15790), (110, 15850), (119, 15874), (144, 15916), (145, 15919), (161, 15949), (195, 16021), (207, 16045), (218, 16060), (219, 16066), (238, 16105), (241, 16111), (322, 16255), (329, 16273), (341, 16294), (344, 16300), (356, 16324), (368, 16360), (471, 16525), (487, 16567), (490, 16573), (569, 16744), (597, 16810),

Gene: PackMan\_28 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for PackMan\_28:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: Padfoot\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Padfoot\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Padpat\_22 Start: 16011, Stop: 17147, Start Num: 30

Candidate Starts for Padpat\_22:

(Start: 30 @16011 has 217 MA's), (61, 16128), (119, 16218), (132, 16239), (144, 16260), (159, 16287), (292, 16542), (340, 16623), (371, 16698), (389, 16713), (471, 16824), (487, 16866), (524, 16959), (533, 16983), (584, 17076), (599, 17115), (601, 17133),

Gene: PainterBoy\_28 Start: 19862, Stop: 20878, Start Num: 97

Candidate Starts for PainterBoy\_28:

(Start: 97 @19862 has 272 MA's), (110, 19880), (152, 19955), (183, 20030), (225, 20093), (296, 20237), (320, 20276), (322, 20279), (361, 20366), (476, 20618), (481, 20633), (497, 20669), (518, 20735), (527, 20753), (528, 20759),

Gene: Paito\_17 Start: 15610, Stop: 16782, Start Num: 30

Candidate Starts for Paito\_17:

(Start: 30 @15610 has 217 MA's), (61, 15730), (75, 15748), (110, 15799), (119, 15823), (142, 15862), (157, 15889), (192, 15967), (195, 15970), (206, 15991), (241, 16045), (280, 16120), (337, 16222), (344, 16234), (451, 16429), (471, 16459), (479, 16477), (518, 16579), (597, 16744),

Gene: Paola\_20 Start: 16323, Stop: 17453, Start Num: 36

Candidate Starts for Paola\_20:

(Start: 36 @16323 has 22 MA's), (142, 16563), (144, 16566), (159, 16593), (206, 16692), (262, 16794), (292, 16848), (312, 16878), (330, 16914), (333, 16917), (337, 16926), (369, 17001), (371, 17004), (427, 17082), (451, 17100), (454, 17106), (471, 17130), (472, 17133), (474, 17139), (487, 17172), (584, 17382), (599, 17421), (601, 17439),

Gene: Parada\_21 Start: 16293, Stop: 17354, Start Num: 60

Candidate Starts for Parada\_21:

(Start: 60 @16293 has 18 MA's), (Start: 94 @16338 has 30 MA's), (111, 16368), (167, 16476), (245, 16626), (265, 16674), (315, 16758), (321, 16767), (345, 16809), (443, 16986), (459, 17019), (479, 17055), (567, 17250), (598, 17322), (599, 17325),

Gene: Paries\_36 Start: 30450, Stop: 31406, Start Num: 78

Candidate Starts for Paries\_36:

(Start: 78 @30450 has 51 MA's), (175, 30636), (180, 30648), (196, 30675), (211, 30696), (248, 30756), (297, 30843), (299, 30846), (322, 30882), (343, 30915), (352, 30930), (356, 30942), (376, 30972), (384, 30978), (415, 31038), (471, 31128), (504, 31218), (512, 31242), (516, 31254), (542, 31320), (569, 31359), (576, 31371),

Gene: Partridge\_22 Start: 15513, Stop: 16385, Start Num: 103

Candidate Starts for Partridge\_22:

(Start: 103 @15513 has 85 MA's), (121, 15552), (165, 15639), (198, 15708), (246, 15786), (322, 15924), (486, 16149), (496, 16167), (518, 16236), (587, 16374),

Gene: Patio\_43 Start: 29772, Stop: 30689, Start Num: 76

Candidate Starts for Patio\_43:

(Start: 76 @29772 has 24 MA's), (130, 29850), (167, 29925), (241, 30033), (285, 30117), (383, 30297), (387, 30303), (505, 30519), (524, 30558), (563, 30633), (571, 30645), (576, 30654), (583, 30675),

Gene: Patt\_23 Start: 17231, Stop: 18364, Start Num: 30

Candidate Starts for Patt\_23:

(Start: 30 @17231 has 217 MA's), (37, 17249), (Start: 51 @17321 has 2 MA's), (61, 17351), (119, 17441), (125, 17450), (144, 17483), (157, 17507), (207, 17612), (292, 17765), (334, 17834), (337, 17840), (427, 17993), (451, 18011), (471, 18041), (487, 18083), (488, 18086), (580, 18278), (584, 18293), (599, 18332), (601, 18350),

Gene: Peanam\_22 Start: 15375, Stop: 16514, Start Num: 30

Candidate Starts for Peanam\_22:

(Start: 30 @15375 has 217 MA's), (61, 15495), (119, 15585), (159, 15654), (206, 15753), (207, 15756), (262, 15855), (292, 15909), (340, 15990), (371, 16065), (389, 16080), (454, 16167), (471, 16191), (487, 16233), (488, 16236), (509, 16287), (524, 16326), (569, 16410), (580, 16428), (584, 16443), (599, 16482), (601, 16500),

Gene: Peeb\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Peeb\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Peel\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Peel\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: PegLeg\_27 Start: 21456, Stop: 22367, Start Num: 91

Candidate Starts for PegLeg\_27:

(Start: 91 @21456 has 19 MA's), (147, 21558), (157, 21576), (163, 21591), (201, 21663), (206, 21672), (252, 21750), (318, 21885), (320, 21888), (322, 21891), (356, 21960), (385, 22002), (390, 22008), (483, 22149), (493, 22170), (498, 22182), (561, 22305), (567, 22317),

Gene: Periodt\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Periodt\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Periwinkle\_21 Start: 15973, Stop: 16896, Start Num: 99

Candidate Starts for Periwinkle\_21:

(Start: 99 @15973 has 15 MA's), (Start: 102 @15976 has 6 MA's), (111, 15988), (121, 16006), (145, 16051), (163, 16090), (180, 16129), (203, 16162), (206, 16168), (244, 16237), (273, 16291), (276, 16294), (277, 16297), (285, 16309), (302, 16333), (306, 16339), (316, 16357), (352, 16411), (356, 16423), (358, 16429), (374, 16450), (404, 16495), (405, 16498), (410, 16516), (415, 16522), (424, 16537), (426, 16540), (502, 16693), (503, 16696), (505, 16702), (518, 16735), (527, 16753), (538, 16786), (571, 16837), (579, 16852), (592, 16888),



Gene: Petersenfast\_26 Start: 19733, Stop: 20755, Start Num: 97

Candidate Starts for Petersenfast\_26:

(Start: 97 @19733 has 272 MA's), (127, 19790), (163, 19865), (232, 19994), (261, 20054), (293, 20114), (296, 20120), (322, 20162), (344, 20207), (347, 20213), (382, 20297), (402, 20330), (518, 20612), (522, 20621), (528, 20636), (565, 20702),

Gene: PeteyPab\_32 Start: 28461, Stop: 29327, Start Num: 66

Candidate Starts for PeteyPab\_32:

(Start: 66 @28461 has 8 MA's), (85, 28485), (113, 28530), (142, 28590), (162, 28629), (209, 28725), (316, 28887), (335, 28920), (383, 28995), (402, 29019), (507, 29160), (524, 29196), (534, 29223), (569, 29280),

Gene: Petra\_20 Start: 16194, Stop: 17054, Start Num: 70

Candidate Starts for Petra\_20:

(Start: 65 @16188 has 6 MA's), (Start: 70 @16194 has 27 MA's), (143, 16311), (163, 16350), (203, 16431), (274, 16530), (340, 16638), (400, 16722), (451, 16788), (454, 16794), (523, 16923), (541, 16965),

Gene: PetterN\_24 Start: 17936, Stop: 18949, Start Num: 103

Candidate Starts for PetterN\_24:

(Start: 103 @17936 has 85 MA's), (165, 18065), (167, 18068), (183, 18107), (274, 18272), (293, 18302), (296, 18308), (308, 18326), (322, 18350), (342, 18392), (518, 18806), (565, 18896),

Gene: Ph8s\_28 Start: 17912, Stop: 18922, Start Num: 97

Candidate Starts for Ph8s\_28:

(Start: 97 @17912 has 272 MA's), (142, 17987), (152, 18005), (167, 18041), (296, 18287), (320, 18326), (322, 18329), (382, 18464), (430, 18557), (446, 18590), (497, 18713), (506, 18743), (518, 18779), (528, 18803),

Gene: Phabuloso\_19 Start: 15505, Stop: 16425, Start Num: 102

Candidate Starts for Phabuloso\_19:

(Start: 99 @15502 has 15 MA's), (Start: 102 @15505 has 6 MA's), (111, 15517), (121, 15535), (145, 15580), (163, 15619), (180, 15658), (203, 15691), (206, 15697), (244, 15766), (273, 15820), (276, 15823), (277, 15826), (285, 15838), (298, 15856), (302, 15862), (306, 15868), (316, 15886), (352, 15940), (356, 15952), (358, 15958), (374, 15979), (405, 16027), (410, 16045), (415, 16051), (424, 16066), (426, 16069), (502, 16222), (503, 16225), (505, 16231), (518, 16264), (527, 16282), (538, 16315), (571, 16366), (579, 16381), (592, 16417),

Gene: Phaded\_30 Start: 21122, Stop: 22138, Start Num: 97

Candidate Starts for Phaded\_30:

(Start: 97 @21122 has 272 MA's), (142, 21197), (152, 21215), (183, 21290), (261, 21431), (274, 21461), (296, 21497), (322, 21539), (362, 21629), (376, 21665), (382, 21680), (446, 21806), (481, 21893), (518, 21995), (528, 22019),

Gene: Phaeder\_28 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for Phaeder\_28:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: PhailMary\_21 Start: 15802, Stop: 16674, Start Num: 103

Candidate Starts for PhailMary\_21:

(Start: 103 @15802 has 85 MA's), (121, 15841), (165, 15928), (198, 15997), (246, 16075), (258, 16102), (322, 16213), (392, 16309), (486, 16438), (496, 16456), (518, 16525), (587, 16663),

Gene: Pharaoh\_27 Start: 20243, Stop: 21259, Start Num: 97

Candidate Starts for Pharaoh\_27:

(45, 20123), (Start: 97 @20243 has 272 MA's), (152, 20336), (167, 20372), (183, 20411), (189, 20423), (240, 20507), (293, 20612), (296, 20618), (320, 20657), (322, 20660), (368, 20768), (376, 20786), (477, 21002), (518, 21116),

Gene: Pharb\_21 Start: 16291, Stop: 17427, Start Num: 30

Candidate Starts for Pharb\_21:

(Start: 30 @16291 has 217 MA's), (61, 16414), (75, 16432), (Start: 105 @16477 has 2 MA's), (110, 16483), (125, 16513), (144, 16546), (195, 16651), (206, 16672), (209, 16678), (244, 16735), (262, 16774), (280, 16804), (330, 16891), (352, 16927), (451, 17074), (471, 17104), (474, 17113), (487, 17146), (488, 17149), (490, 17152), (514, 17212), (524, 17239), (571, 17326), (595, 17383), (597, 17389), (599, 17395),

Gene: Phauci\_25 Start: 24740, Stop: 25726, Start Num: 64

Candidate Starts for Phauci\_25:

(Start: 64 @24740 has 25 MA's), (142, 24863), (161, 24899), (186, 24959), (240, 25055), (296, 25166), (311, 25187), (363, 25289), (396, 25325), (515, 25541), (517, 25547), (523, 25562), (529, 25577), (544, 25613), (564, 25646), (566, 25649), (598, 25715),

Gene: PhelpsODU\_21 Start: 15233, Stop: 16372, Start Num: 30

Candidate Starts for PhelpsODU\_21:

(Start: 30 @15233 has 217 MA's), (61, 15353), (119, 15443), (159, 15512), (262, 15713), (292, 15767), (312, 15797), (389, 15938), (426, 15998), (451, 16019), (471, 16049), (487, 16091), (488, 16094), (490, 16097), (524, 16184), (533, 16208), (580, 16286), (584, 16301), (599, 16340), (601, 16358),

Gene: Phendrix\_86 Start: 51239, Stop: 52195, Start Num: 62

Candidate Starts for Phendrix\_86:

(Start: 62 @51239 has 2 MA's), (Start: 93 @51278 has 72 MA's), (147, 51383), (159, 51404), (178, 51455), (182, 51461), (202, 51494), (291, 51662), (311, 51692), (415, 51872), (457, 51926), (473, 51947), (488, 51986), (490, 51989), (502, 52016), (503, 52019), (505, 52025), (517, 52052), (527, 52070), (540, 52109), (568, 52154), (572, 52160), (574, 52163),

Gene: Phillis\_23 Start: 17609, Stop: 18631, Start Num: 103

Candidate Starts for Phillis\_23:

(Start: 103 @17609 has 85 MA's), (163, 17732), (165, 17738), (201, 17810), (261, 17915), (271, 17942), (322, 18032), (376, 18152), (413, 18233), (429, 18263), (430, 18266), (514, 18476), (529, 18515), (555, 18563), (565, 18578),

Gene: Phinally\_32 Start: 28148, Stop: 29134, Start Num: 64

Candidate Starts for Phinally\_32:

(Start: 64 @28148 has 25 MA's), (142, 28271), (161, 28307), (186, 28367), (240, 28463), (296, 28574), (311, 28595), (363, 28697), (371, 28718), (396, 28733), (426, 28790), (471, 28841), (515, 28949), (517, 28955), (523, 28970), (530, 28988), (544, 29021), (564, 29054), (566, 29057), (598, 29123),

Gene: PhinkBoden\_47 Start: 29095, Stop: 29976, Start Num: 72

Candidate Starts for PhinkBoden\_47:

(Start: 72 @29095 has 12 MA's), (106, 29143), (119, 29170), (160, 29242), (187, 29308), (206, 29338), (282, 29446), (337, 29539), (352, 29563), (357, 29578), (427, 29674), (471, 29722), (552, 29902), (573, 29938),

Gene: Phish\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Phish\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Phishy\_21 Start: 17919, Stop: 18779, Start Num: 70

Candidate Starts for Phishy\_21:

(Start: 70 @17919 has 27 MA's), (74, 17925), (98, 17961), (101, 17964), (157, 18063), (185, 18132), (196, 18147), (203, 18159), (271, 18255), (274, 18258), (278, 18267), (285, 18279), (292, 18294), (363, 18423), (469, 18543), (481, 18564), (543, 18705),

Gene: Phistory\_20 Start: 16280, Stop: 17203, Start Num: 99

Candidate Starts for Phistory\_20:

(Start: 99 @16280 has 15 MA's), (Start: 102 @16283 has 6 MA's), (111, 16295), (121, 16313), (145, 16358), (163, 16397), (180, 16436), (203, 16469), (206, 16475), (244, 16544), (273, 16598), (276, 16601), (277, 16604), (285, 16616), (306, 16646), (316, 16664), (352, 16718), (356, 16730), (358, 16736), (374, 16757), (405, 16805), (410, 16823), (415, 16829), (424, 16844), (426, 16847), (502, 17000), (503, 17003), (505, 17009), (518, 17042), (527, 17060), (538, 17093), (571, 17144), (579, 17159), (592, 17195),

Gene: Phlei\_22 Start: 20737, Stop: 21756, Start Num: 97

Candidate Starts for Phlei\_22:

(Start: 97 @20737 has 272 MA's), (152, 20833), (206, 20947), (277, 21085), (293, 21109), (296, 21115), (322, 21157), (342, 21199), (348, 21211), (362, 21247), (382, 21298), (402, 21331), (421, 21370), (522, 21622), (528, 21637), (565, 21703),

Gene: Phlop\_30 Start: 25004, Stop: 25948, Start Num: 83

Candidate Starts for Phlop\_30:

(Start: 83 @25004 has 29 MA's), (142, 25109), (173, 25178), (175, 25184), (185, 25208), (196, 25223), (415, 25583), (424, 25598), (440, 25616), (486, 25718), (504, 25760), (516, 25796), (563, 25892), (588, 25943),

Gene: Phlorence\_23 Start: 18754, Stop: 19767, Start Num: 103

Candidate Starts for Phlorence\_23:

(Start: 103 @18754 has 85 MA's), (152, 18850), (165, 18883), (167, 18886), (183, 18925), (210, 18973), (296, 19126), (308, 19144), (322, 19168), (342, 19210), (481, 19522), (518, 19624), (529, 19651), (565, 19714),

Gene: Phomeo\_39 Start: 29529, Stop: 30470, Start Num: 76

Candidate Starts for Phomeo\_39:

(Start: 76 @29529 has 24 MA's), (130, 29616), (167, 29691), (198, 29757), (241, 29799), (269, 29856), (387, 30069), (406, 30096), (471, 30207), (524, 30339), (576, 30435),

Gene: Phonnegut\_28 Start: 20560, Stop: 21573, Start Num: 97

Candidate Starts for Phonnegut\_28:

(Start: 97 @20560 has 272 MA's), (110, 20578), (142, 20635), (152, 20653), (167, 20689), (261, 20869), (277, 20905), (296, 20935), (322, 20977), (397, 21136), (464, 21280), (486, 21343), (514, 21418), (518, 21430), (528, 21454),

Gene: PhorbesPhlower\_17 Start: 14248, Stop: 15156, Start Num: 92

Candidate Starts for PhorbesPhlower\_17:

(Start: 92 @14248 has 38 MA's), (Start: 122 @14299 has 5 MA's), (178, 14419), (195, 14443), (204, 14455), (206, 14458), (247, 14521), (339, 14650), (355, 14677), (372, 14704), (374, 14710), (376, 14713), (426, 14800), (475, 14905), (493, 14932), (497, 14941), (498, 14944), (503, 14959), (518, 15004), (522, 15013),

Gene: Phrank\_21 Start: 15187, Stop: 16326, Start Num: 30

Candidate Starts for Phrank\_21:

(Start: 30 @15187 has 217 MA's), (61, 15307), (119, 15397), (159, 15466), (262, 15667), (389, 15892), (426, 15952), (451, 15973), (487, 16045), (488, 16048), (490, 16051), (524, 16138), (533, 16162), (580, 16240), (584, 16255), (599, 16294), (601, 16312),

Gene: Phrankenstein\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Phrankenstein\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: Phreak\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Phreak\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: PhrostedPhlake\_19 Start: 16169, Stop: 17029, Start Num: 70

Candidate Starts for PhrostedPhlake\_19:

(Start: 65 @16163 has 6 MA's), (Start: 70 @16169 has 27 MA's), (163, 16325), (203, 16406), (274, 16505), (340, 16613), (400, 16697), (451, 16763), (454, 16769), (523, 16898), (533, 16925), (541, 16940),

Gene: Piatt\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Piatt\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: PickleBack\_23 Start: 18468, Stop: 19481, Start Num: 103

Candidate Starts for PickleBack\_23:

(Start: 103 @18468 has 85 MA's), (152, 18564), (165, 18597), (167, 18600), (183, 18639), (210, 18687), (296, 18840), (308, 18858), (322, 18882), (342, 18924), (481, 19236), (518, 19338), (529, 19365), (565, 19428),

Gene: Pimento\_22 Start: 15990, Stop: 17051, Start Num: 60

Candidate Starts for Pimento\_22:

(Start: 60 @15990 has 18 MA's), (Start: 94 @16035 has 30 MA's), (111, 16065), (167, 16173), (245, 16323), (265, 16371), (315, 16455), (321, 16464), (345, 16506), (443, 16683), (479, 16752), (567, 16947), (598, 17019), (599, 17022),

Gene: PinkCoffee\_32 Start: 25643, Stop: 26587, Start Num: 83

Candidate Starts for PinkCoffee\_32:

(Start: 83 @25643 has 29 MA's), (142, 25748), (173, 25817), (175, 25823), (185, 25847), (196, 25862), (415, 26222), (424, 26237), (440, 26255), (486, 26357), (504, 26399), (516, 26435), (563, 26531),

(588, 26582),

Gene: PinkYoshi\_17 Start: 15468, Stop: 16640, Start Num: 30

Candidate Starts for PinkYoshi\_17:

(6, 15135), (Start: 30 @15468 has 217 MA's), (61, 15588), (75, 15606), (Start: 105 @15651 has 2 MA's), (110, 15657), (142, 15720), (161, 15756), (192, 15825), (195, 15828), (206, 15849), (241, 15903), (262, 15948), (280, 15978), (337, 16080), (344, 16092), (352, 16104), (358, 16122), (451, 16287), (471, 16317), (479, 16335), (487, 16359), (534, 16479), (584, 16569), (597, 16602),

Gene: Pinnie\_18 Start: 16180, Stop: 17358, Start Num: 30

Candidate Starts for Pinnie\_18:

(Start: 30 @16180 has 217 MA's), (75, 16324), (110, 16375), (144, 16441), (145, 16444), (161, 16474), (195, 16546), (238, 16615), (241, 16621), (315, 16756), (344, 16810), (368, 16870), (437, 16978), (471, 17035), (487, 17077), (567, 17251), (569, 17254), (597, 17320),

Gene: Pioneer\_28 Start: 20560, Stop: 21573, Start Num: 97

Candidate Starts for Pioneer\_28:

(Start: 97 @20560 has 272 MA's), (110, 20578), (142, 20635), (152, 20653), (167, 20689), (261, 20869), (277, 20905), (296, 20935), (322, 20977), (397, 21136), (464, 21280), (486, 21343), (514, 21418), (518, 21430), (528, 21454),

Gene: Pipp\_18 Start: 15781, Stop: 16647, Start Num: 65

Candidate Starts for Pipp\_18:

(Start: 65 @15781 has 6 MA's), (Start: 70 @15787 has 27 MA's), (Start: 84 @15802 has 1 MA's), (163, 15943), (203, 16024), (340, 16231), (400, 16315), (451, 16381), (481, 16426), (523, 16516), (533, 16543), (541, 16558),

Gene: Piro94\_28 Start: 19659, Stop: 20675, Start Num: 97

Candidate Starts for Piro94\_28:

(Start: 97 @19659 has 272 MA's), (142, 19734), (152, 19752), (167, 19788), (183, 19827), (277, 20004), (296, 20034), (320, 20073), (322, 20076), (518, 20532), (528, 20556),

Gene: Pixie\_21 Start: 16222, Stop: 17358, Start Num: 30

Candidate Starts for Pixie\_21:

(Start: 30 @16222 has 217 MA's), (61, 16345), (Start: 105 @16408 has 2 MA's), (110, 16414), (125, 16444), (144, 16477), (195, 16582), (206, 16603), (209, 16609), (244, 16666), (262, 16705), (280, 16735), (330, 16822), (352, 16858), (361, 16885), (451, 17005), (471, 17035), (474, 17044), (487, 17077), (488, 17080), (490, 17083), (524, 17170), (571, 17257), (597, 17320), (599, 17326),

Gene: Plagueis\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Plagueis\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Pleakley\_49 Start: 29758, Stop: 30678, Start Num: 76

Candidate Starts for Pleakley\_49:

(Start: 76 @29758 has 24 MA's), (130, 29839), (167, 29914), (190, 29965), (269, 30079), (383, 30286), (524, 30547), (559, 30610), (576, 30643),

Gene: Pmask\_30 Start: 18960, Stop: 19973, Start Num: 97

Candidate Starts for Pmask\_30:

(Start: 97 @18960 has 272 MA's), (127, 19014), (152, 19053), (201, 19158), (277, 19305), (296, 19335), (320, 19374), (322, 19377), (344, 19422), (368, 19482), (464, 19680), (518, 19830), (522, 19839),

Gene: Poise\_49 Start: 25756, Stop: 26718, Start Num: 94

Candidate Starts for Poise\_49:

(Start: 94 @25756 has 30 MA's), (163, 25888), (173, 25912), (178, 25921), (181, 25927), (184, 25936), (201, 25960), (206, 25969), (213, 25981), (216, 25993), (271, 26107), (312, 26188), (322, 26203), (324, 26209), (385, 26317), (476, 26443), (478, 26449), (536, 26599), (539, 26605), (548, 26617), (550, 26620), (593, 26707), (594, 26710), (596, 26713),

Gene: Pokerus\_21 Start: 15968, Stop: 17104, Start Num: 30

Candidate Starts for Pokerus\_21:

(Start: 30 @15968 has 217 MA's), (61, 16085), (119, 16175), (132, 16196), (144, 16217), (159, 16244), (292, 16499), (340, 16580), (371, 16655), (389, 16670), (471, 16781), (487, 16823), (524, 16916), (533, 16940), (584, 17033), (599, 17072), (601, 17090),

Gene: Pollux\_19 Start: 16661, Stop: 17569, Start Num: 92

Candidate Starts for Pollux\_19:

(Start: 92 @16661 has 38 MA's), (126, 16718), (190, 16853), (203, 16868), (204, 16871), (236, 16922), (316, 17030), (346, 17078), (358, 17102), (372, 17120), (374, 17126), (400, 17162), (475, 17318), (493, 17345), (498, 17357), (503, 17372), (518, 17417), (527, 17435), (529, 17444), (544, 17480), (547, 17483), (567, 17519), (571, 17525), (575, 17531),

Gene: Polyphemus\_29 Start: 18958, Stop: 19971, Start Num: 97

Candidate Starts for Polyphemus\_29:

(Start: 97 @18958 has 272 MA's), (127, 19012), (152, 19051), (201, 19156), (277, 19303), (296, 19333), (320, 19372), (322, 19375), (344, 19420), (368, 19480), (464, 19678), (518, 19828), (522, 19837),

Gene: Polyuki\_44 Start: 30428, Stop: 31354, Start Num: 73

Candidate Starts for Polyuki\_44:

(Start: 73 @30428 has 5 MA's), (Start: 105 @30464 has 2 MA's), (167, 30581), (183, 30620), (195, 30638), (241, 30689), (292, 30788), (338, 30863), (343, 30872), (377, 30947), (387, 30968), (471, 31106), (487, 31142), (504, 31181), (524, 31223), (559, 31286), (576, 31319),

Gene: Pomar16\_30 Start: 19083, Stop: 20093, Start Num: 97

Candidate Starts for Pomar16\_30:

(Start: 97 @19083 has 272 MA's), (127, 19137), (142, 19158), (152, 19176), (240, 19347), (296, 19458), (320, 19497), (322, 19500), (344, 19545), (486, 19863), (514, 19938), (518, 19950), (528, 19974), (565, 20040),

Gene: Pons\_17 Start: 14462, Stop: 15418, Start Num: 97

Candidate Starts for Pons\_17:

(Start: 97 @14462 has 272 MA's), (125, 14507), (163, 14591), (185, 14645), (206, 14672), (240, 14723), (241, 14726), (244, 14732), (246, 14735), (281, 14804), (306, 14849), (320, 14873), (358, 14939), (415, 15035), (502, 15218), (503, 15221), (513, 15251), (516, 15260), (538, 15317), (571, 15368), (587, 15404), (589, 15410),

Gene: Pochiewood\_17 Start: 15865, Stop: 16746, Start Num: 93

Candidate Starts for Pochiewood\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347,

16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: Portcullis\_30 Start: 24953, Stop: 25897, Start Num: 83

Candidate Starts for Portcullis\_30:

(Start: 83 @24953 has 29 MA's), (142, 25058), (173, 25127), (175, 25133), (185, 25157), (196, 25172), (415, 25532), (424, 25547), (440, 25565), (486, 25667), (504, 25709), (516, 25745), (563, 25841), (588, 25892),

Gene: Posh\_19 Start: 16625, Stop: 17533, Start Num: 92

Candidate Starts for Posh\_19:

(Start: 92 @16625 has 38 MA's), (126, 16682), (190, 16817), (203, 16832), (204, 16835), (236, 16886), (287, 16955), (316, 16994), (346, 17042), (358, 17066), (372, 17084), (374, 17090), (400, 17126), (475, 17282), (493, 17309), (498, 17321), (503, 17336), (518, 17381), (527, 17399), (529, 17408), (544, 17444), (547, 17447), (567, 17483), (571, 17489), (575, 17495),

Gene: PotPie\_17 Start: 15327, Stop: 16283, Start Num: 97

Candidate Starts for PotPie\_17:

(Start: 97 @15327 has 272 MA's), (125, 15372), (152, 15429), (163, 15456), (185, 15510), (206, 15537), (240, 15588), (241, 15591), (244, 15597), (246, 15600), (273, 15654), (281, 15669), (306, 15714), (320, 15738), (333, 15753), (358, 15804), (415, 15900), (503, 16086), (513, 16116), (516, 16125), (538, 16182), (571, 16233), (587, 16269), (589, 16275),

Gene: PotatoChip\_33 Start: 28463, Stop: 29329, Start Num: 66

Candidate Starts for PotatoChip\_33:

(Start: 66 @28463 has 8 MA's), (85, 28487), (113, 28532), (142, 28592), (162, 28631), (209, 28727), (316, 28889), (335, 28922), (383, 28997), (402, 29021), (507, 29162), (524, 29198), (534, 29225), (569, 29282),

Gene: Poushou\_18 Start: 16550, Stop: 17428, Start Num: 87

Candidate Starts for Poushou\_18:

(Start: 87 @16550 has 10 MA's), (Start: 90 @16553 has 2 MA's), (136, 16637), (201, 16775), (363, 17063),

Gene: Power\_27 Start: 19105, Stop: 20121, Start Num: 97

Candidate Starts for Power\_27:

(Start: 97 @19105 has 272 MA's), (142, 19180), (152, 19198), (167, 19234), (183, 19273), (296, 19480), (320, 19519), (322, 19522), (446, 19789), (486, 19891), (514, 19966), (518, 19978), (565, 20068),

Gene: Priamo\_30 Start: 19009, Stop: 20022, Start Num: 97

Candidate Starts for Priamo\_30:

(Start: 97 @19009 has 272 MA's), (127, 19063), (152, 19102), (167, 19138), (201, 19207), (277, 19354), (296, 19384), (320, 19423), (322, 19426), (344, 19471), (368, 19531), (430, 19657), (464, 19729), (518, 19879), (522, 19888),

Gene: Prinashe11\_24 Start: 18616, Stop: 19629, Start Num: 103

Candidate Starts for Prinashe11\_24:

(Start: 103 @18616 has 85 MA's), (152, 18712), (165, 18745), (167, 18748), (183, 18787), (261, 18922), (293, 18982), (296, 18988), (308, 19006), (322, 19030), (342, 19072), (481, 19384), (518, 19486), (565, 19576),

Gene: PrincePatrick\_18 Start: 15957, Stop: 16817, Start Num: 68

Candidate Starts for PrincePatrick\_18:

(Start: 68 @15957 has 24 MA's), (Start: 84 @15972 has 1 MA's), (104, 16002), (117, 16023), (163, 16113), (203, 16194), (337, 16398), (340, 16401), (481, 16596), (523, 16686), (541, 16728), (571, 16776), (575, 16782),

Gene: Pringar\_49 Start: 26044, Stop: 27006, Start Num: 94

Candidate Starts for Pringar\_49:

(Start: 94 @26044 has 30 MA's), (163, 26176), (173, 26200), (178, 26209), (181, 26215), (184, 26224), (201, 26248), (206, 26257), (213, 26269), (271, 26395), (312, 26476), (322, 26491), (324, 26497), (385, 26605), (476, 26731), (478, 26737), (536, 26887), (539, 26893), (548, 26905), (550, 26908), (593, 26995), (594, 26998), (596, 27001),

Gene: Prithvi\_22 Start: 15985, Stop: 17121, Start Num: 30

Candidate Starts for Prithvi\_22:

(Start: 30 @15985 has 217 MA's), (61, 16102), (119, 16192), (132, 16213), (144, 16234), (159, 16261), (292, 16516), (340, 16597), (371, 16672), (389, 16687), (471, 16798), (487, 16840), (524, 16933), (533, 16957), (584, 17050), (599, 17089), (601, 17107),

Gene: Priya\_28 Start: 20558, Stop: 21571, Start Num: 97

Candidate Starts for Priya\_28:

(Start: 97 @20558 has 272 MA's), (110, 20576), (142, 20633), (152, 20651), (167, 20687), (261, 20867), (277, 20903), (296, 20933), (322, 20975), (397, 21134), (464, 21278), (486, 21341), (514, 21416), (518, 21428), (528, 21452),

Gene: Psycho\_20 Start: 16299, Stop: 17429, Start Num: 36

Candidate Starts for Psycho\_20:

(Start: 36 @16299 has 22 MA's), (Start: 105 @16473 has 2 MA's), (142, 16539), (159, 16569), (206, 16668), (262, 16770), (292, 16824), (312, 16854), (330, 16890), (333, 16893), (337, 16902), (369, 16977), (371, 16980), (405, 17016), (427, 17058), (451, 17076), (454, 17082), (471, 17106), (472, 17109), (487, 17148), (528, 17250), (584, 17358), (599, 17397), (601, 17415),

Gene: PsychoKiller\_17 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for PsychoKiller\_17:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441, 15394), (462, 15439), (475, 15466), (481, 15484), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Pukovnik\_29 Start: 20677, Stop: 21693, Start Num: 97

Candidate Starts for Pukovnik\_29:

(Start: 97 @20677 has 272 MA's), (142, 20752), (152, 20770), (183, 20845), (192, 20860), (261, 20986), (296, 21052), (320, 21091), (322, 21094), (325, 21103), (362, 21184), (382, 21235), (518, 21550), (528, 21574),

Gene: PullumCavea\_30 Start: 25004, Stop: 25948, Start Num: 83

Candidate Starts for PullumCavea\_30:

(Start: 83 @25004 has 29 MA's), (142, 25109), (173, 25178), (175, 25184), (185, 25208), (196, 25223), (415, 25583), (424, 25598), (440, 25616), (486, 25718), (504, 25760), (516, 25796), (563, 25892), (588, 25943),

Gene: Puppies\_17 Start: 14309, Stop: 15142, Start Num: 96

Candidate Starts for Puppies\_17:



(Start: 96 @14309 has 14 MA's), (132, 14378), (175, 14462), (203, 14513), (275, 14621), (330, 14714), (337, 14726), (341, 14732), (389, 14798), (485, 14924), (502, 14951), (503, 14954), (509, 14972), (514, 14987), (529, 15026),

Gene: Pytheas\_19 Start: 16771, Stop: 17679, Start Num: 92

Candidate Starts for Pytheas\_19:

(Start: 92 @16771 has 38 MA's), (126, 16828), (190, 16963), (203, 16978), (204, 16981), (236, 17032), (316, 17140), (346, 17188), (358, 17212), (372, 17230), (374, 17236), (400, 17272), (475, 17428), (493, 17455), (498, 17467), (503, 17482), (518, 17527), (527, 17545), (529, 17554), (544, 17590), (547, 17593), (567, 17629), (571, 17635), (575, 17641),

Gene: Qobbit\_28 Start: 20557, Stop: 21570, Start Num: 97

Candidate Starts for Qobbit\_28:

(Start: 97 @20557 has 272 MA's), (110, 20575), (142, 20632), (152, 20650), (167, 20686), (261, 20866), (277, 20902), (296, 20932), (322, 20974), (397, 21133), (464, 21277), (486, 21340), (514, 21415), (518, 21427), (528, 21451),

Gene: Quasar\_17 Start: 15373, Stop: 16344, Start Num: 97

Candidate Starts for Quasar\_17:

(Start: 97 @15373 has 272 MA's), (125, 15418), (136, 15439), (163, 15502), (173, 15526), (185, 15556), (214, 15595), (240, 15634), (244, 15643), (246, 15646), (279, 15712), (306, 15760), (334, 15802), (358, 15850), (384, 15901), (415, 15961), (424, 15976), (426, 15979), (437, 15997), (441, 16003), (462, 16048), (475, 16075), (481, 16093), (502, 16144), (503, 16147), (513, 16177), (516, 16186), (522, 16201), (547, 16258), (578, 16306), (587, 16330), (589, 16336),

Gene: Quby\_17 Start: 15700, Stop: 16587, Start Num: 93

Candidate Starts for Quby\_17:

(Start: 93 @15700 has 72 MA's), (111, 15724), (125, 15751), (127, 15754), (136, 15769), (154, 15802), (201, 15898), (277, 16033), (282, 16042), (320, 16102), (322, 16105), (360, 16183), (378, 16198), (390, 16222), (455, 16291), (467, 16315), (474, 16333), (493, 16384), (501, 16411), (518, 16459), (531, 16486), (585, 16570),

Gene: QueenB2\_27 Start: 19223, Stop: 20239, Start Num: 97

Candidate Starts for QueenB2\_27:

(Start: 97 @19223 has 272 MA's), (142, 19298), (152, 19316), (167, 19352), (183, 19391), (296, 19598), (320, 19637), (322, 19640), (446, 19907), (486, 20009), (514, 20084), (518, 20096), (565, 20186),

Gene: QueenBeesly\_27 Start: 19105, Stop: 20121, Start Num: 97

Candidate Starts for QueenBeesly\_27:

(Start: 97 @19105 has 272 MA's), (142, 19180), (152, 19198), (167, 19234), (183, 19273), (296, 19480), (320, 19519), (322, 19522), (446, 19789), (486, 19891), (514, 19966), (518, 19978), (565, 20068),

Gene: QuincyRose\_21 Start: 16031, Stop: 17167, Start Num: 30

Candidate Starts for QuincyRose\_21:

(Start: 30 @16031 has 217 MA's), (61, 16148), (119, 16238), (132, 16259), (144, 16280), (159, 16307), (292, 16562), (340, 16643), (371, 16718), (389, 16733), (471, 16844), (487, 16886), (524, 16979), (533, 17003), (584, 17096), (599, 17135), (601, 17153),

Gene: Quokka\_25 Start: 18067, Stop: 19077, Start Num: 97

Candidate Starts for Quokka\_25:

(Start: 97 @18067 has 272 MA's), (127, 18121), (142, 18142), (152, 18160), (183, 18235), (296, 18442), (320, 18481), (322, 18484), (344, 18529), (430, 18712), (446, 18745), (486, 18847), (518, 18934), (565, 19024),

Gene: REQ3\_49 Start: 31366, Stop: 32277, Start Num: 99

Candidate Starts for REQ3\_49:

(Start: 99 @31366 has 15 MA's), (116, 31399), (121, 31411), (163, 31492), (235, 31615), (244, 31633), (261, 31669), (322, 31774), (341, 31813), (419, 31927), (421, 31930), (483, 32029), (518, 32131), (544, 32191), (587, 32266),

Gene: RER2\_15 Start: 12352, Stop: 13224, Start Num: 103

Candidate Starts for RER2\_15:

(Start: 103 @12352 has 85 MA's), (121, 12391), (163, 12472), (165, 12478), (198, 12547), (246, 12625), (274, 12685), (322, 12763), (392, 12859), (486, 12988), (496, 13006), (514, 13063), (518, 13075), (534, 13117), (587, 13213),

Gene: RGL3\_15 Start: 12514, Stop: 13386, Start Num: 103

Candidate Starts for RGL3\_15:

(Start: 103 @12514 has 85 MA's), (133, 12574), (165, 12640), (192, 12697), (198, 12709), (261, 12820), (293, 12877), (322, 12925), (354, 12976), (486, 13150), (498, 13174), (506, 13201), (514, 13225), (518, 13237),

Gene: Rabbitrun\_29 Start: 22682, Stop: 23611, Start Num: 82

Candidate Starts for Rabbitrun\_29:

(Start: 82 @22682 has 1 MA's), (Start: 93 @22697 has 72 MA's), (127, 22754), (142, 22784), (164, 22829), (180, 22862), (201, 22898), (244, 22973), (258, 23003), (260, 23006), (277, 23042), (308, 23105), (310, 23108), (318, 23123), (333, 23153), (341, 23168), (352, 23189), (390, 23249), (394, 23255), (484, 23402), (496, 23426), (514, 23483), (546, 23540), (563, 23564), (573, 23579),

Gene: Rabbs\_17 Start: 15479, Stop: 16657, Start Num: 30

Candidate Starts for Rabbs\_17:

(4, 15083), (6, 15143), (Start: 30 @15479 has 217 MA's), (61, 15605), (75, 15623), (Start: 105 @15668 has 2 MA's), (110, 15674), (142, 15737), (161, 15773), (192, 15842), (195, 15845), (206, 15866), (241, 15920), (280, 15995), (337, 16097), (344, 16109), (451, 16304), (471, 16334), (479, 16352), (487, 16376), (528, 16478), (534, 16496), (584, 16586), (597, 16619),

Gene: Rachaly\_30 Start: 20827, Stop: 21837, Start Num: 97

Candidate Starts for Rachaly\_30:

(Start: 97 @20827 has 272 MA's), (152, 20920), (167, 20956), (183, 20995), (296, 21202), (320, 21241), (322, 21244), (344, 21289), (382, 21379), (430, 21472), (446, 21505), (486, 21607), (514, 21682), (518, 21694), (565, 21784),

Gene: Raela\_49 Start: 26311, Stop: 27273, Start Num: 94

Candidate Starts for Raela\_49:

(Start: 94 @26311 has 30 MA's), (163, 26443), (173, 26467), (178, 26476), (181, 26482), (184, 26491), (201, 26515), (206, 26524), (213, 26536), (271, 26662), (312, 26743), (322, 26758), (324, 26764), (385, 26872), (476, 26998), (478, 27004), (506, 27079), (536, 27154), (539, 27160), (548, 27172), (550, 27175), (593, 27262), (594, 27265), (596, 27268),

Gene: Rahalelujah\_26 Start: 18587, Stop: 19609, Start Num: 97

Candidate Starts for Rahalelujah\_26:

(Start: 97 @18587 has 272 MA's), (110, 18605), (127, 18641), (142, 18662), (152, 18680), (201, 18785), (277, 18932), (296, 18962), (322, 19004), (368, 19109), (391, 19154), (410, 19199), (433,

19250), (435, 19256), (440, 19265), (486, 19379), (506, 19430), (514, 19454), (518, 19466), (565, 19556),

Gene: Ramen\_22 Start: 16017, Stop: 17153, Start Num: 30

Candidate Starts for Ramen\_22:

(Start: 30 @16017 has 217 MA's), (61, 16134), (119, 16224), (132, 16245), (144, 16266), (159, 16293), (292, 16548), (340, 16629), (371, 16704), (389, 16719), (471, 16830), (487, 16872), (524, 16965), (533, 16989), (584, 17082), (599, 17121), (601, 17139),

Gene: RanchParmCat\_20 Start: 14513, Stop: 15472, Start Num: 97

Candidate Starts for RanchParmCat\_20:

(54, 14438), (Start: 97 @14513 has 272 MA's), (111, 14534), (127, 14561), (128, 14564), (241, 14777), (244, 14783), (273, 14840), (305, 14897), (306, 14900), (358, 14990), (401, 15059), (415, 15092), (494, 15251), (502, 15272), (503, 15275), (513, 15305), (516, 15314), (518, 15320), (527, 15338), (538, 15371), (542, 15380), (547, 15386), (579, 15437), (587, 15458), (589, 15464),

Gene: Rando14\_20 Start: 14989, Stop: 16119, Start Num: 36

Candidate Starts for Rando14\_20:

(Start: 36 @14989 has 22 MA's), (75, 15118), (Start: 105 @15163 has 2 MA's), (142, 15229), (144, 15232), (159, 15259), (206, 15358), (262, 15460), (292, 15514), (312, 15544), (330, 15580), (337, 15592), (361, 15643), (369, 15667), (402, 15700), (427, 15748), (454, 15772), (471, 15796), (472, 15799), (487, 15838), (584, 16048), (599, 16087), (601, 16105),

Gene: Rapunzel97\_22 Start: 16018, Stop: 17154, Start Num: 30

Candidate Starts for Rapunzel97\_22:

(Start: 30 @16018 has 217 MA's), (61, 16135), (119, 16225), (132, 16246), (144, 16267), (159, 16294), (292, 16549), (340, 16630), (371, 16705), (389, 16720), (471, 16831), (487, 16873), (524, 16966), (533, 16990), (584, 17083), (599, 17122), (601, 17140),

Gene: Rasputin\_22 Start: 15448, Stop: 16320, Start Num: 103

Candidate Starts for Rasputin\_22:

(Start: 103 @15448 has 85 MA's), (121, 15487), (163, 15568), (165, 15574), (198, 15643), (246, 15721), (258, 15748), (322, 15859), (392, 15955), (486, 16084), (496, 16102), (518, 16171), (587, 16309),

Gene: RayTheFireFly\_18 Start: 16585, Stop: 17532, Start Num: 94

Candidate Starts for RayTheFireFly\_18:

(Start: 94 @16585 has 30 MA's), (195, 16780), (244, 16861), (250, 16873), (289, 16945), (296, 16951), (306, 16966), (358, 17056), (360, 17062), (405, 17125), (415, 17149), (419, 17155), (442, 17191), (475, 17260), (490, 17302), (502, 17329), (518, 17371), (519, 17374), (524, 17386), (547, 17437), (565, 17461), (590, 17515),

Gene: ReMo\_29 Start: 18119, Stop: 19096, Start Num: 100

Candidate Starts for ReMo\_29:

(Start: 100 @18119 has 20 MA's), (163, 18233), (165, 18239), (167, 18242), (286, 18476), (430, 18743), (461, 18797), (518, 18953),

Gene: Red305\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for Red305\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: RedBaron\_18 Start: 14808, Stop: 15779, Start Num: 97

Candidate Starts for RedBaron\_18:

(Start: 97 @14808 has 272 MA's), (125, 14853), (136, 14874), (163, 14937), (173, 14961), (185, 14991), (214, 15030), (240, 15069), (244, 15078), (246, 15081), (279, 15147), (306, 15195), (334, 15237), (358, 15285), (384, 15336), (415, 15396), (424, 15411), (426, 15414), (437, 15432), (441, 15438), (462, 15483), (475, 15510), (481, 15528), (502, 15579), (503, 15582), (513, 15612), (516, 15621), (522, 15636), (547, 15693), (578, 15741), (587, 15765), (589, 15771),

Gene: RedRaider77\_49 Start: 26212, Stop: 27174, Start Num: 94

Candidate Starts for RedRaider77\_49:

(Start: 94 @26212 has 30 MA's), (163, 26344), (173, 26368), (178, 26377), (181, 26383), (184, 26392), (201, 26416), (206, 26425), (213, 26437), (271, 26563), (312, 26644), (322, 26659), (324, 26665), (385, 26773), (476, 26899), (478, 26905), (506, 26980), (536, 27055), (539, 27061), (548, 27073), (550, 27076), (593, 27163), (594, 27166), (596, 27169),

Gene: RedRaider\_47 Start: 31794, Stop: 32711, Start Num: 76

Candidate Starts for RedRaider\_47:

(Start: 76 @31794 has 24 MA's), (130, 31872), (167, 31947), (241, 32055), (285, 32139), (383, 32319), (387, 32325), (505, 32541), (524, 32580), (559, 32643), (563, 32655), (576, 32676), (583, 32697),

Gene: RedRock\_30 Start: 21090, Stop: 22103, Start Num: 97

Candidate Starts for RedRock\_30:

(Start: 97 @21090 has 272 MA's), (110, 21108), (142, 21165), (152, 21183), (167, 21219), (183, 21258), (296, 21465), (320, 21504), (322, 21507), (344, 21552), (430, 21738), (446, 21771), (481, 21858), (518, 21960),

Gene: Refuge\_30 Start: 22099, Stop: 23115, Start Num: 97

Candidate Starts for Refuge\_30:

(Start: 97 @22099 has 272 MA's), (142, 22174), (152, 22192), (167, 22228), (183, 22267), (296, 22474), (320, 22513), (322, 22516), (398, 22681), (421, 22729), (518, 22972),

Gene: Reindeer\_25 Start: 21276, Stop: 22190, Start Num: 89

Candidate Starts for Reindeer\_25:

(Start: 89 @21276 has 1 MA's), (Start: 91 @21279 has 19 MA's), (145, 21378), (147, 21381), (157, 21399), (163, 21414), (201, 21486), (206, 21495), (252, 21573), (274, 21621), (320, 21711), (322, 21714), (329, 21732), (356, 21783), (378, 21807), (385, 21825), (390, 21831), (472, 21936), (483, 21972), (493, 21993), (533, 22101), (561, 22128), (567, 22140),

Gene: Rem711\_24 Start: 17926, Stop: 19032, Start Num: 51

Candidate Starts for Rem711\_24:

(3, 17356), (11, 17629), (49, 17917), (Start: 51 @17926 has 2 MA's), (Start: 71 @17965 has 1 MA's), (211, 18217), (267, 18337), (337, 18451), (347, 18469), (360, 18499), (364, 18511), (460, 18691), (473, 18718), (600, 19018),

Gene: Remus\_29 Start: 18083, Stop: 19060, Start Num: 100

Candidate Starts for Remus\_29:

(Start: 100 @18083 has 20 MA's), (163, 18197), (165, 18203), (167, 18206), (286, 18440), (430, 18707), (461, 18761), (518, 18917),

Gene: Remy19\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Remy19\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Renaissance\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Renaissance\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Reptar3000\_23 Start: 17233, Stop: 18366, Start Num: 30

Candidate Starts for Reptar3000\_23:

(Start: 30 @17233 has 217 MA's), (37, 17251), (Start: 51 @17323 has 2 MA's), (61, 17353), (119, 17443), (125, 17452), (144, 17485), (157, 17509), (207, 17614), (292, 17767), (334, 17836), (337, 17842), (427, 17995), (451, 18013), (471, 18043), (487, 18085), (488, 18088), (584, 18295), (599, 18334), (601, 18352),

Gene: Retro23\_27 Start: 19253, Stop: 20269, Start Num: 97

Candidate Starts for Retro23\_27:

(Start: 97 @19253 has 272 MA's), (142, 19328), (152, 19346), (167, 19382), (183, 19421), (296, 19628), (320, 19667), (322, 19670), (446, 19937), (486, 20039), (514, 20114), (518, 20126), (565, 20216), (567, 20219),

Gene: RexFury\_22 Start: 15511, Stop: 16383, Start Num: 103

Candidate Starts for RexFury\_22:

(Start: 103 @15511 has 85 MA's), (121, 15550), (163, 15631), (165, 15637), (198, 15706), (246, 15784), (274, 15844), (322, 15922), (392, 16018), (486, 16147), (496, 16165), (514, 16222), (518, 16234), (534, 16276), (587, 16372),

Gene: Rey\_31 Start: 22233, Stop: 23144, Start Num: 91

Candidate Starts for Rey\_31:

(Start: 91 @22233 has 19 MA's), (Start: 96 @22242 has 14 MA's), (127, 22296), (147, 22335), (157, 22353), (163, 22368), (198, 22437), (320, 22665), (322, 22668), (385, 22779), (390, 22785), (483, 22926), (497, 22956), (513, 23007), (583, 23130),

Gene: Reyja\_18 Start: 14313, Stop: 15155, Start Num: 96

Candidate Starts for Reyja\_18:

(9, 13857), (13, 13935), (Start: 36 @14133 has 22 MA's), (Start: 72 @14274 has 12 MA's), (Start: 96 @14313 has 14 MA's), (132, 14382), (150, 14412), (162, 14433), (175, 14466), (197, 14508), (198, 14511), (300, 14652), (337, 14718), (425, 14850), (484, 14925), (509, 14979), (524, 15021), (559, 15087), (579, 15126),

Gene: Rhodalysa\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Rhodalysa\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: Ribeye\_34 Start: 29836, Stop: 30792, Start Num: 78

Candidate Starts for Ribeye\_34:

(Start: 78 @29836 has 51 MA's), (157, 29977), (163, 29992), (175, 30022), (180, 30034), (185, 30046), (196, 30061), (206, 30073), (227, 30100), (233, 30115), (248, 30142), (299, 30232), (322, 30268), (356, 30328), (384, 30364), (415, 30424), (471, 30514), (504, 30604), (512, 30628), (516, 30640), (542, 30706), (554, 30721), (569, 30745),

Gene: Richo\_22 Start: 15375, Stop: 16514, Start Num: 30

Candidate Starts for Richo\_22:

(Start: 30 @15375 has 217 MA's), (61, 15495), (119, 15585), (159, 15654), (206, 15753), (207, 15756), (262, 15855), (292, 15909), (340, 15990), (371, 16065), (389, 16080), (454, 16167), (471, 16191), (487, 16233), (488, 16236), (509, 16287), (524, 16326), (569, 16410), (580, 16428), (584, 16443), (599, 16482), (601, 16500),

Gene: Rifter\_30 Start: 18949, Stop: 19965, Start Num: 97

Candidate Starts for Rifter\_30:

(Start: 97 @18949 has 272 MA's), (110, 18967), (127, 19003), (152, 19042), (201, 19147), (296, 19324), (320, 19363), (322, 19366), (361, 19453), (368, 19474), (464, 19672), (518, 19822), (522, 19831), (565, 19912),

Gene: RiverRaider\_34 Start: 28121, Stop: 29080, Start Num: 78

Candidate Starts for RiverRaider\_34:

(Start: 78 @28121 has 51 MA's), (157, 28265), (163, 28280), (175, 28310), (180, 28322), (196, 28349), (206, 28361), (211, 28370), (248, 28430), (299, 28520), (322, 28556), (352, 28604), (356, 28616), (365, 28640), (376, 28646), (415, 28712), (471, 28802), (504, 28892), (512, 28916), (516, 28928), (518, 28934), (528, 28958), (576, 29045),

Gene: RoadKill\_29 Start: 26072, Stop: 27049, Start Num: 64

Candidate Starts for RoadKill\_29:

(Start: 64 @26072 has 25 MA's), (79, 26084), (Start: 96 @26111 has 14 MA's), (119, 26159), (151, 26213), (186, 26291), (240, 26387), (255, 26420), (277, 26459), (352, 26588), (363, 26621), (396, 26657), (504, 26843), (517, 26873), (529, 26900), (544, 26936), (564, 26969), (588, 27017), (598, 27038),

Gene: Roary\_23 Start: 17600, Stop: 18622, Start Num: 103

Candidate Starts for Roary\_23:

(Start: 103 @17600 has 85 MA's), (163, 17723), (165, 17729), (201, 17801), (261, 17906), (271, 17933), (322, 18023), (413, 18224), (429, 18254), (430, 18257), (514, 18467), (529, 18506), (555, 18554), (565, 18569),

Gene: Rofo\_34 Start: 29848, Stop: 30804, Start Num: 78

Candidate Starts for Rofo\_34:

(Start: 78 @29848 has 51 MA's), (175, 30034), (180, 30046), (196, 30073), (211, 30094), (248, 30154), (297, 30241), (299, 30244), (322, 30280), (343, 30313), (352, 30328), (356, 30340), (376, 30370), (384, 30376), (415, 30436), (471, 30526), (504, 30616), (512, 30640), (516, 30652), (542, 30718), (569, 30757), (576, 30769),

Gene: RogerDodger\_33 Start: 25794, Stop: 26726, Start Num: 83

Candidate Starts for RogerDodger\_33:

(Start: 83 @25794 has 29 MA's), (142, 25890), (173, 25959), (175, 25965), (185, 25989), (196, 26004), (322, 26214), (374, 26292), (405, 26337), (415, 26361), (445, 26400), (486, 26496), (504, 26538), (516, 26574), (549, 26649), (563, 26670), (588, 26721),

Gene: Roksolana\_30 Start: 18977, Stop: 19993, Start Num: 97

Candidate Starts for Roksolana\_30:

(Start: 97 @18977 has 272 MA's), (110, 18995), (127, 19031), (152, 19070), (201, 19175), (296, 19352), (320, 19391), (322, 19394), (361, 19481), (368, 19502), (430, 19628), (464, 19700), (518, 19850), (522, 19859), (565, 19940),

Gene: RonRayGun\_18 Start: 16018, Stop: 16983, Start Num: 87

Candidate Starts for RonRayGun\_18:

(Start: 87 @16018 has 10 MA's), (107, 16045), (116, 16063), (208, 16240), (210, 16243), (246, 16318), (277, 16384), (290, 16411), (320, 16468), (324, 16477), (477, 16714), (485, 16738), (522, 16837), (529, 16858), (537, 16879), (562, 16918), (567, 16927),

Gene: Ronaldo\_55 Start: 27945, Stop: 28892, Start Num: 90

Candidate Starts for Ronaldo\_55:

(Start: 90 @27945 has 2 MA's), (Start: 92 @27948 has 38 MA's), (157, 28068), (206, 28164), (265, 28266), (305, 28332), (316, 28353), (320, 28359), (348, 28410), (358, 28434), (415, 28527), (445, 28566), (494, 28677), (497, 28683), (499, 28692), (502, 28698), (513, 28731), (516, 28740), (519, 28749), (527, 28764), (565, 28839), (573, 28851), (579, 28863), (587, 28884),

Gene: Rosalind\_29 Start: 18241, Stop: 19218, Start Num: 100

Candidate Starts for Rosalind\_29:

(Start: 100 @18241 has 20 MA's), (163, 18355), (165, 18361), (167, 18364), (286, 18598), (430, 18865), (461, 18919), (518, 19075),

Gene: Rose5\_17 Start: 15865, Stop: 16746, Start Num: 93

Candidate Starts for Rose5\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: Rosmarinus\_22 Start: 16039, Stop: 17175, Start Num: 30

Candidate Starts for Rosmarinus\_22:

(Start: 30 @16039 has 217 MA's), (61, 16156), (119, 16246), (132, 16267), (144, 16288), (159, 16315), (292, 16570), (340, 16651), (371, 16726), (389, 16741), (471, 16852), (487, 16894), (524, 16987), (533, 17011), (584, 17104), (599, 17143), (601, 17161),

Gene: Rumpelstiltskin\_17 Start: 16080, Stop: 16994, Start Num: 93

Candidate Starts for Rumpelstiltskin\_17:

(Start: 93 @16080 has 72 MA's), (111, 16104), (127, 16134), (189, 16260), (235, 16332), (318, 16485), (320, 16488), (322, 16491), (336, 16521), (363, 16578), (385, 16602), (390, 16608), (455, 16677), (464, 16695), (473, 16716), (498, 16782), (518, 16845), (585, 16974), (591, 16986),

Gene: Ruthiejr\_22 Start: 17121, Stop: 18254, Start Num: 30

Candidate Starts for Ruthiejr\_22:

(Start: 30 @17121 has 217 MA's), (Start: 51 @17211 has 2 MA's), (61, 17241), (119, 17331), (144, 17373), (145, 17376), (151, 17388), (334, 17724), (337, 17730), (369, 17805), (427, 17883), (449, 17898), (471, 17931), (487, 17973), (488, 17976), (527, 18069), (584, 18183), (599, 18222), (601, 18240),

Gene: Ruthy\_18 Start: 15266, Stop: 16327, Start Num: 60

Candidate Starts for Ruthy\_18:

(Start: 60 @15266 has 18 MA's), (119, 15359), (144, 15401), (167, 15449), (207, 15527), (253, 15617), (264, 15641), (265, 15647), (309, 15719), (313, 15728), (315, 15731), (321, 15740), (345, 15782), (402, 15881), (438, 15950), (524, 16145), (567, 16223), (584, 16259), (598, 16295), (599, 16298),

Gene: RyeScarlet\_29 Start: 20531, Stop: 21544, Start Num: 97

Candidate Starts for RyeScarlet\_29:

(Start: 97 @20531 has 272 MA's), (110, 20549), (142, 20606), (152, 20624), (167, 20660), (261, 20840), (277, 20876), (296, 20906), (322, 20948), (397, 21107), (464, 21251), (486, 21314), (514, 21389), (518, 21401), (528, 21425),

Gene: Sachima\_26 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for Sachima\_26:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: Saintus\_23 Start: 17615, Stop: 18637, Start Num: 103

Candidate Starts for Saintus\_23:

(Start: 103 @17615 has 85 MA's), (163, 17738), (165, 17744), (201, 17816), (261, 17921), (271, 17948), (322, 18038), (413, 18239), (429, 18269), (430, 18272), (514, 18482), (529, 18521), (555, 18569), (565, 18584),

Gene: Salvador\_30 Start: 24918, Stop: 25862, Start Num: 83

Candidate Starts for Salvador\_30:

(Start: 83 @24918 has 29 MA's), (142, 25023), (173, 25092), (175, 25098), (185, 25122), (196, 25137), (415, 25497), (424, 25512), (440, 25530), (486, 25632), (504, 25674), (516, 25710), (549, 25785), (563, 25806), (588, 25857),

Gene: Salz\_27 Start: 19727, Stop: 20749, Start Num: 97

Candidate Starts for Salz\_27:

(Start: 97 @19727 has 272 MA's), (127, 19784), (163, 19859), (232, 19988), (261, 20048), (293, 20108), (296, 20114), (322, 20156), (344, 20201), (347, 20207), (382, 20291), (402, 20324), (518, 20606), (522, 20615), (528, 20630), (565, 20696),

Gene: SamScheppers\_21 Start: 17028, Stop: 18161, Start Num: 30

Candidate Starts for SamScheppers\_21:

(Start: 30 @17028 has 217 MA's), (37, 17046), (Start: 51 @17118 has 2 MA's), (61, 17148), (119, 17238), (144, 17280), (157, 17304), (207, 17409), (292, 17562), (334, 17631), (337, 17637), (427, 17790), (451, 17808), (471, 17838), (487, 17880), (488, 17883), (580, 18075), (584, 18090), (599, 18129), (601, 18147),

Gene: Samba\_18 Start: 15871, Stop: 16731, Start Num: 68

Candidate Starts for Samba\_18:

(Start: 68 @15871 has 24 MA's), (163, 16027), (203, 16108), (252, 16165), (255, 16174), (274, 16207), (340, 16315), (400, 16399), (451, 16465), (454, 16471), (523, 16600), (541, 16642),

Gene: Sampson\_34 Start: 29722, Stop: 30699, Start Num: 64

Candidate Starts for Sampson\_34:

(Start: 64 @29722 has 25 MA's), (115, 29797), (119, 29809), (142, 29845), (161, 29881), (212, 29983), (240, 30037), (277, 30109), (312, 30172), (318, 30181), (352, 30238), (363, 30271), (391, 30304), (396, 30307), (426, 30364), (490, 30460), (504, 30493), (507, 30502), (517, 30523), (529, 30550), (536, 30571), (540, 30580), (544, 30586), (564, 30619), (566, 30622), (591, 30676), (598, 30688),

Gene: Samty\_18 Start: 16493, Stop: 17383, Start Num: 93

Candidate Starts for Samty\_18:



(Start: 93 @16493 has 72 MA's), (111, 16517), (136, 16562), (142, 16577), (154, 16598), (201, 16694), (277, 16829), (282, 16838), (320, 16898), (322, 16901), (324, 16907), (360, 16979), (385, 17012), (455, 17087), (477, 17141), (484, 17162), (503, 17213), (518, 17255), (585, 17366), (587, 17369),

Gene: SamuelLPlaqson\_22 Start: 15965, Stop: 17101, Start Num: 30

Candidate Starts for SamuelLPlaqson\_22:

(Start: 30 @15965 has 217 MA's), (61, 16082), (119, 16172), (132, 16193), (144, 16214), (159, 16241), (262, 16442), (292, 16496), (295, 16502), (340, 16577), (371, 16652), (389, 16667), (487, 16820), (524, 16913), (533, 16937), (584, 17030), (599, 17069), (601, 17087),

Gene: Sanjuju\_32 Start: 30017, Stop: 30973, Start Num: 78

Candidate Starts for Sanjuju\_32:

(Start: 78 @30017 has 51 MA's), (175, 30203), (180, 30215), (196, 30242), (211, 30263), (248, 30323), (297, 30410), (299, 30413), (322, 30449), (343, 30482), (352, 30497), (356, 30509), (376, 30539), (384, 30545), (415, 30605), (471, 30695), (504, 30785), (512, 30809), (516, 30821), (542, 30887), (576, 30938),

Gene: Santhid\_17 Start: 14146, Stop: 14988, Start Num: 96

Candidate Starts for Santhid\_17:

(Start: 72 @14107 has 12 MA's), (Start: 96 @14146 has 14 MA's), (132, 14215), (150, 14245), (162, 14266), (175, 14299), (198, 14344), (337, 14551), (425, 14683), (509, 14812), (524, 14854), (557, 14914), (559, 14920), (579, 14959),

Gene: Sapo\_15 Start: 13755, Stop: 14621, Start Num: 69

Candidate Starts for Sapo\_15:

(Start: 69 @13755 has 1 MA's), (98, 13791), (Start: 118 @13827 has 1 MA's), (209, 13995), (211, 13998), (289, 14118), (311, 14148), (340, 14196), (341, 14199), (342, 14202), (355, 14226), (402, 14286), (471, 14373), (556, 14553),

Gene: Saronaya\_33 Start: 28679, Stop: 29635, Start Num: 78

Candidate Starts for Saronaya\_33:

(Start: 78 @28679 has 51 MA's), (157, 28820), (175, 28865), (180, 28877), (185, 28889), (196, 28904), (206, 28916), (227, 28943), (233, 28958), (248, 28985), (299, 29075), (322, 29111), (356, 29171), (384, 29207), (415, 29267), (471, 29357), (504, 29447), (512, 29471), (516, 29483), (542, 29549), (554, 29564), (569, 29588), (576, 29600),

Gene: Sarshaun\_17 Start: 16107, Stop: 17021, Start Num: 93

Candidate Starts for Sarshaun\_17:

(Start: 93 @16107 has 72 MA's), (127, 16161), (189, 16287), (235, 16359), (318, 16512), (320, 16515), (322, 16518), (336, 16548), (363, 16605), (385, 16629), (390, 16635), (455, 16704), (464, 16722), (473, 16743), (493, 16797), (498, 16809), (518, 16872), (585, 17001), (591, 17013),

Gene: Savbucketdawg\_30 Start: 24699, Stop: 25643, Start Num: 83

Candidate Starts for Savbucketdawg\_30:

(Start: 83 @24699 has 29 MA's), (142, 24804), (173, 24873), (175, 24879), (185, 24903), (196, 24918), (415, 25278), (424, 25293), (440, 25311), (486, 25413), (504, 25455), (516, 25491), (563, 25587), (588, 25638),

Gene: Scarlett\_21 Start: 15263, Stop: 16399, Start Num: 30

Candidate Starts for Scarlett\_21:

(Start: 30 @15263 has 217 MA's), (61, 15380), (75, 15398), (132, 15491), (159, 15539), (262, 15740), (292, 15794), (322, 15839), (330, 15860), (358, 15914), (369, 15947), (389, 15965), (487, 16118), (488, 16121), (509, 16172), (524, 16211), (584, 16328), (599, 16367), (601, 16385),

Gene: Scherzo\_28 Start: 20560, Stop: 21573, Start Num: 97

Candidate Starts for Scherzo\_28:

(Start: 97 @20560 has 272 MA's), (110, 20578), (142, 20635), (152, 20653), (167, 20689), (261, 20869), (277, 20905), (296, 20935), (322, 20977), (397, 21136), (464, 21280), (486, 21343), (514, 21418), (518, 21430), (528, 21454),

Gene: Schiebel\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Schiebel\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Schmidt\_19 Start: 13858, Stop: 14700, Start Num: 122

Candidate Starts for Schmidt\_19:

(Start: 120 @13855 has 6 MA's), (Start: 122 @13858 has 5 MA's), (132, 13873), (139, 13879), (166, 13939), (168, 13942), (229, 14056), (234, 14068), (237, 14074), (251, 14101), (322, 14221), (350, 14272), (357, 14290), (396, 14350), (407, 14377), (426, 14410), (503, 14533), (538, 14614), (564, 14659), (570, 14668),

Gene: Schnabeltier\_18 Start: 16103, Stop: 16966, Start Num: 134

Candidate Starts for Schnabeltier\_18:

(38, 15905), (39, 15908), (79, 16022), (Start: 94 @16040 has 30 MA's), (Start: 102 @16049 has 6 MA's), (128, 16091), (Start: 134 @16103 has 1 MA's), (250, 16325), (276, 16370), (289, 16394), (296, 16400), (302, 16409), (306, 16415), (323, 16445), (344, 16475), (358, 16505), (360, 16511), (404, 16571), (405, 16574), (415, 16598), (450, 16655), (462, 16676), (490, 16742), (518, 16811), (587, 16949),

Gene: SchottB\_32 Start: 29694, Stop: 30650, Start Num: 78

Candidate Starts for SchottB\_32:

(Start: 78 @29694 has 51 MA's), (175, 29880), (180, 29892), (185, 29904), (196, 29919), (206, 29931), (227, 29958), (233, 29973), (248, 30000), (299, 30090), (322, 30126), (356, 30186), (365, 30210), (384, 30222), (415, 30282), (471, 30372), (512, 30486), (516, 30498), (542, 30564), (554, 30579), (569, 30603), (576, 30615),

Gene: Scioto\_34 Start: 29777, Stop: 30754, Start Num: 64

Candidate Starts for Scioto\_34:

(Start: 64 @29777 has 25 MA's), (115, 29852), (119, 29864), (142, 29900), (161, 29936), (212, 30038), (240, 30092), (277, 30164), (312, 30227), (318, 30236), (352, 30293), (363, 30326), (391, 30359), (396, 30362), (426, 30419), (490, 30515), (504, 30548), (507, 30557), (517, 30578), (529, 30605), (536, 30626), (540, 30635), (544, 30641), (564, 30674), (566, 30677), (591, 30731), (598, 30743),

Gene: Scorpia\_24 Start: 17939, Stop: 18952, Start Num: 103

Candidate Starts for Scorpia\_24:

(Start: 103 @17939 has 85 MA's), (165, 18068), (167, 18071), (183, 18110), (261, 18245), (274, 18275), (293, 18305), (296, 18311), (308, 18329), (322, 18353), (342, 18395), (518, 18809), (565, 18899),

Gene: Scuba\_49 Start: 29835, Stop: 30755, Start Num: 76

Candidate Starts for Scuba\_49:

(Start: 76 @29835 has 24 MA's), (130, 29916), (167, 29991), (190, 30042), (269, 30156), (383, 30363), (524, 30624), (559, 30687), (576, 30720),

Gene: Sedona\_34 Start: 30954, Stop: 31910, Start Num: 78

Candidate Starts for Sedona\_34:

(Start: 78 @30954 has 51 MA's), (175, 31140), (180, 31152), (196, 31179), (299, 31350), (322, 31386), (343, 31419), (352, 31434), (356, 31446), (376, 31476), (384, 31482), (415, 31542), (471, 31632), (504, 31722), (512, 31746), (516, 31758), (542, 31824), (554, 31839), (569, 31863), (576, 31875),

Gene: SemperFi\_29 Start: 19522, Stop: 20538, Start Num: 97

Candidate Starts for SemperFi\_29:

(Start: 97 @19522 has 272 MA's), (142, 19597), (152, 19615), (167, 19651), (183, 19690), (296, 19897), (320, 19936), (322, 19939), (446, 20206), (486, 20308), (514, 20383), (518, 20395), (565, 20485),

Gene: Sephiroth\_27 Start: 21043, Stop: 21954, Start Num: 93

Candidate Starts for Sephiroth\_27:

(Start: 93 @21043 has 72 MA's), (104, 21058), (258, 21349), (308, 21451), (318, 21469), (322, 21475), (385, 21586), (390, 21592), (419, 21640), (475, 21718), (476, 21721), (477, 21724), (497, 21772), (514, 21826), (531, 21868), (562, 21904), (563, 21907), (573, 21922),

Gene: Serenity\_26 Start: 18134, Stop: 19144, Start Num: 97

Candidate Starts for Serenity\_26:

(Start: 97 @18134 has 272 MA's), (127, 18188), (142, 18209), (152, 18227), (183, 18302), (277, 18479), (296, 18509), (320, 18548), (322, 18551), (344, 18596), (430, 18779), (486, 18914), (514, 18989), (518, 19001),

Gene: SgtBeansprout\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for SgtBeansprout\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: ShaboiShabazz\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for ShaboiShabazz\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Shadow1\_20 Start: 15075, Stop: 16214, Start Num: 30

Candidate Starts for Shadow1\_20:

(Start: 30 @15075 has 217 MA's), (61, 15195), (119, 15285), (159, 15354), (262, 15555), (340, 15690), (341, 15693), (369, 15762), (389, 15780), (426, 15840), (451, 15861), (471, 15891), (487, 15933), (488, 15936), (490, 15939), (524, 16026), (533, 16050), (580, 16128), (584, 16143), (599, 16182), (601, 16200),

Gene: Sham4\_27 Start: 19733, Stop: 20755, Start Num: 97

Candidate Starts for Sham4\_27:

(Start: 97 @19733 has 272 MA's), (127, 19790), (163, 19865), (232, 19994), (261, 20054), (293, 20114), (296, 20120), (322, 20162), (344, 20207), (347, 20213), (382, 20297), (402, 20330), (518, 20612), (522, 20621), (528, 20636), (565, 20702),

Gene: Shaobing\_22 Start: 15375, Stop: 16514, Start Num: 30

Candidate Starts for Shaobing\_22:

(Start: 30 @15375 has 217 MA's), (61, 15495), (119, 15585), (159, 15654), (206, 15753), (207, 15756), (262, 15855), (292, 15909), (340, 15990), (371, 16065), (389, 16080), (454, 16167), (471, 16191), (487, 16233), (488, 16236), (509, 16287), (524, 16326), (569, 16410), (580, 16428), (584, 16443), (599, 16482), (601, 16500),

Gene: ShawBrad\_19 Start: 15516, Stop: 16439, Start Num: 99

Candidate Starts for ShawBrad\_19:

(Start: 99 @15516 has 15 MA's), (Start: 102 @15519 has 6 MA's), (111, 15531), (121, 15549), (145, 15594), (163, 15633), (180, 15672), (203, 15705), (206, 15711), (244, 15780), (276, 15837), (277, 15840), (285, 15852), (302, 15876), (306, 15882), (316, 15900), (352, 15954), (356, 15966), (358, 15972), (374, 15993), (405, 16041), (410, 16059), (415, 16065), (424, 16080), (426, 16083), (502, 16236), (503, 16239), (505, 16245), (518, 16278), (527, 16296), (538, 16329), (571, 16380), (579, 16395), (592, 16431),

Gene: ShayRa\_30 Start: 18241, Stop: 19218, Start Num: 100

Candidate Starts for ShayRa\_30:

(Start: 100 @18241 has 20 MA's), (163, 18355), (165, 18361), (167, 18364), (286, 18598), (430, 18865), (461, 18919), (518, 19075),

Gene: SheaKeira\_27 Start: 18709, Stop: 19731, Start Num: 97

Candidate Starts for SheaKeira\_27:

(Start: 97 @18709 has 272 MA's), (110, 18727), (127, 18763), (142, 18784), (152, 18802), (167, 18838), (232, 18958), (261, 19018), (277, 19054), (296, 19084), (322, 19126), (391, 19276), (433, 19372), (435, 19378), (514, 19576), (518, 19588), (522, 19597), (528, 19612), (565, 19678),

Gene: SheckWes\_16 Start: 14462, Stop: 15418, Start Num: 97

Candidate Starts for SheckWes\_16:

(Start: 97 @14462 has 272 MA's), (125, 14507), (163, 14591), (185, 14645), (206, 14672), (240, 14723), (241, 14726), (244, 14732), (246, 14735), (273, 14789), (281, 14804), (306, 14849), (320, 14873), (333, 14888), (358, 14939), (415, 15035), (502, 15218), (503, 15221), (513, 15251), (516, 15260), (538, 15317), (571, 15368), (587, 15404), (589, 15410),

Gene: ShedlockHolmes\_21 Start: 16440, Stop: 17576, Start Num: 30

Candidate Starts for ShedlockHolmes\_21:

(Start: 30 @16440 has 217 MA's), (61, 16563), (Start: 105 @16626 has 2 MA's), (110, 16632), (125, 16662), (195, 16800), (206, 16821), (209, 16827), (244, 16884), (262, 16923), (280, 16953), (330, 17040), (352, 17076), (451, 17223), (471, 17253), (474, 17262), (487, 17295), (488, 17298), (490, 17301), (524, 17388), (571, 17475), (597, 17538), (599, 17544),

Gene: Sheng711\_17 Start: 15761, Stop: 16579, Start Num: 136

Candidate Starts for Sheng711\_17:

(Start: 93 @15692 has 72 MA's), (111, 15716), (125, 15743), (127, 15746), (136, 15761), (154, 15794), (201, 15890), (277, 16025), (282, 16034), (320, 16094), (322, 16097), (360, 16175), (378, 16190), (390, 16214), (415, 16247), (455, 16283), (467, 16307), (474, 16325), (476, 16334), (493, 16376), (501, 16403), (518, 16451), (531, 16478), (585, 16562),

Gene: ShiaSurprise\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for ShiaSurprise\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Shinji\_30 Start: 24894, Stop: 25838, Start Num: 83

Candidate Starts for Shinji\_30:

(Start: 83 @24894 has 29 MA's), (142, 24999), (173, 25068), (175, 25074), (185, 25098), (196, 25113), (415, 25473), (424, 25488), (440, 25506), (486, 25608), (504, 25650), (516, 25686), (563, 25782), (588, 25833),

Gene: Shivanishola\_35 Start: 29916, Stop: 30872, Start Num: 78

Candidate Starts for Shivanishola\_35:

(Start: 78 @29916 has 51 MA's), (175, 30102), (180, 30114), (196, 30141), (299, 30312), (322, 30348), (343, 30381), (352, 30396), (356, 30408), (376, 30438), (384, 30444), (415, 30504), (471, 30594), (504, 30684), (512, 30708), (516, 30720), (542, 30786), (554, 30801), (569, 30825), (576, 30837),

Gene: Shuman\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Shuman\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (486, 16116), (496, 16134), (518, 16203), (587, 16341),

Gene: SilverChicken\_18 Start: 12813, Stop: 13742, Start Num: 92

Candidate Starts for SilverChicken\_18:

(Start: 92 @12813 has 38 MA's), (128, 12873), (152, 12924), (203, 13023), (206, 13029), (217, 13044), (285, 13164), (298, 13182), (341, 13248), (348, 13260), (373, 13305), (402, 13344), (405, 13350), (415, 13374), (418, 13377), (419, 13380), (424, 13389), (426, 13392), (468, 13458), (475, 13479), (476, 13482), (490, 13518), (502, 13545), (503, 13548), (518, 13587), (527, 13605), (528, 13611), (542, 13647), (547, 13653), (562, 13677), (567, 13683), (571, 13689),

Gene: Silverleaf\_17 Start: 15865, Stop: 16746, Start Num: 93

Candidate Starts for Silverleaf\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: SirPhilip\_21 Start: 14868, Stop: 16001, Start Num: 30

Candidate Starts for SirPhilip\_21:

(Start: 30 @14868 has 217 MA's), (61, 14985), (132, 15096), (159, 15144), (207, 15246), (209, 15249), (262, 15345), (292, 15399), (330, 15462), (337, 15474), (369, 15549), (389, 15567), (427, 15630), (454, 15654), (472, 15681), (487, 15720), (488, 15723), (524, 15813), (571, 15900), (584, 15930), (595, 15957), (599, 15969), (601, 15987),

Gene: Sitar\_34 Start: 31006, Stop: 31962, Start Num: 78

Candidate Starts for Sitar\_34:

(Start: 78 @31006 has 51 MA's), (175, 31192), (180, 31204), (196, 31231), (211, 31252), (248, 31312), (297, 31399), (299, 31402), (322, 31438), (343, 31471), (352, 31486), (356, 31498), (376, 31528), (384, 31534), (415, 31594), (471, 31684), (504, 31774), (512, 31798), (516, 31810), (542, 31876), (576, 31927), (588, 31957),

Gene: Sixama\_98 Start: 58478, Stop: 59413, Start Num: 77

Candidate Starts for Sixama\_98:

(Start: 77 @58478 has 5 MA's), (Start: 89 @58493 has 1 MA's), (Start: 96 @58505 has 14 MA's), (145, 58601), (147, 58604), (159, 58625), (291, 58883), (311, 58913), (323, 58931), (327, 58940), (447, 59126), (473, 59168), (503, 59240), (504, 59243), (505, 59246), (517, 59273), (527, 59291), (533, 59312), (544, 59336), (572, 59381),

Gene: Sizemore\_17 Start: 15478, Stop: 16650, Start Num: 30

Candidate Starts for Sizemore\_17:

(6, 15145), (Start: 30 @15478 has 217 MA's), (61, 15598), (75, 15616), (Start: 105 @15661 has 2 MA's), (110, 15667), (142, 15730), (161, 15766), (192, 15835), (195, 15838), (206, 15859), (241, 15913), (262, 15958), (280, 15988), (337, 16090), (344, 16102), (352, 16114), (358, 16132), (451, 16297), (471, 16327), (479, 16345), (487, 16369), (534, 16489), (584, 16579), (597, 16612),

Gene: SketchMex\_16 Start: 14412, Stop: 15383, Start Num: 97

Candidate Starts for SketchMex\_16:

(Start: 97 @14412 has 272 MA's), (125, 14457), (136, 14478), (163, 14541), (173, 14565), (185, 14595), (240, 14673), (244, 14682), (246, 14685), (279, 14751), (306, 14799), (334, 14841), (352, 14871), (358, 14889), (384, 14940), (415, 15000), (424, 15015), (426, 15018), (441, 15042), (475, 15114), (481, 15132), (502, 15183), (503, 15186), (513, 15216), (516, 15225), (522, 15240), (547, 15297), (578, 15345), (587, 15369), (589, 15375),

Gene: Skinny\_28 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for Skinny\_28:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: Sknot\_28 Start: 19201, Stop: 20217, Start Num: 97

Candidate Starts for Sknot\_28:

(Start: 97 @19201 has 272 MA's), (142, 19276), (152, 19294), (167, 19330), (183, 19369), (277, 19546), (296, 19576), (320, 19615), (322, 19618), (518, 20074), (528, 20098),

Gene: Skysand\_42 Start: 29992, Stop: 30909, Start Num: 76

Candidate Starts for Skysand\_42:

(Start: 76 @29992 has 24 MA's), (130, 30070), (167, 30145), (241, 30253), (285, 30337), (383, 30517), (387, 30523), (505, 30739), (524, 30778), (563, 30853), (571, 30865), (576, 30874), (583, 30895),

Gene: Slarp\_23 Start: 17500, Stop: 18633, Start Num: 30

Candidate Starts for Slarp\_23:

(Start: 30 @17500 has 217 MA's), (37, 17518), (Start: 51 @17590 has 2 MA's), (61, 17620), (119, 17710), (144, 17752), (157, 17776), (207, 17881), (292, 18034), (334, 18103), (337, 18109), (427, 18262), (451, 18280), (471, 18310), (487, 18352), (488, 18355), (584, 18562), (599, 18601), (601, 18619),

Gene: Sleepyhead\_17 Start: 14846, Stop: 15721, Start Num: 179

Candidate Starts for Sleepyhead\_17:

(Start: 118 @14705 has 1 MA's), (124, 14714), (Start: 179 @14846 has 1 MA's), (207, 14897), (210, 14903), (215, 14912), (240, 14972), (401, 15296), (406, 15308), (409, 15320), (418, 15326), (432, 15359), (444, 15380), (466, 15428), (489, 15494), (491, 15497), (495, 15503), (520, 15581), (525, 15596), (571, 15689),

Gene: SlimJimmy\_26 Start: 21443, Stop: 22354, Start Num: 91

Candidate Starts for SlimJimmy\_26:

(Start: 91 @21443 has 19 MA's), (147, 21545), (157, 21563), (163, 21578), (201, 21650), (206, 21659), (252, 21737), (318, 21872), (320, 21875), (322, 21878), (356, 21947), (385, 21989), (390, 21995), (483, 22136), (493, 22157), (498, 22169), (561, 22292), (567, 22304),

Gene: Slimphazie\_22 Start: 16018, Stop: 17154, Start Num: 30

Candidate Starts for Slimphazie\_22:

(Start: 30 @16018 has 217 MA's), (61, 16135), (119, 16225), (132, 16246), (144, 16267), (159, 16294), (292, 16549), (340, 16630), (371, 16705), (389, 16720), (471, 16831), (487, 16873), (524, 16966), (533, 16990), (584, 17083), (599, 17122), (601, 17140),

Gene: Smeadley\_23 Start: 17633, Stop: 18655, Start Num: 103

Candidate Starts for Smeadley\_23:

(Start: 103 @17633 has 85 MA's), (163, 17756), (165, 17762), (201, 17834), (261, 17939), (271, 17966), (322, 18056), (413, 18257), (429, 18287), (430, 18290), (514, 18500), (529, 18539), (555, 18587), (565, 18602),

Gene: Smeagan\_29 Start: 19679, Stop: 20695, Start Num: 97

Candidate Starts for Smeagan\_29:

(Start: 97 @19679 has 272 MA's), (142, 19754), (152, 19772), (167, 19808), (183, 19847), (296, 20054), (320, 20093), (322, 20096), (361, 20183), (446, 20363), (486, 20465), (514, 20540), (518, 20552),

Gene: SmellyB\_30 Start: 18966, Stop: 19979, Start Num: 97

Candidate Starts for SmellyB\_30:

(Start: 97 @18966 has 272 MA's), (127, 19020), (152, 19059), (201, 19164), (277, 19311), (296, 19341), (320, 19380), (322, 19383), (344, 19428), (368, 19488), (464, 19686), (518, 19836), (522, 19845),

Gene: SmokingBunny\_30 Start: 24909, Stop: 25853, Start Num: 83

Candidate Starts for SmokingBunny\_30:

(Start: 83 @24909 has 29 MA's), (142, 25014), (173, 25083), (175, 25089), (185, 25113), (196, 25128), (415, 25488), (424, 25503), (440, 25521), (486, 25623), (504, 25665), (516, 25701), (563, 25797), (588, 25848),

Gene: Smoothie\_48 Start: 28706, Stop: 29593, Start Num: 68

Candidate Starts for Smoothie\_48:

(Start: 68 @28706 has 24 MA's), (Start: 72 @28712 has 12 MA's), (106, 28760), (119, 28787), (160, 28859), (187, 28925), (206, 28955), (282, 29063), (337, 29156), (352, 29180), (357, 29195), (427, 29291), (471, 29339), (552, 29519), (573, 29555),

Gene: SnapTap\_27 Start: 19105, Stop: 20121, Start Num: 97

Candidate Starts for SnapTap\_27:

(Start: 97 @19105 has 272 MA's), (142, 19180), (152, 19198), (167, 19234), (183, 19273), (296, 19480), (320, 19519), (322, 19522), (446, 19789), (486, 19891), (514, 19966), (518, 19978), (565, 20068),

Gene: Snape\_27 Start: 19733, Stop: 20755, Start Num: 97

Candidate Starts for Snape\_27:

(Start: 97 @19733 has 272 MA's), (127, 19790), (163, 19865), (232, 19994), (261, 20054), (293, 20114), (296, 20120), (322, 20162), (344, 20207), (347, 20213), (382, 20297), (402, 20330), (518, 20612), (522, 20621), (528, 20636), (565, 20702),

Gene: Sneeze\_17 Start: 15478, Stop: 16656, Start Num: 30

Candidate Starts for Sneeze\_17:

(4, 15082), (6, 15142), (Start: 30 @15478 has 217 MA's), (61, 15604), (75, 15622), (Start: 105 @15667 has 2 MA's), (110, 15673), (142, 15736), (161, 15772), (192, 15841), (195, 15844), (206, 15865), (241, 15919), (280, 15994), (337, 16096), (344, 16108), (451, 16303), (471, 16333), (479, 16351), (487, 16375), (528, 16477), (534, 16495), (584, 16585), (597, 16618),

Gene: Snenia\_18 Start: 16491, Stop: 17381, Start Num: 93

Candidate Starts for Snenia\_18:

(Start: 93 @16491 has 72 MA's), (111, 16515), (136, 16560), (142, 16575), (154, 16596), (201, 16692), (277, 16827), (282, 16836), (320, 16896), (322, 16899), (324, 16905), (360, 16977), (385, 17010), (394, 17022), (455, 17085), (477, 17139), (484, 17160), (503, 17211), (518, 17253), (585, 17364), (587, 17367),

Gene: SoJulia\_17 Start: 16073, Stop: 16987, Start Num: 93

Candidate Starts for SoJulia\_17:

(Start: 93 @16073 has 72 MA's), (111, 16097), (127, 16127), (189, 16253), (235, 16325), (318, 16478), (320, 16481), (322, 16484), (336, 16514), (363, 16571), (385, 16595), (390, 16601), (455, 16670), (464, 16688), (473, 16709), (498, 16775), (518, 16838), (585, 16967), (591, 16979),

Gene: SoSeph\_20 Start: 16471, Stop: 17601, Start Num: 36

Candidate Starts for SoSeph\_20:

(Start: 36 @16471 has 22 MA's), (Start: 105 @16645 has 2 MA's), (142, 16711), (144, 16714), (159, 16741), (206, 16840), (262, 16942), (292, 16996), (312, 17026), (330, 17062), (333, 17065), (337, 17074), (369, 17149), (371, 17152), (405, 17188), (427, 17230), (451, 17248), (454, 17254), (471, 17278), (472, 17281), (474, 17287), (487, 17320), (584, 17530), (599, 17569), (601, 17587),

Gene: Soap141\_17 Start: 16107, Stop: 17021, Start Num: 93

Candidate Starts for Soap141\_17:

(Start: 93 @16107 has 72 MA's), (127, 16161), (189, 16287), (235, 16359), (318, 16512), (320, 16515), (322, 16518), (336, 16548), (363, 16605), (385, 16629), (390, 16635), (455, 16704), (464, 16722), (473, 16743), (493, 16797), (498, 16809), (518, 16872), (585, 17001), (591, 17013),

Gene: Socotra\_18 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for Socotra\_18:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441, 15394), (462, 15439), (475, 15466), (481, 15484), (502, 15535), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Sopespian\_17 Start: 14765, Stop: 15736, Start Num: 97

Candidate Starts for Sopespian\_17:

(Start: 97 @14765 has 272 MA's), (125, 14810), (136, 14831), (163, 14894), (173, 14918), (185, 14948), (214, 14987), (240, 15026), (244, 15035), (246, 15038), (279, 15104), (306, 15152), (334, 15194), (358, 15242), (384, 15293), (415, 15353), (424, 15368), (426, 15371), (437, 15389), (441, 15395), (462, 15440), (475, 15467), (481, 15485), (503, 15539), (513, 15569), (516, 15578), (522, 15593), (547, 15650), (578, 15698), (587, 15722), (589, 15728),

Gene: SororFago\_26 Start: 18177, Stop: 19199, Start Num: 97

Candidate Starts for SororFago\_26:

(Start: 97 @18177 has 272 MA's), (110, 18195), (127, 18231), (142, 18252), (152, 18270), (208, 18390), (277, 18522), (296, 18552), (320, 18591), (322, 18594), (421, 18804), (433, 18840), (464, 18906), (518, 19056), (528, 19080),

Gene: Soul22\_18 Start: 12811, Stop: 13740, Start Num: 92

Candidate Starts for Soul22\_18:

(Start: 92 @12811 has 38 MA's), (128, 12871), (152, 12922), (203, 13021), (206, 13027), (217, 13042), (285, 13162), (298, 13180), (341, 13246), (348, 13258), (373, 13303), (402, 13342), (405, 13348), (415, 13372), (418, 13375), (419, 13378), (468, 13456), (475, 13477), (476, 13480), (490, 13516),



(502, 13543), (503, 13546), (518, 13585), (527, 13603), (528, 13609), (542, 13645), (562, 13675), (567, 13681), (571, 13687),

Gene: Soups\_29 Start: 18241, Stop: 19218, Start Num: 100

Candidate Starts for Soups\_29:

(Start: 100 @18241 has 20 MA's), (163, 18355), (165, 18361), (167, 18364), (286, 18598), (430, 18865), (461, 18919), (518, 19075),

Gene: Sparky\_15 Start: 15127, Stop: 16143, Start Num: 72

Candidate Starts for Sparky\_15:

(Start: 72 @15127 has 12 MA's), (Start: 77 @15136 has 5 MA's), (Start: 96 @15166 has 14 MA's), (137, 15235), (146, 15256), (206, 15376), (210, 15385), (246, 15472), (277, 15538), (322, 15625), (324, 15631), (363, 15715), (385, 15739), (388, 15742), (503, 15940), (508, 15952), (522, 15991), (537, 16018), (546, 16033), (591, 16123),

Gene: SpeedDemon\_310 Start: 28038, Stop: 28922, Start Num: 68

Candidate Starts for SpeedDemon\_310:

(Start: 68 @28038 has 24 MA's), (88, 28059), (119, 28113), (160, 28185), (163, 28194), (242, 28314), (268, 28365), (274, 28374), (292, 28410), (337, 28482), (341, 28488), (427, 28617), (471, 28665), (504, 28740), (523, 28788),

Gene: Splinter\_21 Start: 15645, Stop: 16475, Start Num: 122

Candidate Starts for Splinter\_21:

(Start: 120 @15642 has 6 MA's), (Start: 122 @15645 has 5 MA's), (139, 15660), (158, 15699), (166, 15720), (168, 15723), (243, 15867), (350, 16053), (391, 16122), (460, 16224), (502, 16305), (503, 16308), (538, 16389), (540, 16395), (549, 16407), (551, 16410), (564, 16434),

Gene: Spock\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Spock\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Spooky\_19 Start: 15489, Stop: 16412, Start Num: 99

Candidate Starts for Spooky\_19:

(Start: 99 @15489 has 15 MA's), (Start: 102 @15492 has 6 MA's), (111, 15504), (121, 15522), (145, 15567), (152, 15582), (159, 15594), (163, 15606), (180, 15645), (203, 15678), (244, 15753), (273, 15807), (277, 15813), (302, 15849), (306, 15855), (352, 15927), (356, 15939), (358, 15945), (401, 16005), (405, 16014), (415, 16038), (424, 16053), (426, 16056), (456, 16110), (502, 16209), (503, 16212), (505, 16218), (518, 16251), (524, 16266), (527, 16269), (539, 16305),

Gene: Spouty\_28 Start: 20557, Stop: 21570, Start Num: 97

Candidate Starts for Spouty\_28:

(Start: 97 @20557 has 272 MA's), (110, 20575), (142, 20632), (152, 20650), (167, 20686), (261, 20866), (277, 20902), (296, 20932), (322, 20974), (397, 21133), (464, 21277), (486, 21340), (514, 21415), (518, 21427), (528, 21451),

Gene: Squiddly\_21 Start: 16901, Stop: 17824, Start Num: 99

Candidate Starts for Squiddly\_21:

(Start: 99 @16901 has 15 MA's), (Start: 102 @16904 has 6 MA's), (111, 16916), (121, 16934), (145, 16979), (152, 16994), (159, 17006), (163, 17018), (180, 17057), (203, 17090), (244, 17165), (273, 17219), (276, 17222), (277, 17225), (285, 17237), (298, 17255), (302, 17261), (306, 17267), (352, 17339), (356, 17351), (358, 17357), (374, 17378), (405, 17426), (415, 17450), (424, 17465), (426,

17468), (502, 17621), (503, 17624), (505, 17630), (518, 17663), (524, 17678), (527, 17681), (539, 17717), (571, 17765),

Gene: StCroix\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for StCroix\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: StarStruck\_41 Start: 29510, Stop: 30433, Start Num: 76

Candidate Starts for StarStruck\_41:

(Start: 76 @29510 has 24 MA's), (130, 29597), (148, 29633), (167, 29672), (383, 30041), (471, 30185), (524, 30302), (576, 30398), (579, 30404), (583, 30419),

Gene: StarStuff\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for StarStuff\_30:

(Start: 97 @19042 has 272 MA's), (127, 19096), (142, 19117), (152, 19135), (240, 19306), (274, 19381), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: Starburst\_18 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for Starburst\_18:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441, 15394), (462, 15439), (475, 15466), (481, 15484), (502, 15535), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Stargaze\_17 Start: 15800, Stop: 16978, Start Num: 30

Candidate Starts for Stargaze\_17:

(Start: 30 @15800 has 217 MA's), (75, 15944), (110, 15995), (144, 16061), (145, 16064), (192, 16163), (195, 16166), (207, 16190), (238, 16235), (241, 16241), (344, 16430), (368, 16490), (437, 16598), (445, 16610), (471, 16655), (487, 16697), (567, 16871), (569, 16874), (580, 16892), (595, 16934), (597, 16940),

Gene: SteamedHams\_19 Start: 14430, Stop: 15401, Start Num: 97

Candidate Starts for SteamedHams\_19:

(Start: 97 @14430 has 272 MA's), (125, 14475), (136, 14496), (142, 14511), (152, 14532), (173, 14583), (185, 14613), (206, 14640), (240, 14691), (244, 14700), (246, 14703), (273, 14757), (279, 14769), (306, 14817), (358, 14907), (384, 14958), (402, 14988), (415, 15018), (426, 15036), (475, 15132), (481, 15150), (502, 15201), (503, 15204), (513, 15234), (516, 15243), (522, 15258), (547, 15315), (578, 15363), (587, 15387), (589, 15393),

Gene: Steamy\_28 Start: 20226, Stop: 21242, Start Num: 97

Candidate Starts for Steamy\_28:

(Start: 97 @20226 has 272 MA's), (142, 20301), (152, 20319), (167, 20355), (183, 20394), (201, 20424), (296, 20601), (322, 20643), (361, 20730), (481, 20997), (518, 21099),

Gene: Stephig9\_23 Start: 17614, Stop: 18636, Start Num: 103

Candidate Starts for Stephig9\_23:

(Start: 103 @17614 has 85 MA's), (163, 17737), (165, 17743), (201, 17815), (261, 17920), (274, 17950), (322, 18037), (376, 18157), (413, 18238), (429, 18268), (430, 18271), (481, 18391), (514, 18481), (529, 18520), (555, 18568), (565, 18583),

Gene: Stickynote\_32 Start: 27883, Stop: 28749, Start Num: 66

Candidate Starts for Stickynote\_32:

(Start: 66 @27883 has 8 MA's), (85, 27907), (113, 27952), (142, 28012), (162, 28051), (209, 28147), (316, 28309), (335, 28342), (383, 28417), (402, 28441), (481, 28516), (507, 28582), (524, 28618), (569, 28702),

Gene: Stinson\_22 Start: 15984, Stop: 17120, Start Num: 30

Candidate Starts for Stinson\_22:

(Start: 30 @15984 has 217 MA's), (61, 16101), (132, 16212), (144, 16233), (159, 16260), (207, 16362), (292, 16515), (340, 16596), (371, 16671), (389, 16686), (471, 16797), (487, 16839), (524, 16932), (533, 16956), (584, 17049), (599, 17088), (601, 17106),

Gene: StorminNorm\_33 Start: 28561, Stop: 29517, Start Num: 78

Candidate Starts for StorminNorm\_33:

(Start: 78 @28561 has 51 MA's), (175, 28747), (180, 28759), (185, 28771), (196, 28786), (206, 28798), (227, 28825), (233, 28840), (248, 28867), (299, 28957), (322, 28993), (356, 29053), (365, 29077), (384, 29089), (415, 29149), (471, 29239), (512, 29353), (516, 29365), (542, 29431), (554, 29446), (569, 29470), (576, 29482),

Gene: Strobilo\_18 Start: 13892, Stop: 15019, Start Num: 34

Candidate Starts for Strobilo\_18:

(Start: 34 @13892 has 10 MA's), (37, 13901), (61, 14003), (119, 14093), (144, 14135), (145, 14138), (159, 14162), (206, 14261), (244, 14324), (262, 14363), (292, 14417), (330, 14483), (337, 14495), (361, 14546), (369, 14570), (427, 14648), (451, 14666), (471, 14696), (474, 14705), (487, 14738), (488, 14741), (533, 14855), (580, 14933), (584, 14948), (599, 14987), (601, 15005),

Gene: Strosahl\_29 Start: 18083, Stop: 19060, Start Num: 100

Candidate Starts for Strosahl\_29:

(Start: 100 @18083 has 20 MA's), (163, 18197), (165, 18203), (167, 18206), (286, 18440), (430, 18707), (461, 18761), (518, 18917),

Gene: Stultus\_32 Start: 28933, Stop: 29889, Start Num: 78

Candidate Starts for Stultus\_32:

(Start: 78 @28933 has 51 MA's), (175, 29119), (180, 29131), (196, 29158), (211, 29179), (248, 29239), (297, 29326), (299, 29329), (322, 29365), (343, 29398), (352, 29413), (356, 29425), (376, 29455), (384, 29461), (415, 29521), (471, 29611), (504, 29701), (512, 29725), (516, 29737), (542, 29803), (569, 29842), (576, 29854), (588, 29884),

Gene: Sukkupi\_42 Start: 28532, Stop: 29452, Start Num: 81

Candidate Starts for Sukkupi\_42:

(Start: 81 @28532 has 8 MA's), (130, 28613), (154, 28658), (183, 28727), (292, 28895), (343, 28979), (364, 29030), (387, 29063), (499, 29261), (505, 29279), (524, 29321), (573, 29411), (576, 29417), (583, 29438),

Gene: Sulley\_22 Start: 15984, Stop: 17120, Start Num: 30

Candidate Starts for Sulley\_22:

(Start: 30 @15984 has 217 MA's), (61, 16101), (119, 16191), (132, 16212), (144, 16233), (159, 16260), (292, 16515), (340, 16596), (371, 16671), (389, 16686), (471, 16797), (487, 16839), (524, 16932), (533, 16956), (584, 17049), (599, 17088), (601, 17106),

Gene: SummitAcademy\_16 Start: 14542, Stop: 15498, Start Num: 97

Candidate Starts for SummitAcademy\_16:

(Start: 97 @14542 has 272 MA's), (125, 14587), (152, 14644), (163, 14671), (185, 14725), (206, 14752), (240, 14803), (241, 14806), (244, 14812), (246, 14815), (273, 14869), (281, 14884), (306, 14929), (320, 14953), (333, 14968), (358, 15019), (415, 15115), (503, 15301), (513, 15331), (516, 15340), (538, 15397), (571, 15448), (587, 15484), (589, 15490),

Gene: Sunflower1121\_20 Start: 15087, Stop: 16226, Start Num: 30

Candidate Starts for Sunflower1121\_20:

(Start: 30 @15087 has 217 MA's), (61, 15207), (119, 15297), (159, 15366), (262, 15567), (340, 15702), (341, 15705), (369, 15774), (389, 15792), (426, 15852), (451, 15873), (471, 15903), (487, 15945), (488, 15948), (490, 15951), (524, 16038), (533, 16062), (580, 16140), (584, 16155), (599, 16194), (601, 16212),

Gene: Sunhee\_25 Start: 18210, Stop: 19235, Start Num: 95

Candidate Starts for Sunhee\_25:

(Start: 95 @18210 has 1 MA's), (152, 18306), (167, 18342), (169, 18345), (261, 18522), (277, 18558), (296, 18588), (322, 18630), (344, 18675), (368, 18735), (433, 18876), (435, 18882), (518, 19092), (528, 19116), (565, 19182),

Gene: SuperAwesome\_30 Start: 18959, Stop: 19972, Start Num: 97

Candidate Starts for SuperAwesome\_30:

(Start: 97 @18959 has 272 MA's), (127, 19013), (152, 19052), (201, 19157), (277, 19304), (296, 19334), (320, 19373), (322, 19376), (344, 19421), (368, 19481), (464, 19679), (518, 19829), (522, 19838),

Gene: SuperCallie99\_30 Start: 18958, Stop: 19971, Start Num: 97

Candidate Starts for SuperCallie99\_30:

(Start: 97 @18958 has 272 MA's), (127, 19012), (152, 19051), (201, 19156), (277, 19303), (296, 19333), (320, 19372), (322, 19375), (344, 19420), (368, 19480), (464, 19678), (518, 19828), (522, 19837),

Gene: SuperSulley\_41 Start: 29704, Stop: 30621, Start Num: 78

Candidate Starts for SuperSulley\_41:

(Start: 78 @29704 has 51 MA's), (130, 29785), (148, 29821), (190, 29911), (241, 29968), (364, 30202), (383, 30229), (414, 30280), (471, 30373), (524, 30490), (576, 30586), (579, 30592), (583, 30607),

Gene: Superchunk\_26 Start: 17822, Stop: 18838, Start Num: 97

Candidate Starts for Superchunk\_26:

(Start: 97 @17822 has 272 MA's), (149, 17915), (156, 17930), (167, 17957), (296, 18203), (320, 18242), (322, 18245), (344, 18290), (382, 18380), (430, 18473), (446, 18506), (486, 18608), (506, 18659), (514, 18683), (518, 18695), (528, 18719), (565, 18785),

Gene: Survivors\_19 Start: 15594, Stop: 16559, Start Num: 97

Candidate Starts for Survivors\_19:

(Start: 97 @15594 has 272 MA's), (125, 15639), (142, 15675), (152, 15696), (163, 15723), (185, 15777), (240, 15858), (244, 15867), (246, 15870), (279, 15939), (306, 15987), (358, 16077), (365, 16092), (397, 16131), (475, 16287), (502, 16353), (503, 16356), (504, 16359), (513, 16386), (516, 16395), (527, 16419), (538, 16452), (549, 16470), (575, 16515), (587, 16545), (589, 16551),

Gene: Swann\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for Swann\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: SweatNTears\_19 Start: 14923, Stop: 15894, Start Num: 97

Candidate Starts for SweatNTears\_19:

(Start: 97 @14923 has 272 MA's), (125, 14968), (136, 14989), (163, 15052), (173, 15076), (185, 15106), (240, 15184), (244, 15193), (246, 15196), (279, 15262), (306, 15310), (334, 15352), (352, 15382), (358, 15400), (384, 15451), (415, 15511), (424, 15526), (426, 15529), (441, 15553), (475, 15625), (481, 15643), (502, 15694), (503, 15697), (513, 15727), (516, 15736), (522, 15751), (547, 15808), (578, 15856), (587, 15880), (589, 15886),

Gene: SweetiePie\_27 Start: 19105, Stop: 20121, Start Num: 97

Candidate Starts for SweetiePie\_27:

(Start: 97 @19105 has 272 MA's), (142, 19180), (152, 19198), (167, 19234), (183, 19273), (296, 19480), (320, 19519), (322, 19522), (446, 19789), (486, 19891), (514, 19966), (518, 19978), (565, 20068),

Gene: Sweets\_17 Start: 15472, Stop: 16644, Start Num: 30

Candidate Starts for Sweets\_17:

(6, 15139), (Start: 30 @15472 has 217 MA's), (61, 15592), (75, 15610), (Start: 105 @15655 has 2 MA's), (110, 15661), (142, 15724), (161, 15760), (192, 15829), (195, 15832), (206, 15853), (241, 15907), (262, 15952), (280, 15982), (337, 16084), (344, 16096), (352, 16108), (358, 16126), (451, 16291), (471, 16321), (479, 16339), (487, 16363), (534, 16483), (584, 16573), (597, 16606),

Gene: SwirlSquare\_29 Start: 17991, Stop: 19001, Start Num: 97

Candidate Starts for SwirlSquare\_29:

(Start: 97 @17991 has 272 MA's), (142, 18066), (152, 18084), (296, 18366), (320, 18405), (322, 18408), (382, 18543), (430, 18636), (514, 18846), (518, 18858), (528, 18882), (565, 18948),

Gene: Swirley\_23 Start: 18624, Stop: 19637, Start Num: 103

Candidate Starts for Swirley\_23:

(Start: 103 @18624 has 85 MA's), (152, 18720), (165, 18753), (167, 18756), (183, 18795), (261, 18930), (293, 18990), (296, 18996), (308, 19014), (322, 19038), (342, 19080), (481, 19392), (518, 19494), (565, 19584),

Gene: Switzerland\_29 Start: 18234, Stop: 19211, Start Num: 100

Candidate Starts for Switzerland\_29:

(Start: 100 @18234 has 20 MA's), (163, 18348), (165, 18354), (167, 18357), (286, 18591), (430, 18858), (461, 18912), (518, 19068),

Gene: SydNat\_23 Start: 18826, Stop: 19839, Start Num: 103

Candidate Starts for SydNat\_23:

(Start: 103 @18826 has 85 MA's), (152, 18922), (165, 18955), (167, 18958), (183, 18997), (210, 19045), (296, 19198), (308, 19216), (322, 19240), (342, 19282), (481, 19594), (518, 19696), (529, 19723),

Gene: Syleon\_27 Start: 20965, Stop: 21876, Start Num: 93

Candidate Starts for Syleon\_27:

(Start: 93 @20965 has 72 MA's), (104, 20980), (258, 21271), (308, 21373), (318, 21391), (322, 21397), (385, 21508), (390, 21514), (419, 21562), (475, 21640), (476, 21643), (477, 21646), (497, 21694), (514, 21748), (531, 21790), (562, 21826), (563, 21829), (573, 21844),

Gene: Syra333\_21 Start: 15182, Stop: 16321, Start Num: 30

Candidate Starts for Syra333\_21:

(Start: 30 @15182 has 217 MA's), (61, 15302), (119, 15392), (159, 15461), (262, 15662), (292, 15716), (369, 15869), (389, 15887), (451, 15968), (474, 16007), (487, 16040), (524, 16133), (533, 16157), (580, 16235), (584, 16250), (599, 16289), (601, 16307),

Gene: TBond007\_21 Start: 16221, Stop: 17357, Start Num: 30

Candidate Starts for TBond007\_21:

(Start: 30 @16221 has 217 MA's), (61, 16344), (Start: 105 @16407 has 2 MA's), (110, 16413), (125, 16443), (144, 16476), (195, 16581), (206, 16602), (209, 16608), (244, 16665), (280, 16734), (330, 16821), (352, 16857), (451, 17004), (471, 17034), (474, 17043), (487, 17076), (488, 17079), (490, 17082), (524, 17169), (571, 17256), (597, 17319), (599, 17325),

Gene: TClif\_21 Start: 15218, Stop: 16354, Start Num: 30

Candidate Starts for TClif\_21:

(Start: 30 @15218 has 217 MA's), (61, 15335), (Start: 105 @15398 has 2 MA's), (159, 15494), (206, 15593), (207, 15596), (262, 15695), (369, 15902), (371, 15905), (427, 15983), (487, 16073), (490, 16079), (524, 16166), (584, 16283), (595, 16310), (599, 16322), (601, 16340),

Gene: TM4\_18 Start: 13970, Stop: 15097, Start Num: 34

Candidate Starts for TM4\_18:

(Start: 34 @13970 has 10 MA's), (37, 13979), (61, 14081), (119, 14171), (144, 14213), (145, 14216), (159, 14240), (206, 14339), (244, 14402), (262, 14441), (292, 14495), (330, 14561), (337, 14573), (361, 14624), (369, 14648), (427, 14726), (451, 14744), (471, 14774), (487, 14816), (488, 14819), (533, 14933), (580, 15011), (584, 15026), (599, 15065), (601, 15083),

Gene: TPA4\_18 Start: 16629, Stop: 17726, Start Num: 46

Candidate Starts for TPA4\_18:

(7, 16287), (Start: 46 @16629 has 1 MA's), (75, 16710), (Start: 105 @16755 has 2 MA's), (225, 16986), (292, 17121), (334, 17193), (337, 17199), (357, 17238), (471, 17400), (485, 17433), (517, 17511), (580, 17637), (597, 17685), (599, 17691),

Gene: TWAMP\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for TWAMP\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (261, 15786), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: TZGordon\_23 Start: 15781, Stop: 16614, Start Num: 120

Candidate Starts for TZGordon\_23:

(Start: 120 @15781 has 6 MA's), (Start: 122 @15784 has 5 MA's), (139, 15799), (158, 15838), (166, 15859), (168, 15862), (243, 16006), (350, 16192), (402, 16279), (460, 16363), (502, 16444), (538, 16528), (540, 16534), (549, 16546), (551, 16549), (564, 16573),

Gene: Tachez\_22 Start: 15980, Stop: 17116, Start Num: 30

Candidate Starts for Tachez\_22:

(Start: 30 @15980 has 217 MA's), (61, 16097), (119, 16187), (132, 16208), (144, 16229), (159, 16256), (292, 16511), (340, 16592), (371, 16667), (389, 16682), (471, 16793), (487, 16835), (524, 16928), (533, 16952), (584, 17045), (599, 17084), (601, 17102),

Gene: Taheera\_17 Start: 15491, Stop: 16666, Start Num: 30

Candidate Starts for Taheera\_17:

(4, 15095), (6, 15155), (Start: 30 @15491 has 217 MA's), (61, 15614), (75, 15632), (Start: 105 @15677 has 2 MA's), (110, 15683), (142, 15746), (161, 15782), (192, 15851), (195, 15854), (206, 15875), (241, 15929), (280, 16004), (337, 16106), (344, 16118), (451, 16313), (471, 16343), (479, 16361), (487,

16385), (528, 16487), (534, 16505), (584, 16595), (597, 16628),

Gene: TaiwanKao\_23 Start: 15991, Stop: 17127, Start Num: 30

Candidate Starts for TaiwanKao\_23:

(Start: 30 @15991 has 217 MA's), (61, 16108), (119, 16198), (132, 16219), (144, 16240), (159, 16267), (292, 16522), (340, 16603), (371, 16678), (389, 16693), (471, 16804), (487, 16846), (524, 16939), (529, 16951), (533, 16963), (584, 17056), (599, 17095), (601, 17113),

Gene: Takoda\_22 Start: 15440, Stop: 16312, Start Num: 103

Candidate Starts for Takoda\_22:

(Start: 103 @15440 has 85 MA's), (121, 15479), (165, 15566), (198, 15635), (246, 15713), (322, 15851), (392, 15947), (486, 16076), (496, 16094), (518, 16163), (587, 16301),

Gene: Tangent\_34 Start: 29370, Stop: 30326, Start Num: 78

Candidate Starts for Tangent\_34:

(Start: 78 @29370 has 51 MA's), (175, 29556), (180, 29568), (196, 29595), (211, 29616), (248, 29676), (297, 29763), (299, 29766), (322, 29802), (343, 29835), (352, 29850), (356, 29862), (376, 29892), (384, 29898), (415, 29958), (471, 30048), (504, 30138), (512, 30162), (516, 30174), (542, 30240), (569, 30279), (576, 30291), (588, 30321),

Gene: Tangerine\_33 Start: 28564, Stop: 29520, Start Num: 78

Candidate Starts for Tangerine\_33:

(Start: 78 @28564 has 51 MA's), (157, 28705), (175, 28750), (180, 28762), (185, 28774), (196, 28789), (206, 28801), (227, 28828), (233, 28843), (248, 28870), (299, 28960), (322, 28996), (356, 29056), (384, 29092), (415, 29152), (471, 29242), (504, 29332), (512, 29356), (516, 29368), (542, 29434), (554, 29449), (569, 29473), (576, 29485),

Gene: Taquito\_21 Start: 17109, Stop: 18242, Start Num: 30

Candidate Starts for Taquito\_21:

(Start: 30 @17109 has 217 MA's), (37, 17127), (Start: 51 @17199 has 2 MA's), (61, 17229), (119, 17319), (144, 17361), (157, 17385), (207, 17490), (292, 17643), (334, 17712), (337, 17718), (427, 17871), (451, 17889), (471, 17919), (487, 17961), (488, 17964), (580, 18156), (584, 18171), (599, 18210), (601, 18228),

Gene: Tardus\_35 Start: 29129, Stop: 30115, Start Num: 64

Candidate Starts for Tardus\_35:

(Start: 64 @29129 has 25 MA's), (109, 29201), (119, 29225), (142, 29261), (161, 29297), (240, 29453), (277, 29525), (312, 29588), (318, 29597), (352, 29654), (363, 29687), (391, 29720), (396, 29723), (490, 29876), (504, 29909), (507, 29918), (517, 29939), (529, 29966), (536, 29987), (540, 29996), (544, 30002), (564, 30035), (566, 30038), (591, 30092), (598, 30104),

Gene: TaronosaurusRx\_18 Start: 16056, Stop: 16982, Start Num: 94

Candidate Starts for TaronosaurusRx\_18:

(15, 15741), (17, 15765), (18, 15792), (79, 16038), (Start: 94 @16056 has 30 MA's), (Start: 102 @16065 has 6 MA's), (128, 16107), (Start: 134 @16119 has 1 MA's), (250, 16341), (276, 16386), (289, 16410), (296, 16416), (302, 16425), (306, 16431), (323, 16461), (358, 16521), (360, 16527), (404, 16587), (405, 16590), (415, 16614), (450, 16671), (490, 16758), (518, 16827), (539, 16881), (587, 16965),

Gene: TarsusIV\_27 Start: 19201, Stop: 20211, Start Num: 97

Candidate Starts for TarsusIV\_27:

(Start: 97 @19201 has 272 MA's), (142, 19276), (152, 19294), (167, 19330), (183, 19369), (261, 19510), (296, 19576), (320, 19615), (322, 19618), (430, 19846), (486, 19981), (518, 20068), (528,

20092),

Gene: Tarynearal\_22 Start: 18646, Stop: 19659, Start Num: 103

Candidate Starts for Tarynearal\_22:

(Start: 103 @18646 has 85 MA's), (152, 18742), (165, 18775), (167, 18778), (183, 18817), (261, 18952), (293, 19012), (296, 19018), (308, 19036), (322, 19060), (342, 19102), (481, 19414), (518, 19516), (565, 19606),

Gene: Tarzan\_17 Start: 14116, Stop: 14958, Start Num: 96

Candidate Starts for Tarzan\_17:

(9, 13660), (13, 13738), (Start: 36 @13936 has 22 MA's), (Start: 72 @14077 has 12 MA's), (Start: 96 @14116 has 14 MA's), (132, 14185), (150, 14215), (162, 14236), (175, 14269), (197, 14311), (198, 14314), (300, 14455), (337, 14521), (425, 14653), (484, 14728), (509, 14782), (524, 14824), (559, 14890), (579, 14929),

Gene: Teejan\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Teejan\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: Temprado\_31 Start: 18964, Stop: 19980, Start Num: 97

Candidate Starts for Temprado\_31:

(Start: 97 @18964 has 272 MA's), (127, 19018), (152, 19057), (201, 19162), (277, 19309), (296, 19339), (320, 19378), (322, 19381), (361, 19468), (368, 19489), (430, 19615), (464, 19687), (518, 19837), (522, 19846), (565, 19927),

Gene: Terrific\_31 Start: 19655, Stop: 20671, Start Num: 97

Candidate Starts for Terrific\_31:

(Start: 97 @19655 has 272 MA's), (142, 19730), (152, 19748), (167, 19784), (183, 19823), (277, 20000), (296, 20030), (320, 20069), (322, 20072), (518, 20528), (528, 20552),

Gene: Terror\_17 Start: 15491, Stop: 16666, Start Num: 30

Candidate Starts for Terror\_17:

(4, 15095), (6, 15155), (Start: 30 @15491 has 217 MA's), (61, 15614), (75, 15632), (Start: 105 @15677 has 2 MA's), (110, 15683), (142, 15746), (161, 15782), (192, 15851), (195, 15854), (206, 15875), (241, 15929), (280, 16004), (337, 16106), (344, 16118), (451, 16313), (471, 16343), (479, 16361), (487, 16385), (528, 16487), (534, 16505), (584, 16595), (597, 16628),

Gene: Tesla\_48 Start: 26061, Stop: 27023, Start Num: 94

Candidate Starts for Tesla\_48:

(Start: 94 @26061 has 30 MA's), (163, 26193), (173, 26217), (178, 26226), (181, 26232), (184, 26241), (201, 26265), (206, 26274), (213, 26286), (271, 26412), (312, 26493), (322, 26508), (324, 26514), (385, 26622), (476, 26748), (478, 26754), (506, 26829), (536, 26904), (539, 26910), (548, 26922), (550, 26925), (593, 27012), (594, 27015), (596, 27018),

Gene: Theia\_21 Start: 18584, Stop: 19597, Start Num: 103

Candidate Starts for Theia\_21:

(Start: 103 @18584 has 85 MA's), (152, 18680), (165, 18713), (167, 18716), (261, 18890), (293, 18950), (296, 18956), (308, 18974), (322, 18998), (342, 19040), (481, 19352), (518, 19454), (529, 19481), (565, 19544),

Gene: Thing3\_33 Start: 29854, Stop: 30810, Start Num: 78



Candidate Starts for Thing3\_33:

(Start: 78 @29854 has 51 MA's), (175, 30040), (180, 30052), (196, 30079), (211, 30100), (248, 30160), (297, 30247), (299, 30250), (322, 30286), (343, 30319), (352, 30334), (356, 30346), (376, 30376), (384, 30382), (415, 30442), (471, 30532), (504, 30622), (512, 30646), (516, 30658), (542, 30724), (554, 30739), (569, 30763), (576, 30775),

Gene: Thyatira\_20 Start: 16323, Stop: 17453, Start Num: 36

Candidate Starts for Thyatira\_20:

(Start: 36 @16323 has 22 MA's), (144, 16566), (159, 16593), (206, 16692), (262, 16794), (292, 16848), (312, 16878), (330, 16914), (333, 16917), (337, 16926), (369, 17001), (371, 17004), (405, 17040), (427, 17082), (451, 17100), (454, 17106), (471, 17130), (472, 17133), (474, 17139), (487, 17172), (584, 17382), (599, 17421), (601, 17439),

Gene: Tiamoceli\_32 Start: 27405, Stop: 28382, Start Num: 64

Candidate Starts for Tiamoceli\_32:

(Start: 64 @27405 has 25 MA's), (79, 27417), (Start: 96 @27444 has 14 MA's), (119, 27492), (121, 27495), (151, 27546), (186, 27624), (240, 27720), (277, 27792), (352, 27921), (363, 27954), (396, 27990), (504, 28176), (517, 28206), (529, 28233), (544, 28269), (564, 28302), (598, 28371),

Gene: Tierra\_21 Start: 15908, Stop: 17047, Start Num: 30

Candidate Starts for Tierra\_21:

(Start: 30 @15908 has 217 MA's), (61, 16028), (119, 16118), (159, 16187), (262, 16388), (389, 16613), (426, 16673), (451, 16694), (487, 16766), (488, 16769), (490, 16772), (524, 16859), (533, 16883), (580, 16961), (584, 16976), (599, 17015), (601, 17033),

Gene: Tiger\_23 Start: 18468, Stop: 19481, Start Num: 103

Candidate Starts for Tiger\_23:

(Start: 103 @18468 has 85 MA's), (152, 18564), (165, 18597), (167, 18600), (261, 18774), (293, 18834), (296, 18840), (308, 18858), (322, 18882), (342, 18924), (481, 19236), (518, 19338), (565, 19428),

Gene: TillyBobJoe\_30 Start: 24720, Stop: 25652, Start Num: 83

Candidate Starts for TillyBobJoe\_30:

(Start: 83 @24720 has 29 MA's), (142, 24816), (173, 24885), (175, 24891), (185, 24915), (196, 24930), (209, 24948), (322, 25140), (374, 25218), (405, 25263), (415, 25287), (445, 25326), (486, 25422), (504, 25464), (516, 25500), (528, 25530), (549, 25575), (563, 25596), (588, 25647),

Gene: Timothy\_27 Start: 19730, Stop: 20752, Start Num: 97

Candidate Starts for Timothy\_27:

(Start: 97 @19730 has 272 MA's), (127, 19787), (163, 19862), (232, 19991), (261, 20051), (293, 20111), (296, 20117), (322, 20159), (344, 20204), (347, 20210), (382, 20294), (402, 20327), (518, 20609), (522, 20618), (528, 20633), (565, 20699),

Gene: TinaBug\_17 Start: 15472, Stop: 16644, Start Num: 30

Candidate Starts for TinaBug\_17:

(6, 15139), (Start: 30 @15472 has 217 MA's), (61, 15592), (75, 15610), (Start: 105 @15655 has 2 MA's), (110, 15661), (142, 15724), (161, 15760), (192, 15829), (195, 15832), (206, 15853), (241, 15907), (262, 15952), (280, 15982), (337, 16084), (344, 16096), (352, 16108), (358, 16126), (451, 16291), (471, 16321), (479, 16339), (487, 16363), (534, 16483), (584, 16573), (597, 16606),

Gene: TinaLin\_24 Start: 16616, Stop: 17446, Start Num: 122

Candidate Starts for TinaLin\_24:

(Start: 120 @16613 has 6 MA's), (Start: 122 @16616 has 5 MA's), (139, 16631), (153, 16661), (158, 16670), (168, 16694), (229, 16808), (230, 16814), (237, 16826), (243, 16838), (297, 16937), (350, 17024), (359, 17048), (409, 17132), (426, 17156), (427, 17159), (460, 17195), (502, 17276), (529, 17342), (540, 17366), (549, 17378), (551, 17381),

Gene: TingHuaYa\_22 Start: 15317, Stop: 16453, Start Num: 30

Candidate Starts for TingHuaYa\_22:

(Start: 30 @15317 has 217 MA's), (61, 15434), (132, 15545), (159, 15593), (207, 15695), (292, 15848), (340, 15929), (371, 16004), (389, 16019), (471, 16130), (487, 16172), (524, 16265), (533, 16289), (584, 16382), (599, 16421), (601, 16439),

Gene: TiniBug\_22 Start: 15962, Stop: 17098, Start Num: 30

Candidate Starts for TiniBug\_22:

(Start: 30 @15962 has 217 MA's), (61, 16079), (119, 16169), (132, 16190), (144, 16211), (159, 16238), (262, 16439), (292, 16493), (295, 16499), (340, 16574), (371, 16649), (389, 16664), (487, 16817), (524, 16910), (533, 16934), (584, 17027), (599, 17066), (601, 17084),

Gene: TinyTimmy\_27 Start: 19773, Stop: 20795, Start Num: 97

Candidate Starts for TinyTimmy\_27:

(Start: 97 @19773 has 272 MA's), (127, 19830), (163, 19905), (232, 20034), (261, 20094), (293, 20154), (296, 20160), (322, 20202), (344, 20247), (347, 20253), (382, 20337), (402, 20370), (518, 20652), (522, 20661), (528, 20676), (565, 20742),

Gene: TipsytheTRex\_26 Start: 18299, Stop: 19309, Start Num: 97

Candidate Starts for TipsytheTRex\_26:

(Start: 97 @18299 has 272 MA's), (127, 18353), (142, 18374), (152, 18392), (296, 18674), (320, 18713), (322, 18716), (344, 18761), (382, 18851), (430, 18944), (486, 19079), (518, 19166),

Gene: Tiri\_22 Start: 16023, Stop: 17159, Start Num: 30

Candidate Starts for Tiri\_22:

(Start: 30 @16023 has 217 MA's), (61, 16140), (119, 16230), (132, 16251), (144, 16272), (159, 16299), (292, 16554), (340, 16635), (371, 16710), (389, 16725), (471, 16836), (487, 16878), (524, 16971), (533, 16995), (584, 17088), (599, 17127), (601, 17145),

Gene: Toaka\_26 Start: 18892, Stop: 19914, Start Num: 97

Candidate Starts for Toaka\_26:

(Start: 97 @18892 has 272 MA's), (108, 18907), (110, 18910), (152, 18985), (201, 19090), (261, 19201), (277, 19237), (296, 19267), (322, 19309), (391, 19459), (433, 19555), (435, 19561), (514, 19759), (518, 19771), (522, 19780), (528, 19795),

Gene: Toast\_18 Start: 15883, Stop: 16743, Start Num: 68

Candidate Starts for Toast\_18:

(Start: 68 @15883 has 24 MA's), (Start: 84 @15898 has 1 MA's), (104, 15928), (117, 15949), (163, 16039), (203, 16120), (337, 16324), (340, 16327), (481, 16522), (523, 16612), (541, 16654), (571, 16702), (575, 16708),

Gene: Togo\_30 Start: 24909, Stop: 25853, Start Num: 83

Candidate Starts for Togo\_30:

(Start: 83 @24909 has 29 MA's), (142, 25014), (173, 25083), (175, 25089), (185, 25113), (196, 25128), (415, 25488), (424, 25503), (440, 25521), (486, 25623), (504, 25665), (516, 25701), (563, 25797), (588, 25848),

Gene: Tolls\_19 Start: 14433, Stop: 15404, Start Num: 97

Candidate Starts for Tolls\_19:

(Start: 97 @14433 has 272 MA's), (125, 14478), (136, 14499), (142, 14514), (152, 14535), (173, 14586), (185, 14616), (206, 14643), (240, 14694), (244, 14703), (246, 14706), (273, 14760), (279, 14772), (306, 14820), (358, 14910), (384, 14961), (402, 14991), (415, 15021), (426, 15039), (475, 15135), (481, 15153), (502, 15204), (503, 15207), (513, 15237), (516, 15246), (522, 15261), (547, 15318), (578, 15366), (587, 15390), (589, 15396),

Gene: TomBrady\_17 Start: 15478, Stop: 16650, Start Num: 30

Candidate Starts for TomBrady\_17:

(6, 15145), (Start: 30 @15478 has 217 MA's), (61, 15598), (75, 15616), (Start: 105 @15661 has 2 MA's), (110, 15667), (142, 15730), (161, 15766), (192, 15835), (195, 15838), (206, 15859), (241, 15913), (262, 15958), (280, 15988), (337, 16090), (344, 16102), (352, 16114), (358, 16132), (451, 16297), (471, 16327), (479, 16345), (487, 16369), (534, 16489), (584, 16579), (597, 16612),

Gene: Tomathan\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for Tomathan\_30:

(Start: 97 @19042 has 272 MA's), (127, 19096), (142, 19117), (152, 19135), (240, 19306), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: ToneTone\_28 Start: 18890, Stop: 19906, Start Num: 97

Candidate Starts for ToneTone\_28:

(Start: 97 @18890 has 272 MA's), (110, 18908), (127, 18944), (152, 18983), (201, 19088), (296, 19265), (320, 19304), (322, 19307), (361, 19394), (368, 19415), (430, 19541), (464, 19613), (518, 19763), (522, 19772), (565, 19853),

Gene: Toniann\_47 Start: 28657, Stop: 29538, Start Num: 72

Candidate Starts for Toniann\_47:

(Start: 72 @28657 has 12 MA's), (106, 28705), (119, 28732), (160, 28804), (187, 28870), (206, 28900), (282, 29008), (337, 29101), (352, 29125), (357, 29140), (427, 29236), (471, 29284), (552, 29464), (573, 29500),

Gene: Topper\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Topper\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Torres\_18 Start: 15554, Stop: 16696, Start Num: 30

Candidate Starts for Torres\_18:

(Start: 30 @15554 has 217 MA's), (61, 15677), (119, 15767), (159, 15836), (206, 15935), (207, 15938), (262, 16037), (340, 16172), (471, 16373), (487, 16415), (488, 16418), (524, 16508), (533, 16532), (584, 16625), (599, 16664), (601, 16682),

Gene: TouchMeNot\_18 Start: 16550, Stop: 17428, Start Num: 87

Candidate Starts for TouchMeNot\_18:

(Start: 87 @16550 has 10 MA's), (Start: 90 @16553 has 2 MA's), (136, 16637), (201, 16775), (363, 17063),

Gene: Tourach\_17 Start: 16072, Stop: 16986, Start Num: 93

Candidate Starts for Tourach\_17:

(Start: 93 @16072 has 72 MA's), (111, 16096), (127, 16126), (167, 16207), (189, 16252), (318, 16477), (320, 16480), (322, 16483), (363, 16570), (385, 16594), (390, 16600), (455, 16669), (464, 16687),

(473, 16708), (493, 16762), (498, 16774), (518, 16837), (585, 16966), (591, 16978),

Gene: Towmatter\_28 Start: 24381, Stop: 25262, Start Num: 68

Candidate Starts for Towmatter\_28:

(Start: 68 @24381 has 24 MA's), (119, 24456), (155, 24519), (160, 24528), (163, 24537), (242, 24657), (274, 24717), (337, 24825), (427, 24960), (471, 25008), (504, 25083), (523, 25131), (545, 25179), (552, 25188),

Gene: Tracker\_40 Start: 28657, Stop: 29598, Start Num: 76

Candidate Starts for Tracker\_40:

(Start: 76 @28657 has 24 MA's), (130, 28744), (167, 28819), (198, 28885), (241, 28927), (269, 28984), (387, 29197), (406, 29224), (471, 29335), (524, 29467), (576, 29563),

Gene: Travvers\_30 Start: 19042, Stop: 20052, Start Num: 97

Candidate Starts for Travvers\_30:

(Start: 97 @19042 has 272 MA's), (127, 19096), (142, 19117), (152, 19135), (240, 19306), (296, 19417), (320, 19456), (322, 19459), (344, 19504), (486, 19822), (514, 19897), (518, 19909), (528, 19933), (565, 19999),

Gene: Trax\_27 Start: 22698, Stop: 23609, Start Num: 93

Candidate Starts for Trax\_27:

(Start: 82 @22683 has 1 MA's), (Start: 93 @22698 has 72 MA's), (127, 22755), (142, 22785), (201, 22899), (244, 22974), (260, 23007), (277, 23043), (318, 23124), (320, 23127), (333, 23154), (336, 23160), (352, 23187), (390, 23247), (394, 23253), (476, 23376), (477, 23379), (484, 23400), (498, 23430), (499, 23439), (513, 23478), (514, 23481), (531, 23523), (546, 23538), (550, 23544), (563, 23562), (573, 23577),

Gene: TreyKay\_22 Start: 15985, Stop: 17121, Start Num: 30

Candidate Starts for TreyKay\_22:

(Start: 30 @15985 has 217 MA's), (61, 16102), (119, 16192), (132, 16213), (144, 16234), (159, 16261), (292, 16516), (340, 16597), (371, 16672), (389, 16687), (471, 16798), (487, 16840), (524, 16933), (533, 16957), (584, 17050), (599, 17089), (601, 17107),

Gene: TriFive\_18 Start: 16490, Stop: 17380, Start Num: 93

Candidate Starts for TriFive\_18:

(Start: 93 @16490 has 72 MA's), (111, 16514), (136, 16559), (142, 16574), (154, 16595), (201, 16691), (277, 16826), (282, 16835), (320, 16895), (322, 16898), (324, 16904), (360, 16976), (385, 17009), (394, 17021), (455, 17084), (477, 17138), (484, 17159), (503, 17210), (518, 17252), (585, 17363), (587, 17366),

Gene: TribelTrouble\_20 Start: 16264, Stop: 17403, Start Num: 30

Candidate Starts for TribelTrouble\_20:

(Start: 30 @16264 has 217 MA's), (61, 16390), (Start: 105 @16453 has 2 MA's), (110, 16459), (125, 16489), (144, 16522), (195, 16627), (206, 16648), (262, 16750), (280, 16780), (310, 16825), (352, 16903), (451, 17050), (471, 17080), (474, 17089), (487, 17122), (488, 17125), (490, 17128), (524, 17215), (571, 17302), (582, 17326), (584, 17332), (597, 17365), (599, 17371),

Gene: Trine\_17 Start: 13911, Stop: 14768, Start Num: 96

Candidate Starts for Trine\_17:

(Start: 96 @13911 has 14 MA's), (132, 13980), (142, 13995), (198, 14109), (275, 14214), (330, 14307), (337, 14319), (411, 14421), (484, 14523), (494, 14544), (519, 14622), (521, 14625), (524, 14634), (528, 14643), (529, 14646), (553, 14685), (579, 14736),

Gene: Tristan\_28 Start: 20795, Stop: 21811, Start Num: 97

Candidate Starts for Tristan\_28:

(Start: 97 @20795 has 272 MA's), (142, 20870), (152, 20888), (183, 20963), (261, 21104), (296, 21170), (322, 21212), (362, 21302), (376, 21338), (382, 21353), (446, 21479), (481, 21566), (518, 21668), (528, 21692),

Gene: Trixie\_30 Start: 20845, Stop: 21858, Start Num: 97

Candidate Starts for Trixie\_30:

(Start: 97 @20845 has 272 MA's), (110, 20863), (142, 20920), (152, 20938), (167, 20974), (183, 21013), (261, 21154), (296, 21220), (320, 21259), (322, 21262), (344, 21307), (368, 21367), (391, 21412), (430, 21493), (446, 21526), (518, 21715), (522, 21724), (567, 21808),

Gene: Troje\_17 Start: 14394, Stop: 15365, Start Num: 97

Candidate Starts for Troje\_17:

(Start: 97 @14394 has 272 MA's), (125, 14439), (136, 14460), (142, 14475), (163, 14523), (173, 14547), (185, 14577), (240, 14655), (244, 14664), (246, 14667), (279, 14733), (306, 14781), (334, 14823), (358, 14871), (384, 14922), (415, 14982), (424, 14997), (426, 15000), (441, 15024), (475, 15096), (481, 15114), (502, 15165), (503, 15168), (513, 15198), (516, 15207), (522, 15222), (538, 15264), (547, 15279), (578, 15327), (587, 15351), (589, 15357),

Gene: Trooper\_27 Start: 19001, Stop: 20011, Start Num: 97

Candidate Starts for Trooper\_27:

(Start: 97 @19001 has 272 MA's), (142, 19076), (152, 19094), (167, 19130), (183, 19169), (261, 19310), (296, 19376), (320, 19415), (322, 19418), (430, 19646), (486, 19781), (518, 19868), (528, 19892), (565, 19958),

Gene: TruffulaTree\_22 Start: 16014, Stop: 17150, Start Num: 30

Candidate Starts for TruffulaTree\_22:

(Start: 30 @16014 has 217 MA's), (61, 16131), (119, 16221), (132, 16242), (144, 16263), (159, 16290), (292, 16545), (340, 16626), (371, 16701), (389, 16716), (471, 16827), (487, 16869), (524, 16962), (533, 16986), (584, 17079), (599, 17118), (601, 17136),

Gene: Tubs\_28 Start: 20527, Stop: 21540, Start Num: 97

Candidate Starts for Tubs\_28:

(Start: 97 @20527 has 272 MA's), (110, 20545), (142, 20602), (152, 20620), (167, 20656), (261, 20836), (277, 20872), (296, 20902), (322, 20944), (397, 21103), (464, 21247), (486, 21310), (514, 21385), (518, 21397), (528, 21421),

Gene: Tucker\_30 Start: 18976, Stop: 19992, Start Num: 97

Candidate Starts for Tucker\_30:

(Start: 97 @18976 has 272 MA's), (110, 18994), (127, 19030), (152, 19069), (201, 19174), (296, 19351), (320, 19390), (322, 19393), (361, 19480), (368, 19501), (430, 19627), (464, 19699), (518, 19849), (522, 19858), (565, 19939),

Gene: Turbido\_29 Start: 19682, Stop: 20698, Start Num: 97

Candidate Starts for Turbido\_29:

(Start: 97 @19682 has 272 MA's), (142, 19757), (152, 19775), (167, 19811), (183, 19850), (296, 20057), (320, 20096), (322, 20099), (361, 20186), (446, 20366), (486, 20468), (514, 20543), (518, 20555),

Gene: Turuncu\_44 Start: 29978, Stop: 30895, Start Num: 76

Candidate Starts for Turuncu\_44:

(Start: 76 @29978 has 24 MA's), (130, 30056), (165, 30128), (206, 30209), (292, 30338), (387, 30509), (481, 30665), (524, 30764), (563, 30839), (576, 30860),

Gene: Twigg\_23 Start: 18619, Stop: 19632, Start Num: 103

Candidate Starts for Twigg\_23:

(Start: 103 @18619 has 85 MA's), (152, 18715), (165, 18748), (167, 18751), (261, 18925), (293, 18985), (296, 18991), (308, 19009), (322, 19033), (342, 19075), (481, 19387), (518, 19489), (529, 19516), (565, 19579),

Gene: Twister6\_32 Start: 25345, Stop: 26289, Start Num: 83

Candidate Starts for Twister6\_32:

(Start: 83 @25345 has 29 MA's), (142, 25450), (173, 25519), (175, 25525), (185, 25549), (196, 25564), (415, 25924), (424, 25939), (440, 25957), (486, 26059), (504, 26101), (516, 26137), (563, 26233), (588, 26284),

Gene: Twitch\_22 Start: 16051, Stop: 17187, Start Num: 30

Candidate Starts for Twitch\_22:

(Start: 30 @16051 has 217 MA's), (61, 16168), (119, 16258), (132, 16279), (144, 16300), (159, 16327), (292, 16582), (340, 16663), (371, 16738), (389, 16753), (471, 16864), (487, 16906), (524, 16999), (533, 17023), (584, 17116), (599, 17155), (601, 17173),

Gene: Twonlo\_29 Start: 26023, Stop: 27000, Start Num: 64

Candidate Starts for Twonlo\_29:

(Start: 64 @26023 has 25 MA's), (79, 26035), (Start: 96 @26062 has 14 MA's), (119, 26110), (121, 26113), (151, 26164), (186, 26242), (240, 26338), (255, 26371), (277, 26410), (352, 26539), (363, 26572), (396, 26608), (504, 26794), (517, 26824), (529, 26851), (544, 26887), (564, 26920), (598, 26989),

Gene: TyDawg\_27 Start: 21457, Stop: 22368, Start Num: 91

Candidate Starts for TyDawg\_27:

(Start: 91 @21457 has 19 MA's), (147, 21559), (157, 21577), (163, 21592), (201, 21664), (206, 21673), (252, 21751), (318, 21886), (320, 21889), (322, 21892), (356, 21961), (385, 22003), (390, 22009), (483, 22150), (493, 22171), (498, 22183), (561, 22306), (567, 22318),

Gene: Tycho\_33 Start: 28653, Stop: 29609, Start Num: 78

Candidate Starts for Tycho\_33:

(Start: 78 @28653 has 51 MA's), (163, 28809), (175, 28839), (180, 28851), (185, 28863), (196, 28878), (206, 28890), (299, 29049), (322, 29085), (356, 29145), (384, 29181), (415, 29241), (471, 29331), (504, 29421), (512, 29445), (516, 29457), (542, 29523), (554, 29538), (569, 29562), (576, 29574),

Gene: Typha\_23 Start: 18613, Stop: 19611, Start Num: 52

Candidate Starts for Typha\_23:

(Start: 52 @18613 has 5 MA's), (Start: 97 @18679 has 272 MA's), (142, 18769), (145, 18775), (169, 18823), (190, 18871), (206, 18898), (222, 18925), (223, 18928), (244, 18949), (269, 19000), (297, 19051), (305, 19060), (322, 19087), (358, 19162), (366, 19186), (454, 19276), (471, 19300), (472, 19303), (487, 19339), (509, 19393), (512, 19402), (529, 19444), (530, 19447), (580, 19528), (582, 19537), (599, 19582),

Gene: Typhonomachy\_18 Start: 14764, Stop: 15735, Start Num: 97

Candidate Starts for Typhonomachy\_18:

(Start: 97 @14764 has 272 MA's), (125, 14809), (136, 14830), (163, 14893), (173, 14917), (185, 14947), (214, 14986), (240, 15025), (244, 15034), (246, 15037), (279, 15103), (306, 15151), (334, 15193), (358, 15241), (384, 15292), (415, 15352), (424, 15367), (426, 15370), (437, 15388), (441,

15394), (462, 15439), (475, 15466), (481, 15484), (502, 15535), (503, 15538), (513, 15568), (516, 15577), (522, 15592), (547, 15649), (578, 15697), (587, 15721), (589, 15727),

Gene: Tyson\_17 Start: 15865, Stop: 16746, Start Num: 93

Candidate Starts for Tyson\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (274, 16192), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (385, 16381), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: UPIE\_17 Start: 15845, Stop: 16744, Start Num: 80

Candidate Starts for UPIE\_17:

(58, 15809), (Start: 80 @15845 has 9 MA's), (Start: 93 @15863 has 72 MA's), (111, 15887), (127, 15917), (136, 15932), (154, 15965), (235, 16109), (320, 16265), (322, 16268), (324, 16274), (347, 16319), (360, 16346), (385, 16379), (390, 16385), (415, 16418), (421, 16427), (455, 16454), (501, 16574), (518, 16622), (563, 16688), (567, 16694), (585, 16733),

Gene: Ubuntu\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Ubuntu\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Ugenie5\_25 Start: 20560, Stop: 21573, Start Num: 97

Candidate Starts for Ugenie5\_25:

(Start: 97 @20560 has 272 MA's), (110, 20578), (142, 20635), (152, 20653), (167, 20689), (261, 20869), (277, 20905), (296, 20935), (322, 20977), (397, 21136), (464, 21280), (486, 21343), (514, 21418), (518, 21430), (528, 21454),

Gene: UhSalsa\_22 Start: 15480, Stop: 16352, Start Num: 103

Candidate Starts for UhSalsa\_22:

(Start: 103 @15480 has 85 MA's), (121, 15519), (163, 15600), (165, 15606), (198, 15675), (246, 15753), (274, 15813), (322, 15891), (392, 15987), (486, 16116), (496, 16134), (514, 16191), (518, 16203), (534, 16245), (587, 16341),

Gene: UmaThurman\_18 Start: 15921, Stop: 16781, Start Num: 70

Candidate Starts for UmaThurman\_18:

(Start: 65 @15915 has 6 MA's), (Start: 70 @15921 has 27 MA's), (163, 16077), (203, 16158), (274, 16257), (340, 16365), (400, 16449), (451, 16515), (481, 16560), (523, 16650), (541, 16692),

Gene: Underpass\_17 Start: 16079, Stop: 16993, Start Num: 93

Candidate Starts for Underpass\_17:

(Start: 93 @16079 has 72 MA's), (111, 16103), (127, 16133), (189, 16259), (235, 16331), (318, 16484), (320, 16487), (322, 16490), (336, 16520), (363, 16577), (385, 16601), (390, 16607), (455, 16676), (464, 16694), (473, 16715), (493, 16769), (498, 16781), (518, 16844), (585, 16973), (591, 16985),

Gene: Unicorn\_21 Start: 15233, Stop: 16372, Start Num: 30

Candidate Starts for Unicorn\_21:

(Start: 30 @15233 has 217 MA's), (61, 15353), (119, 15443), (159, 15512), (262, 15713), (292, 15767), (312, 15797), (389, 15938), (426, 15998), (451, 16019), (471, 16049), (487, 16091), (488, 16094), (490, 16097), (524, 16184), (533, 16208), (580, 16286), (584, 16301), (599, 16340), (601, 16358),

Gene: UnionJack\_23 Start: 17673, Stop: 18686, Start Num: 103

Candidate Starts for UnionJack\_23:

(Start: 103 @17673 has 85 MA's), (152, 17769), (165, 17802), (167, 17805), (183, 17844), (261, 17979), (274, 18009), (293, 18039), (296, 18045), (308, 18063), (322, 18087), (342, 18129), (421, 18300), (518, 18543), (529, 18570), (565, 18633),

Gene: Updawg\_29 Start: 19643, Stop: 20659, Start Num: 97

Candidate Starts for Updawg\_29:

(Start: 97 @19643 has 272 MA's), (142, 19718), (152, 19736), (167, 19772), (183, 19811), (277, 19988), (296, 20018), (320, 20057), (322, 20060), (518, 20516), (528, 20540),

Gene: Upyo\_17 Start: 14116, Stop: 14946, Start Num: 96

Candidate Starts for Upyo\_17:

(Start: 96 @14116 has 14 MA's), (119, 14161), (132, 14185), (246, 14365), (275, 14419), (330, 14512), (337, 14524), (405, 14608), (411, 14626), (524, 14812), (529, 14824), (553, 14863), (579, 14914),

Gene: Urkel\_22 Start: 15965, Stop: 17101, Start Num: 30

Candidate Starts for Urkel\_22:

(Start: 30 @15965 has 217 MA's), (61, 16082), (119, 16172), (132, 16193), (144, 16214), (159, 16241), (262, 16442), (292, 16496), (295, 16502), (340, 16577), (371, 16652), (389, 16667), (487, 16820), (524, 16913), (533, 16937), (584, 17030), (599, 17069), (601, 17087),

Gene: Utz\_18 Start: 15788, Stop: 16648, Start Num: 70

Candidate Starts for Utz\_18:

(Start: 65 @15782 has 6 MA's), (Start: 70 @15788 has 27 MA's), (163, 15944), (203, 16025), (274, 16124), (340, 16232), (400, 16316), (454, 16388), (523, 16517), (533, 16544), (541, 16559),

Gene: VA6\_27 Start: 19197, Stop: 20207, Start Num: 97

Candidate Starts for VA6\_27:

(Start: 97 @19197 has 272 MA's), (127, 19251), (142, 19272), (152, 19290), (240, 19461), (296, 19572), (320, 19611), (322, 19614), (344, 19659), (382, 19749), (481, 19962), (486, 19977), (514, 20052), (518, 20064), (528, 20088), (565, 20154),

Gene: VC3\_30 Start: 19185, Stop: 20195, Start Num: 97

Candidate Starts for VC3\_30:

(Start: 97 @19185 has 272 MA's), (127, 19239), (142, 19260), (152, 19278), (240, 19449), (296, 19560), (320, 19599), (322, 19602), (344, 19647), (382, 19737), (481, 19950), (486, 19965), (514, 20040), (518, 20052), (528, 20076), (565, 20142),

Gene: Valary\_33 Start: 25854, Stop: 26798, Start Num: 83

Candidate Starts for Valary\_33:

(Start: 83 @25854 has 29 MA's), (142, 25959), (173, 26028), (175, 26034), (185, 26058), (196, 26073), (415, 26433), (424, 26448), (440, 26466), (486, 26568), (504, 26610), (516, 26646), (563, 26742), (588, 26793),

Gene: Validus\_22 Start: 15308, Stop: 16447, Start Num: 30

Candidate Starts for Validus\_22:

(Start: 30 @15308 has 217 MA's), (61, 15428), (119, 15518), (159, 15587), (206, 15686), (207, 15689), (262, 15788), (292, 15842), (340, 15923), (371, 15998), (389, 16013), (471, 16124), (487, 16166), (488, 16169), (524, 16259), (569, 16343), (580, 16361), (584, 16376), (599, 16415), (601, 16433),

Gene: VanDeWege\_33 Start: 25693, Stop: 26625, Start Num: 83



Candidate Starts for VanDeWege\_33:

(Start: 83 @25693 has 29 MA's), (142, 25789), (173, 25858), (175, 25864), (185, 25888), (196, 25903), (299, 26077), (322, 26113), (374, 26191), (415, 26260), (486, 26395), (504, 26437), (516, 26473), (549, 26548), (563, 26569), (588, 26620),

Gene: VanLee\_19 Start: 15562, Stop: 16449, Start Num: 93

Candidate Starts for VanLee\_19:

(Start: 93 @15562 has 72 MA's), (127, 15619), (136, 15634), (201, 15769), (277, 15904), (292, 15934), (318, 15970), (320, 15973), (325, 15985), (336, 16006), (352, 16036), (385, 16093), (390, 16099), (403, 16123), (498, 16273), (533, 16369), (579, 16429),

Gene: Vanisoa\_26 Start: 18587, Stop: 19609, Start Num: 97

Candidate Starts for Vanisoa\_26:

(Start: 97 @18587 has 272 MA's), (110, 18605), (127, 18641), (142, 18662), (152, 18680), (277, 18932), (296, 18962), (322, 19004), (391, 19154), (410, 19199), (433, 19250), (435, 19256), (464, 19316), (518, 19466), (522, 19475),

Gene: VasuNzinga\_49 Start: 25618, Stop: 26580, Start Num: 94

Candidate Starts for VasuNzinga\_49:

(Start: 94 @25618 has 30 MA's), (163, 25750), (173, 25774), (178, 25783), (181, 25789), (184, 25798), (201, 25822), (206, 25831), (213, 25843), (271, 25969), (312, 26050), (322, 26065), (324, 26071), (385, 26179), (476, 26305), (478, 26311), (536, 26461), (539, 26467), (548, 26479), (550, 26482), (593, 26569), (594, 26572), (596, 26575),

Gene: Veliki\_22 Start: 16054, Stop: 17190, Start Num: 30

Candidate Starts for Veliki\_22:

(Start: 30 @16054 has 217 MA's), (61, 16171), (119, 16261), (132, 16282), (144, 16303), (159, 16330), (292, 16585), (340, 16666), (371, 16741), (389, 16756), (471, 16867), (487, 16909), (524, 17002), (533, 17026), (584, 17119), (599, 17158), (601, 17176),

Gene: Vendetta\_21 Start: 15645, Stop: 16475, Start Num: 122

Candidate Starts for Vendetta\_21:

(Start: 120 @15642 has 6 MA's), (Start: 122 @15645 has 5 MA's), (139, 15660), (158, 15699), (166, 15720), (168, 15723), (243, 15867), (350, 16053), (391, 16122), (460, 16224), (502, 16305), (503, 16308), (538, 16389), (540, 16395), (549, 16407), (551, 16410), (564, 16434),

Gene: Verity\_33 Start: 29967, Stop: 30944, Start Num: 64

Candidate Starts for Verity\_33:

(Start: 64 @29967 has 25 MA's), (119, 30054), (142, 30090), (161, 30126), (240, 30282), (241, 30285), (277, 30354), (312, 30417), (318, 30426), (363, 30516), (391, 30549), (396, 30552), (490, 30705), (507, 30747), (517, 30768), (529, 30795), (536, 30816), (540, 30825), (544, 30831), (564, 30864), (566, 30867), (588, 30912), (591, 30921), (598, 30933),

Gene: Vetric\_17 Start: 16080, Stop: 16994, Start Num: 93

Candidate Starts for Vetric\_17:

(Start: 93 @16080 has 72 MA's), (111, 16104), (127, 16134), (189, 16260), (235, 16332), (318, 16485), (320, 16488), (322, 16491), (336, 16521), (363, 16578), (385, 16602), (390, 16608), (455, 16677), (464, 16695), (473, 16716), (498, 16782), (518, 16845), (585, 16974), (591, 16986),

Gene: ViaConlectus\_34 Start: 28404, Stop: 29390, Start Num: 64

Candidate Starts for ViaConlectus\_34:

(Start: 64 @28404 has 25 MA's), (109, 28476), (119, 28500), (142, 28536), (161, 28572), (240, 28728), (277, 28800), (312, 28863), (318, 28872), (352, 28929), (363, 28962), (391, 28995), (396, 28998),

(474, 29115), (490, 29151), (504, 29184), (507, 29193), (517, 29214), (529, 29241), (540, 29271), (544, 29277), (564, 29310), (566, 29313), (591, 29367), (598, 29379),

Gene: Vine\_18 Start: 15477, Stop: 16433, Start Num: 97

Candidate Starts for Vine\_18:

(Start: 97 @15477 has 272 MA's), (125, 15522), (152, 15579), (163, 15606), (185, 15660), (206, 15687), (240, 15738), (241, 15741), (244, 15747), (246, 15750), (273, 15804), (281, 15819), (306, 15864), (320, 15888), (333, 15903), (358, 15954), (415, 16050), (503, 16236), (513, 16266), (516, 16275), (527, 16299), (538, 16332), (587, 16419), (589, 16425),

Gene: Vivi2\_36 Start: 30528, Stop: 31484, Start Num: 78

Candidate Starts for Vivi2\_36:

(Start: 78 @30528 has 51 MA's), (175, 30714), (180, 30726), (196, 30753), (211, 30774), (248, 30834), (297, 30921), (299, 30924), (322, 30960), (343, 30993), (352, 31008), (356, 31020), (376, 31050), (384, 31056), (415, 31116), (471, 31206), (504, 31296), (512, 31320), (516, 31332), (542, 31398), (569, 31437), (576, 31449),

Gene: ViviJ\_19 Start: 16180, Stop: 17310, Start Num: 36

Candidate Starts for ViviJ\_19:

(Start: 36 @16180 has 22 MA's), (Start: 105 @16354 has 2 MA's), (142, 16420), (144, 16423), (159, 16450), (206, 16549), (262, 16651), (292, 16705), (312, 16735), (330, 16771), (333, 16774), (337, 16783), (369, 16858), (371, 16861), (405, 16897), (427, 16939), (451, 16957), (454, 16963), (471, 16987), (472, 16990), (487, 17029), (584, 17239), (599, 17278), (601, 17296),

Gene: VohminGhazi\_30 Start: 18966, Stop: 19979, Start Num: 97

Candidate Starts for VohminGhazi\_30:

(Start: 97 @18966 has 272 MA's), (127, 19020), (152, 19059), (201, 19164), (277, 19311), (296, 19341), (320, 19380), (322, 19383), (344, 19428), (368, 19488), (464, 19686), (518, 19836), (522, 19845),

Gene: Volt\_54 Start: 27948, Stop: 28892, Start Num: 92

Candidate Starts for Volt\_54:

(Start: 90 @27945 has 2 MA's), (Start: 92 @27948 has 38 MA's), (157, 28068), (206, 28164), (265, 28266), (305, 28332), (316, 28353), (320, 28359), (348, 28410), (358, 28434), (415, 28527), (445, 28566), (494, 28677), (497, 28683), (499, 28692), (502, 28698), (513, 28731), (516, 28740), (519, 28749), (527, 28764), (565, 28839), (573, 28851), (579, 28863), (587, 28884),

Gene: Vordorf\_21 Start: 17520, Stop: 18380, Start Num: 70

Candidate Starts for Vordorf\_21:

(Start: 70 @17520 has 27 MA's), (74, 17526), (98, 17562), (101, 17565), (185, 17733), (196, 17748), (203, 17760), (271, 17856), (274, 17859), (285, 17880), (292, 17895), (363, 18024), (453, 18120), (481, 18165), (488, 18186), (502, 18216), (543, 18306),

Gene: Waits\_29 Start: 18089, Stop: 19066, Start Num: 100

Candidate Starts for Waits\_29:

(Start: 100 @18089 has 20 MA's), (163, 18203), (165, 18209), (167, 18212), (286, 18446), (430, 18713), (461, 18767), (518, 18923),

Gene: Walrus\_19 Start: 16016, Stop: 16876, Start Num: 70

Candidate Starts for Walrus\_19:

(Start: 65 @16010 has 6 MA's), (Start: 70 @16016 has 27 MA's), (163, 16172), (203, 16253), (274, 16352), (340, 16460), (400, 16544), (451, 16610), (481, 16655), (523, 16745), (541, 16787),

Gene: Wamburgxpress\_17 Start: 15878, Stop: 16759, Start Num: 93

Candidate Starts for Wamburgxpress\_17:

(Start: 80 @15860 has 9 MA's), (Start: 93 @15878 has 72 MA's), (111, 15902), (127, 15932), (136, 15947), (154, 15980), (235, 16124), (274, 16205), (320, 16280), (322, 16283), (324, 16289), (347, 16334), (360, 16361), (385, 16394), (390, 16400), (415, 16433), (421, 16442), (455, 16469), (501, 16589), (518, 16637), (563, 16703), (567, 16709), (585, 16748),

Gene: Warrior24\_30 Start: 18093, Stop: 19070, Start Num: 100

Candidate Starts for Warrior24\_30:

(Start: 100 @18093 has 20 MA's), (163, 18207), (165, 18213), (167, 18216), (286, 18450), (430, 18717), (461, 18771), (518, 18927),

Gene: Waterfoul\_20 Start: 16344, Stop: 17474, Start Num: 36

Candidate Starts for Waterfoul\_20:

(Start: 36 @16344 has 22 MA's), (144, 16587), (159, 16614), (206, 16713), (262, 16815), (292, 16869), (312, 16899), (330, 16935), (333, 16938), (337, 16947), (369, 17022), (371, 17025), (405, 17061), (427, 17103), (451, 17121), (454, 17127), (471, 17151), (472, 17154), (474, 17160), (487, 17193), (584, 17403), (599, 17442), (601, 17460),

Gene: Webster2\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Webster2\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: WeiHuaDA\_33 Start: 21452, Stop: 22465, Start Num: 97

Candidate Starts for WeiHuaDA\_33:

(Start: 97 @21452 has 272 MA's), (110, 21470), (142, 21527), (152, 21545), (167, 21581), (183, 21620), (296, 21827), (320, 21866), (322, 21869), (344, 21914), (368, 21974), (382, 22007), (429, 22097), (446, 22133), (518, 22322), (522, 22331),

Gene: Weirido19\_18 Start: 14977, Stop: 16083, Start Num: 51

Candidate Starts for Weirido19\_18:

(10, 14650), (12, 14686), (Start: 51 @14977 has 2 MA's), (Start: 55 @14989 has 22 MA's), (132, 15118), (157, 15163), (159, 15166), (161, 15172), (167, 15187), (212, 15271), (253, 15355), (265, 15385), (267, 15391), (284, 15421), (303, 15448), (309, 15454), (313, 15463), (337, 15508), (347, 15526), (352, 15535), (391, 15610), (402, 15628), (473, 15769), (542, 15937), (567, 15976), (580, 15997), (582, 16006), (584, 16012), (599, 16051),

Gene: Wendigo\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Wendigo\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Whabigail7\_29 Start: 19670, Stop: 20686, Start Num: 97

Candidate Starts for Whabigail7\_29:

(Start: 97 @19670 has 272 MA's), (142, 19745), (152, 19763), (167, 19799), (183, 19838), (296, 20045), (320, 20084), (322, 20087), (361, 20174), (446, 20354), (486, 20456), (514, 20531), (518, 20543),

Gene: WheatThin\_21 Start: 16293, Stop: 17354, Start Num: 60

Candidate Starts for WheatThin\_21:

(Start: 60 @16293 has 18 MA's), (Start: 94 @16338 has 30 MA's), (111, 16368), (167, 16476), (245, 16626), (265, 16674), (315, 16758), (321, 16767), (345, 16809), (443, 16986), (459, 17019), (479, 17055), (567, 17250), (598, 17322), (599, 17325),

Gene: Wheezy\_40 Start: 28862, Stop: 29803, Start Num: 76

Candidate Starts for Wheezy\_40:

(Start: 76 @28862 has 24 MA's), (130, 28949), (167, 29024), (198, 29090), (241, 29132), (269, 29189), (387, 29402), (406, 29429), (471, 29540), (524, 29672), (576, 29768),

Gene: Whirlwind\_19 Start: 16247, Stop: 17137, Start Num: 93

Candidate Starts for Whirlwind\_19:

(Start: 93 @16247 has 72 MA's), (111, 16271), (136, 16316), (142, 16331), (154, 16352), (201, 16448), (277, 16583), (282, 16592), (320, 16652), (322, 16655), (324, 16661), (360, 16733), (385, 16766), (455, 16841), (484, 16916), (503, 16967), (518, 17009), (585, 17120), (587, 17123),

Gene: Whitney\_20 Start: 16305, Stop: 17228, Start Num: 99

Candidate Starts for Whitney\_20:

(Start: 99 @16305 has 15 MA's), (Start: 102 @16308 has 6 MA's), (111, 16320), (121, 16338), (145, 16383), (163, 16422), (180, 16461), (203, 16494), (206, 16500), (244, 16569), (273, 16623), (276, 16626), (277, 16629), (285, 16641), (302, 16665), (306, 16671), (316, 16689), (352, 16743), (356, 16755), (358, 16761), (374, 16782), (404, 16827), (405, 16830), (410, 16848), (415, 16854), (424, 16869), (426, 16872), (502, 17025), (503, 17028), (505, 17034), (518, 17067), (527, 17085), (538, 17118), (571, 17169), (579, 17184), (592, 17220),

Gene: Whitty\_18 Start: 16018, Stop: 16983, Start Num: 87

Candidate Starts for Whitty\_18:

(Start: 87 @16018 has 10 MA's), (107, 16045), (116, 16063), (208, 16240), (210, 16243), (246, 16318), (277, 16384), (290, 16411), (320, 16468), (324, 16477), (477, 16714), (485, 16738), (522, 16837), (529, 16858), (537, 16879), (562, 16918), (567, 16927),

Gene: WhoseManz\_42 Start: 26578, Stop: 27498, Start Num: 81

Candidate Starts for WhoseManz\_42:

(Start: 81 @26578 has 8 MA's), (130, 26659), (154, 26704), (183, 26773), (269, 26899), (292, 26941), (343, 27025), (364, 27076), (387, 27109), (471, 27247), (499, 27307), (505, 27325), (524, 27367), (573, 27457), (576, 27463), (583, 27484),

Gene: WideWale\_29 Start: 19643, Stop: 20659, Start Num: 97

Candidate Starts for WideWale\_29:

(Start: 97 @19643 has 272 MA's), (142, 19718), (152, 19736), (167, 19772), (183, 19811), (277, 19988), (296, 20018), (320, 20057), (322, 20060), (518, 20516), (528, 20540),

Gene: Widow\_17 Start: 14300, Stop: 15133, Start Num: 96

Candidate Starts for Widow\_17:

(Start: 96 @14300 has 14 MA's), (132, 14369), (175, 14453), (203, 14504), (275, 14612), (330, 14705), (337, 14717), (341, 14723), (389, 14789), (485, 14915), (502, 14942), (503, 14945), (509, 14963), (514, 14978), (529, 15017),

Gene: Wigglewigggle\_17 Start: 16106, Stop: 17020, Start Num: 93

Candidate Starts for Wigglewigggle\_17:

(Start: 93 @16106 has 72 MA's), (111, 16130), (127, 16160), (189, 16286), (235, 16358), (318, 16511), (320, 16514), (322, 16517), (336, 16547), (363, 16604), (385, 16628), (390, 16634), (455, 16703), (464, 16721), (473, 16742), (493, 16796), (498, 16808), (518, 16871), (585, 17000), (591, 17012),

Gene: Wiks\_30 Start: 18958, Stop: 19974, Start Num: 97

Candidate Starts for Wiks\_30:

(Start: 97 @18958 has 272 MA's), (110, 18976), (127, 19012), (152, 19051), (201, 19156), (296, 19333), (320, 19372), (322, 19375), (361, 19462), (368, 19483), (430, 19609), (464, 19681), (518, 19831), (522, 19840), (565, 19921),

Gene: Wilder\_17 Start: 16079, Stop: 16993, Start Num: 93

Candidate Starts for Wilder\_17:

(Start: 93 @16079 has 72 MA's), (111, 16103), (127, 16133), (189, 16259), (235, 16331), (318, 16484), (320, 16487), (322, 16490), (336, 16520), (363, 16577), (385, 16601), (390, 16607), (455, 16676), (464, 16694), (473, 16715), (493, 16769), (498, 16781), (518, 16844), (585, 16973), (591, 16985),

Gene: William\_18 Start: 15832, Stop: 16692, Start Num: 68

Candidate Starts for William\_18:

(Start: 68 @15832 has 24 MA's), (Start: 84 @15847 has 1 MA's), (104, 15877), (117, 15898), (163, 15988), (203, 16069), (337, 16273), (340, 16276), (481, 16471), (523, 16561), (541, 16603), (571, 16651), (575, 16657),

Gene: WilliamBoone\_47 Start: 28015, Stop: 28902, Start Num: 68

Candidate Starts for WilliamBoone\_47:

(Start: 68 @28015 has 24 MA's), (Start: 72 @28021 has 12 MA's), (106, 28069), (119, 28096), (160, 28168), (165, 28183), (282, 28372), (337, 28465), (352, 28489), (357, 28504), (426, 28597), (427, 28600), (471, 28648), (552, 28828), (573, 28864),

Gene: Winky\_17 Start: 16074, Stop: 16988, Start Num: 93

Candidate Starts for Winky\_17:

(Start: 93 @16074 has 72 MA's), (111, 16098), (127, 16128), (189, 16254), (235, 16326), (318, 16479), (320, 16482), (322, 16485), (336, 16515), (363, 16572), (385, 16596), (390, 16602), (455, 16671), (464, 16689), (473, 16710), (498, 16776), (518, 16839), (585, 16968), (591, 16980),

Gene: Wintermute\_23 Start: 17489, Stop: 18622, Start Num: 30

Candidate Starts for Wintermute\_23:

(Start: 30 @17489 has 217 MA's), (37, 17507), (Start: 51 @17579 has 2 MA's), (61, 17609), (119, 17699), (144, 17741), (157, 17765), (207, 17870), (334, 18092), (337, 18098), (426, 18248), (427, 18251), (451, 18269), (471, 18299), (487, 18341), (488, 18344), (509, 18395), (580, 18536), (584, 18551), (599, 18590), (601, 18608),

Gene: Wishmaker\_21 Start: 16315, Stop: 17409, Start Num: 55

Candidate Starts for Wishmaker\_21:

(Start: 55 @16315 has 22 MA's), (57, 16324), (119, 16420), (125, 16429), (131, 16438), (159, 16489), (161, 16495), (209, 16591), (221, 16609), (253, 16678), (257, 16687), (265, 16708), (267, 16714), (270, 16720), (273, 16723), (315, 16795), (317, 16798), (402, 16954), (431, 17005), (438, 17023), (473, 17095), (481, 17113), (514, 17197), (524, 17224), (527, 17227), (542, 17263), (555, 17281), (580, 17323), (584, 17338), (586, 17341), (597, 17371), (599, 17377),

Gene: Wisp\_17 Start: 15521, Stop: 16366, Start Num: 84

Candidate Starts for Wisp\_17:

(Start: 65 @15500 has 6 MA's), (Start: 70 @15506 has 27 MA's), (Start: 84 @15521 has 1 MA's), (163, 15662), (203, 15743), (252, 15800), (255, 15809), (274, 15842), (340, 15950), (400, 16034), (451,

16100), (481, 16145), (523, 16235), (541, 16277), (585, 16358),

Gene: Wizard\_30 Start: 25052, Stop: 25996, Start Num: 83

Candidate Starts for Wizard\_30:

(Start: 83 @25052 has 29 MA's), (142, 25157), (173, 25226), (175, 25232), (185, 25256), (196, 25271), (415, 25631), (424, 25646), (440, 25664), (486, 25766), (504, 25808), (516, 25844), (563, 25940), (588, 25991),

Gene: Wocket\_19 Start: 15980, Stop: 16840, Start Num: 70

Candidate Starts for Wocket\_19:

(Start: 65 @15974 has 6 MA's), (Start: 70 @15980 has 27 MA's), (163, 16136), (340, 16424), (400, 16508), (451, 16574), (454, 16580), (523, 16709), (541, 16751),

Gene: Wrigley\_19 Start: 16522, Stop: 17430, Start Num: 92

Candidate Starts for Wrigley\_19:

(Start: 92 @16522 has 38 MA's), (126, 16579), (190, 16714), (203, 16729), (204, 16732), (236, 16783), (316, 16891), (346, 16939), (358, 16963), (372, 16981), (374, 16987), (400, 17023), (475, 17179), (493, 17206), (498, 17218), (503, 17233), (518, 17278), (527, 17296), (529, 17305), (544, 17341), (547, 17344), (567, 17380), (571, 17386), (575, 17392),

Gene: WunderPhul\_30 Start: 18958, Stop: 19974, Start Num: 97

Candidate Starts for WunderPhul\_30:

(Start: 97 @18958 has 272 MA's), (110, 18976), (127, 19012), (152, 19051), (201, 19156), (296, 19333), (320, 19372), (322, 19375), (361, 19462), (368, 19483), (430, 19609), (464, 19681), (518, 19831), (522, 19840), (565, 19921),

Gene: Wyatt2\_17 Start: 15847, Stop: 16746, Start Num: 80

Candidate Starts for Wyatt2\_17:

(58, 15811), (Start: 80 @15847 has 9 MA's), (Start: 93 @15865 has 72 MA's), (111, 15889), (127, 15919), (136, 15934), (154, 15967), (235, 16111), (320, 16267), (322, 16270), (324, 16276), (347, 16321), (360, 16348), (390, 16387), (415, 16420), (421, 16429), (455, 16456), (501, 16576), (518, 16624), (563, 16690), (567, 16696), (585, 16735),

Gene: XianYue\_27 Start: 19126, Stop: 20139, Start Num: 97

Candidate Starts for XianYue\_27:

(Start: 97 @19126 has 272 MA's), (142, 19201), (152, 19219), (167, 19255), (183, 19294), (192, 19309), (261, 19435), (277, 19471), (296, 19501), (320, 19540), (322, 19543), (344, 19588), (446, 19807), (486, 19909), (514, 19984), (518, 19996), (528, 20020),

Gene: Ximenita\_22 Start: 15360, Stop: 16499, Start Num: 30

Candidate Starts for Ximenita\_22:

(Start: 30 @15360 has 217 MA's), (61, 15480), (119, 15570), (159, 15639), (262, 15840), (292, 15894), (369, 16047), (389, 16065), (451, 16146), (471, 16176), (474, 16185), (487, 16218), (524, 16311), (533, 16335), (580, 16413), (584, 16428), (599, 16467), (601, 16485),

Gene: Y10\_23 Start: 17489, Stop: 18622, Start Num: 30

Candidate Starts for Y10\_23:

(Start: 30 @17489 has 217 MA's), (37, 17507), (Start: 51 @17579 has 2 MA's), (61, 17609), (119, 17699), (144, 17741), (157, 17765), (207, 17870), (334, 18092), (337, 18098), (426, 18248), (427, 18251), (451, 18269), (471, 18299), (487, 18341), (488, 18344), (509, 18395), (580, 18536), (584, 18551), (599, 18590), (601, 18608),

Gene: Y2\_23 Start: 17489, Stop: 18622, Start Num: 30

Candidate Starts for Y2\_23:

(Start: 30 @17489 has 217 MA's), (37, 17507), (Start: 51 @17579 has 2 MA's), (61, 17609), (119, 17699), (144, 17741), (157, 17765), (207, 17870), (334, 18092), (337, 18098), (426, 18248), (427, 18251), (451, 18269), (471, 18299), (487, 18341), (488, 18344), (509, 18395), (580, 18536), (584, 18551), (599, 18590), (601, 18608),

Gene: Yakult\_18 Start: 14355, Stop: 15323, Start Num: 97

Candidate Starts for Yakult\_18:

(54, 14280), (Start: 97 @14355 has 272 MA's), (125, 14400), (127, 14403), (128, 14406), (136, 14421), (142, 14436), (159, 14472), (163, 14484), (240, 14616), (244, 14625), (305, 14739), (306, 14742), (358, 14832), (415, 14943), (462, 15030), (503, 15126), (504, 15129), (513, 15156), (516, 15165), (518, 15171), (527, 15189), (538, 15222), (542, 15231), (587, 15309), (589, 15315),

Gene: Yarn\_16 Start: 14423, Stop: 15394, Start Num: 97

Candidate Starts for Yarn\_16:

(Start: 97 @14423 has 272 MA's), (125, 14468), (136, 14489), (142, 14504), (152, 14525), (173, 14576), (185, 14606), (206, 14633), (240, 14684), (244, 14693), (246, 14696), (273, 14750), (279, 14762), (306, 14810), (358, 14900), (384, 14951), (402, 14981), (415, 15011), (426, 15029), (475, 15125), (481, 15143), (502, 15194), (503, 15197), (513, 15227), (516, 15236), (522, 15251), (547, 15308), (578, 15356), (587, 15380), (589, 15386),

Gene: Yecey3\_27 Start: 18619, Stop: 19641, Start Num: 97

Candidate Starts for Yecey3\_27:

(Start: 97 @18619 has 272 MA's), (110, 18637), (152, 18712), (167, 18748), (261, 18928), (277, 18964), (296, 18994), (322, 19036), (344, 19081), (382, 19174), (391, 19186), (402, 19207), (433, 19282), (518, 19498), (522, 19507),

Gene: Yndexa\_42 Start: 28532, Stop: 29452, Start Num: 81

Candidate Starts for Yndexa\_42:

(Start: 81 @28532 has 8 MA's), (130, 28613), (154, 28658), (183, 28727), (292, 28895), (343, 28979), (364, 29030), (387, 29063), (499, 29261), (505, 29279), (524, 29321), (573, 29411), (576, 29417), (583, 29438),

Gene: Yogi\_22 Start: 15454, Stop: 16326, Start Num: 103

Candidate Starts for Yogi\_22:

(Start: 103 @15454 has 85 MA's), (121, 15493), (163, 15574), (165, 15580), (198, 15649), (246, 15727), (258, 15754), (322, 15865), (392, 15961), (486, 16090), (496, 16108), (518, 16177), (587, 16315),

Gene: Yokurt\_30 Start: 18958, Stop: 19974, Start Num: 97

Candidate Starts for Yokurt\_30:

(Start: 97 @18958 has 272 MA's), (110, 18976), (127, 19012), (152, 19051), (201, 19156), (296, 19333), (320, 19372), (322, 19375), (361, 19462), (368, 19483), (430, 19609), (464, 19681), (518, 19831), (522, 19840), (565, 19921),

Gene: Yoncess\_22 Start: 15454, Stop: 16326, Start Num: 103

Candidate Starts for Yoncess\_22:

(Start: 103 @15454 has 85 MA's), (121, 15493), (163, 15574), (165, 15580), (198, 15649), (246, 15727), (258, 15754), (322, 15865), (392, 15961), (486, 16090), (496, 16108), (518, 16177), (587, 16315),

Gene: YorkOnyx\_34 Start: 28912, Stop: 29868, Start Num: 78

Candidate Starts for YorkOnyx\_34:

(Start: 78 @28912 has 51 MA's), (163, 29068), (175, 29098), (180, 29110), (185, 29122), (196, 29137), (206, 29149), (299, 29308), (322, 29344), (356, 29404), (365, 29428), (384, 29440), (415, 29500), (471, 29590), (504, 29680), (512, 29704), (516, 29716), (542, 29782), (554, 29797), (569, 29821), (576, 29833),

Gene: Yoshi\_18 Start: 12812, Stop: 13741, Start Num: 92

Candidate Starts for Yoshi\_18:

(Start: 92 @12812 has 38 MA's), (128, 12872), (152, 12923), (203, 13022), (206, 13028), (217, 13043), (241, 13085), (285, 13163), (298, 13181), (341, 13247), (348, 13259), (373, 13304), (402, 13343), (405, 13349), (415, 13373), (418, 13376), (419, 13379), (468, 13457), (475, 13478), (476, 13481), (490, 13517), (502, 13544), (503, 13547), (518, 13586), (527, 13604), (528, 13610), (542, 13646), (547, 13652), (562, 13676), (567, 13682), (571, 13688),

Gene: YoureAdopted\_21 Start: 15987, Stop: 17123, Start Num: 30

Candidate Starts for YoureAdopted\_21:

(Start: 30 @15987 has 217 MA's), (61, 16104), (119, 16194), (132, 16215), (144, 16236), (159, 16263), (292, 16518), (340, 16599), (371, 16674), (389, 16689), (471, 16800), (487, 16842), (524, 16935), (533, 16959), (584, 17052), (599, 17091), (601, 17109),

Gene: Yucky\_19 Start: 15337, Stop: 16293, Start Num: 97

Candidate Starts for Yucky\_19:

(Start: 97 @15337 has 272 MA's), (125, 15382), (152, 15439), (163, 15466), (185, 15520), (206, 15547), (240, 15598), (241, 15601), (244, 15607), (246, 15610), (273, 15664), (281, 15679), (306, 15724), (320, 15748), (333, 15763), (358, 15814), (415, 15910), (503, 16096), (513, 16126), (516, 16135), (527, 16159), (538, 16192), (587, 16279), (589, 16285),

Gene: Yummy\_18 Start: 14308, Stop: 15279, Start Num: 97

Candidate Starts for Yummy\_18:

(Start: 97 @14308 has 272 MA's), (125, 14353), (136, 14374), (142, 14389), (163, 14437), (173, 14461), (185, 14491), (240, 14569), (244, 14578), (246, 14581), (279, 14647), (306, 14695), (334, 14737), (358, 14785), (384, 14836), (415, 14896), (424, 14911), (426, 14914), (441, 14938), (475, 15010), (481, 15028), (502, 15079), (503, 15082), (513, 15112), (516, 15121), (522, 15136), (538, 15178), (547, 15193), (578, 15241), (587, 15265), (589, 15271),

Gene: Yuna\_22 Start: 15278, Stop: 16414, Start Num: 30

Candidate Starts for Yuna\_22:

(Start: 30 @15278 has 217 MA's), (61, 15395), (Start: 105 @15458 has 2 MA's), (159, 15554), (207, 15656), (262, 15755), (292, 15809), (340, 15890), (427, 16043), (454, 16067), (487, 16133), (488, 16136), (490, 16139), (524, 16226), (580, 16328), (584, 16343), (599, 16382), (601, 16400),

Gene: YungMoney\_32 Start: 26412, Stop: 27344, Start Num: 83

Candidate Starts for YungMoney\_32:

(Start: 83 @26412 has 29 MA's), (142, 26508), (173, 26577), (175, 26583), (180, 26595), (181, 26598), (185, 26607), (196, 26622), (299, 26796), (320, 26829), (322, 26832), (402, 26949), (415, 26979), (486, 27114), (502, 27150), (516, 27192), (549, 27267), (563, 27288),

Gene: Yunkel11\_22 Start: 15243, Stop: 16379, Start Num: 30

Candidate Starts for Yunkel11\_22:

(Start: 30 @15243 has 217 MA's), (61, 15360), (119, 15450), (132, 15471), (159, 15519), (292, 15774), (340, 15855), (371, 15930), (389, 15945), (471, 16056), (487, 16098), (518, 16176), (524, 16191), (533, 16215), (584, 16308), (599, 16347), (601, 16365),

Gene: Yvonnetastic\_44 Start: 29619, Stop: 30515, Start Num: 63



Candidate Starts for Yvonnetastic\_44:

(Start: 63 @29619 has 2 MA's), (119, 29706), (157, 29772), (163, 29787), (165, 29793), (271, 29964), (305, 30021), (337, 30075), (352, 30099), (417, 30198), (427, 30216), (471, 30264), (481, 30282), (490, 30306), (571, 30474),

Gene: ZAYM\_18 Start: 16111, Stop: 16974, Start Num: 134

Candidate Starts for ZAYM\_18:

(15, 15733), (18, 15784), (79, 16030), (Start: 94 @16048 has 30 MA's), (Start: 102 @16057 has 6 MA's), (128, 16099), (Start: 134 @16111 has 1 MA's), (250, 16333), (276, 16378), (289, 16402), (296, 16408), (306, 16423), (323, 16453), (358, 16513), (360, 16519), (404, 16579), (405, 16582), (415, 16606), (450, 16663), (490, 16750), (518, 16819), (539, 16873), (587, 16957),

Gene: Zabiza\_22 Start: 16018, Stop: 17154, Start Num: 30

Candidate Starts for Zabiza\_22:

(Start: 30 @16018 has 217 MA's), (61, 16135), (119, 16225), (132, 16246), (144, 16267), (159, 16294), (292, 16549), (340, 16630), (371, 16705), (389, 16720), (471, 16831), (487, 16873), (524, 16966), (533, 16990), (584, 17083), (599, 17122), (601, 17140),

Gene: Zaka\_30 Start: 18958, Stop: 19974, Start Num: 97

Candidate Starts for Zaka\_30:

(Start: 97 @18958 has 272 MA's), (110, 18976), (127, 19012), (152, 19051), (201, 19156), (296, 19333), (320, 19372), (322, 19375), (361, 19462), (368, 19483), (430, 19609), (464, 19681), (518, 19831), (522, 19840), (565, 19921),

Gene: Zakai\_17 Start: 16068, Stop: 16982, Start Num: 93

Candidate Starts for Zakai\_17:

(Start: 93 @16068 has 72 MA's), (111, 16092), (127, 16122), (189, 16248), (235, 16320), (318, 16473), (320, 16476), (322, 16479), (336, 16509), (363, 16566), (385, 16590), (390, 16596), (455, 16665), (464, 16683), (473, 16704), (498, 16770), (518, 16833), (585, 16962), (591, 16974),

Gene: Zapner\_19 Start: 13337, Stop: 14266, Start Num: 92

Candidate Starts for Zapner\_19:

(Start: 92 @13337 has 38 MA's), (128, 13397), (152, 13448), (203, 13547), (206, 13553), (217, 13568), (285, 13688), (298, 13706), (341, 13772), (348, 13784), (373, 13829), (402, 13868), (405, 13874), (415, 13898), (418, 13901), (419, 13904), (424, 13913), (426, 13916), (468, 13982), (475, 14003), (476, 14006), (490, 14042), (502, 14069), (503, 14072), (518, 14111), (527, 14129), (528, 14135), (542, 14171), (547, 14177), (562, 14201), (567, 14207), (571, 14213),

Gene: Zarbodnamra\_18 Start: 15786, Stop: 16652, Start Num: 65

Candidate Starts for Zarbodnamra\_18:

(Start: 65 @15786 has 6 MA's), (Start: 70 @15792 has 27 MA's), (163, 15948), (203, 16029), (274, 16128), (340, 16236), (400, 16320), (523, 16521), (541, 16563),

Gene: Zareef\_21 Start: 15746, Stop: 16711, Start Num: 97

Candidate Starts for Zareef\_21:

(Start: 97 @15746 has 272 MA's), (125, 15791), (142, 15827), (152, 15848), (163, 15875), (185, 15929), (240, 16010), (244, 16019), (246, 16022), (279, 16091), (306, 16139), (358, 16229), (365, 16244), (397, 16283), (475, 16439), (502, 16505), (503, 16508), (504, 16511), (513, 16538), (516, 16547), (527, 16571), (538, 16604), (549, 16622), (575, 16667), (587, 16697), (589, 16703),

Gene: Zaria\_17 Start: 15861, Stop: 16760, Start Num: 80

Candidate Starts for Zaria\_17:

(Start: 80 @15861 has 9 MA's), (Start: 93 @15879 has 72 MA's), (111, 15903), (127, 15933), (136, 15948), (154, 15981), (235, 16125), (274, 16206), (320, 16281), (322, 16284), (324, 16290), (347, 16335), (360, 16362), (385, 16395), (390, 16401), (415, 16434), (421, 16443), (455, 16470), (501, 16590), (518, 16638), (563, 16704), (567, 16710), (585, 16749),

Gene: Zavala\_22 Start: 15992, Stop: 17128, Start Num: 30

Candidate Starts for Zavala\_22:

(Start: 30 @15992 has 217 MA's), (61, 16109), (119, 16199), (132, 16220), (144, 16241), (159, 16268), (292, 16523), (340, 16604), (371, 16679), (389, 16694), (471, 16805), (487, 16847), (524, 16940), (533, 16964), (584, 17057), (599, 17096), (601, 17114),

Gene: ZenTime222\_18 Start: 16018, Stop: 16983, Start Num: 87

Candidate Starts for ZenTime222\_18:

(Start: 87 @16018 has 10 MA's), (107, 16045), (116, 16063), (208, 16240), (210, 16243), (246, 16318), (277, 16384), (290, 16411), (320, 16468), (324, 16477), (477, 16714), (485, 16738), (522, 16837), (529, 16858), (537, 16879), (562, 16918), (567, 16927),

Gene: ZhongYanYuan\_16 Start: 15899, Stop: 16813, Start Num: 93

Candidate Starts for ZhongYanYuan\_16:

(Start: 93 @15899 has 72 MA's), (111, 15923), (127, 15953), (167, 16034), (189, 16079), (318, 16304), (320, 16307), (322, 16310), (336, 16340), (363, 16397), (390, 16427), (455, 16496), (464, 16514), (493, 16589), (498, 16601), (518, 16664), (531, 16691), (567, 16754), (585, 16793), (591, 16805),

Gene: ZiggyZoo\_17 Start: 15583, Stop: 16443, Start Num: 70

Candidate Starts for ZiggyZoo\_17:

(Start: 65 @15577 has 6 MA's), (Start: 70 @15583 has 27 MA's), (163, 15739), (203, 15820), (274, 15919), (340, 16027), (400, 16111), (451, 16177), (481, 16222), (523, 16312), (541, 16354),

Gene: Ziko\_55 Start: 27888, Stop: 28832, Start Num: 92

Candidate Starts for Ziko\_55:

(Start: 90 @27885 has 2 MA's), (Start: 92 @27888 has 38 MA's), (157, 28008), (206, 28104), (265, 28206), (305, 28272), (316, 28293), (320, 28299), (348, 28350), (358, 28374), (415, 28467), (445, 28506), (494, 28617), (497, 28623), (499, 28632), (502, 28638), (513, 28671), (516, 28680), (519, 28689), (527, 28704), (565, 28779), (573, 28791), (579, 28803), (587, 28824),

Gene: Zimmer\_29 Start: 21369, Stop: 22385, Start Num: 97

Candidate Starts for Zimmer\_29:

(Start: 97 @21369 has 272 MA's), (142, 21444), (152, 21462), (167, 21498), (183, 21537), (296, 21744), (320, 21783), (322, 21786), (518, 22242),

Gene: Zion\_33 Start: 28461, Stop: 29327, Start Num: 66

Candidate Starts for Zion\_33:

(Start: 66 @28461 has 8 MA's), (85, 28485), (113, 28530), (142, 28590), (162, 28629), (209, 28725), (316, 28887), (335, 28920), (383, 28995), (402, 29019), (507, 29160), (524, 29196), (534, 29223), (569, 29280),

Gene: Zipp\_33 Start: 29867, Stop: 30844, Start Num: 64

Candidate Starts for Zipp\_33:

(Start: 64 @29867 has 25 MA's), (119, 29954), (142, 29990), (161, 30026), (240, 30182), (241, 30185), (277, 30254), (312, 30317), (318, 30326), (363, 30416), (391, 30449), (396, 30452), (490, 30605), (507, 30647), (517, 30668), (529, 30695), (536, 30716), (540, 30725), (544, 30731), (564, 30764), (566, 30767), (588, 30812), (591, 30821), (598, 30833),

Gene: Zitch\_35 Start: 27751, Stop: 28728, Start Num: 64

Candidate Starts for Zitch\_35:

(Start: 64 @27751 has 25 MA's), (115, 27826), (119, 27838), (142, 27874), (161, 27910), (212, 28012), (240, 28066), (277, 28138), (280, 28144), (312, 28201), (318, 28210), (352, 28267), (363, 28300), (391, 28333), (396, 28336), (490, 28489), (504, 28522), (507, 28531), (517, 28552), (529, 28579), (536, 28600), (540, 28609), (544, 28615), (564, 28648), (566, 28651), (591, 28705), (598, 28717),

Gene: ZoMa\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for ZoMa\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Zodiariah\_17 Start: 15106, Stop: 16167, Start Num: 61

Candidate Starts for Zodiariah\_17:

(56, 15097), (61, 15106), (119, 15199), (144, 15241), (167, 15289), (253, 15457), (264, 15481), (265, 15487), (309, 15559), (313, 15568), (315, 15571), (402, 15721), (416, 15748), (438, 15790), (463, 15838), (524, 15985), (547, 16030), (549, 16033), (567, 16063), (582, 16093), (584, 16099), (598, 16135), (599, 16138),

Gene: ZoeJ\_18 Start: 13830, Stop: 14957, Start Num: 34

Candidate Starts for ZoeJ\_18:

(Start: 34 @13830 has 10 MA's), (37, 13839), (61, 13941), (119, 14031), (144, 14073), (145, 14076), (159, 14100), (206, 14199), (244, 14262), (262, 14301), (292, 14355), (337, 14433), (369, 14508), (427, 14586), (451, 14604), (471, 14634), (487, 14676), (488, 14679), (524, 14769), (533, 14793), (580, 14871), (584, 14886), (599, 14925), (601, 14943),

Gene: Zolita\_22 Start: 18827, Stop: 19840, Start Num: 103

Candidate Starts for Zolita\_22:

(Start: 103 @18827 has 85 MA's), (152, 18923), (165, 18956), (167, 18959), (183, 18998), (210, 19046), (296, 19199), (308, 19217), (322, 19241), (342, 19283), (481, 19595), (518, 19697), (529, 19724),

Gene: Zombie\_17 Start: 15477, Stop: 16649, Start Num: 30

Candidate Starts for Zombie\_17:

(6, 15144), (Start: 30 @15477 has 217 MA's), (61, 15597), (75, 15615), (Start: 105 @15660 has 2 MA's), (110, 15666), (142, 15729), (161, 15765), (192, 15834), (195, 15837), (206, 15858), (241, 15912), (262, 15957), (280, 15987), (337, 16089), (344, 16101), (352, 16113), (358, 16131), (451, 16296), (471, 16326), (479, 16344), (487, 16368), (534, 16488), (584, 16578), (597, 16611),

Gene: Zulu\_30 Start: 18957, Stop: 19973, Start Num: 97

Candidate Starts for Zulu\_30:

(Start: 97 @18957 has 272 MA's), (110, 18975), (127, 19011), (152, 19050), (201, 19155), (296, 19332), (320, 19371), (322, 19374), (361, 19461), (368, 19482), (430, 19608), (464, 19680), (518, 19830), (522, 19839), (565, 19920),