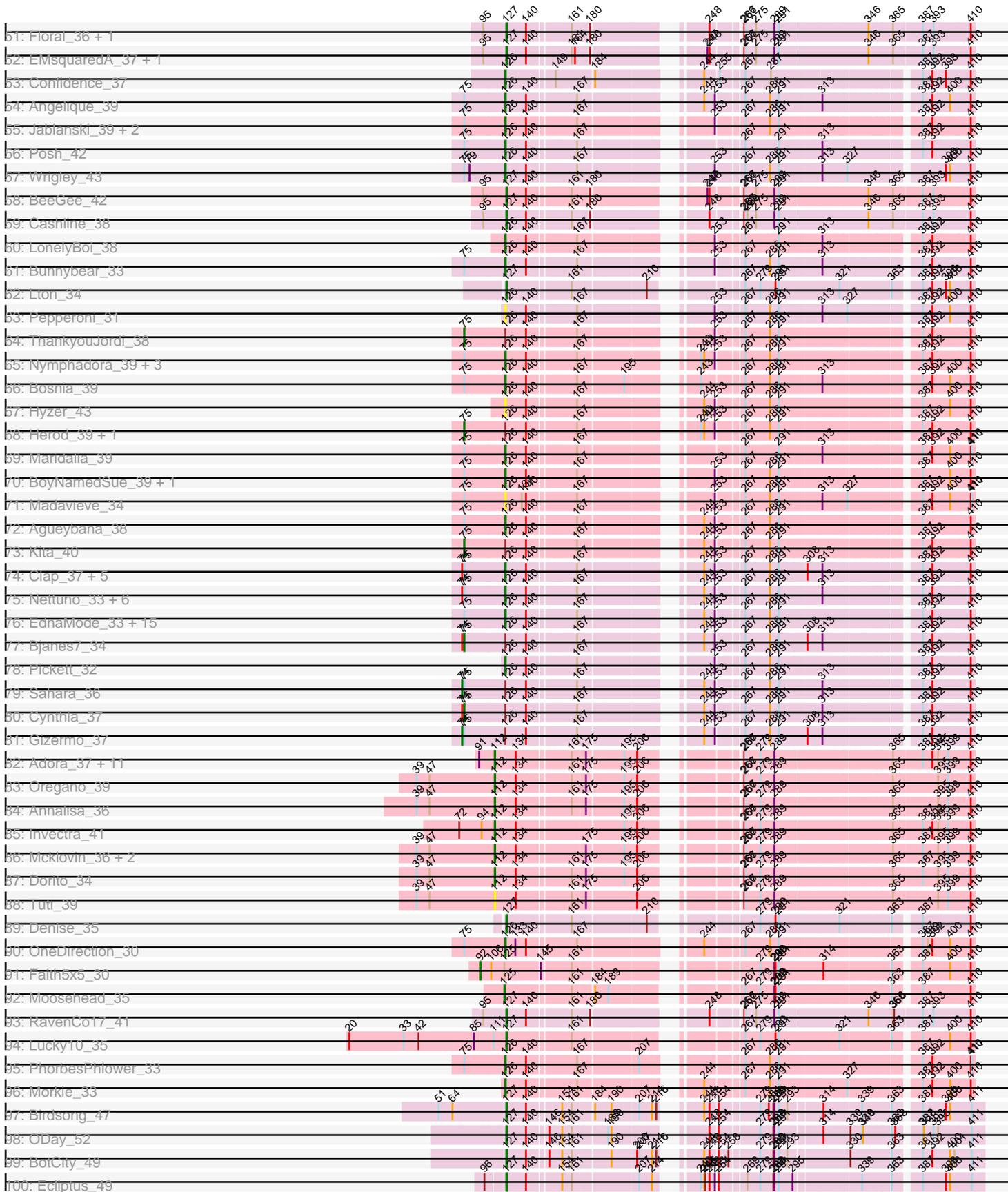




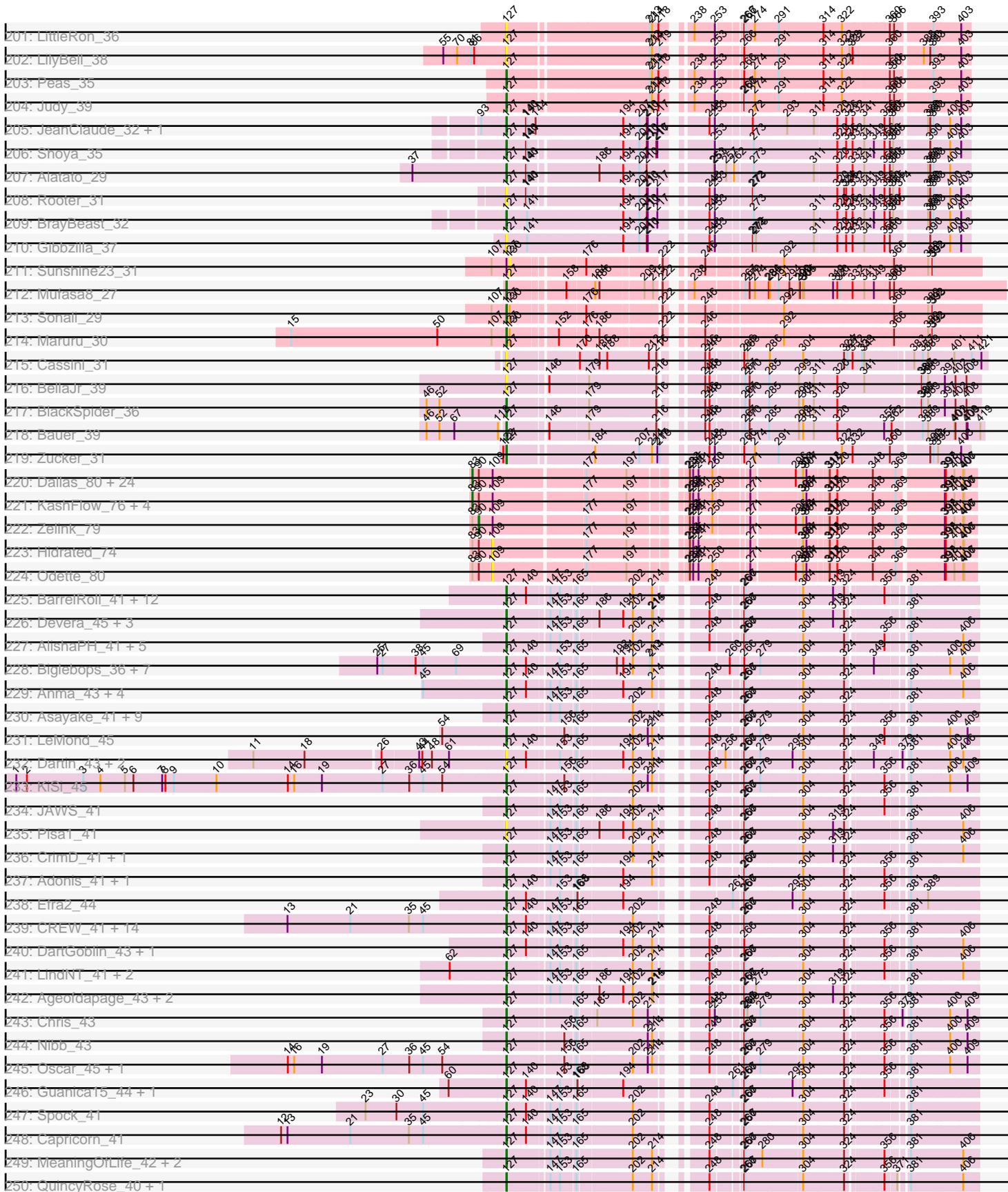
Pham 290700



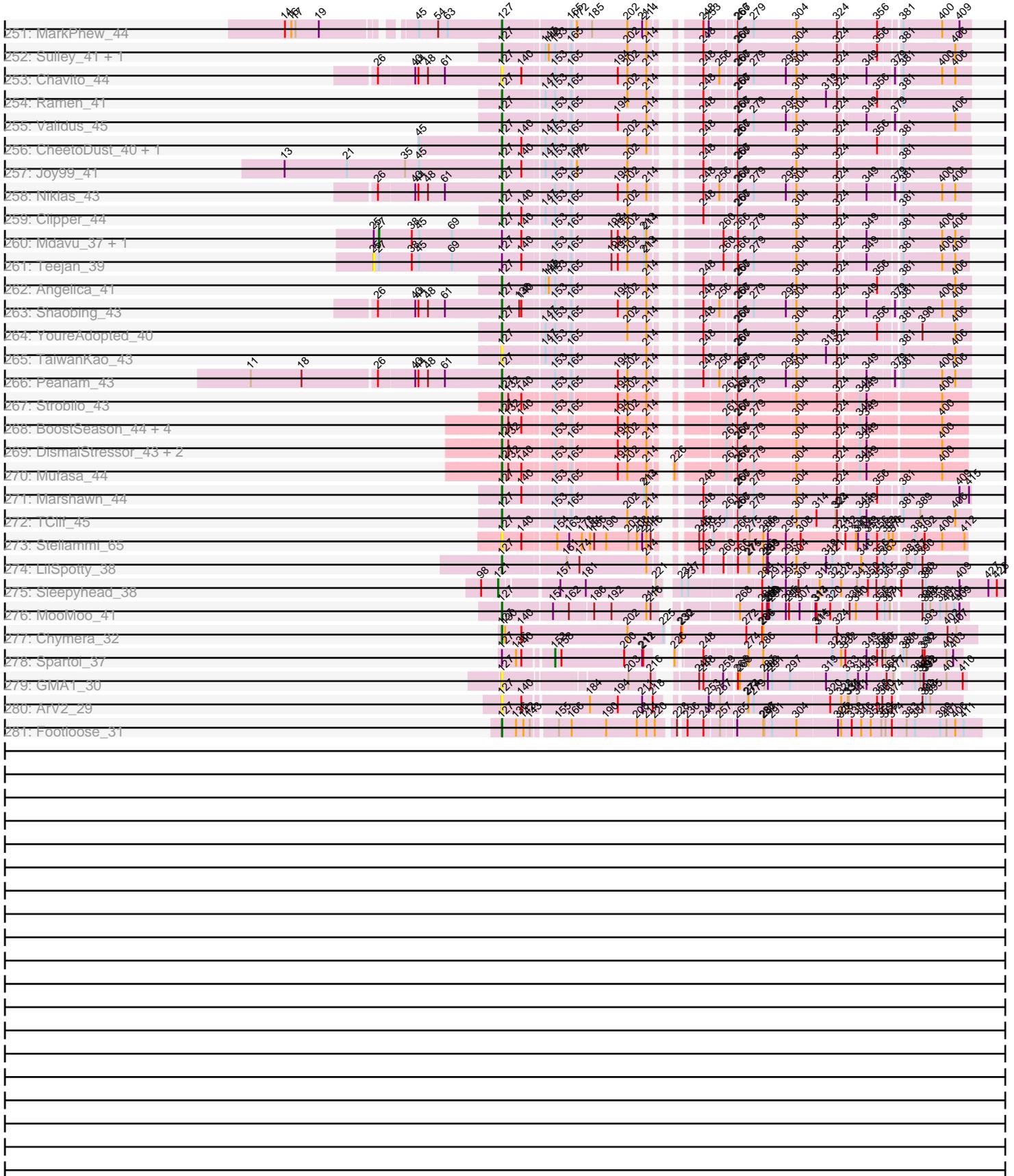




Pham 290700



Pham 290700



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 290700 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290700 has 500 members, 74 are drafts.

Phages represented in each track:

- Track 1 : Phrappuccino\_38, Settecandela\_38
- Track 2 : Farewell\_44, Sparky\_45
- Track 3 : DarwinJr\_42
- Track 4 : Aikyam\_37, MaterMagnus\_40, Gorpy\_41, Raffaella\_40, Sakai\_40
- Track 5 : Bhageatrice\_40
- Track 6 : BasketStar\_41
- Track 7 : Sashimi\_39
- Track 8 : Kabloowy\_40
- Track 9 : YoungHarleezy\_40
- Track 10 : Crescenzo\_39
- Track 11 : JellyBread\_36
- Track 12 : MurphyJoseph\_36
- Track 13 : Faja\_39
- Track 14 : Seahorse\_41
- Track 15 : EvePickles\_38
- Track 16 : Lasker\_39
- Track 17 : Auxilium\_38
- Track 18 : Nyilah\_36
- Track 19 : Ding\_40
- Track 20 : Richie\_40
- Track 21 : ThayneTheZag\_40
- Track 22 : GumGum\_40
- Track 23 : Mapleville\_40, Lawnathon\_40
- Track 24 : Shukran\_42
- Track 25 : Raqqa\_32
- Track 26 : SonDevVon\_40
- Track 27 : Isolde\_41
- Track 28 : LeBruni\_39
- Track 29 : BenchScraper\_39
- Track 30 : MUWow\_39
- Track 31 : Tiff81\_35
- Track 32 : Phrank15\_39
- Track 33 : CookieBear\_40
- Track 34 : NewKitty\_38
- Track 35 : AbbyDaisy\_36
- Track 36 : Anekin\_37
- Track 37 : JakeTheSnake\_41

- Track 38 : SpicyFrank\_39
- Track 39 : BillyTP\_42
- Track 40 : RadFad\_40, Hillester\_40
- Track 41 : Sporco\_41
- Track 42 : Vopal\_43
- Track 43 : CosmicBrownie\_38
- Track 44 : Persistence\_35
- Track 45 : BlueShadow\_39
- Track 46 : Windest\_40
- Track 47 : AdaS\_35, MidnightRain\_42
- Track 48 : Satrap\_40
- Track 49 : Globfish\_39
- Track 50 : Bradissa\_36, EnalisNailo\_35, Lilas\_38
- Track 51 : Floral\_36, Pollux\_38
- Track 52 : EMSquaredA\_37, Marteena\_36
- Track 53 : Confidence\_37
- Track 54 : Angelique\_39
- Track 55 : Jablanski\_39, WelcomeAyanna\_38, Pytheas\_39
- Track 56 : Posh\_42
- Track 57 : Wrigley\_43
- Track 58 : BeeGee\_42
- Track 59 : Cashline\_38
- Track 60 : LonelyBoi\_38
- Track 61 : Bunnybear\_33
- Track 62 : Lton\_34
- Track 63 : Pepperoni\_31
- Track 64 : ThankyouJordi\_38
- Track 65 : Nymphadora\_39, Hugley\_36, Eviarto\_39, TimTam\_39
- Track 66 : Bosnia\_39
- Track 67 : Hyzer\_43
- Track 68 : Herod\_39, BatStarr\_39
- Track 69 : Maridalia\_39
- Track 70 : BoyNamedSue\_39, AlumE\_39
- Track 71 : Madavieve\_34
- Track 72 : Agueybana\_38
- Track 73 : Kita\_40
- Track 74 : Clap\_37, Haley23\_37, GemG\_37, Mocha12\_37, Ebert\_39, Lamberg\_33
- Track 75 : Nettuno\_33, Savage\_37, Sproutie\_37, Matteo\_30, Jalleen\_36, TuertoX\_37, Whiteclaw\_37
- Track 76 : EdnaMode\_33, Eudoria\_39, Attis\_34, Neobush\_39, Zirinka\_36, Manasvini\_39, Suscepit\_39, Bialota\_37, Yeet412\_34, Antonio\_39, Tayonia\_39, SoilAssassin\_34, LordFarquaad\_35, Polly\_36, Zameen\_39, Trumpet\_39
- Track 77 : Bjanes7\_34
- Track 78 : Pickett\_32
- Track 79 : Sahara\_36
- Track 80 : Cynthia\_37
- Track 81 : Gizermo\_37
- Track 82 : Adora\_37, Samman98\_40, Dolores\_40, WinkNick\_41, Howe\_40, Shlim410\_38, Hortense\_40, Clark\_39, Beenie\_33, Sekhmet\_40, MichaelScott\_40, Twinkle\_39
- Track 83 : Oregano\_39
- Track 84 : Annalisa\_36
- Track 85 : Invectra\_41

- Track 86 : Mcklovin\_36, Thimann\_36, DobbysSock\_31
- Track 87 : Dorito\_34
- Track 88 : Tuti\_39
- Track 89 : Denise\_35
- Track 90 : OneDirection\_30
- Track 91 : Faith5x5\_30
- Track 92 : Moosehead\_35
- Track 93 : RavenCo17\_41
- Track 94 : Lucky10\_35
- Track 95 : PhorbesPhlower\_33
- Track 96 : Morkie\_33
- Track 97 : Birdsong\_47
- Track 98 : ODay\_52
- Track 99 : BotCity\_49
- Track 100 : Ecliptus\_49
- Track 101 : Budski\_49
- Track 102 : Holliday\_48
- Track 103 : Kamaru\_44, LitninMcQueen\_43
- Track 104 : Asapag\_47, Frickyeah\_52
- Track 105 : CheeseTouch\_54
- Track 106 : Periwinkle\_57
- Track 107 : Leroy\_50
- Track 108 : Phabuloso\_48
- Track 109 : Phistory\_51
- Track 110 : Kenna\_49, Getalong\_53, Lutum\_50
- Track 111 : BENtherdunthat\_50
- Track 112 : ShawBrad\_51
- Track 113 : Horus\_48, Crater\_49
- Track 114 : Apricot\_48
- Track 115 : Kudetre\_6
- Track 116 : Sephiroth\_7
- Track 117 : Syleon\_7
- Track 118 : MakCheese\_48
- Track 119 : TouchMeNot\_32, Poushou\_32, Colleen\_32, Arianna\_32
- Track 120 : Bran\_28
- Track 121 : Lederberg\_27, Troy\_27, SamW\_27
- Track 122 : Adelaide\_25
- Track 123 : StAB\_26
- Track 124 : Stiles\_27
- Track 125 : Spartan\_32
- Track 126 : Clank\_44, SimranZ1\_43
- Track 127 : Blarby\_54
- Track 128 : LordVader\_38
- Track 129 : Doomslug\_48
- Track 130 : DLane\_41
- Track 131 : Mattes\_43, SwagPigglett\_45, Saal\_43, Gorge\_43, DRBy19\_43, Jennelsea\_37, BobaPhett\_43, Zizzle\_44, Philus\_43, Whatsapiecost\_41, James\_43
- Track 132 : MilleniumForce\_42
- Track 133 : Ms6\_36
- Track 134 : Mutaforma13\_45
- Track 135 : IrishSherpFalk\_41, WillSterrel\_41
- Track 136 : Cornucopia\_45
- Track 137 : SuperGrey\_42

- Track 138 : NewHope4\_45, Polo2Bam\_48, Enzomatic\_49, SeaLumen\_48
- Track 139 : Hegedechwinu\_41, Juice456\_44
- Track 140 : Velveteen\_37, Coco12\_40, Kingsley\_38, Sarma624\_38, Cerasum\_38, BigPhil\_38, Brookers\_39
- Track 141 : PhesterPhotato\_44, Phalconet\_41
- Track 142 : Alexphander\_45
- Track 143 : ShroomBoi\_42
- Track 144 : Corium\_41, KingJulian\_42, Phanphagia\_37
- Track 145 : Spartacus\_41
- Track 146 : Hades\_43
- Track 147 : Bipolar\_39
- Track 148 : Melissauren88\_42
- Track 149 : Estave1\_43, DeadP\_46, Wee\_46, Renaud18\_46, Taj\_45
- Track 150 : Brocalys\_36, Clifton\_35, LastJedi\_34, Pippy\_38
- Track 151 : Violac\_42
- Track 152 : Emma\_44, Moonbeam\_41
- Track 153 : Wachhund\_44
- Track 154 : Mova\_42
- Track 155 : Kenuha5\_39
- Track 156 : Mozy\_51, StAnnes\_42
- Track 157 : KristaRAM\_43
- Track 158 : Ovechkin\_41
- Track 159 : PatoPoderoso\_41
- Track 160 : Flathead\_44
- Track 161 : Mandlovu\_40, Hlubikazi\_41, Strokeseat\_41
- Track 162 : Brushbloom\_46
- Track 163 : Enby\_42, SG4\_40, Lorde\_42
- Track 164 : Ardmore\_36
- Track 165 : MilanaBonita\_37, Akhila\_37
- Track 166 : EleanorGeorge\_40, Beakin\_43, LunaBlu\_46, Galactic\_43
- Track 167 : XFactor\_41
- Track 168 : Rialto\_46
- Track 169 : Fruitloop\_40
- Track 170 : Rita\_44
- Track 171 : Byougenkin\_40
- Track 172 : Cheesepuff\_46
- Track 173 : Shauna1\_38
- Track 174 : DoRead\_44
- Track 175 : Medindi\_40
- Track 176 : Filuzino\_41
- Track 177 : Donkeykong\_41
- Track 178 : Batiatus\_43
- Track 179 : CaptainTrips\_41, MinionDave\_43
- Track 180 : IMpilo\_40
- Track 181 : VRedHorse\_42
- Track 182 : DosHalletts\_40
- Track 183 : Bobi\_46
- Track 184 : Juniper1\_40
- Track 185 : Guppsters\_43
- Track 186 : Jant\_44
- Track 187 : Minnie\_43
- Track 188 : SilverChicken\_53
- Track 189 : Soul22\_46

- Track 190 : Squirty\_35
- Track 191 : TChen\_44, LunaStella\_42
- Track 192 : ChuckDuck\_39
- Track 193 : Bridgette\_38
- Track 194 : FosterFrank\_40
- Track 195 : NidoQ\_33
- Track 196 : Constance\_38
- Track 197 : RootBeer\_29
- Track 198 : Eileen\_34
- Track 199 : GlobiWarming\_38
- Track 200 : KayMoney\_38
- Track 201 : LittleRon\_36
- Track 202 : LilyBell\_38
- Track 203 : Peas\_35
- Track 204 : Judy\_39
- Track 205 : JeanClaude\_32, Sarge\_28
- Track 206 : Shoya\_35
- Track 207 : Alatato\_29
- Track 208 : Rooter\_31
- Track 209 : BrayBeast\_32
- Track 210 : Gibbzilla\_37
- Track 211 : Sunshine23\_31
- Track 212 : Mufasa8\_27
- Track 213 : Sonali\_29
- Track 214 : Maruru\_30
- Track 215 : Cassini\_31
- Track 216 : BellaJr\_39
- Track 217 : BlackSpider\_36
- Track 218 : Bauer\_39
- Track 219 : Zucker\_31
- Track 220 : Dallas\_80, NihilNomen\_82, Halley\_83, BAKA\_86, Phoebus\_84, Yeet\_76, ThreeRngTarjay\_79, Kalah2\_76, Redno2\_78, Dove\_67, Hughesyang\_81, Optimus\_79, Wanda\_85, Duke13\_85, Bombitas\_71, Minerva\_84, JuicyJay\_79, Bagrid\_82, EricMillard\_80, DmpstrDiver\_82, Pound\_82, Beem\_81, Klein\_81, HokkenD\_73, Schatzie\_77
- Track 221 : KashFlow\_76, Constella\_68, Ejimix\_81, Xiaokay\_72, Thibault\_69
- Track 222 : Zelink\_79
- Track 223 : Hidrated\_74
- Track 224 : Odette\_80
- Track 225 : BarrelRoll\_41, TruffulaTree\_41, Adephagia\_41, Atiba\_41, ActinUp\_41, Slimphazie\_41, Tachez\_41, Padpat\_42, HedwigODU\_41, Jayhawk\_42, Rapunzel97\_41, Veliki\_41, Emerson\_42
- Track 226 : Devera\_45, Dole\_44, Illumine\_44, Stinson\_42
- Track 227 : AlishaPH\_41, Beezoo\_43, Tiri\_42, Pokerus\_40, Geraldini\_43, Apocalypse\_44
- Track 228 : Binglebops\_36, Torres\_39, Nikao\_39, LilPharaoh\_36, SgtBeansprout\_36, Nutello\_36, Enkosi\_39, Amelie\_36
- Track 229 : Anma\_43, DrHayes\_42, SamuelLPlaqson\_42, Urkel\_42, TiniBug\_42
- Track 230 : Asayake\_41, BEEST\_41, Hyperbowlee\_41, Blizzard\_41, Durfee\_41, ShiaSurprise\_42, Padfoot\_41, CaseJules\_42, Boiiii\_41, Piatt\_41
- Track 231 : LeMond\_45
- Track 232 : Dartin\_43, McMater\_43, Richo\_43
- Track 233 : KiSi\_45

- Track 234 : JAWS\_41
- Track 235 : Pisa1\_41
- Track 236 : CrimD\_41, Megsy\_42
- Track 237 : Adonis\_41, Anaya\_43
- Track 238 : Efra2\_44
- Track 239 : CREW\_41, Topper\_41, Dalmuri\_41, Rosmarinus\_41, Belladonna\_41, Homura\_41, Inky\_41, Lunahalos\_41, CallaLilly\_41, Peel\_41, Llorens\_41, Jeckyll\_41, BGIlluvia\_41, Jarvi\_41, Twitch\_41
- Track 240 : DartGoblin\_43, Bella96\_42
- Track 241 : LindNT\_41, TreyKay\_42, Prithvi\_42
- Track 242 : Ageofdapage\_43, LaterM\_42, Murucutumbu\_42
- Track 243 : Chris\_43
- Track 244 : Nibb\_43
- Track 245 : Oscar\_45, Scarlett\_45
- Track 246 : Guanica15\_44, Yunkel11\_44
- Track 247 : Spock\_41
- Track 248 : Capricorn\_41
- Track 249 : MeaningOfLife\_42, Zavala\_42, Mynx\_42
- Track 250 : QuincyRose\_40, Ganymede\_42
- Track 251 : MarkPhew\_44
- Track 252 : Sulley\_41, Deby\_41
- Track 253 : Chavito\_44
- Track 254 : Ramen\_41
- Track 255 : Validus\_45
- Track 256 : CheetoDust\_40, BaghaKamala\_40
- Track 257 : Joy99\_41
- Track 258 : Niklas\_43
- Track 259 : Clipper\_44
- Track 260 : Mdavu\_37, Trice\_37
- Track 261 : Teejan\_39
- Track 262 : Angelica\_41
- Track 263 : Shaobing\_43
- Track 264 : YoureAdopted\_40
- Track 265 : TaiwanKao\_43
- Track 266 : Peanam\_43
- Track 267 : Strobilo\_43
- Track 268 : BoostSeason\_44, Findley\_43, Doughnut\_44, Milly\_43, ZoeJ\_43
- Track 269 : DismalStressor\_43, Marcoliusprime\_43, DismalFunk\_43
- Track 270 : Mufasa\_44
- Track 271 : Marshawn\_44
- Track 272 : TClif\_45
- Track 273 : Stellammi\_65
- Track 274 : LilSpotty\_38
- Track 275 : Sleepyhead\_38
- Track 276 : MooMoo\_41
- Track 277 : Chymera\_32
- Track 278 : Spartoi\_37
- Track 279 : GMA1\_30
- Track 280 : ArV2\_29
- Track 281 : Footloose\_31

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

The start number called the most often in the published annotations is 127, it was called in 297 of the 426 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy\_36, ActinUp\_41, AdaS\_35, Adephagia\_41, Adonis\_41, Ageofdapage\_43, Aikyam\_37, Akhila\_37, Alatato\_29, Alexphander\_45, AlishaPH\_41, Amelie\_36, Anaya\_43, Anekin\_37, Angelica\_41, Anma\_43, Apocalypse\_44, Apricot\_48, ArV2\_29, Ardmere\_36, Asapag\_47, Asayake\_41, Atiba\_41, Auxilium\_38, BEEST\_41, BENTherdunthat\_50, BGlluviae\_41, BaghaKamala\_40, BarrelRoll\_41, BasketStar\_41, Batiatus\_43, Bauer\_39, Beakin\_43, BeeGee\_42, Beezoo\_43, Bella96\_42, BellaJr\_39, Belladonna\_41, BenchScraper\_39, Bhageatrice\_40, BigPhil\_38, Biglebops\_36, BillyTP\_42, Bipolar\_39, Birdsong\_47, BlackSpider\_36, Blarby\_54, Blizzard\_41, BlueShadow\_39, BobaPhett\_43, Bobi\_46, Boiiii\_41, BoostSeason\_44, BotCity\_49, BrayBeast\_32, Bridgette\_38, Brocalys\_36, Brookers\_39, Brushbloom\_46, Budski\_49, Byougenkin\_40, CREW\_41, CallaLilly\_41, Capricorn\_41, CaptainTrips\_41, CaseJules\_42, Cashline\_38, Cassini\_31, Cerasum\_38, Chavito\_44, CheeseTouch\_54, CheesePuff\_46, CheetoDust\_40, Chris\_43, ChuckDuck\_39, Chymera\_32, Clank\_44, Clifton\_35, Clipper\_44, Coco12\_40, Constance\_38, CookieBear\_40, Corium\_41, Cornucopia\_45, CosmicBrownie\_38, Crater\_49, Crescenzo\_39, CrimD\_41, DLane\_41, DRBy19\_43, Dalmuri\_41, DartGoblin\_43, Dartin\_43, DeadP\_46, Deby\_41, Denise\_35, Devera\_45, Ding\_40, DismalFunk\_43, DismalStressor\_43, DoRead\_44, Dole\_44, Donkeykong\_41, Doomslug\_48, DosHalletts\_40, Doughnut\_44, DrHayes\_42, Durfee\_41, EMSquaredA\_37, Ecliptus\_49, Efra2\_44, Eileen\_34, EleanorGeorge\_40, Emerson\_42, Emma\_44, Enby\_42, Enkosi\_39, Enzomatic\_49, Estave1\_43, EvePickles\_38, Faja\_39, Filuzino\_41, Findley\_43, Flathead\_44, Floral\_36, Footloose\_31, FosterFrank\_40, Frickyeah\_52, Fruitloop\_40, GMA1\_30, Galactic\_43, Ganymede\_42, Geraldini\_43, Getalong\_53, Gibbzilla\_37, Globfish\_39, GlobiWarming\_38, Gorge\_43, Gorpy\_41, Guanica15\_44, GumGum\_40, Guppsters\_43, Hades\_43, HedwigODU\_41, Hegedechwinu\_41, Hillester\_40, Hlubikazi\_41, Holliday\_48, Homura\_41, Horus\_48, Hyperbowlee\_41, IMpilo\_40, Illumine\_44, Inky\_41, IrishSherpFalk\_41, Isolde\_41, JAWS\_41, JakeTheSnake\_41, James\_43, Jarvi\_41, Jayhawk\_42, JeanClaude\_32, Jeckyll\_41, JellyBread\_36, Jennelsea\_37, Joy99\_41, Judy\_39, Juice456\_44, Juniper1\_40, Kabloowy\_40, Kamaru\_44, KayMoney\_38, Kenna\_49, Kenuha5\_39, KiSi\_45, KingJulian\_42, Kingsley\_38, KristaRAM\_43, Lasker\_39, LastJedi\_34, LaterM\_42, Lawnathon\_40, LeBruni\_39, LeMond\_45, Leroy\_50, LilPharaoh\_36, LilSpotty\_38, LilyBell\_38, LindNT\_41, LitninMcQueen\_43, LittleRon\_36, Llorens\_41, LordVader\_38, Lorde\_42, Lton\_34, Lucky10\_35, LunaBlu\_46, LunaStella\_42, Lunahalos\_41, Lutum\_50, MUWow\_39, MakCheese\_48, Mandlovu\_40, Mapleville\_40, Marcoliusprime\_43, MarkPhew\_44, Marshawn\_44, Marteena\_36, Maruru\_30, MaterMagnus\_40, Mattes\_43, McMater\_43, MeaningOfLife\_42, Medindi\_40, Megsy\_42, Melissauren88\_42, MidnightRain\_42, MilanaBonita\_37, MilleniumForce\_42, Milly\_43, MinionDave\_43, Minnie\_43, MooMoo\_41, Moonbeam\_41, Mova\_42, Mozy\_51, Ms6\_36, Mufasa8\_27, Mufasa\_44, MurphyJoseph\_36, Murucutumbu\_42, Mutaforma13\_45, Mynx\_42, NewHope4\_45, NewKitty\_38, Nibb\_43, NidoQ\_33, Nikao\_39, Niklas\_43, Nutello\_36, Nyilah\_36, ODay\_52, Oscar\_45, Ovechkin\_41, Padfoot\_41, Padpat\_42, Peanam\_43, Peas\_35, Peel\_41, Periwinkle\_57, Persistence\_35, Phabuloso\_48, Phalconet\_41, Phanphagia\_37, PhesterPotato\_44, Philus\_43, Phistory\_51, Phrank15\_39, Phrappuccino\_38, Piatt\_41, Pippy\_38,

Pisa1\_41, Pokerus\_40, Pollux\_38, Polo2Bam\_48, Prithvi\_42, QuincyRose\_40, RadFad\_40, Ramen\_41, Raphaella\_40, Rapunzel97\_41, RavenCo17\_41, Renaud18\_46, Rialto\_46, Richie\_40, Richo\_43, Rita\_44, RootBeer\_29, Rooter\_31, Rosmarinus\_41, SG4\_40, Saal\_43, Sakai\_40, SamuelLPlaqson\_42, Sarge\_28, Sarma624\_38, Sashimi\_39, Satrap\_40, Scarlett\_45, SeaLumen\_48, Seahorse\_41, Settecandela\_38, SgtBeansprout\_36, Shaobing\_43, Shauna1\_38, ShawBrad\_51, ShiaSurprise\_42, Shoya\_35, ShroomBoi\_42, Shukran\_42, SilverChicken\_53, SimranZ1\_43, Slimphazie\_41, SonDevVon\_40, Sonali\_29, Soul22\_46, Spartacus\_41, SpicyFrank\_39, Spock\_41, Squirty\_35, StAnnes\_42, Stellammi\_65, Stinson\_42, Strobilo\_43, Strokeseat\_41, Sulley\_41, SuperGrey\_42, SwagPigglett\_45, TChen\_44, TClif\_45, Tachez\_41, TaiwanKao\_43, Taj\_45, ThayneTheZag\_40, Tiff81\_35, TiniBug\_42, Tiri\_42, Topper\_41, Torres\_39, TreyKay\_42, TruffulaTree\_41, Twitch\_41, Urkel\_42, VRedHorse\_42, Validus\_45, Veliki\_41, Velveteen\_37, Violac\_42, Vopal\_43, Wachhund\_44, Wee\_46, Whatsapiecost\_41, WillSterrel\_41, Windest\_40, XFactor\_41, YoungHarleezy\_40, YoureAdopted\_40, Yunkel11\_44, Zavala\_42, Zizzle\_44, ZoeJ\_43, Zucker\_31,

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

- DarwinJr\_42, Jant\_44, Mdavu\_37, PatoPoderoso\_41, Raqqa\_32, Spartoi\_37, Sporco\_41, Sunshine23\_31, Teejan\_39, Trice\_37,

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

- Adelaide\_25, Adora\_37, Agueybana\_38, AlumE\_39, Angelique\_39, Annalisa\_36, Antonio\_39, Arianna\_32, Attis\_34, BAKA\_86, Bagrid\_82, BatStarr\_39, Beem\_81, Beenie\_33, Bialota\_37, Bjanes7\_34, Bombitas\_71, Bosnia\_39, BoyNamedSue\_39, Bradissa\_36, Bran\_28, Bunnybear\_33, Clap\_37, Clark\_39, Colleen\_32, Confidence\_37, Constella\_68, Cynthia\_37, Dallas\_80, DmpstrDiver\_82, DobbysSock\_31, Dolores\_40, Dorito\_34, Dove\_67, Duke13\_85, Ebert\_39, EdnaMode\_33, Ejimix\_81, EnalisNailo\_35, EricMillard\_80, Eudoria\_39, Eviarto\_39, Faith5x5\_30, Farewell\_44, GemG\_37, Gizermo\_37, Haley23\_37, Halley\_83, Herod\_39, Hidrated\_74, HokkenD\_73, Hortense\_40, Howe\_40, Hughesyang\_81, Hugley\_36, Hyzer\_43, Invectra\_41, Jablanski\_39, Jalleen\_36, JuicyJay\_79, Kalah2\_76, KashFlow\_76, Kita\_40, Klein\_81, Kudrefre\_6, Lamberg\_33, Lederberg\_27, Lilas\_38, LonelyBoi\_38, LordFarquaad\_35, Madavieve\_34, Manasvini\_39, Maridalia\_39, Matteo\_30, Mcklovin\_36, MichaelScott\_40, Minerva\_84, Mocha12\_37, Moosehead\_35, Morkie\_33, Neobush\_39, Nettuno\_33, NihilNomen\_82, Nymphadora\_39, Odette\_80, OneDirection\_30, Optimus\_79, Oregano\_39, Pepperoni\_31, Phoebus\_84, PhorbessPhlower\_33, Pickett\_32, Polly\_36, Posh\_42, Pound\_82, Poushou\_32, Pytheas\_39, Redno2\_78, Sahara\_36, SamW\_27, Samman98\_40, Savage\_37, Schatzie\_77, Sekhmet\_40, Sephiroth\_7, Shlim410\_38, Sleepyhead\_38, SoilAssassin\_34, Sparky\_45, Spartan\_32, Sproutie\_37, StAB\_26, Stiles\_27, Suscepit\_39, Syleon\_7, Tayonia\_39, ThankyouJordi\_38, Thibault\_69, Thimann\_36, ThreeRngTarjay\_79, TimTam\_39, TouchMeNot\_32, Troy\_27, Trumpet\_39, TuertoX\_37, Tuti\_39, Twinkle\_39, Wanda\_85, WelcomeAyanna\_38, Whiteclaw\_37, WinkNick\_41, Wrigley\_43, Xiaokay\_72, Yeet412\_34, Yeet\_76, Zameen\_39, Zelink\_79, Zirinka\_36,

### Summary by start number:

Start 25:

- Found in 11 of 500 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present

- Phage (with cluster) where this start called: Teejan\_39 (K1),

Start 27:

- Found in 14 of 500 ( 2.8% ) of genes in pham
- Manual Annotations of this start: 1 of 426
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Mdavu\_37 (K1), Trice\_37 (K1),

Start 74:

- Found in 17 of 500 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 2 of 426
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Gizermo\_37 (CZ2), Sahara\_36 (CZ2),

Start 75:

- Found in 58 of 500 ( 11.6% ) of genes in pham
- Manual Annotations of this start: 6 of 426
- Called 10.3% of time when present
- Phage (with cluster) where this start called: BatStarr\_39 (CZ1), Bjanes7\_34 (CZ2), Cynthia\_37 (CZ2), Herod\_39 (CZ1), Kita\_40 (CZ1), ThankyouJordi\_38 (CZ1),

Start 76:

- Found in 3 of 500 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lederberg\_27 (EP), SamW\_27 (EP), Troy\_27 (EP),

Start 83:

- Found in 33 of 500 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 28 of 426
- Called 90.9% of time when present
- Phage (with cluster) where this start called: BAKA\_86 (J), Bagrid\_82 (J), Beem\_81 (J), Bombitas\_71 (J), Constella\_68 (J), Dallas\_80 (J), DmpstrDiver\_82 (J), Dove\_67 (J), Duke13\_85 (J), Ejimix\_81 (J), EricMillard\_80 (J), Halley\_83 (J), HokkenD\_73 (J), Hughesyang\_81 (J), JuicyJay\_79 (J), Kalah2\_76 (J), KashFlow\_76 (J), Klein\_81 (J), Minerva\_84 (J), NihilNomen\_82 (J), Optimus\_79 (J), Phoebus\_84 (J), Pound\_82 (J), Redno2\_78 (J), Schatzie\_77 (J), Thibault\_69 (J), ThreeRngTarjay\_79 (J), Wanda\_85 (J), Xiaokay\_72 (J), Yeet\_76 (J),

Start 90:

- Found in 33 of 500 ( 6.6% ) of genes in pham
- Manual Annotations of this start: 1 of 426
- Called 3.0% of time when present
- Phage (with cluster) where this start called: Zelink\_79 (J),

Start 92:

- Found in 1 of 500 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faith5x5\_30 (CZ6),

Start 108:

- Found in 2 of 500 ( 0.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Spartan\_32 (ES),

#### Start 109:

- Found in 33 of 500 ( 6.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 6.1% of time when present
- Phage (with cluster) where this start called: Hidrated\_74 (J), Odette\_80 (J),

#### Start 112:

- Found in 20 of 500 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 19 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adora\_37 (CZ4), Annalisa\_36 (CZ4), Beenie\_33 (CZ4), Clark\_39 (CZ4), DobbysSock\_31 (CZ4), Dolores\_40 (CZ4), Dorito\_34 (CZ4), Hortense\_40 (CZ4), Howe\_40 (CZ4), Invectra\_41 (CZ4), Mcklovin\_36 (CZ4), MichaelScott\_40 (CZ4), Oregano\_39 (CZ4), Samman98\_40 (CZ4), Sekhmet\_40 (CZ4), Shlim410\_38 (CZ4), Thimann\_36 (CZ4), Tuti\_39 (CZ4), Twinkle\_39 (CZ4), WinkNick\_41 (CZ4),

#### Start 113:

- Found in 4 of 500 ( 0.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Sporco\_41 (AY),

#### Start 121:

- Found in 5 of 500 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 426
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead\_38 (singleton), StAB\_26 (EP),

#### Start 123:

- Found in 3 of 500 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Adelaide\_25 (EP), Bran\_28 (EP), Stiles\_27 (EP),

#### Start 124:

- Found in 3 of 500 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudrefre\_6 (DU1), Sephiroth\_7 (DU1), Syleon\_7 (DU1),

#### Start 125:

- Found in 3 of 500 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 426
- Called 33.3% of time when present

- Phage (with cluster) where this start called: Moosehead\_35 (CZ6),

#### Start 126:

- Found in 65 of 500 ( 13.0% ) of genes in pham
- Manual Annotations of this start: 52 of 426
- Called 87.7% of time when present
- Phage (with cluster) where this start called: Agueybana\_38 (CZ1), AlumE\_39 (CZ1), Angelique\_39 (CY1), Antonio\_39 (CZ1), Attis\_34 (CZ2), Bialota\_37 (CZ1), Bosnia\_39 (CZ1), BoyNamedSue\_39 (CZ1), Bradissa\_36 (CY1), Bunnybear\_33 (CZ), Clap\_37 (CZ2), Confidence\_37 (CY1), Ebert\_39 (CZ2), EdnaMode\_33 (CZ2), EnalisNailo\_35 (CY1), Eudoria\_39 (CZ1), Eviarto\_39 (CZ1), GemG\_37 (CZ2), Haley23\_37 (CZ2), Hugley\_36 (CZ1), Hyzer\_43 (CZ1), Jablanski\_39 (CY3), Jalleen\_36 (CZ2), Lamberg\_33 (CZ2), Lilas\_38 (CY1), LonelyBoi\_38 (CY7), LordFarquaad\_35 (CZ2), Madavieve\_34 (CZ1), Manasvini\_39 (CZ1), Maridalia\_39 (CZ1), Matteo\_30 (CZ2), Mocha12\_37 (CZ2), Morkie\_33 (DH), Neobush\_39 (CZ1), Nettuno\_33 (CZ2), Nymphadora\_39 (CZ1), OneDirection\_30 (CZ6), Pepperoni\_31 (CZ), PhorbesPhlower\_33 (DH), Pickett\_32 (CZ2), Polly\_36 (CZ1), Posh\_42 (CY4), Pytheas\_39 (CY3), Savage\_37 (CZ2), SoilAssassin\_34 (CZ2), Sproutie\_37 (CZ2), Susceptit\_39 (CZ1), Tayonia\_39 (CZ1), TimTam\_39 (CZ1), Trumpet\_39 (CZ1), TuertoX\_37 (CZ2), WelcomeAyanna\_38 (CZ1), Whiteclaw\_37 (CZ2), Wrigley\_43 (CY4), Yeet412\_34 (CZ2), Zameen\_39 (CZ1), Zirinka\_36 (CZ1),

#### Start 127:

- Found in 362 of 500 ( 72.4% ) of genes in pham
- Manual Annotations of this start: 297 of 426
- Called 97.2% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_36 (AY), ActinUp\_41 (K1), AdaS\_35 (AY), Adephagia\_41 (K1), Adonis\_41 (K1), Ageofdapage\_43 (K1), Aikyam\_37 (AY), Akhila\_37 (F1), Alatato\_29 (FB), Alexphander\_45 (F1), AlishaPH\_41 (K1), Amelie\_36 (K1), Anaya\_43 (K1), Anekin\_37 (AY), Angelica\_41 (K1), Anma\_43 (K1), Apocalypse\_44 (K1), Apricot\_48 (DN3), ArV2\_29 (singleton), Ardmore\_36 (F1), Asapag\_47 (DN1), Asayake\_41 (K1), Atiba\_41 (K1), Auxilium\_38 (AY), BEEST\_41 (K1), BENtherdunthat\_50 (DN1), BGIlluviae\_41 (K1), BaghaKamala\_40 (K1), BarrelRoll\_41 (K1), BasketStar\_41 (AY), Batiatus\_43 (F1), Bauer\_39 (FN), Beakin\_43 (F1), BeeGee\_42 (CY5), Beezoo\_43 (K1), Bella96\_42 (K1), BellaJr\_39 (FN), Belladonna\_41 (K1), BenchScraper\_39 (AY), Bhageatrice\_40 (AY), BigPhil\_38 (F1), Binglebops\_36 (K1), BillyTP\_42 (AY), Bipolar\_39 (F1), Birdsong\_47 (DN), BlackSpider\_36 (FN), Blarby\_54 (F), Blizzard\_41 (K1), BlueShadow\_39 (AY), BobaPhett\_43 (F1), Bobi\_46 (F1), Boiiii\_41 (K1), BoostSeason\_44 (K2), BotCity\_49 (DN), BrayBeast\_32 (FB), Bridgette\_38 (FA), Brocalys\_36 (F1), Brookers\_39 (F1), Brushbloom\_46 (F1), Budski\_49 (DN), Byougenkin\_40 (F1), CREW\_41 (K1), CallaLilly\_41 (K1), Capricorn\_41 (K1), CaptainTrips\_41 (F1), CaseJules\_42 (K1), Cashline\_38 (CY6), Cassini\_31 (FN), Cerasum\_38 (F1), Chavito\_44 (K1), CheeseTouch\_54 (DN1), Cheesepuff\_46 (F1), CheetoDust\_40 (K1), Chris\_43 (K1), ChuckDuck\_39 (FA), Chymera\_32 (singleton), Clank\_44 (F), Clifton\_35 (F1), Clipper\_44 (K1), Coco12\_40 (F1), Constance\_38 (FA), CookieBear\_40 (AY), Corium\_41 (F1), Cornucopia\_45 (F1), CosmicBrownie\_38 (AY), Crater\_49 (DN3), Crescenzo\_39 (AY), CrimD\_41 (K1), DLane\_41 (F1), DRBy19\_43 (F1), Dalmuri\_41 (K1), DartGoblin\_43 (K1), Dartin\_43 (K1), DeadP\_46 (F1), Deby\_41 (K1), Denise\_35 (CZ5), Devera\_45 (K1), Ding\_40 (AY), DismalFunk\_43 (K2), DismalStressor\_43 (K2), DoRead\_44 (F1), Dole\_44 (K1), Donkeykong\_41 (F1), Doomslug\_48 (F), DosHalletts\_40 (F1), Doughnut\_44 (K2), DrHayes\_42 (K1), Durfee\_41 (K1), EMSquaredA\_37 (CY1), Ecliptus\_49 (DN), Efra2\_44 (K1), Eileen\_34

(FA), EleanorGeorge\_40 (F1), Emerson\_42 (K1), Emma\_44 (F1), Enby\_42 (F1), Enkosi\_39 (K1), Enzomatic\_49 (F1), Estave1\_43 (F1), EvePickles\_38 (AY), Faja\_39 (AY), Filuzino\_41 (F1), Findley\_43 (K2), Flathead\_44 (F1), Floral\_36 (CY1), Footloose\_31 (singleton), FosterFrank\_40 (FA), Frickyeah\_52 (DN1), Fruitloop\_40 (F1), GMA1\_30 (singleton), Galactic\_43 (F1), Ganymede\_42 (K1), Geraldini\_43 (K1), Getalong\_53 (DN1), Gibbzilla\_37 (FB), Globfish\_39 (AY), GlobiWarming\_38 (FA), Gorge\_43 (F1), Gorpy\_41 (AY), Guanica15\_44 (K1), GumGum\_40 (AY), Guppsters\_43 (F1), Hades\_43 (F1), HedwigODU\_41 (K1), Hegedechwinu\_41 (F1), Hillester\_40 (AY), Hlubikazi\_41 (F1), Holliday\_48 (DN1), Homura\_41 (K1), Horus\_48 (DN1), Hyperbowlee\_41 (K1), IMPilo\_40 (F1), Illumine\_44 (K1), Inky\_41 (K1), IrishSherpFalk\_41 (F1), Isolde\_41 (AY), JAWS\_41 (K1), JakeTheSnake\_41 (AY), James\_43 (F1), Jarvi\_41 (K1), Jayhawk\_42 (K1), JeanClaude\_32 (FB), Jeckyll\_41 (K1), JellyBread\_36 (AY), Jennelsea\_37 (F1), Joy99\_41 (K1), Judy\_39 (FA), Juice456\_44 (F1), Juniper1\_40 (F1), Kabloowy\_40 (AY), Kamaru\_44 (DN1), KayMoney\_38 (FA), Kenna\_49 (DN1), Kenuha5\_39 (F1), KiSi\_45 (K1), KingJulian\_42 (F1), Kingsley\_38 (F1), KristaRAM\_43 (F1), Lasker\_39 (AY), LastJedi\_34 (F1), LaterM\_42 (K1), Lawnathon\_40 (AY), LeBruni\_39 (AY), LeMond\_45 (K1), Leroy\_50 (DN1), LilPharaoh\_36 (K1), LilSpotty\_38 (singleton), LilyBell\_38 (FA), LindNT\_41 (K1), LitninMcQueen\_43 (DN1), LittleRon\_36 (FA), Llorens\_41 (K1), LordVader\_38 (F), Lorde\_42 (F1), Lton\_34 (CZ), Lucky10\_35 (DH), LunaBlu\_46 (F1), LunaStella\_42 (F4), Lunahalos\_41 (K1), Lutum\_50 (DN1), MUWow\_39 (AY), MakCheese\_48 (DW), Mandlovu\_40 (F1), Mapleville\_40 (AY), Marcoliusprime\_43 (K2), MarkPhew\_44 (K1), Marshawn\_44 (K6), Marteena\_36 (CY1), Maruru\_30 (FG), MaterMagnus\_40 (AY), Mattes\_43 (F1), McMater\_43 (K1), MeaningOfLife\_42 (K1), Medindi\_40 (F1), Megsy\_42 (K1), Melissauren88\_42 (F1), MidnightRain\_42 (AY), MilanaBonita\_37 (F1), MilleniumForce\_42 (F1), Milly\_43 (K2), MinionDave\_43 (F1), Minnie\_43 (F1), MooMoo\_41 (singleton), Moonbeam\_41 (F1), Mova\_42 (F1), Mozy\_51 (F1), Ms6\_36 (F1), Mufasa8\_27 (FG), Mufasa\_44 (K2), MurphyJoseph\_36 (AY), Murucutumbu\_42 (K1), Mutaforma13\_45 (F1), Mynx\_42 (K1), NewHope4\_45 (F1), NewKitty\_38 (AY), Nibb\_43 (K1), NidoQ\_33 (FA), Nikao\_39 (K1), Niklas\_43 (K1), Nutello\_36 (K1), Nyilah\_36 (AY), ODay\_52 (DN), Oscar\_45 (K1), Ovechkin\_41 (F1), Padfoot\_41 (K1), Padpat\_42 (K1), Peanam\_43 (K1), Peas\_35 (FA), Peel\_41 (K1), Periwinkle\_57 (DN1), Persistence\_35 (AY), Phabuloso\_48 (DN1), Phalconet\_41 (F1), Phanphagia\_37 (F1), PhesterPhotato\_44 (F1), Philus\_43 (F1), Phistory\_51 (DN1), Phrank15\_39 (AY), Phrappuccino\_38 (AA), Piatt\_41 (K1), Pippy\_38 (F1), Pisa1\_41 (K1), Pokerus\_40 (K1), Pollux\_38 (CY1), Polo2Bam\_48 (F1), Prithvi\_42 (K1), QuincyRose\_40 (K1), RadFad\_40 (AY), Ramen\_41 (K1), Raphaella\_40 (AY), Rapunzel97\_41 (K1), RavenCo17\_41 (CZ8), Renaud18\_46 (F4), Rialto\_46 (F1), Richie\_40 (AY), Richo\_43 (K1), Rita\_44 (F1), RootBeer\_29 (FA), Rooter\_31 (FB), Rosmarinus\_41 (K1), SG4\_40 (F1), Saal\_43 (F1), Sakai\_40 (AY), SamuelLPlaqson\_42 (K1), Sarge\_28 (FB), Sarma624\_38 (F1), Sashimi\_39 (AY), Satrap\_40 (AY), Scarlett\_45 (K1), SeaLumen\_48 (F1), Seahorse\_41 (AY), Settecandela\_38 (AA), SgtBeansprout\_36 (K1), Shaobing\_43 (K1), Shauna1\_38 (F1), ShawBrad\_51 (DN1), ShiaSurprise\_42 (K1), Shoya\_35 (FB), ShroomBoi\_42 (F1), Shukran\_42 (AY), SilverChicken\_53 (F2), SimranZ1\_43 (F1), Slimphazie\_41 (K1), SonDevVon\_40 (AY), Sonali\_29 (FG), Soul22\_46 (F2), Spartacus\_41 (F1), SpicyFrank\_39 (AY), Spock\_41 (K1), Squirty\_35 (F3), StAnnes\_42 (F1), Stellammi\_65 (UNK), Stinson\_42 (K1), Strobilo\_43 (K2), Strokeseat\_41 (F1), Sulley\_41 (K1), SuperGrey\_42 (F1), SwagPigglett\_45 (F1), TChen\_44 (F4), TClif\_45 (K6), Tachez\_41 (K1), TaiwanKao\_43 (K1), Taj\_45 (F1), ThayneTheZag\_40 (AY), Tiff81\_35 (AY), TiniBug\_42 (K1), Tiri\_42 (K1), Topper\_41 (K1), Torres\_39 (K1), TreyKay\_42 (K1), TruffulaTree\_41 (K1), Twitch\_41 (K1), Urkel\_42 (K1), VRedHorse\_42 (F1), Validus\_45 (K1), Veliki\_41 (K1), Velveteen\_37 (F1), Violac\_42

(F1), Vopal\_43 (AY), Wachhund\_44 (F1), Wee\_46 (F1), Whatsapiecost\_41 (F1), WillSterrel\_41 (F1), Windest\_40 (AY), XFactor\_41 (F1), YoungHarleezy\_40 (AY), YoureAdopted\_40 (K1), Yunkel11\_44 (K1), Zavala\_42 (K1), Zizzle\_44 (F1), ZoeJ\_43 (K2), Zucker\_31 (FN),

Start 128:

- Found in 4 of 500 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 4 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arianna\_32 (EO), Colleen\_32 (EO), Poushou\_32 (EO), TouchMeNot\_32 (EO),

Start 129:

- Found in 2 of 500 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 2 of 426
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Farewell\_44 (AF), Sparky\_45 (AF),

Start 130:

- Found in 59 of 500 ( 11.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 3.4% of time when present
- Phage (with cluster) where this start called: PatoPoderoso\_41 (F1), Sunshine23\_31 (FG),

Start 135:

- Found in 1 of 500 ( 0.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Raqqa\_32 (AY),

Start 140:

- Found in 217 of 500 ( 43.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.5% of time when present
- Phage (with cluster) where this start called: DarwinJr\_42 (AY),

Start 153:

- Found in 119 of 500 ( 23.8% ) of genes in pham
- Manual Annotations of this start: 1 of 426
- Called 0.8% of time when present
- Phage (with cluster) where this start called: Spartoi\_37 (singleton),

Start 183:

- Found in 11 of 500 ( 2.2% ) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Jant\_44 (F1),

### **Summary by clusters:**

There are 40 clusters represented in this pham: DN, CY3, singleton, DH, CZ2, CZ1, CZ6, CY1, CZ4, CZ5, FA, FB, K6, CZ8, FG, DW, FN, AF, DN1, DN3, DU1, AA, EO,

CY7, CY6, CY5, F, J, CZ, AY, UNK, EP, ES, F1, F2, F3, F4, K2, K1, CY4,

Info for manual annotations of cluster AA:

- Start number 127 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AF:

- Start number 129 was manually annotated 2 times for cluster AF.

Info for manual annotations of cluster AY:

- Start number 127 was manually annotated 33 times for cluster AY.

Info for manual annotations of cluster CY1:

- Start number 126 was manually annotated 5 times for cluster CY1.
- Start number 127 was manually annotated 4 times for cluster CY1.

Info for manual annotations of cluster CY3:

- Start number 126 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 126 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 127 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 127 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 126 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster CZ:

- Start number 126 was manually annotated 1 time for cluster CZ.
- Start number 127 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

- Start number 75 was manually annotated 4 times for cluster CZ1.
- Start number 126 was manually annotated 20 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- Start number 74 was manually annotated 2 times for cluster CZ2.
- Start number 75 was manually annotated 2 times for cluster CZ2.
- Start number 126 was manually annotated 18 times for cluster CZ2.

Info for manual annotations of cluster CZ4:

- Start number 112 was manually annotated 19 times for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 127 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 92 was manually annotated 1 time for cluster CZ6.
- Start number 125 was manually annotated 1 time for cluster CZ6.
- Start number 126 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster CZ8:

- Start number 127 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DH:

- Start number 126 was manually annotated 2 times for cluster DH.
- Start number 127 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 127 was manually annotated 5 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 127 was manually annotated 14 times for cluster DN1.

Info for manual annotations of cluster DN3:

- Start number 127 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DU1:

- Start number 124 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster EO:

- Start number 128 was manually annotated 4 times for cluster EO.

Info for manual annotations of cluster EP:

- Start number 76 was manually annotated 3 times for cluster EP.
- Start number 121 was manually annotated 1 time for cluster EP.
- Start number 123 was manually annotated 3 times for cluster EP.

Info for manual annotations of cluster F1:

- Start number 127 was manually annotated 89 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 127 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F3:

- Start number 127 was manually annotated 1 time for cluster F3.

Info for manual annotations of cluster F4:

- Start number 127 was manually annotated 3 times for cluster F4.

Info for manual annotations of cluster FA:

- Start number 127 was manually annotated 9 times for cluster FA.

Info for manual annotations of cluster FB:

- Start number 127 was manually annotated 4 times for cluster FB.

Info for manual annotations of cluster FG:

- Start number 127 was manually annotated 3 times for cluster FG.

Info for manual annotations of cluster FN:

- Start number 127 was manually annotated 3 times for cluster FN.

Info for manual annotations of cluster J:

- Start number 83 was manually annotated 28 times for cluster J.
- Start number 90 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster K1:

- Start number 27 was manually annotated 1 time for cluster K1.
- Start number 127 was manually annotated 102 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 127 was manually annotated 10 times for cluster K2.

Info for manual annotations of cluster K6:

- Start number 127 was manually annotated 2 times for cluster K6.

### **Gene Information:**

Gene: AbbyDaisy\_36 Start: 27417, Stop: 26233, Start Num: 127

Candidate Starts for AbbyDaisy\_36:

(32, 27699), (34, 27690), (40, 27654), (56, 27579), (Start: 75 @27522 has 6 MA's), (89, 27483), (Start: 127 @27417 has 297 MA's), (140, 27366), (186, 27198), (188, 27180), (216, 27048), (246, 26970), (249, 26952), (257, 26919), (266, 26883), (269, 26874), (286, 26814), (298, 26739), (325, 26619), (360, 26505), (383, 26448), (386, 26427), (387, 26424), (389, 26409), (411, 26289),

Gene: ActinUp\_41 Start: 32479, Stop: 33567, Start Num: 127

Candidate Starts for ActinUp\_41:

(Start: 127 @32479 has 297 MA's), (140, 32530), (147, 32581), (Start: 153 @32605 has 1 MA's), (165, 32641), (202, 32779), (214, 32833), (248, 32917), (266, 32986), (267, 32989), (304, 33139), (319, 33217), (324, 33244), (356, 33331), (381, 33379),

Gene: AdaS\_35 Start: 25676, Stop: 24537, Start Num: 127

Candidate Starts for AdaS\_35:

(Start: 127 @25676 has 297 MA's), (140, 25625), (186, 25457), (188, 25439), (216, 25307), (246, 25229), (248, 25217), (266, 25142), (269, 25133), (286, 25073), (304, 24983), (325, 24878), (332, 24857), (341, 24830), (383, 24707), (387, 24683), (389, 24668), (402, 24593), (408, 24563),

Gene: Adelaide\_25 Start: 24090, Stop: 22960, Start Num: 123

Candidate Starts for Adelaide\_25:

(Start: 123 @24090 has 3 MA's), (131, 24075), (139, 24051), (161, 23937), (177, 23898), (187, 23856), (191, 23823), (193, 23814), (198, 23787), (204, 23769), (227, 23685), (231, 23670), (245, 23625), (263, 23565), (281, 23523), (284, 23511), (287, 23505), (291, 23484), (302, 23430), (303, 23427), (304, 23424), (309, 23403), (324, 23319), (326, 23313), (332, 23295), (342, 23265), (367, 23208), (384, 23166), (387, 23151), (389, 23136), (390, 23130), (393, 23121), (394, 23112), (399, 23082), (406, 23040), (410, 23019), (411, 23016), (414, 23007), (423, 22980), (426, 22965),

Gene: Adephagia\_41 Start: 32476, Stop: 33564, Start Num: 127

Candidate Starts for Adephagia\_41:

(Start: 127 @32476 has 297 MA's), (140, 32527), (147, 32578), (Start: 153 @32602 has 1 MA's), (165, 32638), (202, 32776), (214, 32830), (248, 32914), (266, 32983), (267, 32986), (304, 33136), (319,

33214), (324, 33241), (356, 33328), (381, 33376),

Gene: Adonis\_41 Start: 32777, Stop: 33865, Start Num: 127

Candidate Starts for Adonis\_41:

(Start: 127 @32777 has 297 MA's), (147, 32879), (Start: 153 @32903 has 1 MA's), (165, 32939), (194, 33053), (214, 33131), (248, 33215), (266, 33284), (267, 33287), (304, 33437), (324, 33542), (356, 33629), (381, 33677),

Gene: Adora\_37 Start: 31194, Stop: 32321, Start Num: 112

Candidate Starts for Adora\_37:

(91, 31155), (Start: 112 @31194 has 19 MA's), (134, 31248), (161, 31371), (175, 31404), (195, 31494), (206, 31527), (266, 31722), (267, 31725), (279, 31767), (289, 31803), (365, 32100), (387, 32178), (392, 32205), (395, 32220), (399, 32247), (410, 32310),

Gene: Ageofdapage\_43 Start: 33453, Stop: 34541, Start Num: 127

Candidate Starts for Ageofdapage\_43:

(Start: 127 @33453 has 297 MA's), (147, 33555), (Start: 153 @33579 has 1 MA's), (165, 33615), (186, 33666), (194, 33729), (202, 33753), (214, 33807), (215, 33810), (248, 33891), (266, 33960), (267, 33963), (275, 33993), (304, 34113), (319, 34191), (324, 34218), (381, 34353),

Gene: Agueybana\_38 Start: 30381, Stop: 31463, Start Num: 126

Candidate Starts for Agueybana\_38:

(Start: 75 @30270 has 6 MA's), (Start: 126 @30381 has 52 MA's), (140, 30435), (167, 30555), (244, 30810), (253, 30840), (267, 30900), (286, 30966), (291, 30990), (387, 31320), (410, 31452),

Gene: Aikyam\_37 Start: 25607, Stop: 24468, Start Num: 127

Candidate Starts for Aikyam\_37:

(Start: 127 @25607 has 297 MA's), (140, 25556), (186, 25388), (188, 25370), (216, 25238), (246, 25160), (248, 25148), (249, 25142), (266, 25073), (269, 25064), (286, 25004), (304, 24914), (325, 24809), (332, 24788), (341, 24761), (383, 24638), (387, 24614), (389, 24599), (402, 24524), (408, 24494),

Gene: Akhila\_37 Start: 29110, Stop: 30237, Start Num: 127

Candidate Starts for Akhila\_37:

(77, 29008), (99, 29065), (Start: 127 @29110 has 297 MA's), (130, 29119), (162, 29281), (183, 29332), (186, 29350), (192, 29395), (214, 29491), (216, 29500), (253, 29605), (268, 29674), (279, 29713), (284, 29734), (288, 29746), (289, 29749), (291, 29761), (295, 29800), (296, 29806), (307, 29827), (313, 29863), (314, 29866), (320, 29902), (321, 29908), (324, 29920), (325, 29923), (336, 29938), (356, 30007), (363, 30022), (378, 30040), (383, 30064), (390, 30109), (393, 30118), (395, 30130), (399, 30157), (401, 30175), (405, 30196), (409, 30211), (410, 30220), (411, 30223),

Gene: Alatato\_29 Start: 23820, Stop: 22690, Start Num: 127

Candidate Starts for Alatato\_29:

(37, 24084), (Start: 127 @23820 has 297 MA's), (140, 23769), (141, 23766), (186, 23604), (194, 23541), (207, 23496), (210, 23475), (251, 23337), (253, 23334), (257, 23310), (262, 23295), (273, 23250), (311, 23091), (320, 23037), (332, 22995), (341, 22968), (356, 22914), (360, 22899), (365, 22890), (389, 22806), (390, 22800), (393, 22791), (400, 22746),

Gene: Alexphander\_45 Start: 32418, Stop: 33536, Start Num: 127

Candidate Starts for Alexphander\_45:

(Start: 127 @32418 has 297 MA's), (154, 32556), (162, 32589), (184, 32637), (214, 32790), (216, 32799), (246, 32880), (268, 32973), (279, 33012), (284, 33033), (288, 33045), (289, 33048), (291, 33060), (295, 33099), (296, 33105), (307, 33126), (313, 33162), (314, 33165), (320, 33201), (321,

33207), (325, 33222), (336, 33237), (356, 33306), (363, 33321), (378, 33339), (390, 33408), (393, 33417), (399, 33456), (401, 33474), (405, 33495), (409, 33510), (410, 33519), (411, 33522),

Gene: AlishaPH\_41 Start: 32751, Stop: 33839, Start Num: 127

Candidate Starts for AlishaPH\_41:

(Start: 127 @32751 has 297 MA's), (147, 32853), (Start: 153 @32877 has 1 MA's), (165, 32913), (202, 33051), (214, 33105), (248, 33189), (266, 33258), (267, 33261), (304, 33411), (324, 33516), (356, 33603), (381, 33651), (406, 33795),

Gene: AlumE\_39 Start: 31289, Stop: 32371, Start Num: 126

Candidate Starts for AlumE\_39:

(Start: 75 @31178 has 6 MA's), (Start: 126 @31289 has 52 MA's), (140, 31343), (167, 31463), (253, 31748), (267, 31808), (286, 31874), (291, 31898), (387, 32228), (400, 32303), (410, 32360),

Gene: Amelie\_36 Start: 31976, Stop: 33070, Start Num: 127

Candidate Starts for Amelie\_36:

(25, 31625), (Start: 27 @31640 has 1 MA's), (38, 31733), (45, 31754), (69, 31847), (Start: 127 @31976 has 297 MA's), (140, 32027), (Start: 153 @32102 has 1 MA's), (165, 32138), (192, 32234), (194, 32252), (202, 32276), (213, 32324), (214, 32330), (260, 32462), (266, 32495), (279, 32540), (304, 32648), (324, 32753), (349, 32813), (381, 32888), (400, 32996), (406, 33032),

Gene: Anaya\_43 Start: 33089, Stop: 34177, Start Num: 127

Candidate Starts for Anaya\_43:

(Start: 127 @33089 has 297 MA's), (147, 33191), (Start: 153 @33215 has 1 MA's), (165, 33251), (194, 33365), (214, 33443), (248, 33527), (266, 33596), (267, 33599), (304, 33749), (324, 33854), (356, 33941), (381, 33989),

Gene: Anekin\_37 Start: 26993, Stop: 25815, Start Num: 127

Candidate Starts for Anekin\_37:

(113, 27011), (Start: 127 @26993 has 297 MA's), (140, 26942), (152, 26876), (188, 26756), (208, 26660), (216, 26624), (246, 26546), (266, 26459), (269, 26450), (286, 26390), (293, 26342), (304, 26300), (327, 26189), (341, 26147), (383, 26030), (386, 26009), (387, 26006), (389, 25991), (411, 25871),

Gene: Angelica\_41 Start: 32708, Stop: 33796, Start Num: 127

Candidate Starts for Angelica\_41:

(Start: 127 @32708 has 297 MA's), (147, 32810), (148, 32819), (Start: 153 @32834 has 1 MA's), (165, 32870), (214, 33062), (248, 33146), (266, 33215), (267, 33218), (304, 33368), (324, 33473), (356, 33560), (381, 33608), (406, 33752),

Gene: Angelique\_39 Start: 30954, Stop: 32036, Start Num: 126

Candidate Starts for Angelique\_39:

(Start: 75 @30843 has 6 MA's), (Start: 126 @30954 has 52 MA's), (140, 31008), (167, 31128), (244, 31383), (253, 31413), (267, 31473), (286, 31539), (291, 31563), (313, 31668), (387, 31893), (392, 31920), (400, 31968), (410, 32025),

Gene: Anma\_43 Start: 33376, Stop: 34464, Start Num: 127

Candidate Starts for Anma\_43:

(45, 33154), (Start: 127 @33376 has 297 MA's), (140, 33427), (147, 33478), (Start: 153 @33502 has 1 MA's), (165, 33538), (194, 33652), (214, 33730), (248, 33814), (266, 33883), (267, 33886), (304, 34036), (324, 34141), (381, 34276), (406, 34420),

Gene: Annalisa\_36 Start: 28551, Stop: 29678, Start Num: 112

Candidate Starts for Annalisa\_36:

(39, 28332), (47, 28368), (Start: 112 @28551 has 19 MA's), (134, 28605), (161, 28728), (175, 28761), (195, 28851), (206, 28884), (266, 29079), (267, 29082), (279, 29124), (289, 29160), (365, 29457), (395, 29577), (399, 29604), (410, 29667),

Gene: Antonio\_39 Start: 30563, Stop: 31645, Start Num: 126

Candidate Starts for Antonio\_39:

(Start: 75 @30452 has 6 MA's), (Start: 126 @30563 has 52 MA's), (140, 30617), (167, 30737), (244, 30992), (253, 31022), (267, 31082), (286, 31148), (291, 31172), (387, 31502), (392, 31529), (410, 31634),

Gene: Apocalypse\_44 Start: 33493, Stop: 34581, Start Num: 127

Candidate Starts for Apocalypse\_44:

(Start: 127 @33493 has 297 MA's), (147, 33595), (Start: 153 @33619 has 1 MA's), (165, 33655), (202, 33793), (214, 33847), (248, 33931), (266, 34000), (267, 34003), (304, 34153), (324, 34258), (356, 34345), (381, 34393), (406, 34537),

Gene: Apricot\_48 Start: 31405, Stop: 32475, Start Num: 127

Candidate Starts for Apricot\_48:

(101, 31360), (Start: 127 @31405 has 297 MA's), (140, 31456), (146, 31504), (154, 31534), (161, 31561), (190, 31648), (206, 31714), (207, 31720), (214, 31756), (216, 31765), (243, 31816), (248, 31840), (254, 31858), (269, 31921), (279, 31957), (288, 31990), (289, 31993), (291, 32005), (293, 32029), (330, 32173), (339, 32200), (363, 32272), (387, 32332), (392, 32359), (396, 32389), (400, 32407), (410, 32464),

Gene: ArV2\_29 Start: 22829, Stop: 21699, Start Num: 127

Candidate Starts for ArV2\_29:

(Start: 127 @22829 has 297 MA's), (140, 22778), (184, 22625), (194, 22550), (211, 22481), (218, 22454), (253, 22343), (257, 22319), (273, 22259), (274, 22256), (279, 22241), (320, 22046), (328, 22016), (334, 21998), (335, 21995), (341, 21977), (356, 21923), (360, 21908), (374, 21881), (390, 21809), (393, 21800), (395, 21788),

Gene: Ardmore\_36 Start: 30890, Stop: 32008, Start Num: 127

Candidate Starts for Ardmore\_36:

(Start: 127 @30890 has 297 MA's), (130, 30899), (162, 31061), (207, 31226), (214, 31262), (216, 31271), (268, 31445), (283, 31502), (284, 31505), (288, 31517), (289, 31520), (291, 31532), (295, 31571), (307, 31598), (313, 31634), (314, 31637), (320, 31673), (321, 31679), (324, 31691), (325, 31694), (356, 31778), (363, 31793), (378, 31811), (390, 31880), (393, 31889), (399, 31928), (401, 31946), (405, 31967), (409, 31982), (410, 31991), (411, 31994),

Gene: Arianna\_32 Start: 30114, Stop: 28903, Start Num: 128

Candidate Starts for Arianna\_32:

(Start: 128 @30114 has 4 MA's), (160, 29940), (197, 29799), (244, 29640), (284, 29490), (303, 29400), (372, 29136), (381, 29100), (382, 29094), (413, 28929), (417, 28914), (418, 28911),

Gene: Asapag\_47 Start: 32537, Stop: 33631, Start Num: 127

Candidate Starts for Asapag\_47:

(82, 32450), (97, 32486), (Start: 127 @32537 has 297 MA's), (140, 32588), (152, 32660), (154, 32666), (161, 32693), (190, 32780), (207, 32852), (214, 32888), (216, 32897), (248, 32972), (254, 32990), (279, 33089), (288, 33122), (289, 33125), (291, 33137), (314, 33239), (330, 33305), (339, 33332), (363, 33404), (387, 33464), (392, 33491), (411, 33599),

Gene: Asayake\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for Asayake\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: Atiba\_41 Start: 32439, Stop: 33527, Start Num: 127

Candidate Starts for Atiba\_41:

(Start: 127 @32439 has 297 MA's), (140, 32490), (147, 32541), (Start: 153 @32565 has 1 MA's), (165, 32601), (202, 32739), (214, 32793), (248, 32877), (266, 32946), (267, 32949), (304, 33099), (319, 33177), (324, 33204), (356, 33291), (381, 33339),

Gene: Attis\_34 Start: 27696, Stop: 28778, Start Num: 126

Candidate Starts for Attis\_34:

(Start: 75 @27585 has 6 MA's), (Start: 126 @27696 has 52 MA's), (140, 27750), (167, 27870), (244, 28125), (253, 28155), (267, 28215), (286, 28281), (291, 28305), (387, 28635), (392, 28662), (410, 28767),

Gene: Auxilium\_38 Start: 25309, Stop: 24170, Start Num: 127

Candidate Starts for Auxilium\_38:

(Start: 127 @25309 has 297 MA's), (140, 25258), (186, 25090), (188, 25072), (216, 24940), (246, 24862), (248, 24850), (266, 24775), (269, 24766), (286, 24706), (304, 24616), (325, 24511), (332, 24490), (341, 24463), (383, 24340), (387, 24316), (389, 24301), (402, 24226), (408, 24196),

Gene: BAKA\_86 Start: 53552, Stop: 54781, Start Num: 83

Candidate Starts for BAKA\_86:

(Start: 83 @53552 has 28 MA's), (Start: 90 @53570 has 1 MA's), (109, 53609), (177, 53846), (197, 53954), (233, 54074), (234, 54077), (235, 54086), (241, 54101), (250, 54140), (271, 54218), (296, 54323), (303, 54335), (304, 54338), (307, 54347), (317, 54398), (318, 54401), (320, 54419), (348, 54515), (369, 54572), (397, 54692), (398, 54695), (401, 54719), (406, 54743), (407, 54746),

Gene: BEEST\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for BEEST\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: BENtherdunthat\_50 Start: 31782, Stop: 32852, Start Num: 127

Candidate Starts for BENtherdunthat\_50:

(103, 31740), (Start: 127 @31782 has 297 MA's), (140, 31833), (152, 31905), (154, 31911), (161, 31938), (214, 32133), (216, 32142), (243, 32193), (244, 32202), (246, 32205), (248, 32217), (258, 32262), (269, 32298), (279, 32334), (288, 32367), (289, 32370), (291, 32382), (330, 32550), (363, 32649), (387, 32709), (392, 32736), (393, 32739), (396, 32766), (398, 32772), (400, 32784), (410, 32841),

Gene: BGlluviae\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for BGlluviae\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: BaghaKamala\_40 Start: 31917, Stop: 33005, Start Num: 127

Candidate Starts for BaghaKamala\_40:

(45, 31695), (Start: 127 @31917 has 297 MA's), (140, 31968), (147, 32019), (Start: 153 @32043 has 1 MA's), (165, 32079), (202, 32217), (214, 32271), (248, 32355), (266, 32424), (267, 32427), (304, 32577), (324, 32682), (356, 32769), (381, 32817),

Gene: Bagrid\_82 Start: 52202, Stop: 53431, Start Num: 83

Candidate Starts for Bagrid\_82:

(Start: 83 @52202 has 28 MA's), (Start: 90 @52220 has 1 MA's), (109, 52259), (177, 52496), (197, 52604), (233, 52724), (234, 52727), (235, 52736), (241, 52751), (250, 52790), (271, 52868), (296, 52973), (303, 52985), (304, 52988), (307, 52997), (317, 53048), (318, 53051), (320, 53069), (348, 53165), (369, 53222), (397, 53342), (398, 53345), (401, 53369), (406, 53393), (407, 53396),

Gene: BarrelRoll\_41 Start: 32462, Stop: 33550, Start Num: 127

Candidate Starts for BarrelRoll\_41:

(Start: 127 @32462 has 297 MA's), (140, 32513), (147, 32564), (Start: 153 @32588 has 1 MA's), (165, 32624), (202, 32762), (214, 32816), (248, 32900), (266, 32969), (267, 32972), (304, 33122), (319, 33200), (324, 33227), (356, 33314), (381, 33362),

Gene: BasketStar\_41 Start: 28246, Stop: 27074, Start Num: 127

Candidate Starts for BasketStar\_41:

(Start: 127 @28246 has 297 MA's), (140, 28195), (186, 28027), (188, 28009), (216, 27877), (246, 27799), (248, 27787), (266, 27712), (269, 27703), (286, 27643), (304, 27553), (325, 27448), (332, 27427), (341, 27400), (383, 27277), (387, 27253), (389, 27238), (411, 27118), (421, 27091),

Gene: BatStarr\_39 Start: 31901, Stop: 33094, Start Num: 75

Candidate Starts for BatStarr\_39:

(Start: 75 @31901 has 6 MA's), (Start: 126 @32012 has 52 MA's), (140, 32066), (167, 32186), (243, 32432), (244, 32441), (253, 32471), (267, 32531), (286, 32597), (291, 32621), (387, 32951), (392, 32978), (410, 33083),

Gene: Batiatus\_43 Start: 33150, Stop: 34277, Start Num: 127

Candidate Starts for Batiatus\_43:

(77, 33048), (99, 33105), (Start: 127 @33150 has 297 MA's), (130, 33159), (162, 33321), (183, 33372), (186, 33390), (192, 33435), (214, 33531), (216, 33540), (246, 33621), (253, 33645), (268, 33714), (279, 33753), (283, 33771), (284, 33774), (288, 33786), (289, 33789), (291, 33801), (292, 33816), (295, 33840), (296, 33846), (307, 33867), (313, 33903), (314, 33906), (320, 33942), (321, 33948), (325, 33963), (336, 33978), (356, 34047), (363, 34062), (383, 34104), (390, 34149), (393, 34158), (399, 34197), (401, 34215), (405, 34236), (409, 34251), (410, 34260), (411, 34263),

Gene: Bauer\_39 Start: 26996, Stop: 28129, Start Num: 127

Candidate Starts for Bauer\_39:

(46, 26783), (52, 26819), (67, 26861), (118, 26984), (Start: 127 @26996 has 297 MA's), (146, 27089), (179, 27182), (216, 27359), (246, 27422), (248, 27434), (267, 27512), (270, 27524), (285, 27575), (299, 27656), (304, 27668), (311, 27695), (320, 27749), (355, 27869), (362, 27890), (387, 27962), (389, 27977), (401, 28049), (402, 28052), (408, 28082), (409, 28085), (419, 28118),

Gene: Beakin\_43 Start: 31583, Stop: 32701, Start Num: 127

Candidate Starts for Beakin\_43:

(Start: 127 @31583 has 297 MA's), (130, 31592), (162, 31754), (207, 31919), (214, 31955), (216, 31964), (253, 32069), (268, 32138), (279, 32177), (283, 32195), (284, 32198), (288, 32210), (289, 32213), (291, 32225), (292, 32240), (295, 32264), (296, 32270), (307, 32291), (313, 32327), (314, 32330), (320, 32366), (321, 32372), (325, 32387), (336, 32402), (356, 32471), (363, 32486), (383, 32528), (390, 32573), (393, 32582), (399, 32621), (401, 32639), (405, 32660), (409, 32675), (410, 32684), (411, 32687),

Gene: BeeGee\_42 Start: 31829, Stop: 32935, Start Num: 127

Candidate Starts for BeeGee\_42:

(95, 31772), (Start: 127 @31829 has 297 MA's), (140, 31880), (161, 31985), (180, 32024), (247, 32258), (248, 32264), (266, 32333), (267, 32336), (275, 32366), (289, 32417), (291, 32429), (346, 32657), (365, 32717), (387, 32792), (393, 32822), (410, 32924),

Gene: Beem\_81 Start: 53063, Stop: 54292, Start Num: 83

Candidate Starts for Beem\_81:

(Start: 83 @53063 has 28 MA's), (Start: 90 @53081 has 1 MA's), (109, 53120), (177, 53357), (197, 53465), (233, 53585), (234, 53588), (235, 53597), (241, 53612), (250, 53651), (271, 53729), (296, 53834), (303, 53846), (304, 53849), (307, 53858), (317, 53909), (318, 53912), (320, 53930), (348, 54026), (369, 54083), (397, 54203), (398, 54206), (401, 54230), (406, 54254), (407, 54257),

Gene: Beenie\_33 Start: 29179, Stop: 30306, Start Num: 112

Candidate Starts for Beenie\_33:

(91, 29140), (Start: 112 @29179 has 19 MA's), (134, 29233), (161, 29356), (175, 29389), (195, 29479), (206, 29512), (266, 29707), (267, 29710), (279, 29752), (289, 29788), (365, 30085), (387, 30163), (392, 30190), (395, 30205), (399, 30232), (410, 30295),

Gene: Beezoo\_43 Start: 33442, Stop: 34530, Start Num: 127

Candidate Starts for Beezoo\_43:

(Start: 127 @33442 has 297 MA's), (147, 33544), (Start: 153 @33568 has 1 MA's), (165, 33604), (202, 33742), (214, 33796), (248, 33880), (266, 33949), (267, 33952), (304, 34102), (324, 34207), (356, 34294), (381, 34342), (406, 34486),

Gene: Bella96\_42 Start: 33333, Stop: 34421, Start Num: 127

Candidate Starts for Bella96\_42:

(Start: 127 @33333 has 297 MA's), (140, 33384), (147, 33435), (Start: 153 @33459 has 1 MA's), (165, 33495), (194, 33609), (202, 33633), (214, 33687), (248, 33771), (266, 33840), (304, 33993), (324, 34098), (356, 34185), (381, 34233), (406, 34377),

Gene: BellaJr\_39 Start: 28072, Stop: 29196, Start Num: 127

Candidate Starts for BellaJr\_39:

(Start: 127 @28072 has 297 MA's), (146, 28165), (179, 28258), (216, 28435), (246, 28498), (248, 28510), (267, 28588), (270, 28600), (285, 28651), (299, 28732), (311, 28771), (320, 28825), (341, 28894), (386, 29035), (387, 29038), (389, 29053), (397, 29098), (402, 29128), (408, 29158),

Gene: Belladonna\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Belladonna\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: BenchScraper\_39 Start: 27267, Stop: 26128, Start Num: 127

Candidate Starts for BenchScraper\_39:

(Start: 127 @27267 has 297 MA's), (140, 27216), (186, 27048), (188, 27030), (216, 26898), (246, 26820), (248, 26808), (249, 26802), (266, 26733), (269, 26724), (286, 26664), (304, 26574), (325, 26469), (332, 26448), (341, 26421), (383, 26298), (387, 26274), (389, 26259), (402, 26184), (408, 26154),

Gene: Bhageatrice\_40 Start: 29135, Stop: 27957, Start Num: 127

Candidate Starts for Bhageatrice\_40:

(102, 29174), (Start: 127 @29135 has 297 MA's), (152, 29018), (188, 28898), (216, 28766), (246, 28688), (266, 28601), (269, 28592), (286, 28532), (304, 28442), (325, 28337), (327, 28331), (341, 28289), (383, 28172), (387, 28148), (389, 28133), (411, 28013),

Gene: Bialota\_37 Start: 31315, Stop: 32397, Start Num: 126

Candidate Starts for Bialota\_37:

(Start: 75 @31204 has 6 MA's), (Start: 126 @31315 has 52 MA's), (140, 31369), (167, 31489), (244, 31744), (253, 31774), (267, 31834), (286, 31900), (291, 31924), (387, 32254), (392, 32281), (410, 32386),

Gene: BigPhil\_38 Start: 27903, Stop: 29021, Start Num: 127

Candidate Starts for BigPhil\_38:

(Start: 127 @27903 has 297 MA's), (162, 28074), (207, 28239), (214, 28275), (216, 28284), (246, 28365), (253, 28389), (268, 28458), (279, 28497), (283, 28515), (284, 28518), (288, 28530), (289, 28533), (291, 28545), (292, 28560), (295, 28584), (296, 28590), (307, 28611), (313, 28647), (314, 28650), (320, 28686), (321, 28692), (324, 28704), (325, 28707), (336, 28722), (356, 28791), (363, 28806), (383, 28848), (390, 28893), (393, 28902), (399, 28941), (401, 28959), (405, 28980), (409, 28995), (410, 29004), (411, 29007),

Gene: Biglebops\_36 Start: 31976, Stop: 33070, Start Num: 127

Candidate Starts for Biglebops\_36:

(25, 31625), (Start: 27 @31640 has 1 MA's), (38, 31733), (45, 31754), (69, 31847), (Start: 127 @31976 has 297 MA's), (140, 32027), (Start: 153 @32102 has 1 MA's), (165, 32138), (192, 32234), (194, 32252), (202, 32276), (213, 32324), (214, 32330), (260, 32462), (266, 32495), (279, 32540), (304, 32648), (324, 32753), (349, 32813), (381, 32888), (400, 32996), (406, 33032),

Gene: BillyTP\_42 Start: 29080, Stop: 27908, Start Num: 127

Candidate Starts for BillyTP\_42:

(Start: 127 @29080 has 297 MA's), (152, 28963), (186, 28861), (188, 28843), (216, 28711), (246, 28633), (248, 28621), (266, 28546), (269, 28537), (286, 28477), (304, 28387), (325, 28282), (332, 28261), (339, 28237), (341, 28234), (361, 28165), (383, 28111), (387, 28087), (389, 28072), (411, 27952), (421, 27925),

Gene: Bipolar\_39 Start: 31381, Stop: 32499, Start Num: 127

Candidate Starts for Bipolar\_39:

(Start: 127 @31381 has 297 MA's), (154, 31519), (162, 31552), (184, 31600), (207, 31717), (214, 31753), (216, 31762), (253, 31867), (268, 31936), (279, 31975), (284, 31996), (288, 32008), (289, 32011), (291, 32023), (292, 32038), (295, 32062), (296, 32068), (307, 32089), (313, 32125), (314, 32128), (320, 32164), (321, 32170), (325, 32185), (356, 32269), (363, 32284), (378, 32302), (383, 32326), (390, 32371), (393, 32380), (399, 32419), (401, 32437), (405, 32458), (409, 32473), (410, 32482), (411, 32485),

Gene: Birdsong\_47 Start: 32758, Stop: 33852, Start Num: 127

Candidate Starts for Birdsong\_47:

(51, 32578), (64, 32617), (Start: 127 @32758 has 297 MA's), (140, 32809), (154, 32887), (161, 32914), (184, 32959), (190, 33001), (207, 33073), (214, 33109), (216, 33118), (244, 33178), (248, 33193), (254, 33211), (279, 33310), (284, 33331), (288, 33343), (289, 33346), (291, 33358), (293, 33382), (314, 33460), (339, 33553), (363, 33625), (387, 33685), (398, 33748), (400, 33760), (411, 33820),

Gene: Bjan7\_34 Start: 27585, Stop: 28778, Start Num: 75

Candidate Starts for Bjan7\_34:

(Start: 74 @27579 has 2 MA's), (Start: 75 @27585 has 6 MA's), (Start: 126 @27696 has 52 MA's), (140, 27750), (167, 27870), (244, 28125), (253, 28155), (267, 28215), (286, 28281), (291, 28305), (308, 28374), (313, 28410), (387, 28635), (392, 28662), (410, 28767),

Gene: BlackSpider\_36 Start: 26664, Stop: 27788, Start Num: 127

Candidate Starts for BlackSpider\_36:

(46, 26439), (52, 26475), (Start: 127 @26664 has 297 MA's), (179, 26850), (216, 27027), (246, 27090), (248, 27102), (267, 27180), (270, 27192), (285, 27243), (299, 27324), (304, 27336), (311, 27363), (320, 27417), (386, 27627), (387, 27630), (389, 27645), (397, 27690), (402, 27720), (408, 27750),

Gene: Blarby\_54 Start: 32907, Stop: 34010, Start Num: 127

Candidate Starts for Blarby\_54:

(Start: 127 @32907 has 297 MA's), (140, 32955), (154, 33036), (161, 33063), (214, 33276), (226, 33300), (246, 33348), (266, 33429), (286, 33498), (288, 33507), (295, 33561), (304, 33582), (319, 33660), (321, 33675), (346, 33735), (356, 33774), (363, 33789), (376, 33813), (383, 33840), (387, 33864), (390, 33885), (393, 33894), (400, 33939), (401, 33951),

Gene: Blizzard\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for Blizzard\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: BlueShadow\_39 Start: 27645, Stop: 26479, Start Num: 127

Candidate Starts for BlueShadow\_39:

(Start: 127 @27645 has 297 MA's), (186, 27426), (188, 27408), (216, 27276), (246, 27198), (248, 27186), (266, 27111), (269, 27102), (286, 27042), (304, 26952), (325, 26847), (332, 26826), (339, 26802), (341, 26799), (383, 26676), (386, 26655), (387, 26652), (389, 26637), (421, 26490),

Gene: BobaPhett\_43 Start: 33216, Stop: 34334, Start Num: 127

Candidate Starts for BobaPhett\_43:

(Start: 127 @33216 has 297 MA's), (154, 33354), (162, 33387), (184, 33435), (207, 33552), (214, 33588), (216, 33597), (253, 33702), (268, 33771), (284, 33831), (288, 33843), (289, 33846), (291, 33858), (292, 33873), (295, 33897), (296, 33903), (307, 33924), (313, 33960), (314, 33963), (320, 33999), (321, 34005), (324, 34017), (325, 34020), (356, 34104), (363, 34119), (383, 34161), (390, 34206), (393, 34215), (399, 34254), (401, 34272), (405, 34293), (409, 34308), (410, 34317), (411, 34320),

Gene: Bobi\_46 Start: 33890, Stop: 35017, Start Num: 127

Candidate Starts for Bobi\_46:

(77, 33788), (99, 33845), (Start: 127 @33890 has 297 MA's), (130, 33899), (162, 34061), (183, 34112), (186, 34130), (192, 34175), (214, 34271), (216, 34280), (253, 34385), (268, 34454), (284, 34514), (288, 34526), (289, 34529), (291, 34541), (292, 34556), (295, 34580), (296, 34586), (307, 34607), (313, 34643), (314, 34646), (320, 34682), (321, 34688), (324, 34700), (325, 34703), (356, 34787), (363, 34802), (383, 34844), (390, 34889), (393, 34898), (399, 34937), (401, 34955), (405, 34976), (409, 34991), (410, 35000), (411, 35003),

Gene: Boiiii\_41 Start: 32794, Stop: 33882, Start Num: 127

Candidate Starts for Boiiii\_41:

(Start: 127 @32794 has 297 MA's), (147, 32896), (Start: 153 @32920 has 1 MA's), (165, 32956), (202, 33094), (248, 33232), (266, 33301), (267, 33304), (304, 33454), (324, 33559), (381, 33694),

Gene: Bombitas\_71 Start: 50226, Stop: 51455, Start Num: 83

Candidate Starts for Bombitas\_71:

(Start: 83 @50226 has 28 MA's), (Start: 90 @50244 has 1 MA's), (109, 50283), (177, 50520), (197, 50628), (233, 50748), (234, 50751), (235, 50760), (241, 50775), (250, 50814), (271, 50892), (296, 50997), (303, 51009), (304, 51012), (307, 51021), (317, 51072), (318, 51075), (320, 51093), (348, 51189), (369, 51246), (397, 51366), (398, 51369), (401, 51393), (406, 51417), (407, 51420),

Gene: BoostSeason\_44 Start: 34144, Stop: 35244, Start Num: 127

Candidate Starts for BoostSeason\_44:

(Start: 127 @34144 has 297 MA's), (132, 34162), (140, 34195), (Start: 153 @34270 has 1 MA's), (165, 34306), (194, 34420), (202, 34444), (214, 34498), (261, 34639), (266, 34663), (267, 34666), (279, 34708), (304, 34816), (324, 34921), (345, 34966), (349, 34981), (400, 35173),

Gene: Bosnia\_39 Start: 32012, Stop: 33094, Start Num: 126

Candidate Starts for Bosnia\_39:

(Start: 75 @31901 has 6 MA's), (Start: 126 @32012 has 52 MA's), (140, 32066), (167, 32186), (195, 32297), (243, 32432), (267, 32531), (286, 32597), (291, 32621), (313, 32726), (387, 32951), (392, 32978), (400, 33026), (410, 33083),

Gene: BotCity\_49 Start: 32558, Stop: 33655, Start Num: 127

Candidate Starts for BotCity\_49:

(Start: 127 @32558 has 297 MA's), (140, 32609), (146, 32657), (154, 32687), (161, 32714), (190, 32801), (206, 32867), (207, 32873), (214, 32909), (216, 32918), (244, 32978), (248, 32993), (254, 33011), (258, 33038), (279, 33110), (288, 33143), (289, 33146), (291, 33158), (293, 33182), (330, 33326), (363, 33425), (387, 33485), (392, 33512), (400, 33560), (401, 33572), (411, 33620),

Gene: BoyNamedSue\_39 Start: 31289, Stop: 32371, Start Num: 126

Candidate Starts for BoyNamedSue\_39:

(Start: 75 @31178 has 6 MA's), (Start: 126 @31289 has 52 MA's), (140, 31343), (167, 31463), (253, 31748), (267, 31808), (286, 31874), (291, 31898), (387, 32228), (400, 32303), (410, 32360),

Gene: Bradissa\_36 Start: 31469, Stop: 32551, Start Num: 126

Candidate Starts for Bradissa\_36:

(Start: 126 @31469 has 52 MA's), (149, 31586), (184, 31679), (244, 31901), (255, 31937), (267, 31991), (287, 32060), (289, 32069), (387, 32408), (392, 32435), (410, 32540),

Gene: Bran\_28 Start: 25552, Stop: 24428, Start Num: 123

Candidate Starts for Bran\_28:

(Start: 123 @25552 has 3 MA's), (131, 25537), (139, 25513), (161, 25399), (177, 25360), (187, 25318), (191, 25285), (193, 25276), (198, 25249), (204, 25231), (231, 25132), (239, 25111), (245, 25087), (263, 25027), (281, 24985), (284, 24973), (287, 24967), (291, 24946), (302, 24892), (303, 24889), (304, 24886), (309, 24865), (324, 24781), (326, 24775), (332, 24757), (342, 24727), (367, 24670), (387, 24613), (389, 24598), (390, 24592), (393, 24583), (394, 24574), (395, 24571), (398, 24550), (399, 24544), (401, 24526), (406, 24502), (410, 24481), (411, 24478), (414, 24469),

Gene: BrayBeast\_32 Start: 24672, Stop: 23518, Start Num: 127

Candidate Starts for BrayBeast\_32:

(Start: 127 @24672 has 297 MA's), (141, 24618), (194, 24369), (207, 24324), (210, 24303), (211, 24300), (217, 24276), (248, 24177), (253, 24162), (273, 24078), (311, 23919), (320, 23865), (326, 23841), (332, 23823), (341, 23796), (349, 23769), (356, 23742), (360, 23727), (365, 23718), (389, 23634), (390, 23628), (393, 23619), (400, 23574), (403, 23544),

Gene: Bridgette\_38 Start: 26661, Stop: 27803, Start Num: 127

Candidate Starts for Bridgette\_38:

(120, 26646), (Start: 125 @26655 has 1 MA's), (Start: 127 @26661 has 297 MA's), (213, 27015), (214, 27021), (219, 27039), (253, 27147), (266, 27207), (291, 27300), (314, 27420), (322, 27468), (332, 27498), (360, 27594), (393, 27702), (403, 27777),

Gene: Brocalys\_36 Start: 27204, Stop: 28322, Start Num: 127

Candidate Starts for Brocalys\_36:

(Start: 127 @27204 has 297 MA's), (130, 27213), (162, 27375), (207, 27540), (214, 27576), (216, 27585), (246, 27666), (253, 27690), (268, 27759), (279, 27798), (283, 27816), (284, 27819), (288, 27831), (289, 27834), (291, 27846), (292, 27861), (295, 27885), (296, 27891), (307, 27912), (313, 27948), (314, 27951), (320, 27987), (321, 27993), (325, 28008), (336, 28023), (356, 28092), (363, 28107), (383, 28149), (390, 28194), (393, 28203), (399, 28242), (401, 28260), (405, 28281), (409, 28296), (410, 28305), (411, 28308),

Gene: Brookers\_39 Start: 30854, Stop: 31972, Start Num: 127

Candidate Starts for Brookers\_39:

(Start: 127 @30854 has 297 MA's), (162, 31025), (207, 31190), (214, 31226), (216, 31235), (246, 31316), (253, 31340), (268, 31409), (279, 31448), (283, 31466), (284, 31469), (288, 31481), (289, 31484), (291, 31496), (292, 31511), (295, 31535), (296, 31541), (307, 31562), (313, 31598), (314, 31601), (320, 31637), (321, 31643), (324, 31655), (325, 31658), (336, 31673), (356, 31742), (363, 31757), (383, 31799), (390, 31844), (393, 31853), (399, 31892), (401, 31910), (405, 31931), (409, 31946), (410, 31955), (411, 31958),

Gene: Brushbloom\_46 Start: 32847, Stop: 33965, Start Num: 127

Candidate Starts for Brushbloom\_46:

(Start: 127 @32847 has 297 MA's), (130, 32856), (154, 32985), (162, 33018), (184, 33066), (207, 33183), (214, 33219), (216, 33228), (253, 33333), (268, 33402), (284, 33462), (288, 33474), (289, 33477), (291, 33489), (292, 33504), (295, 33528), (296, 33534), (307, 33555), (313, 33591), (314, 33594), (320, 33630), (321, 33636), (324, 33648), (325, 33651), (356, 33735), (363, 33750), (383, 33792), (390, 33837), (393, 33846), (399, 33885), (401, 33903), (405, 33924), (409, 33939), (410, 33948), (411, 33951),

Gene: Budski\_49 Start: 33439, Stop: 34533, Start Num: 127

Candidate Starts for Budski\_49:

(100, 33394), (Start: 127 @33439 has 297 MA's), (140, 33490), (161, 33595), (184, 33640), (190, 33682), (214, 33790), (216, 33799), (243, 33850), (248, 33874), (254, 33892), (279, 33991), (288, 34024), (289, 34027), (291, 34039), (293, 34063), (327, 34204), (339, 34234), (363, 34306), (368, 34315), (387, 34366), (388, 34369), (393, 34396), (395, 34408), (411, 34501),

Gene: Bunnybear\_33 Start: 29696, Stop: 30778, Start Num: 126

Candidate Starts for Bunnybear\_33:

(Start: 75 @29585 has 6 MA's), (Start: 126 @29696 has 52 MA's), (140, 29750), (167, 29870), (253, 30155), (267, 30215), (286, 30281), (291, 30305), (313, 30410), (387, 30635), (392, 30662), (410, 30767),

Gene: Byougenkin\_40 Start: 32001, Stop: 33119, Start Num: 127

Candidate Starts for Byougenkin\_40:

(Start: 127 @32001 has 297 MA's), (154, 32139), (162, 32172), (184, 32220), (214, 32373), (216, 32382), (246, 32463), (268, 32556), (284, 32616), (288, 32628), (289, 32631), (295, 32682), (307, 32709), (313, 32745), (314, 32748), (320, 32784), (356, 32889), (363, 32904), (383, 32946), (390, 32991), (393, 33000), (399, 33039), (401, 33057), (405, 33078), (409, 33093), (410, 33102), (411, 33105),

Gene: CREW\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for CREW\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: CallaLilly\_41 Start: 32518, Stop: 33606, Start Num: 127

Candidate Starts for CallaLilly\_41:

(13, 31915), (21, 32092), (35, 32257), (45, 32296), (Start: 127 @32518 has 297 MA's), (140, 32569), (147, 32620), (Start: 153 @32644 has 1 MA's), (165, 32680), (202, 32818), (248, 32956), (266, 33025), (267, 33028), (304, 33178), (324, 33283), (381, 33418),

Gene: Capricorn\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Capricorn\_41:

(12, 31974), (13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: CaptainTrips\_41 Start: 32330, Stop: 33448, Start Num: 127

Candidate Starts for CaptainTrips\_41:

(Start: 127 @32330 has 297 MA's), (130, 32339), (162, 32501), (184, 32549), (207, 32666), (214, 32702), (216, 32711), (253, 32816), (268, 32885), (279, 32924), (283, 32942), (284, 32945), (288, 32957), (289, 32960), (291, 32972), (295, 33011), (296, 33017), (307, 33038), (313, 33074), (314, 33077), (320, 33113), (321, 33119), (324, 33131), (325, 33134), (336, 33149), (356, 33218), (363, 33233), (378, 33251), (383, 33275), (390, 33320), (393, 33329), (399, 33368), (401, 33386), (405, 33407), (409, 33422), (410, 33431), (411, 33434),

Gene: CaseJules\_42 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for CaseJules\_42:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: Cashline\_38 Start: 32110, Stop: 33216, Start Num: 127

Candidate Starts for Cashline\_38:

(95, 32053), (Start: 127 @32110 has 297 MA's), (140, 32161), (161, 32266), (180, 32305), (248, 32545), (266, 32614), (267, 32617), (269, 32623), (275, 32647), (289, 32698), (291, 32710), (346, 32938), (365, 32998), (387, 33073), (393, 33103), (410, 33205),

Gene: Cassini\_31 Start: 25264, Stop: 24098, Start Num: 127

Candidate Starts for Cassini\_31:

(Start: 127 @25264 has 297 MA's), (170, 25099), (186, 25045), (188, 25027), (212, 24913), (216, 24895), (246, 24817), (248, 24805), (266, 24730), (269, 24721), (286, 24661), (304, 24571), (324, 24469), (327, 24460), (332, 24445), (339, 24421), (341, 24418), (383, 24301), (387, 24277), (389, 24262), (401, 24190), (411, 24142), (421, 24115),

Gene: Cerasum\_38 Start: 27921, Stop: 29039, Start Num: 127

Candidate Starts for Cerasum\_38:

(Start: 127 @27921 has 297 MA's), (162, 28092), (207, 28257), (214, 28293), (216, 28302), (246, 28383), (253, 28407), (268, 28476), (279, 28515), (283, 28533), (284, 28536), (288, 28548), (289, 28551), (291, 28563), (292, 28578), (295, 28602), (296, 28608), (307, 28629), (313, 28665), (314, 28668), (320, 28704), (321, 28710), (324, 28722), (325, 28725), (336, 28740), (356, 28809), (363, 28824), (383, 28866), (390, 28911), (393, 28920), (399, 28959), (401, 28977), (405, 28998), (409, 29013), (410, 29022), (411, 29025),

Gene: Chavito\_44 Start: 33649, Stop: 34740, Start Num: 127

Candidate Starts for Chavito\_44:

(26, 33316), (43, 33415), (44, 33424), (48, 33451), (61, 33499), (Start: 127 @33649 has 297 MA's), (140, 33700), (Start: 153 @33775 has 1 MA's), (165, 33811), (194, 33925), (202, 33949), (214, 34003), (248, 34087), (256, 34120), (266, 34156), (267, 34159), (279, 34201), (295, 34288), (304, 34309), (324, 34417), (349, 34477), (379, 34540), (381, 34552), (400, 34660), (406, 34696),

Gene: CheeseTouch\_54 Start: 30887, Stop: 31984, Start Num: 127

Candidate Starts for CheeseTouch\_54:

(50, 30722), (53, 30731), (108, 30857), (Start: 127 @30887 has 297 MA's), (140, 30938), (154, 31016), (161, 31043), (190, 31130), (206, 31196), (207, 31202), (244, 31307), (246, 31310), (248, 31322), (279, 31439), (284, 31460), (287, 31466), (291, 31487), (307, 31559), (321, 31643), (363, 31766), (385, 31817), (387, 31826), (392, 31853), (411, 31961), (416, 31976),

Gene: Cheesepuff\_46 Start: 33297, Stop: 34415, Start Num: 127

Candidate Starts for Cheesepuff\_46:

(Start: 127 @33297 has 297 MA's), (162, 33468), (207, 33633), (214, 33669), (216, 33678), (253, 33783), (268, 33852), (279, 33891), (284, 33912), (288, 33924), (289, 33927), (291, 33939), (295, 33978), (296, 33984), (307, 34005), (313, 34041), (314, 34044), (320, 34080), (321, 34086), (325, 34101), (336, 34116), (356, 34185), (363, 34200), (378, 34218), (383, 34242), (390, 34287), (393, 34296), (399, 34335), (401, 34353), (405, 34374), (409, 34389), (410, 34398), (411, 34401),

Gene: CheetoDust\_40 Start: 31967, Stop: 33055, Start Num: 127

Candidate Starts for CheetoDust\_40:

(45, 31745), (Start: 127 @31967 has 297 MA's), (140, 32018), (147, 32069), (Start: 153 @32093 has 1 MA's), (165, 32129), (202, 32267), (214, 32321), (248, 32405), (266, 32474), (267, 32477), (304, 32627), (324, 32732), (356, 32819), (381, 32867),

Gene: Chris\_43 Start: 33288, Stop: 34373, Start Num: 127

Candidate Starts for Chris\_43:

(Start: 127 @33288 has 297 MA's), (165, 33450), (185, 33495), (202, 33588), (211, 33630), (248, 33726), (253, 33741), (266, 33795), (267, 33798), (269, 33804), (279, 33840), (304, 33948), (324, 34053), (356, 34140), (379, 34176), (381, 34188), (400, 34296), (409, 34344),

Gene: ChuckDuck\_39 Start: 26485, Stop: 27627, Start Num: 127

Candidate Starts for ChuckDuck\_39:

(22, 26068), (24, 26098), (29, 26158), (31, 26188), (49, 26278), (58, 26314), (81, 26386), (86, 26395), (Start: 127 @26485 has 297 MA's), (213, 26839), (214, 26845), (219, 26863), (253, 26971), (266, 27031), (291, 27124), (314, 27244), (322, 27292), (332, 27322), (360, 27418), (393, 27526), (403, 27601),

Gene: Chymera\_32 Start: 24210, Stop: 22924, Start Num: 127

Candidate Starts for Chymera\_32:

(Start: 127 @24210 has 297 MA's), (130, 24201), (140, 24156), (202, 23862), (225, 23760), (230, 23730), (232, 23727), (272, 23547), (284, 23502), (286, 23499), (314, 23358), (315, 23352), (324, 23304), (393, 23067), (402, 23007), (407, 22983),

Gene: Clank\_44 Start: 32173, Stop: 33291, Start Num: 127

Candidate Starts for Clank\_44:

(Start: 127 @32173 has 297 MA's), (154, 32311), (162, 32344), (184, 32392), (214, 32545), (216, 32554), (246, 32635), (268, 32728), (284, 32788), (288, 32800), (289, 32803), (292, 32830), (295, 32854), (307, 32881), (313, 32917), (314, 32920), (320, 32956), (336, 32992), (356, 33061), (363, 33076), (378, 33094), (390, 33163), (393, 33172), (399, 33211), (401, 33229), (405, 33250), (409, 33265), (410, 33274), (411, 33277),

Gene: Clap\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for Clap\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484),

(308, 28553), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Clark\_39 Start: 28996, Stop: 30123, Start Num: 112

Candidate Starts for Clark\_39:

(91, 28957), (Start: 112 @28996 has 19 MA's), (134, 29050), (161, 29173), (175, 29206), (195, 29296), (206, 29329), (266, 29524), (267, 29527), (279, 29569), (289, 29605), (365, 29902), (387, 29980), (392, 30007), (395, 30022), (399, 30049), (410, 30112),

Gene: Clifton\_35 Start: 27555, Stop: 28673, Start Num: 127

Candidate Starts for Clifton\_35:

(Start: 127 @27555 has 297 MA's), (130, 27564), (162, 27726), (207, 27891), (214, 27927), (216, 27936), (246, 28017), (253, 28041), (268, 28110), (279, 28149), (283, 28167), (284, 28170), (288, 28182), (289, 28185), (291, 28197), (292, 28212), (295, 28236), (296, 28242), (307, 28263), (313, 28299), (314, 28302), (320, 28338), (321, 28344), (325, 28359), (336, 28374), (356, 28443), (363, 28458), (383, 28500), (390, 28545), (393, 28554), (399, 28593), (401, 28611), (405, 28632), (409, 28647), (410, 28656), (411, 28659),

Gene: Clipper\_44 Start: 33113, Stop: 34201, Start Num: 127

Candidate Starts for Clipper\_44:

(Start: 127 @33113 has 297 MA's), (140, 33164), (147, 33215), (Start: 153 @33239 has 1 MA's), (165, 33275), (202, 33413), (248, 33551), (266, 33620), (267, 33623), (304, 33773), (324, 33878), (381, 34013),

Gene: Coco12\_40 Start: 31978, Stop: 33096, Start Num: 127

Candidate Starts for Coco12\_40:

(Start: 127 @31978 has 297 MA's), (162, 32149), (207, 32314), (214, 32350), (216, 32359), (246, 32440), (253, 32464), (268, 32533), (279, 32572), (283, 32590), (284, 32593), (288, 32605), (289, 32608), (291, 32620), (292, 32635), (295, 32659), (296, 32665), (307, 32686), (313, 32722), (314, 32725), (320, 32761), (321, 32767), (324, 32779), (325, 32782), (336, 32797), (356, 32866), (363, 32881), (383, 32923), (390, 32968), (393, 32977), (399, 33016), (401, 33034), (405, 33055), (409, 33070), (410, 33079), (411, 33082),

Gene: Colleen\_32 Start: 30114, Stop: 28903, Start Num: 128

Candidate Starts for Colleen\_32:

(Start: 128 @30114 has 4 MA's), (160, 29940), (197, 29799), (244, 29640), (284, 29490), (303, 29400), (372, 29136), (381, 29100), (382, 29094), (413, 28929), (417, 28914), (418, 28911),

Gene: Confidence\_37 Start: 29321, Stop: 30403, Start Num: 126

Candidate Starts for Confidence\_37:

(Start: 126 @29321 has 52 MA's), (149, 29438), (184, 29531), (244, 29753), (255, 29789), (267, 29843), (287, 29912), (387, 30260), (392, 30287), (398, 30323), (410, 30392),

Gene: Constance\_38 Start: 26814, Stop: 27956, Start Num: 127

Candidate Starts for Constance\_38:

(66, 26667), (71, 26679), (73, 26688), (84, 26721), (105, 26769), (114, 26784), (Start: 127 @26814 has 297 MA's), (214, 27174), (219, 27192), (253, 27300), (266, 27360), (291, 27453), (314, 27573), (322, 27621), (332, 27651), (360, 27747), (393, 27855), (403, 27930),

Gene: Constella\_68 Start: 47200, Stop: 48429, Start Num: 83

Candidate Starts for Constella\_68:

(Start: 83 @47200 has 28 MA's), (Start: 90 @47218 has 1 MA's), (109, 47257), (177, 47494), (197, 47602), (233, 47722), (234, 47725), (235, 47734), (241, 47749), (250, 47788), (271, 47866), (303, 47983), (304, 47986), (307, 47995), (317, 48046), (318, 48049), (320, 48067), (348, 48163), (369,

48220), (397, 48340), (398, 48343), (401, 48367), (406, 48391), (407, 48394),

Gene: CookieBear\_40 Start: 27769, Stop: 26630, Start Num: 127

Candidate Starts for CookieBear\_40:

(Start: 127 @27769 has 297 MA's), (140, 27718), (186, 27550), (188, 27532), (216, 27400), (242, 27337), (246, 27322), (248, 27310), (249, 27304), (266, 27235), (269, 27226), (286, 27166), (304, 27076), (325, 26971), (332, 26950), (341, 26923), (383, 26800), (387, 26776), (389, 26761), (402, 26686), (408, 26656),

Gene: Corium\_41 Start: 32428, Stop: 33546, Start Num: 127

Candidate Starts for Corium\_41:

(Start: 127 @32428 has 297 MA's), (130, 32437), (162, 32599), (207, 32764), (214, 32800), (216, 32809), (253, 32914), (268, 32983), (279, 33022), (283, 33040), (284, 33043), (288, 33055), (289, 33058), (291, 33070), (292, 33085), (295, 33109), (296, 33115), (307, 33136), (313, 33172), (314, 33175), (320, 33211), (321, 33217), (325, 33232), (336, 33247), (356, 33316), (363, 33331), (383, 33373), (390, 33418), (393, 33427), (395, 33439), (399, 33466), (401, 33484), (405, 33505), (409, 33520), (410, 33529), (411, 33532),

Gene: Cornucopia\_45 Start: 32843, Stop: 33970, Start Num: 127

Candidate Starts for Cornucopia\_45:

(77, 32741), (99, 32798), (Start: 127 @32843 has 297 MA's), (130, 32852), (162, 33014), (183, 33065), (186, 33083), (192, 33128), (214, 33224), (216, 33233), (246, 33314), (253, 33338), (268, 33407), (279, 33446), (284, 33467), (288, 33479), (289, 33482), (291, 33494), (292, 33509), (295, 33533), (307, 33560), (313, 33596), (314, 33599), (320, 33635), (336, 33671), (356, 33740), (363, 33755), (378, 33773), (383, 33797), (390, 33842), (393, 33851), (395, 33863), (399, 33890), (401, 33908), (405, 33929), (409, 33944), (410, 33953), (411, 33956),

Gene: CosmicBrownie\_38 Start: 27262, Stop: 26123, Start Num: 127

Candidate Starts for CosmicBrownie\_38:

(Start: 127 @27262 has 297 MA's), (207, 26941), (214, 26905), (217, 26893), (219, 26887), (248, 26794), (253, 26779), (266, 26719), (274, 26689), (291, 26626), (322, 26458), (329, 26437), (332, 26428), (360, 26332), (395, 26212), (403, 26149),

Gene: Crater\_49 Start: 32565, Stop: 33662, Start Num: 127

Candidate Starts for Crater\_49:

(51, 32385), (64, 32424), (Start: 127 @32565 has 297 MA's), (140, 32616), (154, 32694), (161, 32721), (184, 32766), (189, 32799), (190, 32808), (244, 32985), (246, 32988), (269, 33081), (279, 33117), (288, 33150), (289, 33153), (291, 33165), (327, 33330), (339, 33360), (363, 33432), (383, 33468), (387, 33492), (392, 33519), (400, 33567), (401, 33579), (411, 33627),

Gene: Crescenzo\_39 Start: 27750, Stop: 26572, Start Num: 127

Candidate Starts for Crescenzo\_39:

(Start: 127 @27750 has 297 MA's), (140, 27699), (152, 27633), (188, 27513), (208, 27417), (216, 27381), (246, 27303), (266, 27216), (269, 27207), (286, 27147), (325, 26952), (327, 26946), (341, 26904), (383, 26787), (386, 26766), (387, 26763), (389, 26748), (411, 26628), (424, 26586),

Gene: CrimD\_41 Start: 32723, Stop: 33811, Start Num: 127

Candidate Starts for CrimD\_41:

(Start: 127 @32723 has 297 MA's), (147, 32825), (Start: 153 @32849 has 1 MA's), (165, 32885), (202, 33023), (214, 33077), (248, 33161), (266, 33230), (267, 33233), (304, 33383), (319, 33461), (324, 33488), (381, 33623), (406, 33767),

Gene: Cynthia\_37 Start: 27764, Stop: 28957, Start Num: 75

Candidate Starts for Cynthia\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: DLane\_41 Start: 32255, Stop: 33373, Start Num: 127

Candidate Starts for DLane\_41:

(Start: 127 @32255 has 297 MA's), (162, 32426), (207, 32591), (214, 32627), (216, 32636), (268, 32810), (279, 32849), (284, 32870), (288, 32882), (289, 32885), (291, 32897), (295, 32936), (296, 32942), (307, 32963), (313, 32999), (314, 33002), (320, 33038), (321, 33044), (325, 33059), (356, 33143), (363, 33158), (383, 33200), (390, 33245), (393, 33254), (399, 33293), (401, 33311), (405, 33332), (409, 33347), (410, 33356), (411, 33359),

Gene: DRBy19\_43 Start: 32003, Stop: 33121, Start Num: 127

Candidate Starts for DRBy19\_43:

(Start: 127 @32003 has 297 MA's), (154, 32141), (162, 32174), (184, 32222), (207, 32339), (214, 32375), (216, 32384), (253, 32489), (268, 32558), (284, 32618), (288, 32630), (289, 32633), (291, 32645), (292, 32660), (295, 32684), (296, 32690), (307, 32711), (313, 32747), (314, 32750), (320, 32786), (321, 32792), (324, 32804), (325, 32807), (356, 32891), (363, 32906), (383, 32948), (390, 32993), (393, 33002), (399, 33041), (401, 33059), (405, 33080), (409, 33095), (410, 33104), (411, 33107),

Gene: Dallas\_80 Start: 51984, Stop: 53213, Start Num: 83

Candidate Starts for Dallas\_80:

(Start: 83 @51984 has 28 MA's), (Start: 90 @52002 has 1 MA's), (109, 52041), (177, 52278), (197, 52386), (233, 52506), (234, 52509), (235, 52518), (241, 52533), (250, 52572), (271, 52650), (296, 52755), (303, 52767), (304, 52770), (307, 52779), (317, 52830), (318, 52833), (320, 52851), (348, 52947), (369, 53004), (397, 53124), (398, 53127), (401, 53151), (406, 53175), (407, 53178),

Gene: Dalmuri\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Dalmuri\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: DartGoblin\_43 Start: 33327, Stop: 34415, Start Num: 127

Candidate Starts for DartGoblin\_43:

(Start: 127 @33327 has 297 MA's), (140, 33378), (147, 33429), (Start: 153 @33453 has 1 MA's), (165, 33489), (194, 33603), (202, 33627), (214, 33681), (248, 33765), (266, 33834), (304, 33987), (324, 34092), (356, 34179), (381, 34227), (406, 34371),

Gene: Dartin\_43 Start: 33014, Stop: 34105, Start Num: 127

Candidate Starts for Dartin\_43:

(11, 32333), (18, 32477), (26, 32681), (43, 32780), (44, 32789), (48, 32816), (61, 32864), (Start: 127 @33014 has 297 MA's), (140, 33065), (Start: 153 @33140 has 1 MA's), (165, 33176), (194, 33290), (202, 33314), (214, 33368), (248, 33452), (256, 33485), (266, 33521), (267, 33524), (279, 33566), (295, 33653), (304, 33674), (324, 33782), (349, 33842), (379, 33905), (381, 33917), (400, 34025), (406, 34061),

Gene: DarwinJr\_42 Start: 28654, Stop: 27527, Start Num: 140

Candidate Starts for DarwinJr\_42:

(113, 28723), (Start: 127 @28705 has 297 MA's), (140, 28654), (152, 28588), (188, 28468), (208, 28372), (216, 28336), (246, 28258), (266, 28171), (269, 28162), (286, 28102), (304, 28012), (325,

27907), (327, 27901), (341, 27859), (360, 27793), (383, 27742), (386, 27721), (387, 27718), (389, 27703), (411, 27583),

Gene: DeadP\_46 Start: 32604, Stop: 33707, Start Num: 127

Candidate Starts for DeadP\_46:

(Start: 127 @32604 has 297 MA's), (140, 32652), (154, 32733), (161, 32760), (214, 32973), (226, 32997), (246, 33045), (266, 33126), (286, 33195), (288, 33204), (292, 33234), (295, 33258), (304, 33279), (319, 33357), (321, 33372), (346, 33432), (356, 33471), (363, 33486), (376, 33510), (383, 33537), (387, 33561), (390, 33582), (393, 33591), (400, 33636), (401, 33648),

Gene: Deby\_41 Start: 32726, Stop: 33811, Start Num: 127

Candidate Starts for Deby\_41:

(Start: 127 @32726 has 297 MA's), (147, 32828), (148, 32837), (Start: 153 @32852 has 1 MA's), (165, 32888), (202, 33026), (214, 33080), (248, 33164), (266, 33233), (267, 33236), (304, 33386), (324, 33491), (356, 33578), (381, 33626), (406, 33770),

Gene: Denise\_35 Start: 27272, Stop: 28351, Start Num: 127

Candidate Starts for Denise\_35:

(Start: 127 @27272 has 297 MA's), (161, 27428), (210, 27608), (279, 27821), (290, 27860), (291, 27869), (321, 28025), (363, 28148), (387, 28208), (410, 28340),

Gene: Devera\_45 Start: 33261, Stop: 34349, Start Num: 127

Candidate Starts for Devera\_45:

(Start: 127 @33261 has 297 MA's), (147, 33363), (Start: 153 @33387 has 1 MA's), (165, 33423), (186, 33474), (194, 33537), (202, 33561), (214, 33615), (215, 33618), (248, 33699), (266, 33768), (267, 33771), (304, 33921), (319, 33999), (324, 34026), (381, 34161),

Gene: Ding\_40 Start: 28134, Stop: 27007, Start Num: 127

Candidate Starts for Ding\_40:

(Start: 127 @28134 has 297 MA's), (140, 28083), (141, 28080), (186, 27918), (194, 27855), (207, 27810), (208, 27801), (242, 27690), (248, 27663), (253, 27648), (273, 27564), (279, 27546), (320, 27351), (332, 27309), (337, 27294), (341, 27282), (349, 27255), (356, 27228), (360, 27213), (374, 27189), (390, 27117), (393, 27108), (395, 27096), (401, 27051),

Gene: DismalFunk\_43 Start: 34317, Stop: 35417, Start Num: 127

Candidate Starts for DismalFunk\_43:

(Start: 127 @34317 has 297 MA's), (132, 34335), (Start: 153 @34443 has 1 MA's), (165, 34479), (194, 34593), (202, 34617), (214, 34671), (261, 34812), (266, 34836), (267, 34839), (279, 34881), (304, 34989), (324, 35094), (345, 35139), (349, 35154), (400, 35346),

Gene: DismalStressor\_43 Start: 34317, Stop: 35417, Start Num: 127

Candidate Starts for DismalStressor\_43:

(Start: 127 @34317 has 297 MA's), (132, 34335), (Start: 153 @34443 has 1 MA's), (165, 34479), (194, 34593), (202, 34617), (214, 34671), (261, 34812), (266, 34836), (267, 34839), (279, 34881), (304, 34989), (324, 35094), (345, 35139), (349, 35154), (400, 35346),

Gene: DmpstrDiver\_82 Start: 52410, Stop: 53639, Start Num: 83

Candidate Starts for DmpstrDiver\_82:

(Start: 83 @52410 has 28 MA's), (Start: 90 @52428 has 1 MA's), (109, 52467), (177, 52704), (197, 52812), (233, 52932), (234, 52935), (235, 52944), (241, 52959), (250, 52998), (271, 53076), (296, 53181), (303, 53193), (304, 53196), (307, 53205), (317, 53256), (318, 53259), (320, 53277), (348, 53373), (369, 53430), (397, 53550), (398, 53553), (401, 53577), (406, 53601), (407, 53604),

Gene: DoRead\_44 Start: 32140, Stop: 33258, Start Num: 127

Candidate Starts for DoRead\_44:

(Start: 127 @32140 has 297 MA's), (154, 32278), (162, 32311), (184, 32359), (214, 32512), (216, 32521), (246, 32602), (268, 32695), (284, 32755), (288, 32767), (289, 32770), (292, 32797), (295, 32821), (307, 32848), (313, 32884), (314, 32887), (320, 32923), (336, 32959), (356, 33028), (363, 33043), (390, 33130), (393, 33139), (395, 33151), (399, 33178), (401, 33196), (405, 33217), (409, 33232), (410, 33241), (411, 33244),

Gene: DobbysSock\_31 Start: 27501, Stop: 28628, Start Num: 112

Candidate Starts for DobbysSock\_31:

(39, 27282), (47, 27318), (Start: 112 @27501 has 19 MA's), (134, 27555), (175, 27711), (195, 27801), (206, 27834), (266, 28029), (267, 28032), (279, 28074), (289, 28110), (365, 28407), (387, 28485), (395, 28527), (399, 28554), (410, 28617),

Gene: Dole\_44 Start: 33263, Stop: 34351, Start Num: 127

Candidate Starts for Dole\_44:

(Start: 127 @33263 has 297 MA's), (147, 33365), (Start: 153 @33389 has 1 MA's), (165, 33425), (186, 33476), (194, 33539), (202, 33563), (214, 33617), (215, 33620), (248, 33701), (266, 33770), (267, 33773), (304, 33923), (319, 34001), (324, 34028), (381, 34163),

Gene: Dolores\_40 Start: 29868, Stop: 30995, Start Num: 112

Candidate Starts for Dolores\_40:

(91, 29829), (Start: 112 @29868 has 19 MA's), (134, 29922), (161, 30045), (175, 30078), (195, 30168), (206, 30201), (266, 30396), (267, 30399), (279, 30441), (289, 30477), (365, 30774), (387, 30852), (392, 30879), (395, 30894), (399, 30921), (410, 30984),

Gene: Donkeykong\_41 Start: 32106, Stop: 33224, Start Num: 127

Candidate Starts for Donkeykong\_41:

(Start: 127 @32106 has 297 MA's), (130, 32115), (154, 32244), (162, 32277), (184, 32325), (207, 32442), (214, 32478), (216, 32487), (246, 32568), (253, 32592), (268, 32661), (279, 32700), (284, 32721), (288, 32733), (289, 32736), (291, 32748), (295, 32787), (296, 32793), (307, 32814), (313, 32850), (314, 32853), (320, 32889), (321, 32895), (324, 32907), (325, 32910), (356, 32994), (363, 33009), (378, 33027), (390, 33096), (393, 33105), (399, 33144), (401, 33162), (405, 33183), (409, 33198), (410, 33207), (411, 33210),

Gene: Doomslug\_48 Start: 31734, Stop: 32852, Start Num: 127

Candidate Starts for Doomslug\_48:

(Start: 127 @31734 has 297 MA's), (130, 31743), (162, 31905), (207, 32070), (214, 32106), (216, 32115), (246, 32196), (253, 32220), (268, 32289), (284, 32349), (288, 32361), (289, 32364), (291, 32376), (292, 32391), (295, 32415), (296, 32421), (307, 32442), (313, 32478), (314, 32481), (320, 32517), (321, 32523), (324, 32535), (325, 32538), (356, 32622), (363, 32637), (378, 32655), (388, 32706), (390, 32724), (393, 32733), (395, 32745), (399, 32772), (401, 32790), (405, 32811), (409, 32826), (410, 32835), (411, 32838),

Gene: Dorito\_34 Start: 27145, Stop: 28272, Start Num: 112

Candidate Starts for Dorito\_34:

(39, 26926), (47, 26962), (Start: 112 @27145 has 19 MA's), (134, 27199), (161, 27322), (175, 27355), (195, 27445), (206, 27478), (266, 27673), (267, 27676), (279, 27718), (289, 27754), (365, 28051), (387, 28129), (395, 28171), (399, 28198), (410, 28261),

Gene: DosHalletts\_40 Start: 31274, Stop: 32392, Start Num: 127

Candidate Starts for DosHalletts\_40:

(Start: 127 @31274 has 297 MA's), (162, 31445), (184, 31493), (214, 31646), (216, 31655), (246, 31736), (253, 31760), (268, 31829), (284, 31889), (288, 31901), (289, 31904), (291, 31916), (292, 31931), (295, 31955), (296, 31961), (307, 31982), (313, 32018), (314, 32021), (320, 32057), (321, 32063), (324, 32075), (325, 32078), (336, 32093), (356, 32162), (363, 32177), (383, 32219), (390, 32264), (393, 32273), (399, 32312), (401, 32330), (405, 32351), (409, 32366), (410, 32375), (411, 32378),

Gene: Doughnut\_44 Start: 34142, Stop: 35242, Start Num: 127

Candidate Starts for Doughnut\_44:

(Start: 127 @34142 has 297 MA's), (132, 34160), (140, 34193), (Start: 153 @34268 has 1 MA's), (165, 34304), (194, 34418), (202, 34442), (214, 34496), (261, 34637), (266, 34661), (267, 34664), (279, 34706), (304, 34814), (324, 34919), (345, 34964), (349, 34979), (400, 35171),

Gene: Dove\_67 Start: 48492, Stop: 49721, Start Num: 83

Candidate Starts for Dove\_67:

(Start: 83 @48492 has 28 MA's), (Start: 90 @48510 has 1 MA's), (109, 48549), (177, 48786), (197, 48894), (233, 49014), (234, 49017), (235, 49026), (241, 49041), (250, 49080), (271, 49158), (296, 49263), (303, 49275), (304, 49278), (307, 49287), (317, 49338), (318, 49341), (320, 49359), (348, 49455), (369, 49512), (397, 49632), (398, 49635), (401, 49659), (406, 49683), (407, 49686),

Gene: DrHayes\_42 Start: 33376, Stop: 34464, Start Num: 127

Candidate Starts for DrHayes\_42:

(45, 33154), (Start: 127 @33376 has 297 MA's), (140, 33427), (147, 33478), (Start: 153 @33502 has 1 MA's), (165, 33538), (194, 33652), (214, 33730), (248, 33814), (266, 33883), (267, 33886), (304, 34036), (324, 34141), (381, 34276), (406, 34420),

Gene: Duke13\_85 Start: 52764, Stop: 53993, Start Num: 83

Candidate Starts for Duke13\_85:

(Start: 83 @52764 has 28 MA's), (Start: 90 @52782 has 1 MA's), (109, 52821), (177, 53058), (197, 53166), (233, 53286), (234, 53289), (235, 53298), (241, 53313), (250, 53352), (271, 53430), (296, 53535), (303, 53547), (304, 53550), (307, 53559), (317, 53610), (318, 53613), (320, 53631), (348, 53727), (369, 53784), (397, 53904), (398, 53907), (401, 53931), (406, 53955), (407, 53958),

Gene: Durfee\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for Durfee\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: EMSquaredA\_37 Start: 30030, Stop: 31136, Start Num: 127

Candidate Starts for EMSquaredA\_37:

(95, 29973), (Start: 127 @30030 has 297 MA's), (140, 30081), (161, 30186), (164, 30195), (180, 30225), (247, 30459), (248, 30465), (266, 30534), (267, 30537), (275, 30567), (289, 30618), (291, 30630), (346, 30858), (365, 30918), (387, 30993), (393, 31023), (410, 31125),

Gene: Ebert\_39 Start: 27799, Stop: 28881, Start Num: 126

Candidate Starts for Ebert\_39:

(Start: 74 @27682 has 2 MA's), (Start: 75 @27688 has 6 MA's), (Start: 126 @27799 has 52 MA's), (140, 27853), (167, 27973), (244, 28228), (253, 28258), (267, 28318), (286, 28384), (291, 28408), (308, 28477), (313, 28513), (387, 28738), (392, 28765), (410, 28870),

Gene: Ecliptus\_49 Start: 33668, Stop: 34762, Start Num: 127

Candidate Starts for Ecliptus\_49:

(96, 33623), (Start: 127 @33668 has 297 MA's), (140, 33719), (154, 33797), (161, 33824), (207, 33983), (214, 34019), (243, 34079), (244, 34088), (246, 34091), (248, 34103), (253, 34118), (254, 34121), (269, 34184), (279, 34220), (288, 34253), (289, 34256), (291, 34268), (295, 34307), (339, 34463), (363, 34535), (387, 34595), (398, 34658), (400, 34670), (411, 34730),

Gene: EdnaMode\_33 Start: 26384, Stop: 27466, Start Num: 126

Candidate Starts for EdnaMode\_33:

(Start: 75 @26273 has 6 MA's), (Start: 126 @26384 has 52 MA's), (140, 26438), (167, 26558), (244, 26813), (253, 26843), (267, 26903), (286, 26969), (291, 26993), (387, 27323), (392, 27350), (410, 27455),

Gene: Efra2\_44 Start: 32569, Stop: 33669, Start Num: 127

Candidate Starts for Efra2\_44:

(Start: 127 @32569 has 297 MA's), (140, 32620), (Start: 153 @32695 has 1 MA's), (165, 32731), (168, 32734), (194, 32845), (261, 33064), (266, 33088), (267, 33091), (295, 33220), (304, 33241), (324, 33346), (356, 33433), (381, 33481), (389, 33529),

Gene: Eileen\_34 Start: 24892, Stop: 26034, Start Num: 127

Candidate Starts for Eileen\_34:

(Start: 127 @24892 has 297 MA's), (213, 25246), (214, 25252), (218, 25267), (238, 25321), (253, 25378), (266, 25438), (267, 25441), (274, 25468), (291, 25531), (314, 25651), (322, 25699), (360, 25825), (366, 25837), (393, 25933), (403, 26008),

Gene: Ejimix\_81 Start: 53852, Stop: 55081, Start Num: 83

Candidate Starts for Ejimix\_81:

(Start: 83 @53852 has 28 MA's), (Start: 90 @53870 has 1 MA's), (109, 53909), (177, 54146), (197, 54254), (233, 54374), (234, 54377), (235, 54386), (241, 54401), (250, 54440), (271, 54518), (303, 54635), (304, 54638), (307, 54647), (317, 54698), (318, 54701), (320, 54719), (348, 54815), (369, 54872), (397, 54992), (398, 54995), (401, 55019), (406, 55043), (407, 55046),

Gene: EleanorGeorge\_40 Start: 31639, Stop: 32757, Start Num: 127

Candidate Starts for EleanorGeorge\_40:

(Start: 127 @31639 has 297 MA's), (130, 31648), (162, 31810), (207, 31975), (214, 32011), (216, 32020), (253, 32125), (268, 32194), (279, 32233), (283, 32251), (284, 32254), (288, 32266), (289, 32269), (291, 32281), (292, 32296), (295, 32320), (296, 32326), (307, 32347), (313, 32383), (314, 32386), (320, 32422), (321, 32428), (325, 32443), (336, 32458), (356, 32527), (363, 32542), (383, 32584), (390, 32629), (393, 32638), (399, 32677), (401, 32695), (405, 32716), (409, 32731), (410, 32740), (411, 32743),

Gene: Emerson\_42 Start: 32470, Stop: 33558, Start Num: 127

Candidate Starts for Emerson\_42:

(Start: 127 @32470 has 297 MA's), (140, 32521), (147, 32572), (Start: 153 @32596 has 1 MA's), (165, 32632), (202, 32770), (214, 32824), (248, 32908), (266, 32977), (267, 32980), (304, 33130), (319, 33208), (324, 33235), (356, 33322), (381, 33370),

Gene: Emma\_44 Start: 32666, Stop: 33784, Start Num: 127

Candidate Starts for Emma\_44:

(Start: 127 @32666 has 297 MA's), (130, 32675), (162, 32837), (184, 32885), (207, 33002), (214, 33038), (216, 33047), (253, 33152), (268, 33221), (279, 33260), (283, 33278), (284, 33281), (288, 33293), (289, 33296), (291, 33308), (292, 33323), (295, 33347), (296, 33353), (307, 33374), (313, 33410), (314, 33413), (320, 33449), (321, 33455), (324, 33467), (325, 33470), (336, 33485), (356, 33554), (363, 33569), (378, 33587), (383, 33611), (390, 33656), (393, 33665), (399, 33704), (401, 33722), (405, 33743), (409, 33758), (410, 33767), (411, 33770),

Gene: EnalisNailo\_35 Start: 31003, Stop: 32085, Start Num: 126

Candidate Starts for EnalisNailo\_35:

(Start: 126 @31003 has 52 MA's), (149, 31120), (184, 31213), (244, 31435), (255, 31471), (267, 31525), (287, 31594), (289, 31603), (387, 31942), (392, 31969), (410, 32074),

Gene: Enby\_42 Start: 31168, Stop: 32286, Start Num: 127

Candidate Starts for Enby\_42:

(Start: 127 @31168 has 297 MA's), (130, 31177), (162, 31339), (207, 31504), (214, 31540), (216, 31549), (246, 31630), (253, 31654), (268, 31723), (279, 31762), (283, 31780), (284, 31783), (288, 31795), (289, 31798), (291, 31810), (295, 31849), (296, 31855), (307, 31876), (313, 31912), (314, 31915), (320, 31951), (321, 31957), (325, 31972), (356, 32056), (363, 32071), (378, 32089), (390, 32158), (393, 32167), (399, 32206), (401, 32224), (405, 32245), (409, 32260), (410, 32269), (411, 32272),

Gene: Enkosi\_39 Start: 34589, Stop: 35683, Start Num: 127

Candidate Starts for Enkosi\_39:

(25, 34238), (Start: 27 @34253 has 1 MA's), (38, 34346), (45, 34367), (69, 34460), (Start: 127 @34589 has 297 MA's), (140, 34640), (Start: 153 @34715 has 1 MA's), (165, 34751), (192, 34847), (194, 34865), (202, 34889), (213, 34937), (214, 34943), (260, 35075), (266, 35108), (279, 35153), (304, 35261), (324, 35366), (349, 35426), (381, 35501), (400, 35609), (406, 35645),

Gene: Enzomatic\_49 Start: 32594, Stop: 33712, Start Num: 127

Candidate Starts for Enzomatic\_49:

(Start: 127 @32594 has 297 MA's), (154, 32732), (162, 32765), (184, 32813), (214, 32966), (216, 32975), (253, 33080), (268, 33149), (284, 33209), (288, 33221), (289, 33224), (292, 33251), (295, 33275), (307, 33302), (313, 33338), (314, 33341), (320, 33377), (321, 33383), (324, 33395), (325, 33398), (356, 33482), (363, 33497), (383, 33539), (390, 33584), (393, 33593), (399, 33632), (401, 33650), (405, 33671), (409, 33686), (410, 33695), (411, 33698),

Gene: EricMillard\_80 Start: 53055, Stop: 54284, Start Num: 83

Candidate Starts for EricMillard\_80:

(Start: 83 @53055 has 28 MA's), (Start: 90 @53073 has 1 MA's), (109, 53112), (177, 53349), (197, 53457), (233, 53577), (234, 53580), (235, 53589), (241, 53604), (250, 53643), (271, 53721), (296, 53826), (303, 53838), (304, 53841), (307, 53850), (317, 53901), (318, 53904), (320, 53922), (348, 54018), (369, 54075), (397, 54195), (398, 54198), (401, 54222), (406, 54246), (407, 54249),

Gene: Estave1\_43 Start: 31907, Stop: 33010, Start Num: 127

Candidate Starts for Estave1\_43:

(Start: 127 @31907 has 297 MA's), (140, 31955), (154, 32036), (161, 32063), (214, 32276), (226, 32300), (246, 32348), (266, 32429), (286, 32498), (288, 32507), (292, 32537), (295, 32561), (304, 32582), (319, 32660), (321, 32675), (346, 32735), (356, 32774), (363, 32789), (376, 32813), (383, 32840), (387, 32864), (390, 32885), (393, 32894), (400, 32939), (401, 32951),

Gene: Eudoria\_39 Start: 30563, Stop: 31645, Start Num: 126

Candidate Starts for Eudoria\_39:

(Start: 75 @30452 has 6 MA's), (Start: 126 @30563 has 52 MA's), (140, 30617), (167, 30737), (244, 30992), (253, 31022), (267, 31082), (286, 31148), (291, 31172), (387, 31502), (392, 31529), (410, 31634),

Gene: EvePickles\_38 Start: 28599, Stop: 27466, Start Num: 127

Candidate Starts for EvePickles\_38:

(50, 28782), (59, 28752), (Start: 127 @28599 has 297 MA's), (140, 28548), (170, 28434), (184, 28392), (186, 28380), (188, 28362), (212, 28248), (216, 28230), (242, 28167), (246, 28152), (248, 28140), (266, 28065), (269, 28056), (286, 27996), (298, 27921), (304, 27906), (339, 27756), (341, 27753), (383, 27636), (387, 27612), (389, 27597), (399, 27543), (402, 27522), (408, 27492),

Gene: Eviarto\_39 Start: 31988, Stop: 33070, Start Num: 126

Candidate Starts for Eviarto\_39:

(Start: 75 @31877 has 6 MA's), (Start: 126 @31988 has 52 MA's), (140, 32042), (167, 32162), (243, 32408), (244, 32417), (253, 32447), (267, 32507), (286, 32573), (291, 32597), (387, 32927), (392, 32954), (410, 33059),

Gene: Faith5x5\_30 Start: 24997, Stop: 26145, Start Num: 92

Candidate Starts for Faith5x5\_30:

(Start: 92 @24997 has 1 MA's), (106, 25027), (Start: 125 @25060 has 1 MA's), (145, 25147), (161, 25219), (279, 25615), (289, 25651), (290, 25654), (291, 25663), (314, 25777), (363, 25942), (387, 26002), (400, 26077), (410, 26134),

Gene: Faja\_39 Start: 29043, Stop: 27904, Start Num: 127

Candidate Starts for Faja\_39:

(Start: 127 @29043 has 297 MA's), (140, 28992), (186, 28824), (188, 28806), (216, 28674), (246, 28596), (248, 28584), (249, 28578), (266, 28509), (269, 28500), (286, 28440), (304, 28350), (325, 28245), (332, 28224), (341, 28197), (383, 28074), (387, 28050), (389, 28035), (408, 27930),

Gene: Farewell\_44 Start: 33396, Stop: 34574, Start Num: 129

Candidate Starts for Farewell\_44:

(Start: 129 @33396 has 2 MA's), (140, 33444), (150, 33510), (162, 33555), (206, 33705), (214, 33747), (248, 33861), (255, 33888), (266, 33936), (267, 33939), (289, 34020), (291, 34032), (312, 34137), (320, 34179), (323, 34194), (332, 34209), (340, 34233), (381, 34344), (392, 34404), (405, 34485), (408, 34497), (419, 34536),

Gene: Filuzino\_41 Start: 31324, Stop: 32442, Start Num: 127

Candidate Starts for Filuzino\_41:

(Start: 127 @31324 has 297 MA's), (162, 31495), (207, 31660), (214, 31696), (216, 31705), (253, 31810), (268, 31879), (279, 31918), (284, 31939), (288, 31951), (289, 31954), (291, 31966), (292, 31981), (295, 32005), (296, 32011), (307, 32032), (313, 32068), (314, 32071), (320, 32107), (321, 32113), (325, 32128), (336, 32143), (356, 32212), (363, 32227), (378, 32245), (383, 32269), (390, 32314), (393, 32323), (399, 32362), (401, 32380), (405, 32401), (409, 32416), (410, 32425), (411, 32428),

Gene: Findley\_43 Start: 34310, Stop: 35410, Start Num: 127

Candidate Starts for Findley\_43:

(Start: 127 @34310 has 297 MA's), (132, 34328), (140, 34361), (Start: 153 @34436 has 1 MA's), (165, 34472), (194, 34586), (202, 34610), (214, 34664), (261, 34805), (266, 34829), (267, 34832), (279, 34874), (304, 34982), (324, 35087), (345, 35132), (349, 35147), (400, 35339),

Gene: Flathead\_44 Start: 33580, Stop: 34698, Start Num: 127

Candidate Starts for Flathead\_44:

(Start: 127 @33580 has 297 MA's), (130, 33589), (162, 33751), (207, 33916), (214, 33952), (216, 33961), (253, 34066), (268, 34135), (279, 34174), (283, 34192), (284, 34195), (288, 34207), (289, 34210), (291, 34222), (292, 34237), (295, 34261), (296, 34267), (307, 34288), (313, 34324), (314, 34327), (320, 34363), (321, 34369), (324, 34381), (325, 34384), (356, 34468), (363, 34483), (378, 34501), (383, 34525), (390, 34570), (393, 34579), (399, 34618), (401, 34636), (405, 34657), (409, 34672), (410, 34681), (411, 34684),

Gene: Floral\_36 Start: 32103, Stop: 33209, Start Num: 127

Candidate Starts for Floral\_36:

(95, 32046), (Start: 127 @32103 has 297 MA's), (140, 32154), (161, 32259), (180, 32298), (248, 32538), (266, 32607), (267, 32610), (275, 32640), (289, 32691), (291, 32703), (346, 32931), (365, 32991), (387, 33066), (393, 33096), (410, 33198),

Gene: Footloose\_31 Start: 22512, Stop: 21292, Start Num: 127

Candidate Starts for Footloose\_31:

(Start: 127 @22512 has 297 MA's), (136, 22473), (142, 22455), (143, 22437), (155, 22386), (166, 22350), (190, 22254), (208, 22170), (214, 22143), (220, 22119), (228, 22077), (236, 22062), (248, 22017), (257, 21978), (265, 21945), (286, 21879), (287, 21876), (291, 21855), (304, 21789), (325, 21687), (328, 21678), (338, 21648), (346, 21621), (352, 21594), (359, 21567), (365, 21555), (374, 21537), (383, 21501), (387, 21477), (399, 21408), (401, 21390), (406, 21366), (411, 21342),

Gene: FosterFrank\_40 Start: 26544, Stop: 27686, Start Num: 127

Candidate Starts for FosterFrank\_40:

(66, 26397), (71, 26409), (73, 26418), (84, 26451), (105, 26499), (114, 26514), (Start: 127 @26544 has 297 MA's), (213, 26898), (214, 26904), (219, 26922), (253, 27030), (266, 27090), (291, 27183), (314, 27303), (322, 27351), (332, 27381), (360, 27477), (393, 27585), (403, 27660),

Gene: Frickyeah\_52 Start: 32012, Stop: 33106, Start Num: 127

Candidate Starts for Frickyeah\_52:

(82, 31925), (97, 31961), (Start: 127 @32012 has 297 MA's), (140, 32063), (152, 32135), (154, 32141), (161, 32168), (190, 32255), (207, 32327), (214, 32363), (216, 32372), (248, 32447), (254, 32465), (279, 32564), (288, 32597), (289, 32600), (291, 32612), (314, 32714), (330, 32780), (339, 32807), (363, 32879), (387, 32939), (392, 32966), (411, 33074),

Gene: Fruitloop\_40 Start: 32560, Stop: 33678, Start Num: 127

Candidate Starts for Fruitloop\_40:

(Start: 127 @32560 has 297 MA's), (162, 32731), (207, 32896), (214, 32932), (216, 32941), (246, 33022), (253, 33046), (268, 33115), (279, 33154), (284, 33175), (288, 33187), (289, 33190), (291, 33202), (292, 33217), (295, 33241), (296, 33247), (307, 33268), (313, 33304), (314, 33307), (320, 33343), (321, 33349), (325, 33364), (336, 33379), (356, 33448), (363, 33463), (383, 33505), (390, 33550), (393, 33559), (399, 33598), (401, 33616), (405, 33637), (409, 33652), (410, 33661), (411, 33664),

Gene: GMA1\_30 Start: 24152, Stop: 23064, Start Num: 127

Candidate Starts for GMA1\_30:

(Start: 127 @24152 has 297 MA's), (203, 23858), (216, 23798), (246, 23723), (248, 23711), (259, 23663), (266, 23642), (268, 23636), (287, 23567), (289, 23558), (291, 23546), (297, 23498), (319, 23414), (333, 23363), (343, 23336), (349, 23315), (366, 23267), (377, 23249), (387, 23207), (389, 23192), (391, 23183), (392, 23180), (393, 23177), (401, 23120), (410, 23075),

Gene: Galactic\_43 Start: 32779, Stop: 33897, Start Num: 127

Candidate Starts for Galactic\_43:

(Start: 127 @32779 has 297 MA's), (130, 32788), (162, 32950), (207, 33115), (214, 33151), (216, 33160), (253, 33265), (268, 33334), (279, 33373), (283, 33391), (284, 33394), (288, 33406), (289, 33409), (291, 33421), (292, 33436), (295, 33460), (296, 33466), (307, 33487), (313, 33523), (314, 33526), (320, 33562), (321, 33568), (325, 33583), (336, 33598), (356, 33667), (363, 33682), (383, 33724), (390, 33769), (393, 33778), (399, 33817), (401, 33835), (405, 33856), (409, 33871), (410, 33880), (411, 33883),

Gene: Ganymede\_42 Start: 32781, Stop: 33869, Start Num: 127

Candidate Starts for Ganymede\_42:

(Start: 127 @32781 has 297 MA's), (147, 32883), (Start: 153 @32907 has 1 MA's), (165, 32943), (202, 33081), (214, 33135), (248, 33219), (266, 33288), (267, 33291), (304, 33441), (324, 33546), (356, 33633), (371, 33663), (381, 33681), (406, 33825),

Gene: GemG\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for GemG\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (308, 28553), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Geraldini\_43 Start: 33527, Stop: 34615, Start Num: 127

Candidate Starts for Geraldini\_43:

(Start: 127 @33527 has 297 MA's), (147, 33629), (Start: 153 @33653 has 1 MA's), (165, 33689), (202, 33827), (214, 33881), (248, 33965), (266, 34034), (267, 34037), (304, 34187), (324, 34292), (356, 34379), (381, 34427), (406, 34571),

Gene: Getalong\_53 Start: 34783, Stop: 35853, Start Num: 127

Candidate Starts for Getalong\_53:

(Start: 127 @34783 has 297 MA's), (140, 34834), (154, 34912), (161, 34939), (214, 35134), (216, 35143), (243, 35194), (244, 35203), (246, 35206), (248, 35218), (258, 35263), (269, 35299), (279, 35335), (288, 35368), (289, 35371), (291, 35383), (330, 35551), (363, 35650), (387, 35710), (392, 35737), (393, 35740), (396, 35767), (398, 35773), (400, 35785), (410, 35842),

Gene: Gibbzilla\_37 Start: 25123, Stop: 23969, Start Num: 127

Candidate Starts for Gibbzilla\_37:

(Start: 127 @25123 has 297 MA's), (141, 25069), (194, 24820), (207, 24775), (210, 24754), (211, 24751), (248, 24628), (253, 24613), (272, 24532), (273, 24529), (275, 24523), (311, 24370), (320, 24316), (326, 24292), (332, 24274), (341, 24247), (356, 24193), (360, 24178), (390, 24079), (400, 24025), (403, 23995),

Gene: Gizermo\_37 Start: 27758, Stop: 28957, Start Num: 74

Candidate Starts for Gizermo\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (308, 28553), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Globfish\_39 Start: 27492, Stop: 26353, Start Num: 127

Candidate Starts for Globfish\_39:

(Start: 127 @27492 has 297 MA's), (140, 27441), (170, 27327), (186, 27273), (188, 27255), (212, 27141), (216, 27123), (246, 27045), (248, 27033), (266, 26958), (269, 26949), (286, 26889), (304, 26799), (324, 26697), (327, 26688), (332, 26673), (339, 26649), (341, 26646), (383, 26529), (387, 26505), (389, 26490), (401, 26418), (402, 26415), (411, 26370),

Gene: GlobiWarming\_38 Start: 26068, Stop: 27210, Start Num: 127

Candidate Starts for GlobiWarming\_38:

(Start: 127 @26068 has 297 MA's), (213, 26422), (214, 26428), (219, 26446), (253, 26554), (266, 26614), (291, 26707), (314, 26827), (322, 26875), (332, 26905), (360, 27001), (393, 27109), (403, 27184),

Gene: Gorge\_43 Start: 32137, Stop: 33255, Start Num: 127

Candidate Starts for Gorge\_43:

(Start: 127 @32137 has 297 MA's), (154, 32275), (162, 32308), (184, 32356), (207, 32473), (214, 32509), (216, 32518), (253, 32623), (268, 32692), (284, 32752), (288, 32764), (289, 32767), (291, 32779), (292, 32794), (295, 32818), (296, 32824), (307, 32845), (313, 32881), (314, 32884), (320, 32920), (321, 32926), (324, 32938), (325, 32941), (356, 33025), (363, 33040), (383, 33082), (390, 33127), (393, 33136), (399, 33175), (401, 33193), (405, 33214), (409, 33229), (410, 33238), (411, 33241),

Gene: Gorpy\_41 Start: 29001, Stop: 27862, Start Num: 127

Candidate Starts for Gorpy\_41:

(Start: 127 @29001 has 297 MA's), (140, 28950), (186, 28782), (188, 28764), (216, 28632), (246, 28554), (248, 28542), (249, 28536), (266, 28467), (269, 28458), (286, 28398), (304, 28308), (325, 28203), (332, 28182), (341, 28155), (383, 28032), (387, 28008), (389, 27993), (402, 27918), (408, 27888),

Gene: Guanica15\_44 Start: 32526, Stop: 33626, Start Num: 127

Candidate Starts for Guanica15\_44:

(60, 32376), (Start: 127 @32526 has 297 MA's), (140, 32577), (Start: 153 @32652 has 1 MA's), (165, 32688), (168, 32691), (194, 32802), (261, 33021), (266, 33045), (267, 33048), (295, 33177), (304, 33198), (324, 33303), (356, 33390), (381, 33438),

Gene: GumGum\_40 Start: 27604, Stop: 26465, Start Num: 127

Candidate Starts for GumGum\_40:

(Start: 127 @27604 has 297 MA's), (207, 27283), (214, 27247), (217, 27235), (219, 27229), (248, 27136), (253, 27121), (266, 27061), (274, 27031), (291, 26968), (322, 26800), (329, 26779), (332, 26770), (360, 26674), (393, 26566), (395, 26554), (403, 26491),

Gene: Guppsters\_43 Start: 32537, Stop: 33664, Start Num: 127

Candidate Starts for Guppsters\_43:

(77, 32435), (99, 32492), (Start: 127 @32537 has 297 MA's), (130, 32546), (162, 32708), (183, 32759), (186, 32777), (192, 32822), (214, 32918), (216, 32927), (246, 33008), (253, 33032), (268, 33101), (284, 33161), (288, 33173), (289, 33176), (291, 33188), (292, 33203), (295, 33227), (296, 33233), (307, 33254), (313, 33290), (314, 33293), (320, 33329), (321, 33335), (325, 33350), (356, 33434), (363, 33449), (383, 33491), (390, 33536), (393, 33545), (399, 33584), (401, 33602), (405, 33623), (409, 33638), (410, 33647), (411, 33650),

Gene: Hades\_43 Start: 31946, Stop: 33073, Start Num: 127

Candidate Starts for Hades\_43:

(77, 31844), (99, 31901), (Start: 127 @31946 has 297 MA's), (130, 31955), (162, 32117), (183, 32168), (186, 32186), (192, 32231), (214, 32327), (216, 32336), (246, 32417), (253, 32441), (268, 32510), (279, 32549), (284, 32570), (288, 32582), (289, 32585), (291, 32597), (292, 32612), (295, 32636), (296, 32642), (307, 32663), (313, 32699), (314, 32702), (320, 32738), (321, 32744), (324, 32756), (325, 32759), (336, 32774), (356, 32843), (363, 32858), (383, 32900), (390, 32945), (393, 32954), (395, 32966), (399, 32993), (401, 33011), (405, 33032), (409, 33047), (410, 33056), (411, 33059),

Gene: Haley23\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for Haley23\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (308, 28553), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Halley\_83 Start: 53063, Stop: 54292, Start Num: 83

Candidate Starts for Halley\_83:

(Start: 83 @53063 has 28 MA's), (Start: 90 @53081 has 1 MA's), (109, 53120), (177, 53357), (197, 53465), (233, 53585), (234, 53588), (235, 53597), (241, 53612), (250, 53651), (271, 53729), (296, 53834), (303, 53846), (304, 53849), (307, 53858), (317, 53909), (318, 53912), (320, 53930), (348, 54026), (369, 54083), (397, 54203), (398, 54206), (401, 54230), (406, 54254), (407, 54257),

Gene: HedwigODU\_41 Start: 32479, Stop: 33567, Start Num: 127

Candidate Starts for HedwigODU\_41:

(Start: 127 @32479 has 297 MA's), (140, 32530), (147, 32581), (Start: 153 @32605 has 1 MA's), (165, 32641), (202, 32779), (214, 32833), (248, 32917), (266, 32986), (267, 32989), (304, 33139), (319, 33217), (324, 33244), (356, 33331), (381, 33379),

Gene: Hegedechwinu\_41 Start: 30918, Stop: 32036, Start Num: 127

Candidate Starts for Hegedechwinu\_41:

(Start: 127 @30918 has 297 MA's), (154, 31056), (162, 31089), (184, 31137), (207, 31254), (214, 31290), (216, 31299), (253, 31404), (268, 31473), (279, 31512), (283, 31530), (284, 31533), (288, 31545), (289, 31548), (291, 31560), (292, 31575), (295, 31599), (296, 31605), (307, 31626), (313, 31662), (314, 31665), (320, 31701), (321, 31707), (324, 31719), (325, 31722), (336, 31737), (356, 31806), (363, 31821), (383, 31863), (390, 31908), (393, 31917), (399, 31956), (401, 31974), (405, 31995), (409, 32010), (410, 32019), (411, 32022),

Gene: Herod\_39 Start: 31901, Stop: 33094, Start Num: 75

Candidate Starts for Herod\_39:

(Start: 75 @31901 has 6 MA's), (Start: 126 @32012 has 52 MA's), (140, 32066), (167, 32186), (243, 32432), (244, 32441), (253, 32471), (267, 32531), (286, 32597), (291, 32621), (387, 32951), (392, 32978), (410, 33083),

Gene: Hidrated\_74 Start: 52276, Stop: 53448, Start Num: 109

Candidate Starts for Hidrated\_74:

(Start: 83 @52219 has 28 MA's), (Start: 90 @52237 has 1 MA's), (109, 52276), (177, 52513), (197, 52621), (233, 52741), (234, 52744), (235, 52753), (241, 52768), (271, 52885), (303, 53002), (304, 53005), (307, 53014), (317, 53065), (318, 53068), (320, 53086), (348, 53182), (369, 53239), (397, 53359), (398, 53362), (401, 53386), (406, 53410), (407, 53413),

Gene: Hillester\_40 Start: 27831, Stop: 26659, Start Num: 127

Candidate Starts for Hillester\_40:

(Start: 127 @27831 has 297 MA's), (140, 27780), (170, 27666), (186, 27612), (188, 27594), (203, 27522), (212, 27480), (216, 27462), (246, 27384), (248, 27372), (266, 27297), (269, 27288), (286, 27228), (304, 27138), (325, 27033), (332, 27012), (339, 26988), (341, 26985), (361, 26916), (383, 26862), (387, 26838), (389, 26823), (411, 26703), (421, 26676),

Gene: Hlubikazi\_41 Start: 31787, Stop: 32905, Start Num: 127

Candidate Starts for Hlubikazi\_41:

(Start: 127 @31787 has 297 MA's), (162, 31958), (207, 32123), (214, 32159), (216, 32168), (253, 32273), (268, 32342), (279, 32381), (284, 32402), (288, 32414), (289, 32417), (291, 32429), (295, 32468), (296, 32474), (307, 32495), (313, 32531), (314, 32534), (320, 32570), (321, 32576), (324, 32588), (325, 32591), (336, 32606), (356, 32675), (363, 32690), (378, 32708), (390, 32777), (393, 32786), (399, 32825), (401, 32843), (405, 32864), (409, 32879), (410, 32888), (411, 32891),

Gene: HokkenD\_73 Start: 51332, Stop: 52561, Start Num: 83

Candidate Starts for HokkenD\_73:

(Start: 83 @51332 has 28 MA's), (Start: 90 @51350 has 1 MA's), (109, 51389), (177, 51626), (197, 51734), (233, 51854), (234, 51857), (235, 51866), (241, 51881), (250, 51920), (271, 51998), (296, 52103), (303, 52115), (304, 52118), (307, 52127), (317, 52178), (318, 52181), (320, 52199), (348,

52295), (369, 52352), (397, 52472), (398, 52475), (401, 52499), (406, 52523), (407, 52526),

Gene: Holliday\_48 Start: 32014, Stop: 33084, Start Num: 127

Candidate Starts for Holliday\_48:

(115, 31993), (Start: 127 @32014 has 297 MA's), (140, 32065), (146, 32113), (161, 32170), (184, 32215), (248, 32449), (254, 32467), (279, 32566), (288, 32599), (289, 32602), (291, 32614), (330, 32782), (363, 32881), (368, 32890), (387, 32941), (392, 32968), (396, 32998), (398, 33004), (400, 33016), (410, 33073),

Gene: Homura\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Homura\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: Hortense\_40 Start: 32549, Stop: 33676, Start Num: 112

Candidate Starts for Hortense\_40:

(91, 32510), (Start: 112 @32549 has 19 MA's), (134, 32603), (161, 32726), (175, 32759), (195, 32849), (206, 32882), (266, 33077), (267, 33080), (279, 33122), (289, 33158), (365, 33455), (387, 33533), (392, 33560), (395, 33575), (399, 33602), (410, 33665),

Gene: Horus\_48 Start: 33163, Stop: 34260, Start Num: 127

Candidate Starts for Horus\_48:

(51, 32983), (64, 33022), (Start: 127 @33163 has 297 MA's), (140, 33214), (154, 33292), (161, 33319), (184, 33364), (189, 33397), (190, 33406), (244, 33583), (246, 33586), (269, 33679), (279, 33715), (288, 33748), (289, 33751), (291, 33763), (327, 33928), (339, 33958), (363, 34030), (383, 34066), (387, 34090), (392, 34117), (400, 34165), (401, 34177), (411, 34225),

Gene: Howe\_40 Start: 32549, Stop: 33676, Start Num: 112

Candidate Starts for Howe\_40:

(91, 32510), (Start: 112 @32549 has 19 MA's), (134, 32603), (161, 32726), (175, 32759), (195, 32849), (206, 32882), (266, 33077), (267, 33080), (279, 33122), (289, 33158), (365, 33455), (387, 33533), (392, 33560), (395, 33575), (399, 33602), (410, 33665),

Gene: Hughesyang\_81 Start: 53021, Stop: 54250, Start Num: 83

Candidate Starts for Hughesyang\_81:

(Start: 83 @53021 has 28 MA's), (Start: 90 @53039 has 1 MA's), (109, 53078), (177, 53315), (197, 53423), (233, 53543), (234, 53546), (235, 53555), (241, 53570), (250, 53609), (271, 53687), (296, 53792), (303, 53804), (304, 53807), (307, 53816), (317, 53867), (318, 53870), (320, 53888), (348, 53984), (369, 54041), (397, 54161), (398, 54164), (401, 54188), (406, 54212), (407, 54215),

Gene: Hugley\_36 Start: 32011, Stop: 33093, Start Num: 126

Candidate Starts for Hugley\_36:

(Start: 75 @31900 has 6 MA's), (Start: 126 @32011 has 52 MA's), (140, 32065), (167, 32185), (243, 32431), (244, 32440), (253, 32470), (267, 32530), (286, 32596), (291, 32620), (387, 32950), (392, 32977), (410, 33082),

Gene: Hyperbowlee\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for Hyperbowlee\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: Hyzer\_43 Start: 33426, Stop: 34508, Start Num: 126

Candidate Starts for Hyzer\_43:

(Start: 126 @33426 has 52 MA's), (140, 33480), (167, 33600), (244, 33855), (253, 33885), (267, 33945), (286, 34011), (291, 34035), (387, 34365), (400, 34440), (410, 34497),

Gene: IMpilo\_40 Start: 31720, Stop: 32838, Start Num: 127

Candidate Starts for IMpilo\_40:

(Start: 127 @31720 has 297 MA's), (130, 31729), (162, 31891), (207, 32056), (214, 32092), (216, 32101), (253, 32206), (268, 32275), (279, 32314), (284, 32335), (288, 32347), (289, 32350), (291, 32362), (292, 32377), (295, 32401), (296, 32407), (307, 32428), (313, 32464), (314, 32467), (320, 32503), (321, 32509), (324, 32521), (325, 32524), (336, 32539), (356, 32608), (363, 32623), (390, 32710), (393, 32719), (399, 32758), (401, 32776), (405, 32797), (409, 32812), (410, 32821), (411, 32824),

Gene: Illumine\_44 Start: 33263, Stop: 34351, Start Num: 127

Candidate Starts for Illumine\_44:

(Start: 127 @33263 has 297 MA's), (147, 33365), (Start: 153 @33389 has 1 MA's), (165, 33425), (186, 33476), (194, 33539), (202, 33563), (214, 33617), (215, 33620), (248, 33701), (266, 33770), (267, 33773), (304, 33923), (319, 34001), (324, 34028), (381, 34163),

Gene: Inky\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Inky\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: Invectra\_41 Start: 30570, Stop: 31697, Start Num: 112

Candidate Starts for Invectra\_41:

(72, 30474), (94, 30537), (Start: 112 @30570 has 19 MA's), (134, 30624), (195, 30870), (206, 30903), (266, 31098), (267, 31101), (279, 31143), (289, 31179), (365, 31476), (387, 31554), (392, 31581), (395, 31596), (399, 31623), (410, 31686),

Gene: IrishSherpFalk\_41 Start: 32488, Stop: 33606, Start Num: 127

Candidate Starts for IrishSherpFalk\_41:

(Start: 127 @32488 has 297 MA's), (130, 32497), (162, 32659), (216, 32869), (246, 32950), (253, 32974), (268, 33043), (284, 33103), (288, 33115), (289, 33118), (291, 33130), (292, 33145), (295, 33169), (296, 33175), (307, 33196), (313, 33232), (314, 33235), (320, 33271), (321, 33277), (325, 33292), (356, 33376), (363, 33391), (383, 33433), (390, 33478), (393, 33487), (399, 33526), (401, 33544), (405, 33565), (409, 33580), (410, 33589), (411, 33592),

Gene: Isolde\_41 Start: 27878, Stop: 26739, Start Num: 127

Candidate Starts for Isolde\_41:

(Start: 127 @27878 has 297 MA's), (140, 27827), (186, 27659), (188, 27641), (216, 27509), (246, 27431), (248, 27419), (266, 27344), (269, 27335), (286, 27275), (304, 27185), (325, 27080), (332, 27059), (341, 27032), (383, 26909), (387, 26885), (389, 26870), (408, 26765),

Gene: JAWS\_41 Start: 32469, Stop: 33557, Start Num: 127

Candidate Starts for JAWS\_41:

(Start: 127 @32469 has 297 MA's), (147, 32571), (Start: 153 @32595 has 1 MA's), (165, 32631), (202, 32769), (248, 32907), (266, 32976), (267, 32979), (304, 33129), (324, 33234), (356, 33321), (381, 33369),

Gene: Jablanski\_39 Start: 31311, Stop: 32393, Start Num: 126

Candidate Starts for Jablanski\_39:

(Start: 75 @31200 has 6 MA's), (Start: 126 @31311 has 52 MA's), (140, 31365), (167, 31485), (253, 31770), (267, 31830), (286, 31896), (291, 31920), (387, 32250), (392, 32277), (410, 32382),

Gene: JakeTheSnake\_41 Start: 28491, Stop: 27319, Start Num: 127

Candidate Starts for JakeTheSnake\_41:

(114, 28509), (Start: 127 @28491 has 297 MA's), (152, 28374), (186, 28272), (188, 28254), (216, 28122), (242, 28059), (246, 28044), (248, 28032), (266, 27957), (269, 27948), (286, 27888), (304, 27798), (332, 27672), (339, 27648), (341, 27645), (383, 27522), (387, 27498), (389, 27483), (411, 27363), (421, 27336),

Gene: Jalleen\_36 Start: 27514, Stop: 28596, Start Num: 126

Candidate Starts for Jalleen\_36:

(Start: 74 @27397 has 2 MA's), (Start: 75 @27403 has 6 MA's), (Start: 126 @27514 has 52 MA's), (140, 27568), (167, 27688), (244, 27943), (253, 27973), (267, 28033), (286, 28099), (291, 28123), (313, 28228), (387, 28453), (392, 28480), (410, 28585),

Gene: James\_43 Start: 32094, Stop: 33212, Start Num: 127

Candidate Starts for James\_43:

(Start: 127 @32094 has 297 MA's), (154, 32232), (162, 32265), (184, 32313), (207, 32430), (214, 32466), (216, 32475), (253, 32580), (268, 32649), (284, 32709), (288, 32721), (289, 32724), (291, 32736), (292, 32751), (295, 32775), (296, 32781), (307, 32802), (313, 32838), (314, 32841), (320, 32877), (321, 32883), (324, 32895), (325, 32898), (356, 32982), (363, 32997), (383, 33039), (390, 33084), (393, 33093), (399, 33132), (401, 33150), (405, 33171), (409, 33186), (410, 33195), (411, 33198),

Gene: Jant\_44 Start: 33079, Stop: 33984, Start Num: 183

Candidate Starts for Jant\_44:

(77, 32755), (99, 32812), (Start: 127 @32857 has 297 MA's), (130, 32866), (162, 33028), (183, 33079), (186, 33097), (192, 33142), (214, 33238), (216, 33247), (253, 33352), (268, 33421), (284, 33481), (288, 33493), (289, 33496), (291, 33508), (292, 33523), (295, 33547), (296, 33553), (307, 33574), (313, 33610), (314, 33613), (320, 33649), (321, 33655), (325, 33670), (356, 33754), (363, 33769), (378, 33787), (383, 33811), (390, 33856), (393, 33865), (399, 33904), (401, 33922), (405, 33943), (409, 33958), (410, 33967), (411, 33970),

Gene: Jarvi\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Jarvi\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: Jayhawk\_42 Start: 32477, Stop: 33565, Start Num: 127

Candidate Starts for Jayhawk\_42:

(Start: 127 @32477 has 297 MA's), (140, 32528), (147, 32579), (Start: 153 @32603 has 1 MA's), (165, 32639), (202, 32777), (214, 32831), (248, 32915), (266, 32984), (267, 32987), (304, 33137), (319, 33215), (324, 33242), (356, 33329), (381, 33377),

Gene: JeanClaude\_32 Start: 23615, Stop: 22461, Start Num: 127

Candidate Starts for JeanClaude\_32:

(93, 23678), (Start: 127 @23615 has 297 MA's), (140, 23564), (141, 23561), (144, 23537), (194, 23312), (207, 23267), (210, 23246), (211, 23243), (217, 23219), (248, 23120), (253, 23105), (272, 23024), (293, 22931), (311, 22862), (320, 22808), (326, 22784), (332, 22766), (341, 22739), (356, 22685), (360, 22670), (365, 22661), (389, 22577), (390, 22571), (393, 22562), (400, 22517), (403, 22487),

Gene: Jeckyll\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Jeckyll\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: JellyBread\_36 Start: 26251, Stop: 25067, Start Num: 127

Candidate Starts for JellyBread\_36:

(80, 26341), (88, 26320), (Start: 127 @26251 has 297 MA's), (140, 26200), (186, 26032), (188, 26014), (216, 25882), (243, 25816), (246, 25804), (248, 25792), (266, 25717), (269, 25708), (286, 25648), (304, 25558), (332, 25432), (339, 25408), (341, 25405), (383, 25282), (387, 25258), (389, 25243), (411, 25123),

Gene: Jennelsea\_37 Start: 28858, Stop: 29976, Start Num: 127

Candidate Starts for Jennelsea\_37:

(Start: 127 @28858 has 297 MA's), (154, 28996), (162, 29029), (184, 29077), (207, 29194), (214, 29230), (216, 29239), (253, 29344), (268, 29413), (284, 29473), (288, 29485), (289, 29488), (291, 29500), (292, 29515), (295, 29539), (296, 29545), (307, 29566), (313, 29602), (314, 29605), (320, 29641), (321, 29647), (324, 29659), (325, 29662), (356, 29746), (363, 29761), (383, 29803), (390, 29848), (393, 29857), (399, 29896), (401, 29914), (405, 29935), (409, 29950), (410, 29959), (411, 29962),

Gene: Joy99\_41 Start: 32524, Stop: 33612, Start Num: 127

Candidate Starts for Joy99\_41:

(13, 31921), (21, 32098), (35, 32263), (45, 32302), (Start: 127 @32524 has 297 MA's), (140, 32575), (147, 32626), (Start: 153 @32650 has 1 MA's), (165, 32686), (172, 32695), (202, 32824), (248, 32962), (266, 33031), (267, 33034), (304, 33184), (324, 33289), (381, 33424),

Gene: Judy\_39 Start: 26980, Stop: 28122, Start Num: 127

Candidate Starts for Judy\_39:

(Start: 127 @26980 has 297 MA's), (213, 27334), (214, 27340), (218, 27355), (238, 27409), (253, 27466), (266, 27526), (267, 27529), (274, 27556), (291, 27619), (314, 27739), (322, 27787), (360, 27913), (366, 27925), (393, 28021), (403, 28096),

Gene: Juice456\_44 Start: 33520, Stop: 34638, Start Num: 127

Candidate Starts for Juice456\_44:

(Start: 127 @33520 has 297 MA's), (154, 33658), (162, 33691), (184, 33739), (207, 33856), (214, 33892), (216, 33901), (253, 34006), (268, 34075), (279, 34114), (283, 34132), (284, 34135), (288, 34147), (289, 34150), (291, 34162), (292, 34177), (295, 34201), (296, 34207), (307, 34228), (313, 34264), (314, 34267), (320, 34303), (321, 34309), (324, 34321), (325, 34324), (336, 34339), (356, 34408), (363, 34423), (383, 34465), (390, 34510), (393, 34519), (399, 34558), (401, 34576), (405, 34597), (409, 34612), (410, 34621), (411, 34624),

Gene: JuicyJay\_79 Start: 54197, Stop: 55426, Start Num: 83

Candidate Starts for JuicyJay\_79:

(Start: 83 @54197 has 28 MA's), (Start: 90 @54215 has 1 MA's), (109, 54254), (177, 54491), (197, 54599), (233, 54719), (234, 54722), (235, 54731), (241, 54746), (250, 54785), (271, 54863), (296, 54968), (303, 54980), (304, 54983), (307, 54992), (317, 55043), (318, 55046), (320, 55064), (348, 55160), (369, 55217), (397, 55337), (398, 55340), (401, 55364), (406, 55388), (407, 55391),

Gene: Juniper1\_40 Start: 31679, Stop: 32797, Start Num: 127

Candidate Starts for Juniper1\_40:

(Start: 127 @31679 has 297 MA's), (162, 31850), (184, 31898), (214, 32051), (216, 32060), (246, 32141), (268, 32234), (284, 32294), (288, 32306), (289, 32309), (292, 32336), (295, 32360), (307, 32387), (313, 32423), (314, 32426), (320, 32462), (336, 32498), (356, 32567), (363, 32582), (378, 32600), (390, 32669), (393, 32678), (399, 32717), (401, 32735), (409, 32771), (410, 32780), (411, 32783),

Gene: Kabloowy\_40 Start: 27949, Stop: 26810, Start Num: 127

Candidate Starts for Kabloowy\_40:

(Start: 127 @27949 has 297 MA's), (140, 27898), (186, 27730), (188, 27712), (207, 27625), (216, 27580), (246, 27502), (266, 27415), (269, 27406), (304, 27256), (325, 27151), (332, 27130), (341, 27103), (383, 26980), (387, 26956), (389, 26941), (402, 26866), (408, 26836),

Gene: Kalah2\_76 Start: 52356, Stop: 53585, Start Num: 83

Candidate Starts for Kalah2\_76:

(Start: 83 @52356 has 28 MA's), (Start: 90 @52374 has 1 MA's), (109, 52413), (177, 52650), (197, 52758), (233, 52878), (234, 52881), (235, 52890), (241, 52905), (250, 52944), (271, 53022), (296, 53127), (303, 53139), (304, 53142), (307, 53151), (317, 53202), (318, 53205), (320, 53223), (348, 53319), (369, 53376), (397, 53496), (398, 53499), (401, 53523), (406, 53547), (407, 53550),

Gene: Kamaru\_44 Start: 31555, Stop: 32652, Start Num: 127

Candidate Starts for Kamaru\_44:

(28, 31219), (41, 31315), (95, 31498), (Start: 127 @31555 has 297 MA's), (140, 31606), (152, 31678), (154, 31684), (161, 31711), (184, 31756), (190, 31798), (214, 31906), (244, 31975), (248, 31990), (267, 32065), (279, 32107), (288, 32140), (289, 32143), (291, 32155), (314, 32257), (339, 32350), (363, 32422), (383, 32458), (387, 32482), (392, 32509), (400, 32557), (411, 32617),

Gene: KashFlow\_76 Start: 48091, Stop: 49320, Start Num: 83

Candidate Starts for KashFlow\_76:

(Start: 83 @48091 has 28 MA's), (Start: 90 @48109 has 1 MA's), (109, 48148), (177, 48385), (197, 48493), (233, 48613), (234, 48616), (235, 48625), (241, 48640), (250, 48679), (271, 48757), (303, 48874), (304, 48877), (307, 48886), (317, 48937), (318, 48940), (320, 48958), (348, 49054), (369, 49111), (397, 49231), (398, 49234), (401, 49258), (406, 49282), (407, 49285),

Gene: KayMoney\_38 Start: 26157, Stop: 27299, Start Num: 127

Candidate Starts for KayMoney\_38:

(122, 26148), (Start: 127 @26157 has 297 MA's), (214, 26517), (219, 26535), (253, 26643), (266, 26703), (291, 26796), (314, 26916), (322, 26964), (332, 26994), (360, 27090), (393, 27198), (403, 27273),

Gene: Kenna\_49 Start: 32526, Stop: 33596, Start Num: 127

Candidate Starts for Kenna\_49:

(Start: 127 @32526 has 297 MA's), (140, 32577), (154, 32655), (161, 32682), (214, 32877), (216, 32886), (243, 32937), (244, 32946), (246, 32949), (248, 32961), (258, 33006), (269, 33042), (279, 33078), (288, 33111), (289, 33114), (291, 33126), (330, 33294), (363, 33393), (387, 33453), (392, 33480), (393, 33483), (396, 33510), (398, 33516), (400, 33528), (410, 33585),

Gene: Kenuha5\_39 Start: 31177, Stop: 32295, Start Num: 127

Candidate Starts for Kenuha5\_39:

(Start: 127 @31177 has 297 MA's), (162, 31348), (207, 31513), (214, 31549), (216, 31558), (253, 31663), (268, 31732), (279, 31771), (284, 31792), (288, 31804), (289, 31807), (291, 31819), (292, 31834), (295, 31858), (296, 31864), (307, 31885), (313, 31921), (314, 31924), (320, 31960), (321, 31966), (325, 31981), (336, 31996), (356, 32065), (363, 32080), (383, 32122), (390, 32167), (393, 32176), (399, 32215), (401, 32233), (405, 32254), (409, 32269), (410, 32278), (411, 32281),

Gene: KiSi\_45 Start: 33691, Stop: 34776, Start Num: 127

Candidate Starts for KiSi\_45:

(1, 32323), (2, 32353), (3, 32512), (4, 32560), (5, 32629), (6, 32653), (7, 32734), (8, 32743), (9, 32767), (10, 32887), (14, 33088), (16, 33106), (19, 33184), (Start: 27 @33355 has 1 MA's), (36, 33430), (45, 33469), (54, 33523), (Start: 127 @33691 has 297 MA's), (156, 33826), (165, 33853), (202, 33991), (211, 34033), (214, 34045), (248, 34129), (266, 34198), (267, 34201), (279, 34243), (304, 34351), (324, 34456), (356, 34543), (381, 34591), (400, 34699), (409, 34747),

Gene: KingJulian\_42 Start: 32428, Stop: 33546, Start Num: 127

Candidate Starts for KingJulian\_42:

(Start: 127 @32428 has 297 MA's), (130, 32437), (162, 32599), (207, 32764), (214, 32800), (216, 32809), (253, 32914), (268, 32983), (279, 33022), (283, 33040), (284, 33043), (288, 33055), (289, 33058), (291, 33070), (292, 33085), (295, 33109), (296, 33115), (307, 33136), (313, 33172), (314, 33175), (320, 33211), (321, 33217), (325, 33232), (336, 33247), (356, 33316), (363, 33331), (383, 33373), (390, 33418), (393, 33427), (395, 33439), (399, 33466), (401, 33484), (405, 33505), (409, 33520), (410, 33529), (411, 33532),

Gene: Kingsley\_38 Start: 30711, Stop: 31829, Start Num: 127

Candidate Starts for Kingsley\_38:

(Start: 127 @30711 has 297 MA's), (162, 30882), (207, 31047), (214, 31083), (216, 31092), (246, 31173), (253, 31197), (268, 31266), (279, 31305), (283, 31323), (284, 31326), (288, 31338), (289, 31341), (291, 31353), (292, 31368), (295, 31392), (296, 31398), (307, 31419), (313, 31455), (314, 31458), (320, 31494), (321, 31500), (324, 31512), (325, 31515), (336, 31530), (356, 31599), (363, 31614), (383, 31656), (390, 31701), (393, 31710), (399, 31749), (401, 31767), (405, 31788), (409, 31803), (410, 31812), (411, 31815),

Gene: Kita\_40 Start: 30461, Stop: 31654, Start Num: 75

Candidate Starts for Kita\_40:

(Start: 75 @30461 has 6 MA's), (Start: 126 @30572 has 52 MA's), (140, 30626), (167, 30746), (244, 31001), (253, 31031), (267, 31091), (286, 31157), (291, 31181), (387, 31511), (392, 31538), (410, 31643),

Gene: Klein\_81 Start: 51782, Stop: 53011, Start Num: 83

Candidate Starts for Klein\_81:

(Start: 83 @51782 has 28 MA's), (Start: 90 @51800 has 1 MA's), (109, 51839), (177, 52076), (197, 52184), (233, 52304), (234, 52307), (235, 52316), (241, 52331), (250, 52370), (271, 52448), (296, 52553), (303, 52565), (304, 52568), (307, 52577), (317, 52628), (318, 52631), (320, 52649), (348, 52745), (369, 52802), (397, 52922), (398, 52925), (401, 52949), (406, 52973), (407, 52976),

Gene: KristaRAM\_43 Start: 33503, Stop: 34630, Start Num: 127

Candidate Starts for KristaRAM\_43:

(77, 33401), (99, 33458), (Start: 127 @33503 has 297 MA's), (130, 33512), (162, 33674), (183, 33725), (186, 33743), (192, 33788), (214, 33884), (216, 33893), (246, 33974), (253, 33998), (268, 34067), (279, 34106), (284, 34127), (288, 34139), (289, 34142), (291, 34154), (292, 34169), (295, 34193), (296, 34199), (307, 34220), (313, 34256), (314, 34259), (320, 34295), (321, 34301), (324, 34313), (325, 34316), (336, 34331), (356, 34400), (363, 34415), (383, 34457), (390, 34502), (393, 34511), (399, 34550), (401, 34568), (405, 34589), (409, 34604), (410, 34613), (411, 34616),

Gene: Kudrefre\_6 Start: 2520, Stop: 1432, Start Num: 124

Candidate Starts for Kudrefre\_6:

(78, 2625), (116, 2541), (Start: 124 @2520 has 3 MA's), (171, 2349), (191, 2259), (194, 2235), (269, 1983), (284, 1950), (292, 1908), (294, 1893), (300, 1872), (304, 1863), (306, 1857), (321, 1773), (325,

1758), (353, 1671), (364, 1638), (392, 1545), (397, 1512), (399, 1503), (400, 1497),

Gene: Lamberg\_33 Start: 26384, Stop: 27466, Start Num: 126

Candidate Starts for Lamberg\_33:

(Start: 74 @26267 has 2 MA's), (Start: 75 @26273 has 6 MA's), (Start: 126 @26384 has 52 MA's), (140, 26438), (167, 26558), (244, 26813), (253, 26843), (267, 26903), (286, 26969), (291, 26993), (308, 27062), (313, 27098), (387, 27323), (392, 27350), (410, 27455),

Gene: Lasker\_39 Start: 27772, Stop: 26633, Start Num: 127

Candidate Starts for Lasker\_39:

(117, 27787), (Start: 127 @27772 has 297 MA's), (140, 27721), (186, 27553), (188, 27535), (216, 27403), (246, 27325), (248, 27313), (249, 27307), (266, 27238), (269, 27229), (286, 27169), (304, 27079), (325, 26974), (332, 26953), (341, 26926), (383, 26803), (387, 26779), (389, 26764), (402, 26689), (408, 26659),

Gene: LastJedi\_34 Start: 27598, Stop: 28716, Start Num: 127

Candidate Starts for LastJedi\_34:

(Start: 127 @27598 has 297 MA's), (130, 27607), (162, 27769), (207, 27934), (214, 27970), (216, 27979), (246, 28060), (253, 28084), (268, 28153), (279, 28192), (283, 28210), (284, 28213), (288, 28225), (289, 28228), (291, 28240), (292, 28255), (295, 28279), (296, 28285), (307, 28306), (313, 28342), (314, 28345), (320, 28381), (321, 28387), (325, 28402), (336, 28417), (356, 28486), (363, 28501), (383, 28543), (390, 28588), (393, 28597), (399, 28636), (401, 28654), (405, 28675), (409, 28690), (410, 28699), (411, 28702),

Gene: LaterM\_42 Start: 33376, Stop: 34464, Start Num: 127

Candidate Starts for LaterM\_42:

(Start: 127 @33376 has 297 MA's), (147, 33478), (Start: 153 @33502 has 1 MA's), (165, 33538), (186, 33589), (194, 33652), (202, 33676), (214, 33730), (215, 33733), (248, 33814), (266, 33883), (267, 33886), (275, 33916), (304, 34036), (319, 34114), (324, 34141), (381, 34276),

Gene: Lawnathon\_40 Start: 27623, Stop: 26484, Start Num: 127

Candidate Starts for Lawnathon\_40:

(Start: 127 @27623 has 297 MA's), (140, 27572), (186, 27404), (188, 27386), (216, 27254), (246, 27176), (248, 27164), (249, 27158), (266, 27089), (269, 27080), (286, 27020), (304, 26930), (325, 26825), (332, 26804), (341, 26777), (383, 26654), (387, 26630), (389, 26615), (402, 26540), (408, 26510),

Gene: LeBruni\_39 Start: 27007, Stop: 25868, Start Num: 127

Candidate Starts for LeBruni\_39:

(110, 27031), (Start: 127 @27007 has 297 MA's), (136, 26968), (140, 26956), (186, 26788), (188, 26770), (216, 26638), (246, 26560), (248, 26548), (266, 26473), (269, 26464), (286, 26404), (304, 26314), (341, 26161), (361, 26092), (383, 26038), (387, 26014), (389, 25999), (408, 25894),

Gene: LeMond\_45 Start: 33694, Stop: 34779, Start Num: 127

Candidate Starts for LeMond\_45:

(54, 33526), (Start: 127 @33694 has 297 MA's), (156, 33829), (165, 33856), (202, 33994), (211, 34036), (214, 34048), (248, 34132), (266, 34201), (267, 34204), (279, 34246), (304, 34354), (324, 34459), (356, 34546), (381, 34594), (400, 34702), (409, 34750),

Gene: Lederberg\_27 Start: 25613, Stop: 24285, Start Num: 76

Candidate Starts for Lederberg\_27:

(Start: 76 @25613 has 3 MA's), (89, 25577), (93, 25568), (Start: 121 @25511 has 2 MA's), (181, 25301), (182, 25298), (199, 25199), (205, 25181), (219, 25115), (221, 25109), (224, 25097), (264,

24932), (276, 24887), (282, 24866), (286, 24854), (291, 24830), (293, 24806), (294, 24800), (306, 24764), (327, 24668), (347, 24611), (358, 24566), (373, 24542), (380, 24527), (392, 24461), (393, 24458), (396, 24431), (400, 24413), (411, 24353), (426, 24299),

Gene: Leroy\_50 Start: 33450, Stop: 34544, Start Num: 127

Candidate Starts for Leroy\_50:

(Start: 127 @33450 has 297 MA's), (140, 33501), (152, 33573), (154, 33579), (161, 33606), (184, 33651), (190, 33693), (207, 33765), (244, 33870), (248, 33885), (258, 33930), (279, 34002), (288, 34035), (289, 34038), (291, 34050), (327, 34215), (387, 34377), (388, 34380), (393, 34407), (395, 34419), (411, 34512),

Gene: LilPharaoh\_36 Start: 31976, Stop: 33070, Start Num: 127

Candidate Starts for LilPharaoh\_36:

(25, 31625), (Start: 27 @31640 has 1 MA's), (38, 31733), (45, 31754), (69, 31847), (Start: 127 @31976 has 297 MA's), (140, 32027), (Start: 153 @32102 has 1 MA's), (165, 32138), (192, 32234), (194, 32252), (202, 32276), (213, 32324), (214, 32330), (260, 32462), (266, 32495), (279, 32540), (304, 32648), (324, 32753), (349, 32813), (381, 32888), (400, 32996), (406, 33032),

Gene: LilSpotty\_38 Start: 27607, Stop: 28713, Start Num: 127

Candidate Starts for LilSpotty\_38:

(Start: 127 @27607 has 297 MA's), (161, 27766), (174, 27802), (214, 27979), (248, 28063), (260, 28108), (266, 28132), (274, 28162), (275, 28165), (286, 28201), (288, 28210), (289, 28213), (295, 28264), (304, 28285), (319, 28363), (321, 28378), (346, 28438), (356, 28477), (363, 28492), (383, 28543), (387, 28567), (390, 28588),

Gene: Lilas\_38 Start: 32714, Stop: 33796, Start Num: 126

Candidate Starts for Lilas\_38:

(Start: 126 @32714 has 52 MA's), (149, 32831), (184, 32924), (244, 33146), (255, 33182), (267, 33236), (287, 33305), (289, 33314), (387, 33653), (392, 33680), (410, 33785),

Gene: LilyBell\_38 Start: 26387, Stop: 27529, Start Num: 127

Candidate Starts for LilyBell\_38:

(55, 26210), (70, 26249), (81, 26288), (86, 26297), (Start: 127 @26387 has 297 MA's), (213, 26741), (214, 26747), (219, 26765), (253, 26873), (266, 26933), (291, 27026), (314, 27146), (322, 27194), (329, 27215), (332, 27224), (360, 27320), (388, 27401), (390, 27419), (393, 27428), (403, 27503),

Gene: LindNT\_41 Start: 32665, Stop: 33753, Start Num: 127

Candidate Starts for LindNT\_41:

(62, 32518), (Start: 127 @32665 has 297 MA's), (147, 32767), (Start: 153 @32791 has 1 MA's), (165, 32827), (202, 32965), (214, 33019), (248, 33103), (266, 33172), (267, 33175), (304, 33325), (324, 33430), (356, 33517), (381, 33565), (406, 33709),

Gene: LitninMcQueen\_43 Start: 31304, Stop: 32401, Start Num: 127

Candidate Starts for LitninMcQueen\_43:

(28, 30968), (41, 31064), (95, 31247), (Start: 127 @31304 has 297 MA's), (140, 31355), (152, 31427), (154, 31433), (161, 31460), (184, 31505), (190, 31547), (214, 31655), (244, 31724), (248, 31739), (267, 31814), (279, 31856), (288, 31889), (289, 31892), (291, 31904), (314, 32006), (339, 32099), (363, 32171), (383, 32207), (387, 32231), (392, 32258), (400, 32306), (411, 32366),

Gene: LittleRon\_36 Start: 25766, Stop: 26908, Start Num: 127

Candidate Starts for LittleRon\_36:

(Start: 127 @25766 has 297 MA's), (213, 26120), (214, 26126), (218, 26141), (238, 26195), (253, 26252), (266, 26312), (267, 26315), (274, 26342), (291, 26405), (314, 26525), (322, 26573), (360,

26699), (366, 26711), (393, 26807), (403, 26882),

Gene: Llorens\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Llorens\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: LonelyBoi\_38 Start: 32508, Stop: 33590, Start Num: 126

Candidate Starts for LonelyBoi\_38:

(Start: 126 @32508 has 52 MA's), (140, 32562), (167, 32682), (253, 32967), (267, 33027), (291, 33117), (313, 33222), (387, 33447), (392, 33474), (410, 33579),

Gene: LordFarquaad\_35 Start: 27696, Stop: 28778, Start Num: 126

Candidate Starts for LordFarquaad\_35:

(Start: 75 @27585 has 6 MA's), (Start: 126 @27696 has 52 MA's), (140, 27750), (167, 27870), (244, 28125), (253, 28155), (267, 28215), (286, 28281), (291, 28305), (387, 28635), (392, 28662), (410, 28767),

Gene: LordVader\_38 Start: 26840, Stop: 27946, Start Num: 127

Candidate Starts for LordVader\_38:

(115, 26822), (Start: 127 @26840 has 297 MA's), (161, 26999), (174, 27035), (211, 27200), (214, 27212), (248, 27296), (251, 27308), (260, 27341), (266, 27365), (286, 27434), (288, 27443), (289, 27446), (295, 27497), (304, 27518), (319, 27596), (321, 27611), (346, 27671), (356, 27710), (363, 27725), (376, 27749), (383, 27776), (387, 27800), (390, 27821), (393, 27830), (401, 27887),

Gene: Lorde\_42 Start: 31143, Stop: 32261, Start Num: 127

Candidate Starts for Lorde\_42:

(Start: 127 @31143 has 297 MA's), (130, 31152), (162, 31314), (207, 31479), (214, 31515), (216, 31524), (246, 31605), (253, 31629), (268, 31698), (279, 31737), (283, 31755), (284, 31758), (288, 31770), (289, 31773), (291, 31785), (295, 31824), (296, 31830), (307, 31851), (313, 31887), (314, 31890), (320, 31926), (321, 31932), (325, 31947), (356, 32031), (363, 32046), (378, 32064), (390, 32133), (393, 32142), (399, 32181), (401, 32199), (405, 32220), (409, 32235), (410, 32244), (411, 32247),

Gene: Lton\_34 Start: 25220, Stop: 26299, Start Num: 127

Candidate Starts for Lton\_34:

(Start: 127 @25220 has 297 MA's), (161, 25376), (210, 25556), (267, 25727), (279, 25769), (290, 25808), (291, 25817), (321, 25973), (363, 26096), (387, 26156), (392, 26183), (398, 26219), (400, 26231), (410, 26288),

Gene: Lucky10\_35 Start: 28235, Stop: 29314, Start Num: 127

Candidate Starts for Lucky10\_35:

(20, 27794), (33, 27947), (42, 27989), (85, 28145), (111, 28199), (Start: 127 @28235 has 297 MA's), (161, 28391), (267, 28742), (279, 28784), (290, 28823), (291, 28832), (321, 28988), (363, 29111), (387, 29171), (400, 29246), (410, 29303),

Gene: LunaBlu\_46 Start: 33438, Stop: 34556, Start Num: 127

Candidate Starts for LunaBlu\_46:

(Start: 127 @33438 has 297 MA's), (130, 33447), (162, 33609), (207, 33774), (214, 33810), (216, 33819), (253, 33924), (268, 33993), (279, 34032), (283, 34050), (284, 34053), (288, 34065), (289, 34068), (291, 34080), (292, 34095), (295, 34119), (296, 34125), (307, 34146), (313, 34182), (314, 34185), (320, 34221), (321, 34227), (325, 34242), (336, 34257), (356, 34326), (363, 34341), (383,

34383), (390, 34428), (393, 34437), (399, 34476), (401, 34494), (405, 34515), (409, 34530), (410, 34539), (411, 34542),

Gene: LunaStella\_42 Start: 31631, Stop: 32749, Start Num: 127

Candidate Starts for LunaStella\_42:

(Start: 127 @31631 has 297 MA's), (130, 31640), (154, 31769), (162, 31802), (184, 31850), (214, 32003), (216, 32012), (246, 32093), (268, 32186), (284, 32246), (288, 32258), (289, 32261), (292, 32288), (295, 32312), (307, 32339), (313, 32375), (314, 32378), (320, 32414), (336, 32450), (356, 32519), (363, 32534), (378, 32552), (390, 32621), (393, 32630), (399, 32669), (401, 32687), (405, 32708), (409, 32723),

Gene: Lunahalos\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Lunahalos\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: Lutum\_50 Start: 32526, Stop: 33596, Start Num: 127

Candidate Starts for Lutum\_50:

(Start: 127 @32526 has 297 MA's), (140, 32577), (154, 32655), (161, 32682), (214, 32877), (216, 32886), (243, 32937), (244, 32946), (246, 32949), (248, 32961), (258, 33006), (269, 33042), (279, 33078), (288, 33111), (289, 33114), (291, 33126), (330, 33294), (363, 33393), (387, 33453), (392, 33480), (393, 33483), (396, 33510), (398, 33516), (400, 33528), (410, 33585),

Gene: MUWow\_39 Start: 27853, Stop: 26681, Start Num: 127

Candidate Starts for MUWow\_39:

(Start: 127 @27853 has 297 MA's), (152, 27736), (157, 27721), (188, 27616), (208, 27520), (216, 27484), (246, 27406), (266, 27319), (269, 27310), (286, 27250), (332, 27034), (339, 27010), (341, 27007), (383, 26884), (387, 26860), (389, 26845), (411, 26725), (421, 26698),

Gene: Madavieve\_34 Start: 30231, Stop: 31313, Start Num: 126

Candidate Starts for Madavieve\_34:

(Start: 75 @30120 has 6 MA's), (Start: 126 @30231 has 52 MA's), (137, 30276), (140, 30285), (167, 30405), (253, 30690), (267, 30750), (286, 30816), (291, 30840), (313, 30945), (327, 31011), (387, 31170), (392, 31197), (400, 31245), (410, 31302), (411, 31305),

Gene: MakCheese\_48 Start: 36086, Stop: 34929, Start Num: 127

Candidate Starts for MakCheese\_48:

(Start: 127 @36086 has 297 MA's), (193, 35825), (208, 35759), (211, 35744), (214, 35732), (223, 35702), (244, 35588), (253, 35558), (267, 35498), (291, 35408), (295, 35369), (325, 35243), (327, 35237), (330, 35234), (340, 35204), (343, 35198), (349, 35174), (387, 35072), (400, 34997), (410, 34940),

Gene: Manasvini\_39 Start: 30564, Stop: 31646, Start Num: 126

Candidate Starts for Manasvini\_39:

(Start: 75 @30453 has 6 MA's), (Start: 126 @30564 has 52 MA's), (140, 30618), (167, 30738), (244, 30993), (253, 31023), (267, 31083), (286, 31149), (291, 31173), (387, 31503), (392, 31530), (410, 31635),

Gene: Mandlovu\_40 Start: 31729, Stop: 32847, Start Num: 127

Candidate Starts for Mandlovu\_40:

(Start: 127 @31729 has 297 MA's), (162, 31900), (207, 32065), (214, 32101), (216, 32110), (253, 32215), (268, 32284), (279, 32323), (284, 32344), (288, 32356), (289, 32359), (291, 32371), (295,

32410), (296, 32416), (307, 32437), (313, 32473), (314, 32476), (320, 32512), (321, 32518), (324, 32530), (325, 32533), (336, 32548), (356, 32617), (363, 32632), (378, 32650), (390, 32719), (393, 32728), (399, 32767), (401, 32785), (405, 32806), (409, 32821), (410, 32830), (411, 32833),

Gene: Mapleville\_40 Start: 27702, Stop: 26563, Start Num: 127

Candidate Starts for Mapleville\_40:

(Start: 127 @27702 has 297 MA's), (140, 27651), (186, 27483), (188, 27465), (216, 27333), (246, 27255), (248, 27243), (249, 27237), (266, 27168), (269, 27159), (286, 27099), (304, 27009), (325, 26904), (332, 26883), (341, 26856), (383, 26733), (387, 26709), (389, 26694), (402, 26619), (408, 26589),

Gene: Marcoliusprime\_43 Start: 34317, Stop: 35417, Start Num: 127

Candidate Starts for Marcoliusprime\_43:

(Start: 127 @34317 has 297 MA's), (132, 34335), (Start: 153 @34443 has 1 MA's), (165, 34479), (194, 34593), (202, 34617), (214, 34671), (261, 34812), (266, 34836), (267, 34839), (279, 34881), (304, 34989), (324, 35094), (345, 35139), (349, 35154), (400, 35346),

Gene: Maridalia\_39 Start: 30563, Stop: 31645, Start Num: 126

Candidate Starts for Maridalia\_39:

(Start: 75 @30452 has 6 MA's), (Start: 126 @30563 has 52 MA's), (140, 30617), (167, 30737), (267, 31082), (291, 31172), (313, 31277), (387, 31502), (392, 31529), (400, 31577), (410, 31634), (411, 31637),

Gene: MarkPhew\_44 Start: 33135, Stop: 34214, Start Num: 127

Candidate Starts for MarkPhew\_44:

(14, 32601), (16, 32619), (17, 32631), (19, 32697), (45, 32913), (54, 32967), (63, 32994), (Start: 127 @33135 has 297 MA's), (165, 33297), (172, 33306), (185, 33339), (202, 33432), (211, 33474), (214, 33486), (248, 33570), (253, 33585), (266, 33639), (267, 33642), (279, 33684), (304, 33792), (324, 33897), (356, 33984), (381, 34032), (400, 34140), (409, 34188),

Gene: Marshawn\_44 Start: 33433, Stop: 34515, Start Num: 127

Candidate Starts for Marshawn\_44:

(Start: 127 @33433 has 297 MA's), (140, 33484), (Start: 153 @33559 has 1 MA's), (165, 33595), (213, 33781), (214, 33787), (248, 33871), (266, 33940), (267, 33943), (279, 33985), (304, 34093), (324, 34198), (356, 34285), (381, 34333), (409, 34489), (415, 34510),

Gene: Marteena\_36 Start: 30030, Stop: 31136, Start Num: 127

Candidate Starts for Marteena\_36:

(95, 29973), (Start: 127 @30030 has 297 MA's), (140, 30081), (161, 30186), (164, 30195), (180, 30225), (247, 30459), (248, 30465), (266, 30534), (267, 30537), (275, 30567), (289, 30618), (291, 30630), (346, 30858), (365, 30918), (387, 30993), (393, 31023), (410, 31125),

Gene: Maruru\_30 Start: 28338, Stop: 29489, Start Num: 127

Candidate Starts for Maruru\_30:

(15, 27732), (50, 28143), (107, 28296), (Start: 127 @28338 has 297 MA's), (130, 28347), (152, 28449), (176, 28515), (186, 28551), (222, 28692), (246, 28764), (292, 28959), (366, 29247), (389, 29343), (392, 29355), (393, 29358),

Gene: MaterMagnus\_40 Start: 27779, Stop: 26640, Start Num: 127

Candidate Starts for MaterMagnus\_40:

(Start: 127 @27779 has 297 MA's), (140, 27728), (186, 27560), (188, 27542), (216, 27410), (246, 27332), (248, 27320), (249, 27314), (266, 27245), (269, 27236), (286, 27176), (304, 27086), (325, 26981), (332, 26960), (341, 26933), (383, 26810), (387, 26786), (389, 26771), (402, 26696), (408,

26666),

Gene: Matteo\_30 Start: 25426, Stop: 26508, Start Num: 126

Candidate Starts for Matteo\_30:

(Start: 74 @25309 has 2 MA's), (Start: 75 @25315 has 6 MA's), (Start: 126 @25426 has 52 MA's), (140, 25480), (167, 25600), (244, 25855), (253, 25885), (267, 25945), (286, 26011), (291, 26035), (313, 26140), (387, 26365), (392, 26392), (410, 26497),

Gene: Mattes\_43 Start: 32094, Stop: 33212, Start Num: 127

Candidate Starts for Mattes\_43:

(Start: 127 @32094 has 297 MA's), (154, 32232), (162, 32265), (184, 32313), (207, 32430), (214, 32466), (216, 32475), (253, 32580), (268, 32649), (284, 32709), (288, 32721), (289, 32724), (291, 32736), (292, 32751), (295, 32775), (296, 32781), (307, 32802), (313, 32838), (314, 32841), (320, 32877), (321, 32883), (324, 32895), (325, 32898), (356, 32982), (363, 32997), (383, 33039), (390, 33084), (393, 33093), (399, 33132), (401, 33150), (405, 33171), (409, 33186), (410, 33195), (411, 33198),

Gene: McMater\_43 Start: 33014, Stop: 34105, Start Num: 127

Candidate Starts for McMater\_43:

(11, 32333), (18, 32477), (26, 32681), (43, 32780), (44, 32789), (48, 32816), (61, 32864), (Start: 127 @33014 has 297 MA's), (140, 33065), (Start: 153 @33140 has 1 MA's), (165, 33176), (194, 33290), (202, 33314), (214, 33368), (248, 33452), (256, 33485), (266, 33521), (267, 33524), (279, 33566), (295, 33653), (304, 33674), (324, 33782), (349, 33842), (379, 33905), (381, 33917), (400, 34025), (406, 34061),

Gene: Mcklovin\_36 Start: 33917, Stop: 35044, Start Num: 112

Candidate Starts for Mcklovin\_36:

(39, 33698), (47, 33734), (Start: 112 @33917 has 19 MA's), (134, 33971), (175, 34127), (195, 34217), (206, 34250), (266, 34445), (267, 34448), (279, 34490), (289, 34526), (365, 34823), (387, 34901), (395, 34943), (399, 34970), (410, 35033),

Gene: Mdavu\_37 Start: 31629, Stop: 33059, Start Num: 27

Candidate Starts for Mdavu\_37:

(25, 31614), (Start: 27 @31629 has 1 MA's), (38, 31722), (45, 31743), (69, 31836), (Start: 127 @31965 has 297 MA's), (140, 32016), (Start: 153 @32091 has 1 MA's), (165, 32127), (192, 32223), (194, 32241), (202, 32265), (213, 32313), (214, 32319), (260, 32451), (266, 32484), (279, 32529), (304, 32637), (324, 32742), (349, 32802), (381, 32877), (400, 32985), (406, 33021),

Gene: MeaningOfLife\_42 Start: 33409, Stop: 34497, Start Num: 127

Candidate Starts for MeaningOfLife\_42:

(Start: 127 @33409 has 297 MA's), (147, 33511), (Start: 153 @33535 has 1 MA's), (165, 33571), (202, 33709), (214, 33763), (248, 33847), (266, 33916), (267, 33919), (280, 33967), (304, 34069), (324, 34174), (356, 34261), (381, 34309), (406, 34453),

Gene: Medindi\_40 Start: 31479, Stop: 32597, Start Num: 127

Candidate Starts for Medindi\_40:

(Start: 127 @31479 has 297 MA's), (130, 31488), (162, 31650), (207, 31815), (214, 31851), (216, 31860), (253, 31965), (268, 32034), (279, 32073), (284, 32094), (288, 32106), (289, 32109), (291, 32121), (292, 32136), (295, 32160), (296, 32166), (307, 32187), (313, 32223), (314, 32226), (320, 32262), (321, 32268), (324, 32280), (325, 32283), (336, 32298), (356, 32367), (363, 32382), (383, 32424), (390, 32469), (393, 32478), (399, 32517), (401, 32535), (405, 32556), (409, 32571), (410, 32580), (411, 32583),

Gene: Megsy\_42 Start: 32724, Stop: 33812, Start Num: 127

Candidate Starts for Megsy\_42:

(Start: 127 @32724 has 297 MA's), (147, 32826), (Start: 153 @32850 has 1 MA's), (165, 32886), (202, 33024), (214, 33078), (248, 33162), (266, 33231), (267, 33234), (304, 33384), (319, 33462), (324, 33489), (381, 33624), (406, 33768),

Gene: Melissauren88\_42 Start: 32565, Stop: 33683, Start Num: 127

Candidate Starts for Melissauren88\_42:

(Start: 127 @32565 has 297 MA's), (130, 32574), (162, 32736), (207, 32901), (214, 32937), (216, 32946), (253, 33051), (268, 33120), (279, 33159), (284, 33180), (288, 33192), (289, 33195), (291, 33207), (295, 33246), (296, 33252), (307, 33273), (313, 33309), (314, 33312), (320, 33348), (321, 33354), (325, 33369), (336, 33384), (356, 33453), (363, 33468), (383, 33510), (390, 33555), (393, 33564), (399, 33603), (401, 33621), (405, 33642), (409, 33657), (410, 33666), (411, 33669),

Gene: MichaelScott\_40 Start: 30472, Stop: 31599, Start Num: 112

Candidate Starts for MichaelScott\_40:

(91, 30433), (Start: 112 @30472 has 19 MA's), (134, 30526), (161, 30649), (175, 30682), (195, 30772), (206, 30805), (266, 31000), (267, 31003), (279, 31045), (289, 31081), (365, 31378), (387, 31456), (392, 31483), (395, 31498), (399, 31525), (410, 31588),

Gene: MidnightRain\_42 Start: 28565, Stop: 27426, Start Num: 127

Candidate Starts for MidnightRain\_42:

(Start: 127 @28565 has 297 MA's), (140, 28514), (186, 28346), (188, 28328), (216, 28196), (246, 28118), (248, 28106), (266, 28031), (269, 28022), (286, 27962), (304, 27872), (325, 27767), (332, 27746), (341, 27719), (383, 27596), (387, 27572), (389, 27557), (402, 27482), (408, 27452),

Gene: MilanaBonita\_37 Start: 29110, Stop: 30237, Start Num: 127

Candidate Starts for MilanaBonita\_37:

(77, 29008), (99, 29065), (Start: 127 @29110 has 297 MA's), (130, 29119), (162, 29281), (183, 29332), (186, 29350), (192, 29395), (214, 29491), (216, 29500), (253, 29605), (268, 29674), (279, 29713), (284, 29734), (288, 29746), (289, 29749), (291, 29761), (295, 29800), (296, 29806), (307, 29827), (313, 29863), (314, 29866), (320, 29902), (321, 29908), (324, 29920), (325, 29923), (336, 29938), (356, 30007), (363, 30022), (378, 30040), (383, 30064), (390, 30109), (393, 30118), (395, 30130), (399, 30157), (401, 30175), (405, 30196), (409, 30211), (410, 30220), (411, 30223),

Gene: MilleniumForce\_42 Start: 32868, Stop: 33986, Start Num: 127

Candidate Starts for MilleniumForce\_42:

(Start: 127 @32868 has 297 MA's), (130, 32877), (162, 33039), (207, 33204), (214, 33240), (216, 33249), (246, 33330), (253, 33354), (268, 33423), (283, 33480), (284, 33483), (288, 33495), (289, 33498), (291, 33510), (295, 33549), (307, 33576), (313, 33612), (314, 33615), (320, 33651), (321, 33657), (325, 33672), (356, 33756), (363, 33771), (383, 33813), (390, 33858), (393, 33867), (399, 33906), (401, 33924), (405, 33945), (409, 33960), (410, 33969), (411, 33972),

Gene: Milly\_43 Start: 34290, Stop: 35390, Start Num: 127

Candidate Starts for Milly\_43:

(Start: 127 @34290 has 297 MA's), (132, 34308), (140, 34341), (Start: 153 @34416 has 1 MA's), (165, 34452), (194, 34566), (202, 34590), (214, 34644), (261, 34785), (266, 34809), (267, 34812), (279, 34854), (304, 34962), (324, 35067), (345, 35112), (349, 35127), (400, 35319),

Gene: Minerva\_84 Start: 53196, Stop: 54425, Start Num: 83

Candidate Starts for Minerva\_84:

(Start: 83 @53196 has 28 MA's), (Start: 90 @53214 has 1 MA's), (109, 53253), (177, 53490), (197, 53598), (233, 53718), (234, 53721), (235, 53730), (241, 53745), (250, 53784), (271, 53862), (296,

53967), (303, 53979), (304, 53982), (307, 53991), (317, 54042), (318, 54045), (320, 54063), (348, 54159), (369, 54216), (397, 54336), (398, 54339), (401, 54363), (406, 54387), (407, 54390),

Gene: MinionDave\_43 Start: 33105, Stop: 34223, Start Num: 127

Candidate Starts for MinionDave\_43:

(Start: 127 @33105 has 297 MA's), (130, 33114), (162, 33276), (184, 33324), (207, 33441), (214, 33477), (216, 33486), (253, 33591), (268, 33660), (279, 33699), (283, 33717), (284, 33720), (288, 33732), (289, 33735), (291, 33747), (295, 33786), (296, 33792), (307, 33813), (313, 33849), (314, 33852), (320, 33888), (321, 33894), (324, 33906), (325, 33909), (336, 33924), (356, 33993), (363, 34008), (378, 34026), (383, 34050), (390, 34095), (393, 34104), (399, 34143), (401, 34161), (405, 34182), (409, 34197), (410, 34206), (411, 34209),

Gene: Minnie\_43 Start: 32650, Stop: 33768, Start Num: 127

Candidate Starts for Minnie\_43:

(Start: 127 @32650 has 297 MA's), (154, 32788), (162, 32821), (184, 32869), (214, 33022), (216, 33031), (246, 33112), (268, 33205), (279, 33244), (283, 33262), (284, 33265), (288, 33277), (289, 33280), (291, 33292), (292, 33307), (295, 33331), (296, 33337), (307, 33358), (313, 33394), (314, 33397), (320, 33433), (321, 33439), (325, 33454), (336, 33469), (356, 33538), (363, 33553), (383, 33595), (390, 33640), (393, 33649), (399, 33688), (401, 33706), (405, 33727), (409, 33742), (410, 33751), (411, 33754),

Gene: Mocha12\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for Mocha12\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (308, 28553), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: MooMoo\_41 Start: 31904, Stop: 33025, Start Num: 127

Candidate Starts for MooMoo\_41:

(Start: 127 @31904 has 297 MA's), (151, 32033), (162, 32075), (186, 32135), (192, 32180), (214, 32276), (216, 32285), (268, 32462), (284, 32522), (288, 32534), (289, 32537), (290, 32540), (291, 32549), (295, 32588), (296, 32594), (307, 32615), (313, 32651), (314, 32654), (320, 32690), (336, 32726), (340, 32741), (356, 32795), (363, 32810), (371, 32825), (390, 32897), (393, 32906), (395, 32918), (399, 32945), (401, 32963), (405, 32984), (409, 32999),

Gene: Moonbeam\_41 Start: 32622, Stop: 33740, Start Num: 127

Candidate Starts for Moonbeam\_41:

(Start: 127 @32622 has 297 MA's), (130, 32631), (162, 32793), (184, 32841), (207, 32958), (214, 32994), (216, 33003), (253, 33108), (268, 33177), (279, 33216), (283, 33234), (284, 33237), (288, 33249), (289, 33252), (291, 33264), (292, 33279), (295, 33303), (296, 33309), (307, 33330), (313, 33366), (314, 33369), (320, 33405), (321, 33411), (324, 33423), (325, 33426), (336, 33441), (356, 33510), (363, 33525), (378, 33543), (383, 33567), (390, 33612), (393, 33621), (399, 33660), (401, 33678), (405, 33699), (409, 33714), (410, 33723), (411, 33726),

Gene: Moosehead\_35 Start: 25354, Stop: 26436, Start Num: 125

Candidate Starts for Moosehead\_35:

(Start: 125 @25354 has 1 MA's), (161, 25513), (184, 25558), (189, 25591), (267, 25864), (279, 25906), (289, 25942), (290, 25945), (291, 25954), (363, 26233), (387, 26293), (410, 26425),

Gene: Morkie\_33 Start: 26172, Stop: 27254, Start Num: 126

Candidate Starts for Morkie\_33:

(Start: 126 @26172 has 52 MA's), (140, 26226), (167, 26346), (244, 26601), (267, 26691), (286, 26757), (291, 26781), (327, 26952), (387, 27111), (392, 27138), (400, 27186), (410, 27243),

Gene: Mova\_42 Start: 31760, Stop: 32878, Start Num: 127

Candidate Starts for Mova\_42:

(Start: 127 @31760 has 297 MA's), (154, 31898), (162, 31931), (184, 31979), (214, 32132), (216, 32141), (246, 32222), (268, 32315), (279, 32354), (284, 32375), (288, 32387), (289, 32390), (291, 32402), (292, 32417), (295, 32441), (296, 32447), (307, 32468), (313, 32504), (314, 32507), (320, 32543), (325, 32564), (336, 32579), (356, 32648), (363, 32663), (378, 32681), (383, 32705), (390, 32750), (393, 32759), (395, 32771), (399, 32798), (401, 32816), (405, 32837), (409, 32852), (410, 32861), (411, 32864),

Gene: Mozy\_51 Start: 34630, Stop: 35748, Start Num: 127

Candidate Starts for Mozy\_51:

(Start: 127 @34630 has 297 MA's), (130, 34639), (162, 34801), (207, 34966), (214, 35002), (216, 35011), (253, 35116), (268, 35185), (279, 35224), (284, 35245), (288, 35257), (289, 35260), (291, 35272), (295, 35311), (296, 35317), (307, 35338), (313, 35374), (314, 35377), (320, 35413), (321, 35419), (325, 35434), (356, 35518), (363, 35533), (383, 35575), (390, 35620), (393, 35629), (399, 35668), (401, 35686), (405, 35707), (409, 35722), (410, 35731), (411, 35734),

Gene: Ms6\_36 Start: 27630, Stop: 28748, Start Num: 127

Candidate Starts for Ms6\_36:

(Start: 127 @27630 has 297 MA's), (130, 27639), (162, 27801), (207, 27966), (214, 28002), (216, 28011), (253, 28116), (268, 28185), (279, 28224), (284, 28245), (288, 28257), (289, 28260), (291, 28272), (295, 28311), (296, 28317), (307, 28338), (313, 28374), (314, 28377), (320, 28413), (321, 28419), (324, 28431), (325, 28434), (336, 28449), (356, 28518), (363, 28533), (390, 28620), (393, 28629), (399, 28668), (401, 28686), (405, 28707), (409, 28722), (410, 28731), (411, 28734),

Gene: Mufasa\_44 Start: 34136, Stop: 35236, Start Num: 127

Candidate Starts for Mufasa\_44:

(Start: 127 @34136 has 297 MA's), (132, 34154), (140, 34187), (Start: 153 @34262 has 1 MA's), (165, 34298), (194, 34412), (202, 34436), (214, 34490), (226, 34514), (261, 34631), (266, 34655), (267, 34658), (279, 34700), (304, 34808), (324, 34913), (345, 34958), (349, 34973), (400, 35165),

Gene: Mufasa8\_27 Start: 25316, Stop: 26536, Start Num: 127

Candidate Starts for Mufasa8\_27:

(Start: 127 @25316 has 297 MA's), (158, 25445), (184, 25517), (186, 25529), (209, 25634), (215, 25658), (222, 25670), (238, 25712), (267, 25832), (270, 25844), (274, 25859), (284, 25895), (286, 25898), (291, 25922), (294, 25952), (299, 25976), (300, 25979), (304, 25988), (305, 25991), (319, 26063), (320, 26072), (321, 26078), (332, 26114), (341, 26144), (349, 26171), (360, 26213), (366, 26225),

Gene: MurphyJoseph\_36 Start: 26546, Stop: 25368, Start Num: 127

Candidate Starts for MurphyJoseph\_36:

(Start: 127 @26546 has 297 MA's), (152, 26429), (188, 26309), (208, 26213), (216, 26177), (246, 26099), (266, 26012), (269, 26003), (286, 25943), (293, 25895), (327, 25742), (341, 25700), (383, 25583), (386, 25562), (387, 25559), (389, 25544), (411, 25424),

Gene: Murucutumbu\_42 Start: 33469, Stop: 34557, Start Num: 127

Candidate Starts for Murucutumbu\_42:

(Start: 127 @33469 has 297 MA's), (147, 33571), (Start: 153 @33595 has 1 MA's), (165, 33631), (186, 33682), (194, 33745), (202, 33769), (214, 33823), (215, 33826), (248, 33907), (266, 33976), (267, 33979), (275, 34009), (304, 34129), (319, 34207), (324, 34234), (381, 34369),

Gene: Mutaforma13\_45 Start: 33170, Stop: 34288, Start Num: 127

Candidate Starts for Mutaforma13\_45:

(Start: 127 @33170 has 297 MA's), (130, 33179), (154, 33308), (162, 33341), (184, 33389), (207, 33506), (214, 33542), (216, 33551), (253, 33656), (268, 33725), (284, 33785), (288, 33797), (289, 33800), (291, 33812), (292, 33827), (295, 33851), (296, 33857), (307, 33878), (313, 33914), (314, 33917), (320, 33953), (321, 33959), (324, 33971), (325, 33974), (356, 34058), (363, 34073), (383, 34115), (390, 34160), (393, 34169), (399, 34208), (401, 34226), (405, 34247), (409, 34262), (410, 34271), (411, 34274),

Gene: Mynx\_42 Start: 32799, Stop: 33887, Start Num: 127

Candidate Starts for Mynx\_42:

(Start: 127 @32799 has 297 MA's), (147, 32901), (Start: 153 @32925 has 1 MA's), (165, 32961), (202, 33099), (214, 33153), (248, 33237), (266, 33306), (267, 33309), (280, 33357), (304, 33459), (324, 33564), (356, 33651), (381, 33699), (406, 33843),

Gene: Neobush\_39 Start: 30557, Stop: 31639, Start Num: 126

Candidate Starts for Neobush\_39:

(Start: 75 @30446 has 6 MA's), (Start: 126 @30557 has 52 MA's), (140, 30611), (167, 30731), (244, 30986), (253, 31016), (267, 31076), (286, 31142), (291, 31166), (387, 31496), (392, 31523), (410, 31628),

Gene: Nettuno\_33 Start: 26384, Stop: 27466, Start Num: 126

Candidate Starts for Nettuno\_33:

(Start: 74 @26267 has 2 MA's), (Start: 75 @26273 has 6 MA's), (Start: 126 @26384 has 52 MA's), (140, 26438), (167, 26558), (244, 26813), (253, 26843), (267, 26903), (286, 26969), (291, 26993), (313, 27098), (387, 27323), (392, 27350), (410, 27455),

Gene: NewHope4\_45 Start: 32740, Stop: 33858, Start Num: 127

Candidate Starts for NewHope4\_45:

(Start: 127 @32740 has 297 MA's), (154, 32878), (162, 32911), (184, 32959), (214, 33112), (216, 33121), (253, 33226), (268, 33295), (284, 33355), (288, 33367), (289, 33370), (292, 33397), (295, 33421), (307, 33448), (313, 33484), (314, 33487), (320, 33523), (321, 33529), (324, 33541), (325, 33544), (356, 33628), (363, 33643), (383, 33685), (390, 33730), (393, 33739), (399, 33778), (401, 33796), (405, 33817), (409, 33832), (410, 33841), (411, 33844),

Gene: NewKitty\_38 Start: 26896, Stop: 25718, Start Num: 127

Candidate Starts for NewKitty\_38:

(Start: 127 @26896 has 297 MA's), (152, 26779), (157, 26764), (188, 26659), (208, 26563), (216, 26527), (246, 26449), (266, 26362), (269, 26353), (286, 26293), (304, 26203), (325, 26098), (327, 26092), (341, 26050), (360, 25984), (383, 25933), (386, 25912), (387, 25909), (389, 25894), (411, 25774),

Gene: Nibb\_43 Start: 32855, Stop: 33940, Start Num: 127

Candidate Starts for Nibb\_43:

(Start: 127 @32855 has 297 MA's), (156, 32990), (165, 33017), (211, 33197), (214, 33209), (248, 33293), (266, 33362), (267, 33365), (304, 33515), (324, 33620), (356, 33707), (381, 33755), (400, 33863), (409, 33911),

Gene: NidoQ\_33 Start: 25490, Stop: 26632, Start Num: 127

Candidate Starts for NidoQ\_33:

(57, 25322), (65, 25346), (66, 25349), (Start: 127 @25490 has 297 MA's), (213, 25844), (214, 25850), (219, 25868), (253, 25976), (266, 26036), (291, 26129), (314, 26249), (322, 26297), (332, 26327), (360, 26423), (393, 26531), (403, 26606),

Gene: NihilNomen\_82 Start: 53150, Stop: 54379, Start Num: 83

Candidate Starts for NihilNomen\_82:

(Start: 83 @53150 has 28 MA's), (Start: 90 @53168 has 1 MA's), (109, 53207), (177, 53444), (197, 53552), (233, 53672), (234, 53675), (235, 53684), (241, 53699), (250, 53738), (271, 53816), (296, 53921), (303, 53933), (304, 53936), (307, 53945), (317, 53996), (318, 53999), (320, 54017), (348, 54113), (369, 54170), (397, 54290), (398, 54293), (401, 54317), (406, 54341), (407, 54344),

Gene: Nikao\_39 Start: 34589, Stop: 35683, Start Num: 127

Candidate Starts for Nikao\_39:

(25, 34238), (Start: 27 @34253 has 1 MA's), (38, 34346), (45, 34367), (69, 34460), (Start: 127 @34589 has 297 MA's), (140, 34640), (Start: 153 @34715 has 1 MA's), (165, 34751), (192, 34847), (194, 34865), (202, 34889), (213, 34937), (214, 34943), (260, 35075), (266, 35108), (279, 35153), (304, 35261), (324, 35366), (349, 35426), (381, 35501), (400, 35609), (406, 35645),

Gene: Niklas\_43 Start: 33040, Stop: 34131, Start Num: 127

Candidate Starts for Niklas\_43:

(26, 32707), (43, 32806), (44, 32815), (48, 32842), (61, 32890), (Start: 127 @33040 has 297 MA's), (Start: 153 @33166 has 1 MA's), (165, 33202), (194, 33316), (202, 33340), (214, 33394), (248, 33478), (256, 33511), (266, 33547), (267, 33550), (279, 33592), (295, 33679), (304, 33700), (324, 33808), (349, 33868), (379, 33931), (381, 33943), (400, 34051), (406, 34087),

Gene: Nutello\_36 Start: 31976, Stop: 33070, Start Num: 127

Candidate Starts for Nutello\_36:

(25, 31625), (Start: 27 @31640 has 1 MA's), (38, 31733), (45, 31754), (69, 31847), (Start: 127 @31976 has 297 MA's), (140, 32027), (Start: 153 @32102 has 1 MA's), (165, 32138), (192, 32234), (194, 32252), (202, 32276), (213, 32324), (214, 32330), (260, 32462), (266, 32495), (279, 32540), (304, 32648), (324, 32753), (349, 32813), (381, 32888), (400, 32996), (406, 33032),

Gene: Nyilah\_36 Start: 25981, Stop: 24842, Start Num: 127

Candidate Starts for Nyilah\_36:

(119, 25996), (Start: 127 @25981 has 297 MA's), (207, 25660), (214, 25624), (217, 25612), (219, 25606), (248, 25513), (253, 25498), (266, 25438), (274, 25408), (291, 25345), (295, 25306), (322, 25177), (329, 25156), (332, 25147), (360, 25051), (393, 24943), (395, 24931), (403, 24868),

Gene: Nymphadora\_39 Start: 32012, Stop: 33094, Start Num: 126

Candidate Starts for Nymphadora\_39:

(Start: 75 @31901 has 6 MA's), (Start: 126 @32012 has 52 MA's), (140, 32066), (167, 32186), (243, 32432), (244, 32441), (253, 32471), (267, 32531), (286, 32597), (291, 32621), (387, 32951), (392, 32978), (410, 33083),

Gene: ODay\_52 Start: 33934, Stop: 35028, Start Num: 127

Candidate Starts for ODay\_52:

(Start: 127 @33934 has 297 MA's), (140, 33985), (146, 34033), (154, 34063), (161, 34090), (189, 34168), (190, 34177), (248, 34369), (254, 34387), (279, 34486), (288, 34519), (289, 34522), (291, 34534), (314, 34636), (330, 34702), (339, 34729), (340, 34732), (363, 34801), (368, 34810), (387, 34861), (388, 34864), (393, 34891), (395, 34903), (411, 34996),

Gene: Odette\_80 Start: 52249, Stop: 53421, Start Num: 109

Candidate Starts for Odette\_80:

(Start: 83 @52192 has 28 MA's), (Start: 90 @52210 has 1 MA's), (109, 52249), (177, 52486), (197, 52594), (233, 52714), (234, 52717), (235, 52726), (241, 52741), (250, 52780), (271, 52858), (296, 52963), (303, 52975), (304, 52978), (307, 52987), (317, 53038), (318, 53041), (320, 53059), (348, 53155), (369, 53212), (397, 53332), (398, 53335), (401, 53359), (406, 53383), (407, 53386),

Gene: OneDirection\_30 Start: 24794, Stop: 25876, Start Num: 126

Candidate Starts for OneDirection\_30:

(Start: 75 @24683 has 6 MA's), (Start: 126 @24794 has 52 MA's), (133, 24821), (140, 24848), (167, 24968), (244, 25223), (267, 25313), (286, 25379), (291, 25403), (387, 25733), (389, 25748), (392, 25760), (400, 25808), (410, 25865),

Gene: Optimus\_79 Start: 51901, Stop: 53130, Start Num: 83

Candidate Starts for Optimus\_79:

(Start: 83 @51901 has 28 MA's), (Start: 90 @51919 has 1 MA's), (109, 51958), (177, 52195), (197, 52303), (233, 52423), (234, 52426), (235, 52435), (241, 52450), (250, 52489), (271, 52567), (296, 52672), (303, 52684), (304, 52687), (307, 52696), (317, 52747), (318, 52750), (320, 52768), (348, 52864), (369, 52921), (397, 53041), (398, 53044), (401, 53068), (406, 53092), (407, 53095),

Gene: Oregano\_39 Start: 29184, Stop: 30311, Start Num: 112

Candidate Starts for Oregano\_39:

(39, 28965), (47, 29001), (Start: 112 @29184 has 19 MA's), (134, 29238), (161, 29361), (175, 29394), (195, 29484), (206, 29517), (266, 29712), (267, 29715), (279, 29757), (289, 29793), (365, 30090), (395, 30210), (399, 30237), (410, 30300),

Gene: Oscar\_45 Start: 33597, Stop: 34682, Start Num: 127

Candidate Starts for Oscar\_45:

(14, 32994), (16, 33012), (19, 33090), (Start: 27 @33261 has 1 MA's), (36, 33336), (45, 33375), (54, 33429), (Start: 127 @33597 has 297 MA's), (156, 33732), (165, 33759), (202, 33897), (211, 33939), (214, 33951), (248, 34035), (266, 34104), (267, 34107), (279, 34149), (304, 34257), (324, 34362), (356, 34449), (381, 34497), (400, 34605), (409, 34653),

Gene: Ovechkin\_41 Start: 32949, Stop: 34067, Start Num: 127

Candidate Starts for Ovechkin\_41:

(Start: 127 @32949 has 297 MA's), (130, 32958), (162, 33120), (207, 33285), (214, 33321), (216, 33330), (253, 33435), (268, 33504), (283, 33561), (284, 33564), (288, 33576), (289, 33579), (291, 33591), (295, 33630), (307, 33657), (313, 33693), (314, 33696), (320, 33732), (321, 33738), (325, 33753), (336, 33768), (356, 33837), (363, 33852), (383, 33894), (390, 33939), (393, 33948), (399, 33987), (401, 34005), (405, 34026), (409, 34041), (410, 34050), (411, 34053),

Gene: Padfoot\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for Padfoot\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: Padpat\_42 Start: 32470, Stop: 33558, Start Num: 127

Candidate Starts for Padpat\_42:

(Start: 127 @32470 has 297 MA's), (140, 32521), (147, 32572), (Start: 153 @32596 has 1 MA's), (165, 32632), (202, 32770), (214, 32824), (248, 32908), (266, 32977), (267, 32980), (304, 33130), (319, 33208), (324, 33235), (356, 33322), (381, 33370),

Gene: PatoPoderoso\_41 Start: 32437, Stop: 33546, Start Num: 130

Candidate Starts for PatoPoderoso\_41:

(Start: 127 @32428 has 297 MA's), (130, 32437), (162, 32599), (207, 32764), (214, 32800), (216, 32809), (253, 32914), (268, 32983), (279, 33022), (283, 33040), (284, 33043), (288, 33055), (289, 33058), (291, 33070), (292, 33085), (295, 33109), (296, 33115), (307, 33136), (313, 33172), (314, 33175), (320, 33211), (321, 33217), (325, 33232), (336, 33247), (356, 33316), (363, 33331), (383, 33373), (390, 33418), (393, 33427), (395, 33439), (399, 33466), (401, 33484), (405, 33505), (409,

33520), (410, 33529), (411, 33532),

Gene: Peanam\_43 Start: 33014, Stop: 34105, Start Num: 127

Candidate Starts for Peanam\_43:

(11, 32333), (18, 32477), (26, 32681), (43, 32780), (44, 32789), (48, 32816), (61, 32864), (Start: 127 @33014 has 297 MA's), (Start: 153 @33140 has 1 MA's), (165, 33176), (194, 33290), (202, 33314), (214, 33368), (248, 33452), (256, 33485), (266, 33521), (267, 33524), (279, 33566), (295, 33653), (304, 33674), (324, 33782), (349, 33842), (379, 33905), (381, 33917), (400, 34025), (406, 34061),

Gene: Peas\_35 Start: 27040, Stop: 28182, Start Num: 127

Candidate Starts for Peas\_35:

(Start: 127 @27040 has 297 MA's), (213, 27394), (214, 27400), (218, 27415), (238, 27469), (253, 27526), (266, 27586), (274, 27616), (291, 27679), (314, 27799), (322, 27847), (360, 27973), (366, 27985), (393, 28081), (403, 28156),

Gene: Peel\_41 Start: 32597, Stop: 33685, Start Num: 127

Candidate Starts for Peel\_41:

(13, 31994), (21, 32171), (35, 32336), (45, 32375), (Start: 127 @32597 has 297 MA's), (140, 32648), (147, 32699), (Start: 153 @32723 has 1 MA's), (165, 32759), (202, 32897), (248, 33035), (266, 33104), (267, 33107), (304, 33257), (324, 33362), (381, 33497),

Gene: Pepperoni\_31 Start: 25939, Stop: 27021, Start Num: 126

Candidate Starts for Pepperoni\_31:

(Start: 126 @25939 has 52 MA's), (140, 25993), (167, 26113), (253, 26398), (267, 26458), (286, 26524), (291, 26548), (313, 26653), (327, 26719), (387, 26878), (392, 26905), (400, 26953), (410, 27010),

Gene: Periwinkle\_57 Start: 34837, Stop: 35922, Start Num: 127

Candidate Starts for Periwinkle\_57:

(82, 34750), (97, 34786), (Start: 127 @34837 has 297 MA's), (140, 34888), (146, 34936), (154, 34966), (161, 34993), (190, 35080), (207, 35152), (214, 35188), (216, 35197), (248, 35272), (254, 35290), (279, 35389), (288, 35422), (289, 35425), (291, 35437), (301, 35488), (314, 35539), (330, 35605), (363, 35704), (387, 35764), (392, 35791), (399, 35833), (411, 35899),

Gene: Persistence\_35 Start: 26237, Stop: 25068, Start Num: 127

Candidate Starts for Persistence\_35:

(Start: 75 @26342 has 6 MA's), (89, 26303), (Start: 127 @26237 has 297 MA's), (140, 26186), (186, 26018), (188, 26000), (208, 25904), (216, 25868), (246, 25790), (266, 25703), (269, 25694), (286, 25634), (304, 25544), (325, 25439), (327, 25433), (341, 25391), (383, 25274), (386, 25253), (387, 25250), (389, 25235), (399, 25181), (422, 25085),

Gene: Phabuloso\_48 Start: 32389, Stop: 33486, Start Num: 127

Candidate Starts for Phabuloso\_48:

(Start: 127 @32389 has 297 MA's), (140, 32440), (154, 32518), (161, 32545), (190, 32632), (207, 32704), (214, 32740), (216, 32749), (248, 32824), (254, 32842), (258, 32869), (279, 32941), (288, 32974), (289, 32977), (291, 32989), (363, 33256), (387, 33316), (392, 33343), (400, 33391), (401, 33403), (411, 33451),

Gene: Phalconet\_41 Start: 31939, Stop: 33057, Start Num: 127

Candidate Starts for Phalconet\_41:

(Start: 127 @31939 has 297 MA's), (130, 31948), (162, 32110), (207, 32275), (214, 32311), (216, 32320), (268, 32494), (279, 32533), (284, 32554), (288, 32566), (289, 32569), (291, 32581), (295, 32620), (296, 32626), (307, 32647), (313, 32683), (314, 32686), (320, 32722), (321, 32728), (325,

32743), (356, 32827), (363, 32842), (378, 32860), (390, 32929), (393, 32938), (399, 32977), (401, 32995), (405, 33016), (409, 33031), (410, 33040), (411, 33043),

Gene: Phanphagia\_37 Start: 31053, Stop: 32171, Start Num: 127

Candidate Starts for Phanphagia\_37:

(Start: 127 @31053 has 297 MA's), (130, 31062), (162, 31224), (207, 31389), (214, 31425), (216, 31434), (253, 31539), (268, 31608), (279, 31647), (283, 31665), (284, 31668), (288, 31680), (289, 31683), (291, 31695), (292, 31710), (295, 31734), (296, 31740), (307, 31761), (313, 31797), (314, 31800), (320, 31836), (321, 31842), (325, 31857), (336, 31872), (356, 31941), (363, 31956), (383, 31998), (390, 32043), (393, 32052), (395, 32064), (399, 32091), (401, 32109), (405, 32130), (409, 32145), (410, 32154), (411, 32157),

Gene: PhesterPhotato\_44 Start: 32894, Stop: 34012, Start Num: 127

Candidate Starts for PhesterPhotato\_44:

(Start: 127 @32894 has 297 MA's), (130, 32903), (162, 33065), (207, 33230), (214, 33266), (216, 33275), (268, 33449), (279, 33488), (284, 33509), (288, 33521), (289, 33524), (291, 33536), (295, 33575), (296, 33581), (307, 33602), (313, 33638), (314, 33641), (320, 33677), (321, 33683), (325, 33698), (356, 33782), (363, 33797), (378, 33815), (390, 33884), (393, 33893), (399, 33932), (401, 33950), (405, 33971), (409, 33986), (410, 33995), (411, 33998),

Gene: Philus\_43 Start: 31979, Stop: 33097, Start Num: 127

Candidate Starts for Philus\_43:

(Start: 127 @31979 has 297 MA's), (154, 32117), (162, 32150), (184, 32198), (207, 32315), (214, 32351), (216, 32360), (253, 32465), (268, 32534), (284, 32594), (288, 32606), (289, 32609), (291, 32621), (292, 32636), (295, 32660), (296, 32666), (307, 32687), (313, 32723), (314, 32726), (320, 32762), (321, 32768), (324, 32780), (325, 32783), (356, 32867), (363, 32882), (383, 32924), (390, 32969), (393, 32978), (399, 33017), (401, 33035), (405, 33056), (409, 33071), (410, 33080), (411, 33083),

Gene: Phistory\_51 Start: 33096, Stop: 34193, Start Num: 127

Candidate Starts for Phistory\_51:

(82, 33009), (97, 33045), (Start: 127 @33096 has 297 MA's), (140, 33147), (154, 33225), (161, 33252), (184, 33297), (190, 33339), (248, 33531), (254, 33549), (258, 33576), (279, 33648), (284, 33669), (287, 33675), (291, 33696), (307, 33768), (321, 33852), (363, 33975), (385, 34026), (387, 34035), (392, 34062), (411, 34170), (416, 34185),

Gene: Phoebus\_84 Start: 54332, Stop: 55561, Start Num: 83

Candidate Starts for Phoebus\_84:

(Start: 83 @54332 has 28 MA's), (Start: 90 @54350 has 1 MA's), (109, 54389), (177, 54626), (197, 54734), (233, 54854), (234, 54857), (235, 54866), (241, 54881), (250, 54920), (271, 54998), (296, 55103), (303, 55115), (304, 55118), (307, 55127), (317, 55178), (318, 55181), (320, 55199), (348, 55295), (369, 55352), (397, 55472), (398, 55475), (401, 55499), (406, 55523), (407, 55526),

Gene: PhorbesPhlower\_33 Start: 25600, Stop: 26682, Start Num: 126

Candidate Starts for PhorbesPhlower\_33:

(Start: 75 @25489 has 6 MA's), (Start: 126 @25600 has 52 MA's), (140, 25654), (167, 25774), (207, 25921), (267, 26119), (286, 26185), (291, 26209), (387, 26539), (392, 26566), (410, 26671), (411, 26674),

Gene: Phrank15\_39 Start: 27192, Stop: 26020, Start Num: 127

Candidate Starts for Phrank15\_39:

(93, 27249), (Start: 127 @27192 has 297 MA's), (140, 27141), (186, 26973), (188, 26955), (216, 26823), (246, 26745), (248, 26733), (249, 26727), (266, 26658), (269, 26649), (286, 26589), (304,

26499), (325, 26394), (332, 26373), (341, 26346), (383, 26223), (387, 26199), (389, 26184), (411, 26064), (421, 26037),

Gene: Phrappuccino\_38 Start: 20588, Stop: 21727, Start Num: 127

Candidate Starts for Phrappuccino\_38:

(Start: 127 @20588 has 297 MA's), (141, 20642), (149, 20714), (214, 20966), (216, 20975), (244, 21065), (248, 21080), (266, 21158), (286, 21227), (289, 21239), (304, 21311), (315, 21362), (316, 21365), (321, 21401), (343, 21452), (356, 21500), (357, 21506), (363, 21515), (389, 21596), (404, 21689), (408, 21701), (410, 21713),

Gene: Piatt\_41 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for Piatt\_41:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: Pickett\_32 Start: 24860, Stop: 25942, Start Num: 126

Candidate Starts for Pickett\_32:

(Start: 126 @24860 has 52 MA's), (140, 24914), (167, 25034), (253, 25319), (267, 25379), (286, 25445), (291, 25469), (387, 25799), (392, 25826), (410, 25931),

Gene: Pippy\_38 Start: 29161, Stop: 30279, Start Num: 127

Candidate Starts for Pippy\_38:

(Start: 127 @29161 has 297 MA's), (130, 29170), (162, 29332), (207, 29497), (214, 29533), (216, 29542), (246, 29623), (253, 29647), (268, 29716), (279, 29755), (283, 29773), (284, 29776), (288, 29788), (289, 29791), (291, 29803), (292, 29818), (295, 29842), (296, 29848), (307, 29869), (313, 29905), (314, 29908), (320, 29944), (321, 29950), (325, 29965), (336, 29980), (356, 30049), (363, 30064), (383, 30106), (390, 30151), (393, 30160), (399, 30199), (401, 30217), (405, 30238), (409, 30253), (410, 30262), (411, 30265),

Gene: Pisa1\_41 Start: 33768, Stop: 34856, Start Num: 127

Candidate Starts for Pisa1\_41:

(Start: 127 @33768 has 297 MA's), (147, 33870), (Start: 153 @33894 has 1 MA's), (165, 33930), (186, 33981), (194, 34044), (202, 34068), (214, 34122), (248, 34206), (266, 34275), (267, 34278), (304, 34428), (319, 34506), (324, 34533), (381, 34668), (406, 34812),

Gene: Pokerus\_40 Start: 32516, Stop: 33604, Start Num: 127

Candidate Starts for Pokerus\_40:

(Start: 127 @32516 has 297 MA's), (147, 32618), (Start: 153 @32642 has 1 MA's), (165, 32678), (202, 32816), (214, 32870), (248, 32954), (266, 33023), (267, 33026), (304, 33176), (324, 33281), (356, 33368), (381, 33416), (406, 33560),

Gene: Pollux\_38 Start: 32103, Stop: 33209, Start Num: 127

Candidate Starts for Pollux\_38:

(95, 32046), (Start: 127 @32103 has 297 MA's), (140, 32154), (161, 32259), (180, 32298), (248, 32538), (266, 32607), (267, 32610), (275, 32640), (289, 32691), (291, 32703), (346, 32931), (365, 32991), (387, 33066), (393, 33096), (410, 33198),

Gene: Polly\_36 Start: 30006, Stop: 31088, Start Num: 126

Candidate Starts for Polly\_36:

(Start: 75 @29895 has 6 MA's), (Start: 126 @30006 has 52 MA's), (140, 30060), (167, 30180), (244, 30435), (253, 30465), (267, 30525), (286, 30591), (291, 30615), (387, 30945), (392, 30972), (410, 31077),

Gene: Polo2Bam\_48 Start: 32594, Stop: 33712, Start Num: 127

Candidate Starts for Polo2Bam\_48:

(Start: 127 @32594 has 297 MA's), (154, 32732), (162, 32765), (184, 32813), (214, 32966), (216, 32975), (253, 33080), (268, 33149), (284, 33209), (288, 33221), (289, 33224), (292, 33251), (295, 33275), (307, 33302), (313, 33338), (314, 33341), (320, 33377), (321, 33383), (324, 33395), (325, 33398), (356, 33482), (363, 33497), (383, 33539), (390, 33584), (393, 33593), (399, 33632), (401, 33650), (405, 33671), (409, 33686), (410, 33695), (411, 33698),

Gene: Posh\_42 Start: 32975, Stop: 34057, Start Num: 126

Candidate Starts for Posh\_42:

(Start: 75 @32864 has 6 MA's), (Start: 126 @32975 has 52 MA's), (140, 33029), (167, 33149), (267, 33494), (291, 33584), (313, 33689), (387, 33914), (392, 33941), (410, 34046),

Gene: Pound\_82 Start: 54468, Stop: 55697, Start Num: 83

Candidate Starts for Pound\_82:

(Start: 83 @54468 has 28 MA's), (Start: 90 @54486 has 1 MA's), (109, 54525), (177, 54762), (197, 54870), (233, 54990), (234, 54993), (235, 55002), (241, 55017), (250, 55056), (271, 55134), (296, 55239), (303, 55251), (304, 55254), (307, 55263), (317, 55314), (318, 55317), (320, 55335), (348, 55431), (369, 55488), (397, 55608), (398, 55611), (401, 55635), (406, 55659), (407, 55662),

Gene: Poushou\_32 Start: 29943, Stop: 28732, Start Num: 128

Candidate Starts for Poushou\_32:

(Start: 128 @29943 has 4 MA's), (160, 29769), (197, 29628), (244, 29469), (284, 29319), (303, 29229), (372, 28965), (381, 28929), (382, 28923), (413, 28758), (417, 28743), (418, 28740),

Gene: Prithvi\_42 Start: 32665, Stop: 33753, Start Num: 127

Candidate Starts for Prithvi\_42:

(62, 32518), (Start: 127 @32665 has 297 MA's), (147, 32767), (Start: 153 @32791 has 1 MA's), (165, 32827), (202, 32965), (214, 33019), (248, 33103), (266, 33172), (267, 33175), (304, 33325), (324, 33430), (356, 33517), (381, 33565), (406, 33709),

Gene: Pytheas\_39 Start: 31310, Stop: 32392, Start Num: 126

Candidate Starts for Pytheas\_39:

(Start: 75 @31199 has 6 MA's), (Start: 126 @31310 has 52 MA's), (140, 31364), (167, 31484), (253, 31769), (267, 31829), (286, 31895), (291, 31919), (387, 32249), (392, 32276), (410, 32381),

Gene: QuincyRose\_40 Start: 32781, Stop: 33869, Start Num: 127

Candidate Starts for QuincyRose\_40:

(Start: 127 @32781 has 297 MA's), (147, 32883), (Start: 153 @32907 has 1 MA's), (165, 32943), (202, 33081), (214, 33135), (248, 33219), (266, 33288), (267, 33291), (304, 33441), (324, 33546), (356, 33633), (371, 33663), (381, 33681), (406, 33825),

Gene: RadFad\_40 Start: 27831, Stop: 26659, Start Num: 127

Candidate Starts for RadFad\_40:

(Start: 127 @27831 has 297 MA's), (140, 27780), (170, 27666), (186, 27612), (188, 27594), (203, 27522), (212, 27480), (216, 27462), (246, 27384), (248, 27372), (266, 27297), (269, 27288), (286, 27228), (304, 27138), (325, 27033), (332, 27012), (339, 26988), (341, 26985), (361, 26916), (383, 26862), (387, 26838), (389, 26823), (411, 26703), (421, 26676),

Gene: Ramen\_41 Start: 32481, Stop: 33569, Start Num: 127

Candidate Starts for Ramen\_41:

(Start: 127 @32481 has 297 MA's), (147, 32583), (Start: 153 @32607 has 1 MA's), (165, 32643), (202, 32781), (214, 32835), (248, 32919), (266, 32988), (267, 32991), (304, 33141), (319, 33219), (324,

33246), (356, 33333), (381, 33381),

Gene: Raphaella\_40 Start: 27703, Stop: 26564, Start Num: 127

Candidate Starts for Raphaella\_40:

(Start: 127 @27703 has 297 MA's), (140, 27652), (186, 27484), (188, 27466), (216, 27334), (246, 27256), (248, 27244), (249, 27238), (266, 27169), (269, 27160), (286, 27100), (304, 27010), (325, 26905), (332, 26884), (341, 26857), (383, 26734), (387, 26710), (389, 26695), (402, 26620), (408, 26590),

Gene: Rapunzel97\_41 Start: 32477, Stop: 33565, Start Num: 127

Candidate Starts for Rapunzel97\_41:

(Start: 127 @32477 has 297 MA's), (140, 32528), (147, 32579), (Start: 153 @32603 has 1 MA's), (165, 32639), (202, 32777), (214, 32831), (248, 32915), (266, 32984), (267, 32987), (304, 33137), (319, 33215), (324, 33242), (356, 33329), (381, 33377),

Gene: Raqqa\_32 Start: 24809, Stop: 23658, Start Num: 135

Candidate Starts for Raqqa\_32:

(Start: 127 @24836 has 297 MA's), (135, 24809), (140, 24785), (188, 24599), (208, 24503), (216, 24467), (246, 24389), (266, 24302), (269, 24293), (286, 24233), (304, 24143), (325, 24038), (327, 24032), (360, 23924), (383, 23873), (387, 23849), (389, 23834), (402, 23759), (411, 23714),

Gene: RavenCo17\_41 Start: 31793, Stop: 32899, Start Num: 127

Candidate Starts for RavenCo17\_41:

(95, 31736), (Start: 127 @31793 has 297 MA's), (140, 31844), (161, 31949), (180, 31988), (248, 32228), (266, 32297), (267, 32300), (275, 32330), (289, 32381), (291, 32393), (346, 32621), (365, 32681), (366, 32684), (387, 32756), (393, 32786), (410, 32888),

Gene: Redno2\_78 Start: 49946, Stop: 51175, Start Num: 83

Candidate Starts for Redno2\_78:

(Start: 83 @49946 has 28 MA's), (Start: 90 @49964 has 1 MA's), (109, 50003), (177, 50240), (197, 50348), (233, 50468), (234, 50471), (235, 50480), (241, 50495), (250, 50534), (271, 50612), (296, 50717), (303, 50729), (304, 50732), (307, 50741), (317, 50792), (318, 50795), (320, 50813), (348, 50909), (369, 50966), (397, 51086), (398, 51089), (401, 51113), (406, 51137), (407, 51140),

Gene: Renaud18\_46 Start: 32683, Stop: 33786, Start Num: 127

Candidate Starts for Renaud18\_46:

(Start: 127 @32683 has 297 MA's), (140, 32731), (154, 32812), (161, 32839), (214, 33052), (226, 33076), (246, 33124), (266, 33205), (286, 33274), (288, 33283), (292, 33313), (295, 33337), (304, 33358), (319, 33436), (321, 33451), (346, 33511), (356, 33550), (363, 33565), (376, 33589), (383, 33616), (387, 33640), (390, 33661), (393, 33670), (400, 33715), (401, 33727),

Gene: Rialto\_46 Start: 34385, Stop: 35503, Start Num: 127

Candidate Starts for Rialto\_46:

(Start: 127 @34385 has 297 MA's), (162, 34556), (207, 34721), (214, 34757), (216, 34766), (253, 34871), (268, 34940), (279, 34979), (284, 35000), (288, 35012), (289, 35015), (291, 35027), (295, 35066), (296, 35072), (307, 35093), (313, 35129), (314, 35132), (320, 35168), (321, 35174), (325, 35189), (336, 35204), (356, 35273), (363, 35288), (390, 35375), (393, 35384), (399, 35423), (401, 35441), (405, 35462), (409, 35477), (410, 35486), (411, 35489),

Gene: Richie\_40 Start: 27784, Stop: 26645, Start Num: 127

Candidate Starts for Richie\_40:

(Start: 127 @27784 has 297 MA's), (140, 27733), (186, 27565), (188, 27547), (214, 27424), (216, 27415), (246, 27337), (248, 27325), (249, 27319), (266, 27250), (269, 27241), (286, 27181), (304,

27091), (325, 26986), (332, 26965), (341, 26938), (383, 26815), (387, 26791), (389, 26776), (402, 26701), (408, 26671),

Gene: Richo\_43 Start: 33014, Stop: 34105, Start Num: 127

Candidate Starts for Richo\_43:

(11, 32333), (18, 32477), (26, 32681), (43, 32780), (44, 32789), (48, 32816), (61, 32864), (Start: 127 @33014 has 297 MA's), (140, 33065), (Start: 153 @33140 has 1 MA's), (165, 33176), (194, 33290), (202, 33314), (214, 33368), (248, 33452), (256, 33485), (266, 33521), (267, 33524), (279, 33566), (295, 33653), (304, 33674), (324, 33782), (349, 33842), (379, 33905), (381, 33917), (400, 34025), (406, 34061),

Gene: Rita\_44 Start: 31945, Stop: 33063, Start Num: 127

Candidate Starts for Rita\_44:

(Start: 127 @31945 has 297 MA's), (154, 32083), (162, 32116), (184, 32164), (214, 32317), (216, 32326), (246, 32407), (268, 32500), (284, 32560), (288, 32572), (289, 32575), (292, 32602), (295, 32626), (307, 32653), (313, 32689), (314, 32692), (320, 32728), (336, 32764), (356, 32833), (363, 32848), (378, 32866), (390, 32935), (393, 32944), (395, 32956), (399, 32983), (401, 33001), (405, 33022), (409, 33037), (410, 33046), (411, 33049),

Gene: RootBeer\_29 Start: 22941, Stop: 24083, Start Num: 127

Candidate Starts for RootBeer\_29:

(Start: 127 @22941 has 297 MA's), (140, 22992), (144, 23019), (213, 23295), (214, 23301), (219, 23319), (253, 23427), (266, 23487), (291, 23580), (314, 23700), (322, 23748), (332, 23778), (360, 23874), (393, 23982), (403, 24057),

Gene: Rooter\_31 Start: 23761, Stop: 22631, Start Num: 127

Candidate Starts for Rooter\_31:

(Start: 127 @23761 has 297 MA's), (140, 23710), (141, 23707), (194, 23482), (207, 23437), (210, 23416), (211, 23413), (217, 23389), (248, 23290), (253, 23275), (272, 23194), (273, 23191), (320, 22978), (324, 22960), (326, 22954), (332, 22936), (341, 22909), (349, 22882), (356, 22855), (360, 22840), (365, 22831), (374, 22813), (389, 22747), (390, 22741), (393, 22732), (400, 22687), (403, 22657),

Gene: Rosmarinus\_41 Start: 32583, Stop: 33671, Start Num: 127

Candidate Starts for Rosmarinus\_41:

(13, 31980), (21, 32157), (35, 32322), (45, 32361), (Start: 127 @32583 has 297 MA's), (140, 32634), (147, 32685), (Start: 153 @32709 has 1 MA's), (165, 32745), (202, 32883), (248, 33021), (266, 33090), (267, 33093), (304, 33243), (324, 33348), (381, 33483),

Gene: SG4\_40 Start: 31653, Stop: 32771, Start Num: 127

Candidate Starts for SG4\_40:

(Start: 127 @31653 has 297 MA's), (130, 31662), (162, 31824), (207, 31989), (214, 32025), (216, 32034), (246, 32115), (253, 32139), (268, 32208), (279, 32247), (283, 32265), (284, 32268), (288, 32280), (289, 32283), (291, 32295), (295, 32334), (296, 32340), (307, 32361), (313, 32397), (314, 32400), (320, 32436), (321, 32442), (325, 32457), (356, 32541), (363, 32556), (378, 32574), (390, 32643), (393, 32652), (399, 32691), (401, 32709), (405, 32730), (409, 32745), (410, 32754), (411, 32757),

Gene: Saal\_43 Start: 31957, Stop: 33075, Start Num: 127

Candidate Starts for Saal\_43:

(Start: 127 @31957 has 297 MA's), (154, 32095), (162, 32128), (184, 32176), (207, 32293), (214, 32329), (216, 32338), (253, 32443), (268, 32512), (284, 32572), (288, 32584), (289, 32587), (291, 32599), (292, 32614), (295, 32638), (296, 32644), (307, 32665), (313, 32701), (314, 32704), (320,

32740), (321, 32746), (324, 32758), (325, 32761), (356, 32845), (363, 32860), (383, 32902), (390, 32947), (393, 32956), (399, 32995), (401, 33013), (405, 33034), (409, 33049), (410, 33058), (411, 33061),

Gene: Sahara\_36 Start: 27505, Stop: 28704, Start Num: 74

Candidate Starts for Sahara\_36:

(Start: 74 @27505 has 2 MA's), (Start: 75 @27511 has 6 MA's), (Start: 126 @27622 has 52 MA's), (140, 27676), (167, 27796), (244, 28051), (253, 28081), (267, 28141), (286, 28207), (291, 28231), (313, 28336), (387, 28561), (392, 28588), (410, 28693),

Gene: Sakai\_40 Start: 27712, Stop: 26573, Start Num: 127

Candidate Starts for Sakai\_40:

(Start: 127 @27712 has 297 MA's), (140, 27661), (186, 27493), (188, 27475), (216, 27343), (246, 27265), (248, 27253), (249, 27247), (266, 27178), (269, 27169), (286, 27109), (304, 27019), (325, 26914), (332, 26893), (341, 26866), (383, 26743), (387, 26719), (389, 26704), (402, 26629), (408, 26599),

Gene: SamW\_27 Start: 25228, Stop: 23900, Start Num: 76

Candidate Starts for SamW\_27:

(Start: 76 @25228 has 3 MA's), (89, 25192), (93, 25183), (Start: 121 @25126 has 2 MA's), (181, 24916), (182, 24913), (199, 24814), (205, 24796), (219, 24730), (221, 24724), (224, 24712), (264, 24547), (276, 24502), (282, 24481), (286, 24469), (291, 24445), (293, 24421), (294, 24415), (306, 24379), (327, 24283), (347, 24226), (358, 24181), (373, 24157), (380, 24142), (392, 24076), (393, 24073), (396, 24046), (400, 24028), (411, 23968), (426, 23914),

Gene: Samman98\_40 Start: 29099, Stop: 30226, Start Num: 112

Candidate Starts for Samman98\_40:

(91, 29060), (Start: 112 @29099 has 19 MA's), (134, 29153), (161, 29276), (175, 29309), (195, 29399), (206, 29432), (266, 29627), (267, 29630), (279, 29672), (289, 29708), (365, 30005), (387, 30083), (392, 30110), (395, 30125), (399, 30152), (410, 30215),

Gene: SamuelLPlaqson\_42 Start: 33376, Stop: 34464, Start Num: 127

Candidate Starts for SamuelLPlaqson\_42:

(45, 33154), (Start: 127 @33376 has 297 MA's), (140, 33427), (147, 33478), (Start: 153 @33502 has 1 MA's), (165, 33538), (194, 33652), (214, 33730), (248, 33814), (266, 33883), (267, 33886), (304, 34036), (324, 34141), (381, 34276), (406, 34420),

Gene: Sarge\_28 Start: 22501, Stop: 21347, Start Num: 127

Candidate Starts for Sarge\_28:

(93, 22564), (Start: 127 @22501 has 297 MA's), (140, 22450), (141, 22447), (144, 22423), (194, 22198), (207, 22153), (210, 22132), (211, 22129), (217, 22105), (248, 22006), (253, 21991), (272, 21910), (293, 21817), (311, 21748), (320, 21694), (326, 21670), (332, 21652), (341, 21625), (356, 21571), (360, 21556), (365, 21547), (389, 21463), (390, 21457), (393, 21448), (400, 21403), (403, 21373),

Gene: Sarma624\_38 Start: 27903, Stop: 29021, Start Num: 127

Candidate Starts for Sarma624\_38:

(Start: 127 @27903 has 297 MA's), (162, 28074), (207, 28239), (214, 28275), (216, 28284), (246, 28365), (253, 28389), (268, 28458), (279, 28497), (283, 28515), (284, 28518), (288, 28530), (289, 28533), (291, 28545), (292, 28560), (295, 28584), (296, 28590), (307, 28611), (313, 28647), (314, 28650), (320, 28686), (321, 28692), (324, 28704), (325, 28707), (336, 28722), (356, 28791), (363, 28806), (383, 28848), (390, 28893), (393, 28902), (399, 28941), (401, 28959), (405, 28980), (409, 28995), (410, 29004), (411, 29007),

Gene: Sashimi\_39 Start: 28789, Stop: 27602, Start Num: 127

Candidate Starts for Sashimi\_39:

(Start: 127 @28789 has 297 MA's), (140, 28738), (152, 28672), (188, 28552), (206, 28471), (208, 28456), (216, 28420), (246, 28342), (266, 28255), (269, 28246), (278, 28216), (286, 28186), (304, 28096), (325, 27991), (383, 27820), (387, 27796), (389, 27781), (411, 27661),

Gene: Satrap\_40 Start: 27780, Stop: 26602, Start Num: 127

Candidate Starts for Satrap\_40:

(Start: 127 @27780 has 297 MA's), (152, 27663), (188, 27543), (208, 27447), (216, 27411), (242, 27348), (246, 27333), (266, 27246), (269, 27237), (286, 27177), (293, 27129), (325, 26982), (327, 26976), (341, 26934), (383, 26817), (386, 26796), (387, 26793), (389, 26778), (411, 26658),

Gene: Savage\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for Savage\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Scarlett\_45 Start: 33589, Stop: 34674, Start Num: 127

Candidate Starts for Scarlett\_45:

(14, 32986), (16, 33004), (19, 33082), (Start: 27 @33253 has 1 MA's), (36, 33328), (45, 33367), (54, 33421), (Start: 127 @33589 has 297 MA's), (156, 33724), (165, 33751), (202, 33889), (211, 33931), (214, 33943), (248, 34027), (266, 34096), (267, 34099), (279, 34141), (304, 34249), (324, 34354), (356, 34441), (381, 34489), (400, 34597), (409, 34645),

Gene: Schatzie\_77 Start: 51939, Stop: 53168, Start Num: 83

Candidate Starts for Schatzie\_77:

(Start: 83 @51939 has 28 MA's), (Start: 90 @51957 has 1 MA's), (109, 51996), (177, 52233), (197, 52341), (233, 52461), (234, 52464), (235, 52473), (241, 52488), (250, 52527), (271, 52605), (296, 52710), (303, 52722), (304, 52725), (307, 52734), (317, 52785), (318, 52788), (320, 52806), (348, 52902), (369, 52959), (397, 53079), (398, 53082), (401, 53106), (406, 53130), (407, 53133),

Gene: SeaLumen\_48 Start: 32594, Stop: 33712, Start Num: 127

Candidate Starts for SeaLumen\_48:

(Start: 127 @32594 has 297 MA's), (154, 32732), (162, 32765), (184, 32813), (214, 32966), (216, 32975), (253, 33080), (268, 33149), (284, 33209), (288, 33221), (289, 33224), (292, 33251), (295, 33275), (307, 33302), (313, 33338), (314, 33341), (320, 33377), (321, 33383), (324, 33395), (325, 33398), (356, 33482), (363, 33497), (383, 33539), (390, 33584), (393, 33593), (399, 33632), (401, 33650), (405, 33671), (409, 33686), (410, 33695), (411, 33698),

Gene: Seahorse\_41 Start: 29287, Stop: 28109, Start Num: 127

Candidate Starts for Seahorse\_41:

(Start: 127 @29287 has 297 MA's), (152, 29170), (188, 29050), (216, 28918), (246, 28840), (266, 28753), (269, 28744), (286, 28684), (304, 28594), (325, 28489), (327, 28483), (341, 28441), (383, 28324), (386, 28303), (387, 28300), (389, 28285), (411, 28165),

Gene: Sekhmet\_40 Start: 29999, Stop: 31126, Start Num: 112

Candidate Starts for Sekhmet\_40:

(91, 29960), (Start: 112 @29999 has 19 MA's), (134, 30053), (161, 30176), (175, 30209), (195, 30299), (206, 30332), (266, 30527), (267, 30530), (279, 30572), (289, 30608), (365, 30905), (387, 30983), (392, 31010), (395, 31025), (399, 31052), (410, 31115),

Gene: Sephiroth\_7 Start: 2692, Stop: 1604, Start Num: 124

Candidate Starts for Sephiroth\_7:

(78, 2797), (116, 2713), (Start: 124 @2692 has 3 MA's), (171, 2521), (191, 2431), (194, 2407), (201, 2386), (269, 2155), (284, 2122), (292, 2080), (294, 2065), (300, 2044), (304, 2035), (306, 2029), (321, 1945), (325, 1930), (353, 1843), (364, 1810), (390, 1723), (392, 1717), (397, 1684), (399, 1675), (400, 1669),

Gene: Settecandela\_38 Start: 20588, Stop: 21727, Start Num: 127

Candidate Starts for Settecandela\_38:

(Start: 127 @20588 has 297 MA's), (141, 20642), (149, 20714), (214, 20966), (216, 20975), (244, 21065), (248, 21080), (266, 21158), (286, 21227), (289, 21239), (304, 21311), (315, 21362), (316, 21365), (321, 21401), (343, 21452), (356, 21500), (357, 21506), (363, 21515), (389, 21596), (404, 21689), (408, 21701), (410, 21713),

Gene: SgtBeansprout\_36 Start: 31976, Stop: 33070, Start Num: 127

Candidate Starts for SgtBeansprout\_36:

(25, 31625), (Start: 27 @31640 has 1 MA's), (38, 31733), (45, 31754), (69, 31847), (Start: 127 @31976 has 297 MA's), (140, 32027), (Start: 153 @32102 has 1 MA's), (165, 32138), (192, 32234), (194, 32252), (202, 32276), (213, 32324), (214, 32330), (260, 32462), (266, 32495), (279, 32540), (304, 32648), (324, 32753), (349, 32813), (381, 32888), (400, 32996), (406, 33032),

Gene: Shaobing\_43 Start: 33037, Stop: 34128, Start Num: 127

Candidate Starts for Shaobing\_43:

(26, 32704), (43, 32803), (44, 32812), (48, 32839), (61, 32887), (Start: 127 @33037 has 297 MA's), (138, 33082), (140, 33088), (Start: 153 @33163 has 1 MA's), (165, 33199), (194, 33313), (202, 33337), (214, 33391), (248, 33475), (256, 33508), (266, 33544), (267, 33547), (279, 33589), (295, 33676), (304, 33697), (324, 33805), (349, 33865), (379, 33928), (381, 33940), (400, 34048), (406, 34084),

Gene: Shauna1\_38 Start: 31056, Stop: 32174, Start Num: 127

Candidate Starts for Shauna1\_38:

(Start: 127 @31056 has 297 MA's), (162, 31227), (207, 31392), (214, 31428), (216, 31437), (246, 31518), (268, 31611), (284, 31671), (288, 31683), (289, 31686), (292, 31713), (295, 31737), (307, 31764), (313, 31800), (314, 31803), (320, 31839), (336, 31875), (356, 31944), (363, 31959), (378, 31977), (390, 32046), (393, 32055), (395, 32067), (399, 32094), (401, 32112), (405, 32133), (409, 32148), (410, 32157), (411, 32160),

Gene: ShawBrad\_51 Start: 32319, Stop: 33413, Start Num: 127

Candidate Starts for ShawBrad\_51:

(82, 32232), (97, 32268), (Start: 127 @32319 has 297 MA's), (140, 32370), (154, 32448), (161, 32475), (184, 32520), (190, 32562), (214, 32670), (216, 32679), (248, 32754), (254, 32772), (279, 32871), (288, 32904), (289, 32907), (291, 32919), (314, 33021), (339, 33114), (363, 33186), (387, 33246), (398, 33309), (400, 33321), (411, 33381),

Gene: ShiaSurprise\_42 Start: 32792, Stop: 33880, Start Num: 127

Candidate Starts for ShiaSurprise\_42:

(Start: 127 @32792 has 297 MA's), (147, 32894), (Start: 153 @32918 has 1 MA's), (165, 32954), (202, 33092), (248, 33230), (266, 33299), (267, 33302), (304, 33452), (324, 33557), (381, 33692),

Gene: Shlim410\_38 Start: 32549, Stop: 33676, Start Num: 112

Candidate Starts for Shlim410\_38:

(91, 32510), (Start: 112 @32549 has 19 MA's), (134, 32603), (161, 32726), (175, 32759), (195, 32849), (206, 32882), (266, 33077), (267, 33080), (279, 33122), (289, 33158), (365, 33455), (387, 33533), (392, 33560), (395, 33575), (399, 33602), (410, 33665),

Gene: Shoya\_35 Start: 24881, Stop: 23751, Start Num: 127

Candidate Starts for Shoya\_35:

(Start: 127 @24881 has 297 MA's), (140, 24830), (141, 24827), (194, 24602), (207, 24557), (210, 24536), (211, 24533), (216, 24512), (217, 24509), (253, 24395), (273, 24311), (320, 24098), (326, 24074), (332, 24056), (341, 24029), (349, 24002), (356, 23975), (360, 23960), (365, 23951), (390, 23861), (400, 23807), (403, 23777),

Gene: ShroomBoi\_42 Start: 32032, Stop: 33150, Start Num: 127

Candidate Starts for ShroomBoi\_42:

(Start: 127 @32032 has 297 MA's), (130, 32041), (154, 32170), (162, 32203), (184, 32251), (207, 32368), (214, 32404), (216, 32413), (246, 32494), (253, 32518), (268, 32587), (279, 32626), (283, 32644), (284, 32647), (288, 32659), (289, 32662), (291, 32674), (292, 32689), (295, 32713), (296, 32719), (307, 32740), (313, 32776), (314, 32779), (320, 32815), (321, 32821), (325, 32836), (336, 32851), (356, 32920), (363, 32935), (383, 32977), (390, 33022), (393, 33031), (399, 33070), (401, 33088), (405, 33109), (409, 33124), (410, 33133), (411, 33136),

Gene: Shukran\_42 Start: 28423, Stop: 27284, Start Num: 127

Candidate Starts for Shukran\_42:

(52, 28612), (68, 28567), (87, 28507), (Start: 127 @28423 has 297 MA's), (140, 28375), (173, 28249), (186, 28210), (214, 28066), (217, 28054), (219, 28048), (248, 27955), (253, 27940), (266, 27880), (272, 27856), (274, 27850), (291, 27787), (322, 27619), (332, 27589), (360, 27493), (393, 27385), (395, 27373), (403, 27310),

Gene: SilverChicken\_53 Start: 32857, Stop: 33975, Start Num: 127

Candidate Starts for SilverChicken\_53:

(Start: 127 @32857 has 297 MA's), (130, 32866), (162, 33028), (184, 33076), (207, 33193), (214, 33229), (216, 33238), (253, 33343), (268, 33412), (279, 33451), (283, 33469), (284, 33472), (288, 33484), (289, 33487), (291, 33499), (295, 33538), (296, 33544), (307, 33565), (313, 33601), (314, 33604), (320, 33640), (321, 33646), (324, 33658), (325, 33661), (336, 33676), (356, 33745), (363, 33760), (383, 33802), (390, 33847), (393, 33856), (399, 33895), (401, 33913), (405, 33934), (409, 33949), (410, 33958), (411, 33961),

Gene: SimranZ1\_43 Start: 31600, Stop: 32718, Start Num: 127

Candidate Starts for SimranZ1\_43:

(Start: 127 @31600 has 297 MA's), (154, 31738), (162, 31771), (184, 31819), (214, 31972), (216, 31981), (246, 32062), (268, 32155), (284, 32215), (288, 32227), (289, 32230), (292, 32257), (295, 32281), (307, 32308), (313, 32344), (314, 32347), (320, 32383), (336, 32419), (356, 32488), (363, 32503), (378, 32521), (390, 32590), (393, 32599), (399, 32638), (401, 32656), (405, 32677), (409, 32692), (410, 32701), (411, 32704),

Gene: Sleepyhead\_38 Start: 29423, Stop: 28182, Start Num: 121

Candidate Starts for Sleepyhead\_38:

(98, 29465), (Start: 121 @29423 has 2 MA's), (157, 29285), (181, 29213), (221, 29036), (231, 28997), (237, 28979), (284, 28808), (291, 28781), (295, 28742), (306, 28715), (316, 28667), (321, 28634), (328, 28610), (341, 28568), (350, 28538), (354, 28520), (365, 28499), (380, 28469), (390, 28409), (393, 28400), (409, 28307), (427, 28229), (428, 28205),

Gene: Slimphazie\_41 Start: 32477, Stop: 33565, Start Num: 127

Candidate Starts for Slimphazie\_41:

(Start: 127 @32477 has 297 MA's), (140, 32528), (147, 32579), (Start: 153 @32603 has 1 MA's), (165, 32639), (202, 32777), (214, 32831), (248, 32915), (266, 32984), (267, 32987), (304, 33137), (319, 33215), (324, 33242), (356, 33329), (381, 33377),

Gene: SoilAssassin\_34 Start: 27695, Stop: 28777, Start Num: 126

Candidate Starts for SoilAssassin\_34:

(Start: 75 @27584 has 6 MA's), (Start: 126 @27695 has 52 MA's), (140, 27749), (167, 27869), (244, 28124), (253, 28154), (267, 28214), (286, 28280), (291, 28304), (387, 28634), (392, 28661), (410, 28766),

Gene: SonDevVon\_40 Start: 28176, Stop: 27004, Start Num: 127

Candidate Starts for SonDevVon\_40:

(Start: 127 @28176 has 297 MA's), (152, 28059), (188, 27939), (216, 27807), (246, 27729), (249, 27711), (266, 27642), (269, 27633), (286, 27573), (304, 27483), (325, 27378), (332, 27357), (339, 27333), (341, 27330), (383, 27207), (387, 27183), (389, 27168), (411, 27048), (421, 27021),

Gene: Sonali\_29 Start: 28564, Stop: 29715, Start Num: 127

Candidate Starts for Sonali\_29:

(107, 28522), (Start: 127 @28564 has 297 MA's), (130, 28573), (176, 28741), (222, 28918), (246, 28990), (292, 29185), (366, 29473), (389, 29569), (392, 29581), (393, 29584),

Gene: Soul22\_46 Start: 32314, Stop: 33432, Start Num: 127

Candidate Starts for Soul22\_46:

(Start: 127 @32314 has 297 MA's), (162, 32485), (214, 32686), (216, 32695), (246, 32776), (268, 32869), (284, 32929), (288, 32941), (289, 32944), (292, 32971), (295, 32995), (307, 33022), (313, 33058), (314, 33061), (320, 33097), (336, 33133), (356, 33202), (363, 33217), (378, 33235), (390, 33304), (393, 33313), (399, 33352), (401, 33370), (405, 33391), (409, 33406), (410, 33415), (411, 33418),

Gene: Sparky\_45 Start: 33811, Stop: 34989, Start Num: 129

Candidate Starts for Sparky\_45:

(Start: 129 @33811 has 2 MA's), (140, 33859), (150, 33925), (162, 33970), (206, 34120), (214, 34162), (248, 34276), (255, 34303), (266, 34351), (267, 34354), (289, 34435), (291, 34447), (312, 34552), (320, 34594), (323, 34609), (332, 34624), (340, 34648), (381, 34759), (392, 34819), (405, 34900), (408, 34912), (419, 34951),

Gene: Spartacus\_41 Start: 31407, Stop: 32525, Start Num: 127

Candidate Starts for Spartacus\_41:

(Start: 127 @31407 has 297 MA's), (130, 31416), (162, 31578), (216, 31788), (246, 31869), (268, 31962), (279, 32001), (284, 32022), (288, 32034), (289, 32037), (293, 32073), (295, 32088), (296, 32094), (307, 32115), (313, 32151), (314, 32154), (320, 32190), (321, 32196), (336, 32226), (343, 32247), (356, 32295), (363, 32310), (383, 32352), (390, 32397), (393, 32406), (399, 32445), (401, 32463), (405, 32484), (409, 32499), (410, 32508), (411, 32511),

Gene: Spartan\_32 Start: 30530, Stop: 29343, Start Num: 108

Candidate Starts for Spartan\_32:

(108, 30530), (151, 30392), (180, 30302), (191, 30236), (193, 30227), (227, 30101), (237, 30068), (240, 30062), (245, 30041), (257, 29996), (284, 29912), (310, 29807), (329, 29720), (387, 29540), (395, 29498), (406, 29429), (409, 29417), (414, 29402),

Gene: Spartoi\_37 Start: 25898, Stop: 24921, Start Num: 153

Candidate Starts for Spartoi\_37:

(Start: 127 @26012 has 297 MA's), (136, 25973), (140, 25961), (Start: 153 @25898 has 1 MA's), (158, 25883), (200, 25718), (211, 25670), (212, 25667), (226, 25643), (248, 25583), (274, 25481), (286, 25442), (321, 25262), (328, 25238), (332, 25226), (349, 25166), (356, 25139), (360, 25124), (365, 25115), (381, 25085), (383, 25076), (390, 25031), (392, 25025), (401, 24965), (403, 24947),

Gene: SpicyFrank\_39 Start: 27481, Stop: 26348, Start Num: 127

Candidate Starts for SpicyFrank\_39:

(80, 27571), (88, 27550), (Start: 127 @27481 has 297 MA's), (140, 27430), (186, 27262), (188, 27244), (212, 27130), (216, 27112), (246, 27034), (266, 26947), (269, 26938), (286, 26878), (293, 26830), (304, 26788), (325, 26683), (339, 26638), (341, 26635), (383, 26518), (387, 26494), (389, 26479), (402, 26404), (408, 26374),

Gene: Spock\_41 Start: 32596, Stop: 33684, Start Num: 127

Candidate Starts for Spock\_41:

(23, 32212), (30, 32299), (45, 32374), (Start: 127 @32596 has 297 MA's), (140, 32647), (147, 32698), (Start: 153 @32722 has 1 MA's), (165, 32758), (202, 32896), (248, 33034), (266, 33103), (267, 33106), (304, 33256), (324, 33361), (381, 33496),

Gene: Sporco\_41 Start: 27778, Stop: 26621, Start Num: 113

Candidate Starts for Sporco\_41:

(113, 27778), (Start: 127 @27760 has 297 MA's), (140, 27709), (186, 27541), (188, 27523), (216, 27391), (246, 27313), (248, 27301), (249, 27295), (266, 27226), (269, 27217), (286, 27157), (304, 27067), (325, 26962), (332, 26941), (341, 26914), (383, 26791), (387, 26767), (389, 26752), (402, 26677), (408, 26647),

Gene: Sproutie\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for Sproutie\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Squirty\_35 Start: 28972, Stop: 30078, Start Num: 127

Candidate Starts for Squirty\_35:

(113, 28951), (Start: 127 @28972 has 297 MA's), (161, 29131), (174, 29167), (211, 29332), (248, 29428), (251, 29440), (260, 29473), (266, 29497), (286, 29566), (288, 29575), (289, 29578), (295, 29629), (304, 29650), (319, 29728), (321, 29743), (346, 29803), (356, 29842), (363, 29857), (376, 29881), (383, 29908), (387, 29932), (390, 29953), (393, 29962), (401, 30019),

Gene: StAB\_26 Start: 25588, Stop: 24371, Start Num: 121

Candidate Starts for StAB\_26:

(91, 25651), (Start: 121 @25588 has 2 MA's), (159, 25408), (169, 25375), (198, 25243), (224, 25153), (229, 25135), (234, 25120), (237, 25108), (245, 25081), (252, 25054), (257, 25021), (259, 25012), (277, 24949), (282, 24931), (287, 24916), (291, 24895), (306, 24829), (321, 24751), (327, 24730), (331, 24718), (332, 24715), (344, 24685), (371, 24616), (375, 24610), (380, 24598), (383, 24583), (387, 24559), (388, 24556), (389, 24544), (393, 24529), (395, 24517), (398, 24496), (400, 24484), (405, 24451), (411, 24424), (420, 24406), (425, 24385), (426, 24376),

Gene: StAnnes\_42 Start: 33543, Stop: 34661, Start Num: 127

Candidate Starts for StAnnes\_42:

(Start: 127 @33543 has 297 MA's), (130, 33552), (162, 33714), (207, 33879), (214, 33915), (216, 33924), (253, 34029), (268, 34098), (279, 34137), (284, 34158), (288, 34170), (289, 34173), (291, 34185), (295, 34224), (296, 34230), (307, 34251), (313, 34287), (314, 34290), (320, 34326), (321, 34332), (325, 34347), (356, 34431), (363, 34446), (383, 34488), (390, 34533), (393, 34542), (399, 34581), (401, 34599), (405, 34620), (409, 34635), (410, 34644), (411, 34647),

Gene: Stellammi\_65 Start: 36349, Stop: 37437, Start Num: 127

Candidate Starts for Stellammi\_65:

(Start: 127 @36349 has 297 MA's), (140, 36400), (154, 36478), (163, 36505), (178, 36541), (184, 36556), (186, 36568), (190, 36598), (203, 36658), (208, 36682), (211, 36697), (214, 36709), (216, 36718), (246, 36781), (248, 36793), (255, 36814), (266, 36862), (275, 36895), (286, 36931), (289, 36943), (295, 36994), (308, 37024), (324, 37117), (332, 37129), (340, 37150), (343, 37156), (349, 37177), (351, 37183), (356, 37204), (363, 37219), (370, 37231), (376, 37243), (387, 37294), (392, 37321), (400, 37369), (412, 37429),

Gene: Stiles\_27 Start: 25121, Stop: 23991, Start Num: 123

Candidate Starts for Stiles\_27:

(Start: 123 @25121 has 3 MA's), (131, 25106), (139, 25082), (161, 24968), (177, 24929), (187, 24887), (191, 24854), (193, 24845), (198, 24818), (204, 24800), (227, 24716), (231, 24701), (245, 24656), (263, 24596), (281, 24554), (284, 24542), (287, 24536), (291, 24515), (296, 24470), (302, 24461), (303, 24458), (304, 24455), (309, 24434), (324, 24350), (326, 24344), (332, 24326), (342, 24296), (367, 24239), (384, 24197), (387, 24182), (389, 24167), (390, 24161), (393, 24152), (394, 24143), (399, 24113), (406, 24071), (410, 24050), (411, 24047), (414, 24038), (423, 24011), (426, 23996),

Gene: Stinson\_42 Start: 32990, Stop: 34078, Start Num: 127

Candidate Starts for Stinson\_42:

(Start: 127 @32990 has 297 MA's), (147, 33092), (Start: 153 @33116 has 1 MA's), (165, 33152), (186, 33203), (194, 33266), (202, 33290), (214, 33344), (215, 33347), (248, 33428), (266, 33497), (267, 33500), (304, 33650), (319, 33728), (324, 33755), (381, 33890),

Gene: Strobilo\_43 Start: 34292, Stop: 35392, Start Num: 127

Candidate Starts for Strobilo\_43:

(Start: 127 @34292 has 297 MA's), (132, 34310), (140, 34343), (Start: 153 @34418 has 1 MA's), (165, 34454), (194, 34568), (202, 34592), (214, 34646), (261, 34787), (266, 34811), (267, 34814), (279, 34856), (304, 34964), (324, 35069), (345, 35114), (349, 35129), (400, 35321),

Gene: Strokeseat\_41 Start: 31786, Stop: 32904, Start Num: 127

Candidate Starts for Strokeseat\_41:

(Start: 127 @31786 has 297 MA's), (162, 31957), (207, 32122), (214, 32158), (216, 32167), (253, 32272), (268, 32341), (279, 32380), (284, 32401), (288, 32413), (289, 32416), (291, 32428), (295, 32467), (296, 32473), (307, 32494), (313, 32530), (314, 32533), (320, 32569), (321, 32575), (324, 32587), (325, 32590), (336, 32605), (356, 32674), (363, 32689), (378, 32707), (390, 32776), (393, 32785), (399, 32824), (401, 32842), (405, 32863), (409, 32878), (410, 32887), (411, 32890),

Gene: Sulley\_41 Start: 32725, Stop: 33810, Start Num: 127

Candidate Starts for Sulley\_41:

(Start: 127 @32725 has 297 MA's), (147, 32827), (148, 32836), (Start: 153 @32851 has 1 MA's), (165, 32887), (202, 33025), (214, 33079), (248, 33163), (266, 33232), (267, 33235), (304, 33385), (324, 33490), (356, 33577), (381, 33625), (406, 33769),

Gene: Sunshine23\_31 Start: 28591, Stop: 29733, Start Num: 130

Candidate Starts for Sunshine23\_31:

(107, 28540), (Start: 127 @28582 has 297 MA's), (130, 28591), (176, 28759), (222, 28936), (246, 29008), (292, 29203), (366, 29491), (389, 29587), (392, 29599), (393, 29602),

Gene: SuperGrey\_42 Start: 32615, Stop: 33742, Start Num: 127

Candidate Starts for SuperGrey\_42:

(77, 32513), (99, 32570), (Start: 127 @32615 has 297 MA's), (130, 32624), (162, 32786), (183, 32837), (186, 32855), (192, 32900), (214, 32996), (216, 33005), (246, 33086), (253, 33110), (268, 33179), (279, 33218), (284, 33239), (288, 33251), (289, 33254), (292, 33281), (295, 33305), (296, 33311), (307, 33332), (313, 33368), (314, 33371), (320, 33407), (321, 33413), (324, 33425), (325, 33428),

(336, 33443), (356, 33512), (363, 33527), (383, 33569), (390, 33614), (393, 33623), (399, 33662), (401, 33680), (405, 33701), (409, 33716), (410, 33725), (411, 33728),

Gene: Suscepit\_39 Start: 30564, Stop: 31646, Start Num: 126

Candidate Starts for Suscepit\_39:

(Start: 75 @30453 has 6 MA's), (Start: 126 @30564 has 52 MA's), (140, 30618), (167, 30738), (244, 30993), (253, 31023), (267, 31083), (286, 31149), (291, 31173), (387, 31503), (392, 31530), (410, 31635),

Gene: SwagPigglett\_45 Start: 33012, Stop: 34130, Start Num: 127

Candidate Starts for SwagPigglett\_45:

(Start: 127 @33012 has 297 MA's), (154, 33150), (162, 33183), (184, 33231), (207, 33348), (214, 33384), (216, 33393), (253, 33498), (268, 33567), (284, 33627), (288, 33639), (289, 33642), (291, 33654), (292, 33669), (295, 33693), (296, 33699), (307, 33720), (313, 33756), (314, 33759), (320, 33795), (321, 33801), (324, 33813), (325, 33816), (356, 33900), (363, 33915), (383, 33957), (390, 34002), (393, 34011), (399, 34050), (401, 34068), (405, 34089), (409, 34104), (410, 34113), (411, 34116),

Gene: Syleon\_7 Start: 2611, Stop: 1523, Start Num: 124

Candidate Starts for Syleon\_7:

(78, 2716), (116, 2632), (Start: 124 @2611 has 3 MA's), (171, 2440), (191, 2350), (194, 2326), (201, 2305), (269, 2074), (284, 2041), (292, 1999), (294, 1984), (300, 1963), (304, 1954), (306, 1948), (321, 1864), (325, 1849), (353, 1762), (364, 1729), (392, 1636), (397, 1603), (399, 1594), (400, 1588),

Gene: TChen\_44 Start: 33582, Stop: 34700, Start Num: 127

Candidate Starts for TChen\_44:

(Start: 127 @33582 has 297 MA's), (130, 33591), (154, 33720), (162, 33753), (184, 33801), (214, 33954), (216, 33963), (246, 34044), (268, 34137), (284, 34197), (288, 34209), (289, 34212), (292, 34239), (295, 34263), (307, 34290), (313, 34326), (314, 34329), (320, 34365), (336, 34401), (356, 34470), (363, 34485), (378, 34503), (390, 34572), (393, 34581), (399, 34620), (401, 34638), (405, 34659), (409, 34674),

Gene: TClif\_45 Start: 33489, Stop: 34589, Start Num: 127

Candidate Starts for TClif\_45:

(Start: 127 @33489 has 297 MA's), (Start: 153 @33615 has 1 MA's), (165, 33651), (202, 33789), (214, 33843), (248, 33927), (261, 33984), (266, 34008), (267, 34011), (279, 34053), (304, 34161), (314, 34212), (323, 34263), (324, 34266), (345, 34311), (349, 34326), (381, 34401), (389, 34449), (406, 34545),

Gene: Tachez\_41 Start: 32439, Stop: 33527, Start Num: 127

Candidate Starts for Tachez\_41:

(Start: 127 @32439 has 297 MA's), (140, 32490), (147, 32541), (Start: 153 @32565 has 1 MA's), (165, 32601), (202, 32739), (214, 32793), (248, 32877), (266, 32946), (267, 32949), (304, 33099), (319, 33177), (324, 33204), (356, 33291), (381, 33339),

Gene: TaiwanKao\_43 Start: 32721, Stop: 33809, Start Num: 127

Candidate Starts for TaiwanKao\_43:

(Start: 127 @32721 has 297 MA's), (147, 32823), (Start: 153 @32847 has 1 MA's), (165, 32883), (214, 33075), (248, 33159), (266, 33228), (267, 33231), (304, 33381), (319, 33459), (324, 33486), (381, 33621), (406, 33765),

Gene: Taj\_45 Start: 32606, Stop: 33709, Start Num: 127

Candidate Starts for Taj\_45:

(Start: 127 @32606 has 297 MA's), (140, 32654), (154, 32735), (161, 32762), (214, 32975), (226, 32999), (246, 33047), (266, 33128), (286, 33197), (288, 33206), (292, 33236), (295, 33260), (304, 33281), (319, 33359), (321, 33374), (346, 33434), (356, 33473), (363, 33488), (376, 33512), (383, 33539), (387, 33563), (390, 33584), (393, 33593), (400, 33638), (401, 33650),

Gene: Tayonia\_39 Start: 30563, Stop: 31645, Start Num: 126

Candidate Starts for Tayonia\_39:

(Start: 75 @30452 has 6 MA's), (Start: 126 @30563 has 52 MA's), (140, 30617), (167, 30737), (244, 30992), (253, 31022), (267, 31082), (286, 31148), (291, 31172), (387, 31502), (392, 31529), (410, 31634),

Gene: Teejan\_39 Start: 34238, Stop: 35683, Start Num: 25

Candidate Starts for Teejan\_39:

(25, 34238), (Start: 27 @34253 has 1 MA's), (38, 34346), (45, 34367), (69, 34460), (Start: 127 @34589 has 297 MA's), (140, 34640), (Start: 153 @34715 has 1 MA's), (165, 34751), (192, 34847), (194, 34865), (202, 34889), (213, 34937), (214, 34943), (260, 35075), (266, 35108), (279, 35153), (304, 35261), (324, 35366), (349, 35426), (381, 35501), (400, 35609), (406, 35645),

Gene: ThankyouJordi\_38 Start: 31428, Stop: 32621, Start Num: 75

Candidate Starts for ThankyouJordi\_38:

(Start: 75 @31428 has 6 MA's), (Start: 126 @31539 has 52 MA's), (140, 31593), (167, 31713), (253, 31998), (267, 32058), (286, 32124), (291, 32148), (387, 32478), (392, 32505), (410, 32610),

Gene: ThayneTheZag\_40 Start: 27570, Stop: 26437, Start Num: 127

Candidate Starts for ThayneTheZag\_40:

(Start: 127 @27570 has 297 MA's), (140, 27519), (186, 27351), (188, 27333), (212, 27219), (216, 27201), (246, 27123), (266, 27036), (269, 27027), (286, 26967), (296, 26898), (304, 26877), (339, 26727), (341, 26724), (360, 26658), (383, 26607), (387, 26583), (389, 26568), (399, 26514), (402, 26493), (408, 26463),

Gene: Thibault\_69 Start: 48145, Stop: 49374, Start Num: 83

Candidate Starts for Thibault\_69:

(Start: 83 @48145 has 28 MA's), (Start: 90 @48163 has 1 MA's), (109, 48202), (177, 48439), (197, 48547), (233, 48667), (234, 48670), (235, 48679), (241, 48694), (250, 48733), (271, 48811), (303, 48928), (304, 48931), (307, 48940), (317, 48991), (318, 48994), (320, 49012), (348, 49108), (369, 49165), (397, 49285), (398, 49288), (401, 49312), (406, 49336), (407, 49339),

Gene: Thimann\_36 Start: 28027, Stop: 29154, Start Num: 112

Candidate Starts for Thimann\_36:

(39, 27808), (47, 27844), (Start: 112 @28027 has 19 MA's), (134, 28081), (175, 28237), (195, 28327), (206, 28360), (266, 28555), (267, 28558), (279, 28600), (289, 28636), (365, 28933), (387, 29011), (395, 29053), (399, 29080), (410, 29143),

Gene: ThreeRngTarjay\_79 Start: 53224, Stop: 54453, Start Num: 83

Candidate Starts for ThreeRngTarjay\_79:

(Start: 83 @53224 has 28 MA's), (Start: 90 @53242 has 1 MA's), (109, 53281), (177, 53518), (197, 53626), (233, 53746), (234, 53749), (235, 53758), (241, 53773), (250, 53812), (271, 53890), (296, 53995), (303, 54007), (304, 54010), (307, 54019), (317, 54070), (318, 54073), (320, 54091), (348, 54187), (369, 54244), (397, 54364), (398, 54367), (401, 54391), (406, 54415), (407, 54418),

Gene: Tiff81\_35 Start: 24880, Stop: 23702, Start Num: 127

Candidate Starts for Tiff81\_35:

(Start: 127 @24880 has 297 MA's), (152, 24763), (170, 24715), (188, 24643), (208, 24547), (216, 24511), (242, 24448), (246, 24433), (266, 24346), (269, 24337), (286, 24277), (293, 24229), (325, 24082), (327, 24076), (341, 24034), (383, 23917), (386, 23896), (387, 23893), (389, 23878), (411, 23758),

Gene: TimTam\_39 Start: 32012, Stop: 33094, Start Num: 126

Candidate Starts for TimTam\_39:

(Start: 75 @31901 has 6 MA's), (Start: 126 @32012 has 52 MA's), (140, 32066), (167, 32186), (243, 32432), (244, 32441), (253, 32471), (267, 32531), (286, 32597), (291, 32621), (387, 32951), (392, 32978), (410, 33083),

Gene: TiniBug\_42 Start: 33372, Stop: 34460, Start Num: 127

Candidate Starts for TiniBug\_42:

(45, 33150), (Start: 127 @33372 has 297 MA's), (140, 33423), (147, 33474), (Start: 153 @33498 has 1 MA's), (165, 33534), (194, 33648), (214, 33726), (248, 33810), (266, 33879), (267, 33882), (304, 34032), (324, 34137), (381, 34272), (406, 34416),

Gene: Tiri\_42 Start: 32775, Stop: 33863, Start Num: 127

Candidate Starts for Tiri\_42:

(Start: 127 @32775 has 297 MA's), (147, 32877), (Start: 153 @32901 has 1 MA's), (165, 32937), (202, 33075), (214, 33129), (248, 33213), (266, 33282), (267, 33285), (304, 33435), (324, 33540), (356, 33627), (381, 33675), (406, 33819),

Gene: Topper\_41 Start: 32595, Stop: 33683, Start Num: 127

Candidate Starts for Topper\_41:

(13, 31992), (21, 32169), (35, 32334), (45, 32373), (Start: 127 @32595 has 297 MA's), (140, 32646), (147, 32697), (Start: 153 @32721 has 1 MA's), (165, 32757), (202, 32895), (248, 33033), (266, 33102), (267, 33105), (304, 33255), (324, 33360), (381, 33495),

Gene: Torres\_39 Start: 34590, Stop: 35684, Start Num: 127

Candidate Starts for Torres\_39:

(25, 34239), (Start: 27 @34254 has 1 MA's), (38, 34347), (45, 34368), (69, 34461), (Start: 127 @34590 has 297 MA's), (140, 34641), (Start: 153 @34716 has 1 MA's), (165, 34752), (192, 34848), (194, 34866), (202, 34890), (213, 34938), (214, 34944), (260, 35076), (266, 35109), (279, 35154), (304, 35262), (324, 35367), (349, 35427), (381, 35502), (400, 35610), (406, 35646),

Gene: TouchMeNot\_32 Start: 30114, Stop: 28903, Start Num: 128

Candidate Starts for TouchMeNot\_32:

(Start: 128 @30114 has 4 MA's), (160, 29940), (197, 29799), (244, 29640), (284, 29490), (303, 29400), (372, 29136), (381, 29100), (382, 29094), (413, 28929), (417, 28914), (418, 28911),

Gene: TreyKay\_42 Start: 32665, Stop: 33753, Start Num: 127

Candidate Starts for TreyKay\_42:

(62, 32518), (Start: 127 @32665 has 297 MA's), (147, 32767), (Start: 153 @32791 has 1 MA's), (165, 32827), (202, 32965), (214, 33019), (248, 33103), (266, 33172), (267, 33175), (304, 33325), (324, 33430), (356, 33517), (381, 33565), (406, 33709),

Gene: Trice\_37 Start: 31641, Stop: 33071, Start Num: 27

Candidate Starts for Trice\_37:

(25, 31626), (Start: 27 @31641 has 1 MA's), (38, 31734), (45, 31755), (69, 31848), (Start: 127 @31977 has 297 MA's), (140, 32028), (Start: 153 @32103 has 1 MA's), (165, 32139), (192, 32235), (194, 32253), (202, 32277), (213, 32325), (214, 32331), (260, 32463), (266, 32496), (279, 32541), (304, 32649), (324, 32754), (349, 32814), (381, 32889), (400, 32997), (406, 33033),

Gene: Troy\_27 Start: 25228, Stop: 23900, Start Num: 76

Candidate Starts for Troy\_27:

(Start: 76 @25228 has 3 MA's), (89, 25192), (93, 25183), (Start: 121 @25126 has 2 MA's), (181, 24916), (182, 24913), (199, 24814), (205, 24796), (219, 24730), (221, 24724), (224, 24712), (264, 24547), (276, 24502), (282, 24481), (286, 24469), (291, 24445), (293, 24421), (294, 24415), (306, 24379), (327, 24283), (347, 24226), (358, 24181), (373, 24157), (380, 24142), (392, 24076), (393, 24073), (396, 24046), (400, 24028), (411, 23968), (426, 23914),

Gene: TruffulaTree\_41 Start: 32473, Stop: 33561, Start Num: 127

Candidate Starts for TruffulaTree\_41:

(Start: 127 @32473 has 297 MA's), (140, 32524), (147, 32575), (Start: 153 @32599 has 1 MA's), (165, 32635), (202, 32773), (214, 32827), (248, 32911), (266, 32980), (267, 32983), (304, 33133), (319, 33211), (324, 33238), (356, 33325), (381, 33373),

Gene: Trumpet\_39 Start: 30564, Stop: 31646, Start Num: 126

Candidate Starts for Trumpet\_39:

(Start: 75 @30453 has 6 MA's), (Start: 126 @30564 has 52 MA's), (140, 30618), (167, 30738), (244, 30993), (253, 31023), (267, 31083), (286, 31149), (291, 31173), (387, 31503), (392, 31530), (410, 31635),

Gene: TuertoX\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for TuertoX\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: Tuti\_39 Start: 29576, Stop: 30703, Start Num: 112

Candidate Starts for Tuti\_39:

(39, 29357), (47, 29393), (Start: 112 @29576 has 19 MA's), (134, 29630), (161, 29753), (175, 29786), (206, 29909), (266, 30104), (267, 30107), (279, 30149), (289, 30185), (365, 30482), (395, 30602), (399, 30629), (410, 30692),

Gene: Twinkle\_39 Start: 33608, Stop: 34735, Start Num: 112

Candidate Starts for Twinkle\_39:

(91, 33569), (Start: 112 @33608 has 19 MA's), (134, 33662), (161, 33785), (175, 33818), (195, 33908), (206, 33941), (266, 34136), (267, 34139), (279, 34181), (289, 34217), (365, 34514), (387, 34592), (392, 34619), (395, 34634), (399, 34661), (410, 34724),

Gene: Twitch\_41 Start: 32597, Stop: 33685, Start Num: 127

Candidate Starts for Twitch\_41:

(13, 31994), (21, 32171), (35, 32336), (45, 32375), (Start: 127 @32597 has 297 MA's), (140, 32648), (147, 32699), (Start: 153 @32723 has 1 MA's), (165, 32759), (202, 32897), (248, 33035), (266, 33104), (267, 33107), (304, 33257), (324, 33362), (381, 33497),

Gene: Urkel\_42 Start: 33376, Stop: 34464, Start Num: 127

Candidate Starts for Urkel\_42:

(45, 33154), (Start: 127 @33376 has 297 MA's), (140, 33427), (147, 33478), (Start: 153 @33502 has 1 MA's), (165, 33538), (194, 33652), (214, 33730), (248, 33814), (266, 33883), (267, 33886), (304, 34036), (324, 34141), (381, 34276), (406, 34420),

Gene: VRedHorse\_42 Start: 32159, Stop: 33286, Start Num: 127

Candidate Starts for VRedHorse\_42:

(77, 32057), (99, 32114), (Start: 127 @32159 has 297 MA's), (130, 32168), (162, 32330), (183, 32381), (186, 32399), (192, 32444), (207, 32504), (214, 32540), (216, 32549), (253, 32654), (268, 32723), (284, 32783), (288, 32795), (289, 32798), (291, 32810), (292, 32825), (295, 32849), (296, 32855), (307, 32876), (313, 32912), (314, 32915), (320, 32951), (321, 32957), (325, 32972), (336, 32987), (356, 33056), (363, 33071), (383, 33113), (390, 33158), (393, 33167), (399, 33206), (401, 33224), (405, 33245), (409, 33260), (410, 33269), (411, 33272),

Gene: Validus\_45 Start: 33099, Stop: 34196, Start Num: 127

Candidate Starts for Validus\_45:

(Start: 127 @33099 has 297 MA's), (Start: 153 @33225 has 1 MA's), (165, 33261), (194, 33375), (214, 33453), (248, 33537), (266, 33618), (267, 33621), (279, 33663), (295, 33750), (304, 33771), (324, 33876), (349, 33936), (379, 33999), (406, 34155),

Gene: Veliki\_41 Start: 32513, Stop: 33601, Start Num: 127

Candidate Starts for Veliki\_41:

(Start: 127 @32513 has 297 MA's), (140, 32564), (147, 32615), (Start: 153 @32639 has 1 MA's), (165, 32675), (202, 32813), (214, 32867), (248, 32951), (266, 33020), (267, 33023), (304, 33173), (319, 33251), (324, 33278), (356, 33365), (381, 33413),

Gene: Velveteen\_37 Start: 27903, Stop: 29021, Start Num: 127

Candidate Starts for Velveteen\_37:

(Start: 127 @27903 has 297 MA's), (162, 28074), (207, 28239), (214, 28275), (216, 28284), (246, 28365), (253, 28389), (268, 28458), (279, 28497), (283, 28515), (284, 28518), (288, 28530), (289, 28533), (291, 28545), (292, 28560), (295, 28584), (296, 28590), (307, 28611), (313, 28647), (314, 28650), (320, 28686), (321, 28692), (324, 28704), (325, 28707), (336, 28722), (356, 28791), (363, 28806), (383, 28848), (390, 28893), (393, 28902), (399, 28941), (401, 28959), (405, 28980), (409, 28995), (410, 29004), (411, 29007),

Gene: Violac\_42 Start: 32601, Stop: 33719, Start Num: 127

Candidate Starts for Violac\_42:

(Start: 127 @32601 has 297 MA's), (130, 32610), (162, 32772), (207, 32937), (214, 32973), (216, 32982), (253, 33087), (268, 33156), (275, 33183), (279, 33195), (284, 33216), (288, 33228), (289, 33231), (291, 33243), (292, 33258), (295, 33282), (296, 33288), (307, 33309), (313, 33345), (314, 33348), (320, 33384), (321, 33390), (325, 33405), (336, 33420), (356, 33489), (363, 33504), (390, 33591), (393, 33600), (399, 33639), (401, 33657), (405, 33678), (409, 33693), (410, 33702), (411, 33705),

Gene: Vopal\_43 Start: 30649, Stop: 29477, Start Num: 127

Candidate Starts for Vopal\_43:

(Start: 127 @30649 has 297 MA's), (140, 30598), (186, 30430), (188, 30412), (196, 30361), (216, 30280), (246, 30202), (248, 30190), (266, 30115), (269, 30106), (286, 30046), (304, 29956), (325, 29851), (332, 29830), (339, 29806), (341, 29803), (361, 29734), (383, 29680), (387, 29656), (389, 29641), (411, 29521), (421, 29494),

Gene: Wachhund\_44 Start: 32077, Stop: 33195, Start Num: 127

Candidate Starts for Wachhund\_44:

(Start: 127 @32077 has 297 MA's), (130, 32086), (162, 32248), (207, 32413), (214, 32449), (216, 32458), (253, 32563), (268, 32632), (279, 32671), (284, 32692), (288, 32704), (289, 32707), (291, 32719), (295, 32758), (296, 32764), (307, 32785), (313, 32821), (314, 32824), (320, 32860), (321, 32866), (324, 32878), (325, 32881), (356, 32965), (363, 32980), (383, 33022), (390, 33067), (393, 33076), (399, 33115), (401, 33133), (405, 33154), (409, 33169), (410, 33178), (411, 33181),

Gene: Wanda\_85 Start: 52091, Stop: 53320, Start Num: 83

Candidate Starts for Wanda\_85:

(Start: 83 @52091 has 28 MA's), (Start: 90 @52109 has 1 MA's), (109, 52148), (177, 52385), (197, 52493), (233, 52613), (234, 52616), (235, 52625), (241, 52640), (250, 52679), (271, 52757), (296, 52862), (303, 52874), (304, 52877), (307, 52886), (317, 52937), (318, 52940), (320, 52958), (348, 53054), (369, 53111), (397, 53231), (398, 53234), (401, 53258), (406, 53282), (407, 53285),

Gene: Wee\_46 Start: 33180, Stop: 34283, Start Num: 127

Candidate Starts for Wee\_46:

(Start: 127 @33180 has 297 MA's), (140, 33228), (154, 33309), (161, 33336), (214, 33549), (226, 33573), (246, 33621), (266, 33702), (286, 33771), (288, 33780), (292, 33810), (295, 33834), (304, 33855), (319, 33933), (321, 33948), (346, 34008), (356, 34047), (363, 34062), (376, 34086), (383, 34113), (387, 34137), (390, 34158), (393, 34167), (400, 34212), (401, 34224),

Gene: WelcomeAyanna\_38 Start: 31686, Stop: 32768, Start Num: 126

Candidate Starts for WelcomeAyanna\_38:

(Start: 75 @31575 has 6 MA's), (Start: 126 @31686 has 52 MA's), (140, 31740), (167, 31860), (253, 32145), (267, 32205), (286, 32271), (291, 32295), (387, 32625), (392, 32652), (410, 32757),

Gene: Whatsapiecost\_41 Start: 31324, Stop: 32442, Start Num: 127

Candidate Starts for Whatsapiecost\_41:

(Start: 127 @31324 has 297 MA's), (154, 31462), (162, 31495), (184, 31543), (207, 31660), (214, 31696), (216, 31705), (253, 31810), (268, 31879), (284, 31939), (288, 31951), (289, 31954), (291, 31966), (292, 31981), (295, 32005), (296, 32011), (307, 32032), (313, 32068), (314, 32071), (320, 32107), (321, 32113), (324, 32125), (325, 32128), (356, 32212), (363, 32227), (383, 32269), (390, 32314), (393, 32323), (399, 32362), (401, 32380), (405, 32401), (409, 32416), (410, 32425), (411, 32428),

Gene: Whiteclaw\_37 Start: 27875, Stop: 28957, Start Num: 126

Candidate Starts for Whiteclaw\_37:

(Start: 74 @27758 has 2 MA's), (Start: 75 @27764 has 6 MA's), (Start: 126 @27875 has 52 MA's), (140, 27929), (167, 28049), (244, 28304), (253, 28334), (267, 28394), (286, 28460), (291, 28484), (313, 28589), (387, 28814), (392, 28841), (410, 28946),

Gene: WillSterrel\_41 Start: 32521, Stop: 33639, Start Num: 127

Candidate Starts for WillSterrel\_41:

(Start: 127 @32521 has 297 MA's), (130, 32530), (162, 32692), (216, 32902), (246, 32983), (253, 33007), (268, 33076), (284, 33136), (288, 33148), (289, 33151), (291, 33163), (292, 33178), (295, 33202), (296, 33208), (307, 33229), (313, 33265), (314, 33268), (320, 33304), (321, 33310), (325, 33325), (356, 33409), (363, 33424), (383, 33466), (390, 33511), (393, 33520), (399, 33559), (401, 33577), (405, 33598), (409, 33613), (410, 33622), (411, 33625),

Gene: Windest\_40 Start: 26669, Stop: 25497, Start Num: 127

Candidate Starts for Windest\_40:

(Start: 127 @26669 has 297 MA's), (140, 26618), (186, 26450), (188, 26432), (216, 26300), (246, 26222), (248, 26210), (249, 26204), (266, 26135), (269, 26126), (286, 26066), (304, 25976), (332, 25850), (339, 25826), (341, 25823), (383, 25700), (387, 25676), (389, 25661), (411, 25541), (421, 25514),

Gene: WinkNick\_41 Start: 29791, Stop: 30918, Start Num: 112

Candidate Starts for WinkNick\_41:

(91, 29752), (Start: 112 @29791 has 19 MA's), (134, 29845), (161, 29968), (175, 30001), (195, 30091), (206, 30124), (266, 30319), (267, 30322), (279, 30364), (289, 30400), (365, 30697), (387, 30775), (392, 30802), (395, 30817), (399, 30844), (410, 30907),

Gene: Wrigley\_43 Start: 31922, Stop: 33004, Start Num: 126

Candidate Starts for Wrigley\_43:

(Start: 75 @31811 has 6 MA's), (79, 31826), (Start: 126 @31922 has 52 MA's), (140, 31976), (167, 32096), (253, 32381), (267, 32441), (286, 32507), (291, 32531), (313, 32636), (327, 32702), (398, 32924), (400, 32936), (410, 32993),

Gene: XFactor\_41 Start: 32278, Stop: 33396, Start Num: 127

Candidate Starts for XFactor\_41:

(Start: 127 @32278 has 297 MA's), (162, 32449), (207, 32614), (214, 32650), (216, 32659), (253, 32764), (268, 32833), (279, 32872), (283, 32890), (284, 32893), (288, 32905), (289, 32908), (291, 32920), (292, 32935), (295, 32959), (296, 32965), (307, 32986), (313, 33022), (314, 33025), (320, 33061), (321, 33067), (325, 33082), (336, 33097), (356, 33166), (363, 33181), (383, 33223), (390, 33268), (393, 33277), (399, 33316), (401, 33334), (405, 33355), (409, 33370), (410, 33379), (411, 33382),

Gene: Xiaokay\_72 Start: 49061, Stop: 50290, Start Num: 83

Candidate Starts for Xiaokay\_72:

(Start: 83 @49061 has 28 MA's), (Start: 90 @49079 has 1 MA's), (109, 49118), (177, 49355), (197, 49463), (233, 49583), (234, 49586), (235, 49595), (241, 49610), (250, 49649), (271, 49727), (303, 49844), (304, 49847), (307, 49856), (317, 49907), (318, 49910), (320, 49928), (348, 50024), (369, 50081), (397, 50201), (398, 50204), (401, 50228), (406, 50252), (407, 50255),

Gene: Yeet\_76 Start: 51441, Stop: 52670, Start Num: 83

Candidate Starts for Yeet\_76:

(Start: 83 @51441 has 28 MA's), (Start: 90 @51459 has 1 MA's), (109, 51498), (177, 51735), (197, 51843), (233, 51963), (234, 51966), (235, 51975), (241, 51990), (250, 52029), (271, 52107), (296, 52212), (303, 52224), (304, 52227), (307, 52236), (317, 52287), (318, 52290), (320, 52308), (348, 52404), (369, 52461), (397, 52581), (398, 52584), (401, 52608), (406, 52632), (407, 52635),

Gene: Yeet412\_34 Start: 27696, Stop: 28778, Start Num: 126

Candidate Starts for Yeet412\_34:

(Start: 75 @27585 has 6 MA's), (Start: 126 @27696 has 52 MA's), (140, 27750), (167, 27870), (244, 28125), (253, 28155), (267, 28215), (286, 28281), (291, 28305), (387, 28635), (392, 28662), (410, 28767),

Gene: YoungHarleezy\_40 Start: 27782, Stop: 26643, Start Num: 127

Candidate Starts for YoungHarleezy\_40:

(104, 27815), (Start: 127 @27782 has 297 MA's), (140, 27731), (186, 27563), (188, 27545), (216, 27413), (246, 27335), (248, 27323), (249, 27317), (266, 27248), (269, 27239), (286, 27179), (304, 27089), (325, 26984), (332, 26963), (341, 26936), (383, 26813), (387, 26789), (389, 26774), (402, 26699), (408, 26669),

Gene: YoureAdopted\_40 Start: 32682, Stop: 33770, Start Num: 127

Candidate Starts for YoureAdopted\_40:

(Start: 127 @32682 has 297 MA's), (147, 32784), (Start: 153 @32808 has 1 MA's), (165, 32844), (202, 32982), (214, 33036), (248, 33120), (266, 33189), (267, 33192), (304, 33342), (324, 33447), (356, 33534), (381, 33582), (390, 33636), (406, 33726),

Gene: Yunkel11\_44 Start: 32525, Stop: 33625, Start Num: 127

Candidate Starts for Yunkel11\_44:

(60, 32375), (Start: 127 @32525 has 297 MA's), (140, 32576), (Start: 153 @32651 has 1 MA's), (165, 32687), (168, 32690), (194, 32801), (261, 33020), (266, 33044), (267, 33047), (295, 33176), (304,

33197), (324, 33302), (356, 33389), (381, 33437),

Gene: Zameen\_39 Start: 30563, Stop: 31645, Start Num: 126

Candidate Starts for Zameen\_39:

(Start: 75 @30452 has 6 MA's), (Start: 126 @30563 has 52 MA's), (140, 30617), (167, 30737), (244, 30992), (253, 31022), (267, 31082), (286, 31148), (291, 31172), (387, 31502), (392, 31529), (410, 31634),

Gene: Zavala\_42 Start: 32759, Stop: 33847, Start Num: 127

Candidate Starts for Zavala\_42:

(Start: 127 @32759 has 297 MA's), (147, 32861), (Start: 153 @32885 has 1 MA's), (165, 32921), (202, 33059), (214, 33113), (248, 33197), (266, 33266), (267, 33269), (280, 33317), (304, 33419), (324, 33524), (356, 33611), (381, 33659), (406, 33803),

Gene: Zelink\_79 Start: 53554, Stop: 54765, Start Num: 90

Candidate Starts for Zelink\_79:

(Start: 83 @53536 has 28 MA's), (Start: 90 @53554 has 1 MA's), (109, 53593), (177, 53830), (197, 53938), (233, 54058), (234, 54061), (235, 54070), (241, 54085), (250, 54124), (271, 54202), (296, 54307), (303, 54319), (304, 54322), (307, 54331), (317, 54382), (318, 54385), (320, 54403), (348, 54499), (369, 54556), (397, 54676), (398, 54679), (401, 54703), (406, 54727), (407, 54730),

Gene: Zirinka\_36 Start: 31303, Stop: 32385, Start Num: 126

Candidate Starts for Zirinka\_36:

(Start: 75 @31192 has 6 MA's), (Start: 126 @31303 has 52 MA's), (140, 31357), (167, 31477), (244, 31732), (253, 31762), (267, 31822), (286, 31888), (291, 31912), (387, 32242), (392, 32269), (410, 32374),

Gene: Zizzle\_44 Start: 32003, Stop: 33121, Start Num: 127

Candidate Starts for Zizzle\_44:

(Start: 127 @32003 has 297 MA's), (154, 32141), (162, 32174), (184, 32222), (207, 32339), (214, 32375), (216, 32384), (253, 32489), (268, 32558), (284, 32618), (288, 32630), (289, 32633), (291, 32645), (292, 32660), (295, 32684), (296, 32690), (307, 32711), (313, 32747), (314, 32750), (320, 32786), (321, 32792), (324, 32804), (325, 32807), (356, 32891), (363, 32906), (383, 32948), (390, 32993), (393, 33002), (399, 33041), (401, 33059), (405, 33080), (409, 33095), (410, 33104), (411, 33107),

Gene: ZoeJ\_43 Start: 33972, Stop: 35072, Start Num: 127

Candidate Starts for ZoeJ\_43:

(Start: 127 @33972 has 297 MA's), (132, 33990), (140, 34023), (Start: 153 @34098 has 1 MA's), (165, 34134), (194, 34248), (202, 34272), (214, 34326), (261, 34467), (266, 34491), (267, 34494), (279, 34536), (304, 34644), (324, 34749), (345, 34794), (349, 34809), (400, 35001),

Gene: Zucker\_31 Start: 26379, Stop: 25240, Start Num: 127

Candidate Starts for Zucker\_31:

(122, 26388), (Start: 127 @26379 has 297 MA's), (184, 26178), (207, 26058), (214, 26022), (217, 26010), (219, 26004), (248, 25911), (253, 25896), (266, 25836), (274, 25806), (291, 25743), (322, 25575), (332, 25545), (360, 25449), (390, 25350), (393, 25341), (395, 25329), (403, 25266),