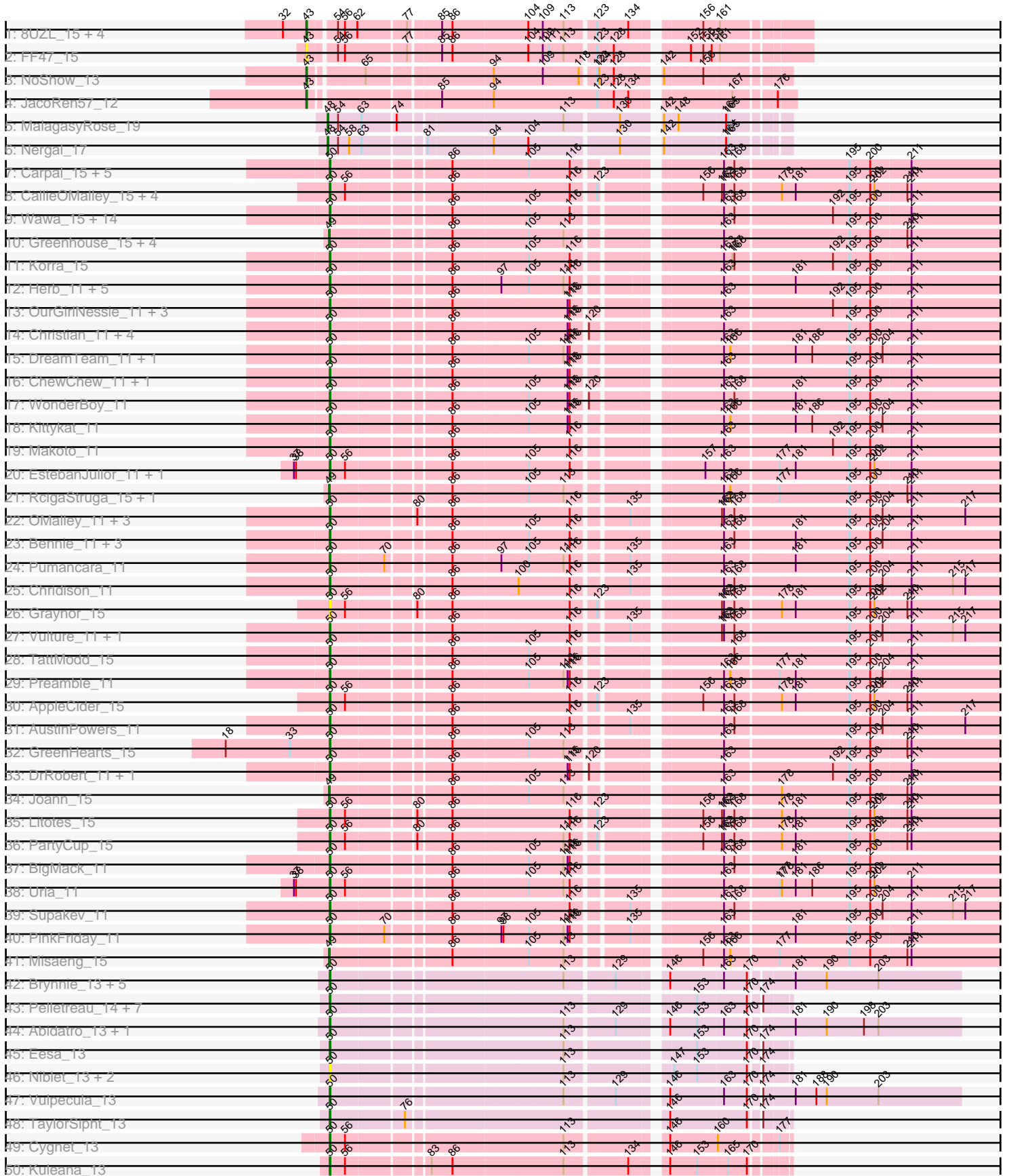
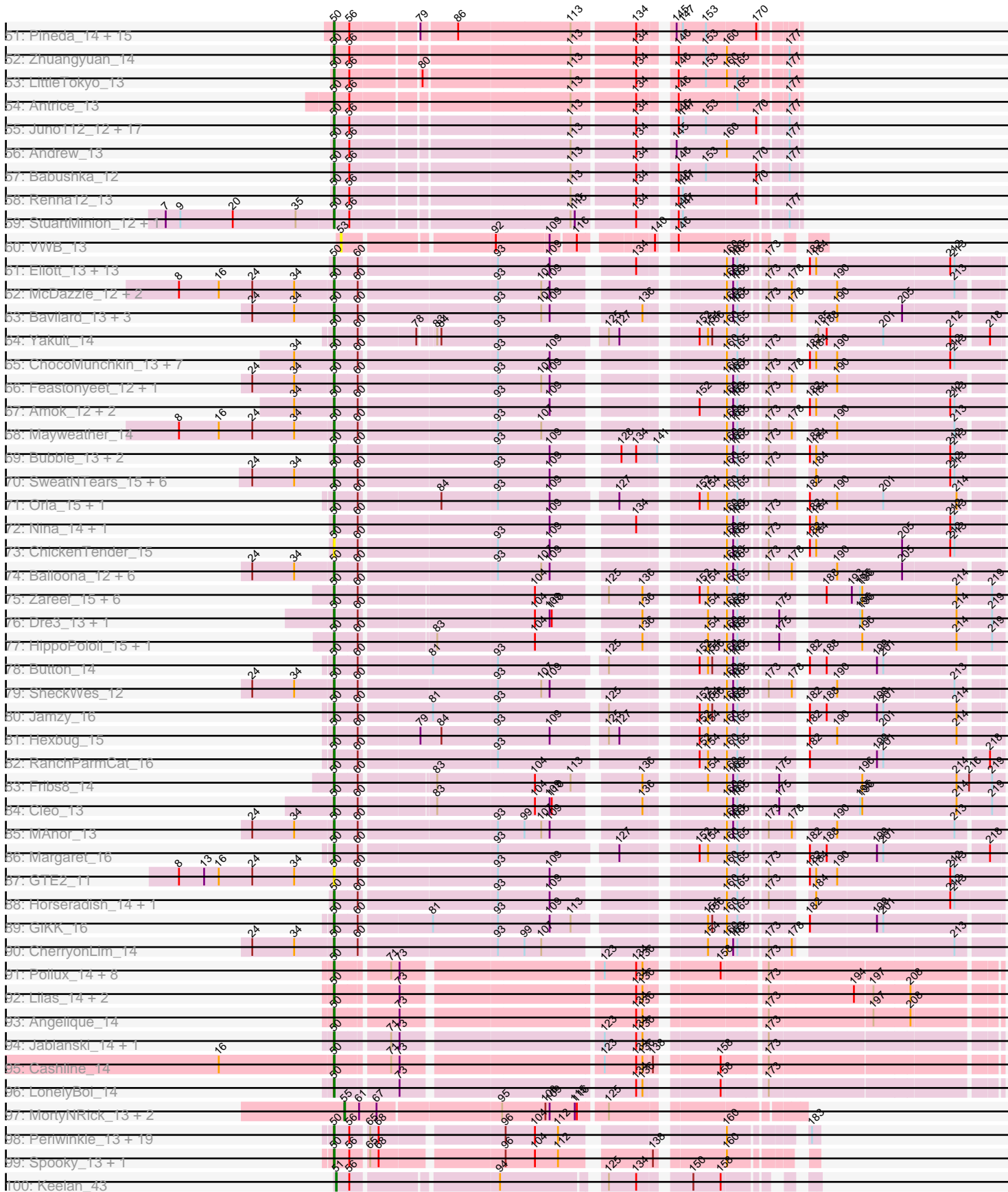
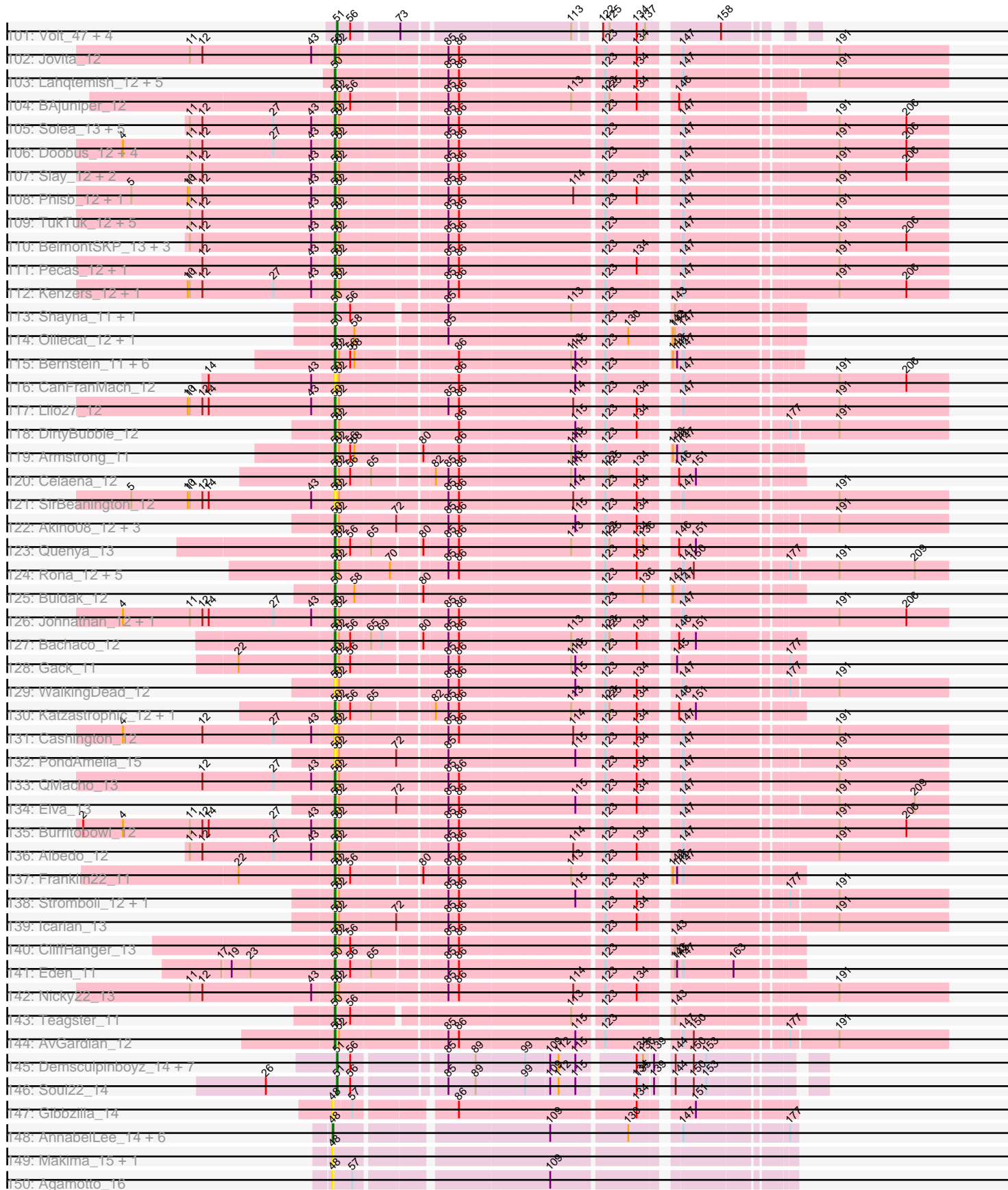


Pham 296082



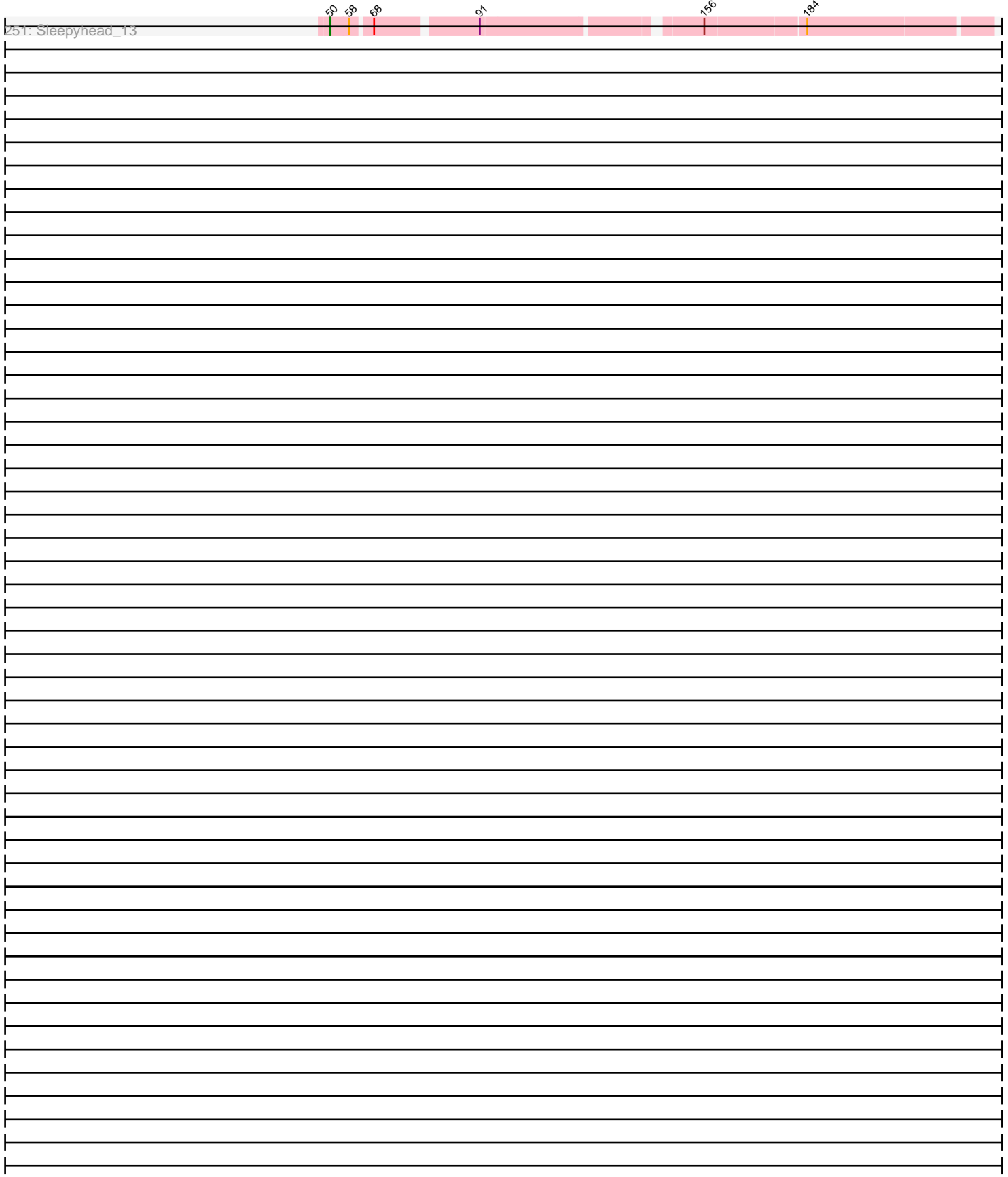








Pham 296082



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 296082 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296082 has 730 members, 118 are drafts.

Phages represented in each track:

- Track 1 : 8UZL\_15, Maco6\_13, LongHai\_16, Salvus\_16, Muddy\_15
- Track 2 : FF47\_15
- Track 3 : NoShow\_13
- Track 4 : JacoRen57\_12
- Track 5 : MalagasyRose\_19
- Track 6 : Nergal\_17
- Track 7 : Carpal\_15, Fluke\_15, MrGloopy\_15, Riverdale\_15, Scuttle\_15, Beethoven\_15
- Track 8 : CallieOMalley\_15, Wayne\_15, MrBoss\_15, Suppi\_15, Canowicakte\_15
- Track 9 : Wawa\_15, Glenn\_15, Kalizoi\_15, Vallejo\_15, BrotherBLo\_15, Zorro\_15, Cholula\_15, RAP15\_15, Jumboset\_15, MeganNoll\_15, Rozby\_15, Potatoes\_15, Immaculata\_15, Savage2526\_15, Dino\_15
- Track 10 : Greenhouse\_15, Lakshmi\_15, Nubia\_15, Oxynfrius\_15, Albanese\_15
- Track 11 : Korra\_15
- Track 12 : Herb\_11, Daiboju\_11, Maria1952\_11, Sergei\_11, KingBob\_11, Temper16\_11
- Track 13 : OurGirlNessie\_11, PitaDog\_11, Lucy\_11, Lennox\_11
- Track 14 : Christian\_11, Lasagna\_11, CristinaYang\_11, Nancia\_11, LilStuart\_11
- Track 15 : DreamTeam\_11, Gisselle\_11
- Track 16 : ChewChew\_11, Bodacious\_11
- Track 17 : WonderBoy\_11
- Track 18 : Kittykat\_11
- Track 19 : Makoto\_11
- Track 20 : EstebanJulior\_11, MamaPearl\_11
- Track 21 : RcigaStruga\_15, Huntingdon\_15
- Track 22 : OMalley\_11, Aledel\_11, Eunoia\_11, Riovina\_11
- Track 23 : Bennie\_11, Huckleberry\_11, HeadNerd\_11, Moki\_11
- Track 24 : Pumancara\_11
- Track 25 : Chridison\_11
- Track 26 : Graynor\_15
- Track 27 : Vulture\_11, HunterDalle\_11
- Track 28 : TattModd\_15
- Track 29 : Preamble\_11
- Track 30 : AppleCider\_15
- Track 31 : AustinPowers\_11
- Track 32 : GreenHearts\_15
- Track 33 : DrRobert\_11, Pterodactyl\_11

- Track 34 : Joann\_15
- Track 35 : Litotes\_15
- Track 36 : PartyCup\_15
- Track 37 : BigMack\_11
- Track 38 : Urla\_11
- Track 39 : Supakev\_11
- Track 40 : PinkFriday\_11
- Track 41 : Misaeng\_15
- Track 42 : Brynnie\_13, Chickaboom\_12, Ruchi\_13, Jamun\_13, WileyE\_12, Basilisk\_13
- Track 43 : Pelletreau\_14, Toad24\_14, Shen\_14, Amanises\_14, Orcanus\_13, KendraB23\_14, Westrich\_14, Gravel\_14
- Track 44 : Abidatro\_13, Galaxy\_13
- Track 45 : Eesa\_13
- Track 46 : Niblet\_13, Chicken\_13, Zixiang\_13
- Track 47 : Vulpecula\_13
- Track 48 : TaylorSipht\_13
- Track 49 : Cygnet\_13
- Track 50 : Kuleana\_13
- Track 51 : Pineda\_14, Bibble12\_14, Jerole\_14, Polka\_13, Daob\_14, Coral\_13, Colusalem\_13, HannahPhantana\_14, Melons\_14, Bedetta\_14, PhirstandPhine\_14, Kepler\_13, Amelia\_14, Cote\_14, Lunar\_14, OtsoOtso\_13
- Track 52 : Zhuangyuan\_14
- Track 53 : LittleTokyo\_13
- Track 54 : Antrice\_13
- Track 55 : Juno112\_12, Fingolfin\_12, Oppalora\_12, PhluffyCoco\_12, HamCheese\_12, Glotell\_12, Atlantica\_12, RedFox\_12, Rattail\_12, Leona\_12, DanHam62\_12, AmiCi24\_12, Azaz\_12, Amphitrite\_12, Camara\_12, KHumphrey\_12, Laphuphu24k\_12, AdoptaAdorbs\_12
- Track 56 : Andrew\_13
- Track 57 : Babushka\_12
- Track 58 : Renna12\_13
- Track 59 : StuartMinion\_12, AlexMinion\_12
- Track 60 : VWB\_13
- Track 61 : Elliott\_13, Starburst\_14, RedBaron\_14, Burnsey\_13, Agatha\_13, PsychoKiller\_13, Typhonmarchy\_13, RADical\_14, Carsonalex\_14, Socotra\_14, RSchmailz\_14, GoldHunter\_14, MunkgeeRoachy\_13, Sopespian\_13
- Track 62 : McDazzle\_12, ElJefes\_12, Pons\_13
- Track 63 : Bavidard\_13, Yucky\_13, KayGee\_13, Elinal\_14
- Track 64 : Yakult\_14
- Track 65 : ChocoMunchkin\_13, Tolls\_15, CanesSauce\_13, SteamedHams\_15, AndPeggy\_12, Yarn\_12, CaramelLatte\_13, BillDoor\_15
- Track 66 : Feastonyeet\_12, BigChungus\_12
- Track 67 : Amok\_12, AikoCarson\_12, Emalyn\_12
- Track 68 : Mayweather\_14
- Track 69 : Bubble\_13, Cozz\_13, Axym\_13
- Track 70 : SweatNTears\_15, MScarn\_15, SketchMex\_12, Troje\_13, Blondies\_14, Biskit\_14, Buttrmlkdreams\_13
- Track 71 : Orla\_15, Nodigi\_15
- Track 72 : Nina\_14, Quasar\_13
- Track 73 : ChickenTender\_15
- Track 74 : Balloona\_12, CocoaPuff\_12, PotPie\_13, Lauer\_12, Vine\_14, SummitAcademy\_12, Tarnish\_13

- Track 75 : Zareef\_15, Survivors\_15, MaVan\_15, Wallaby\_17, Azira\_15, Wolfwood\_17, Nibbles\_15
- Track 76 : Dre3\_13, Gibbous\_13
- Track 77 : HippoPololi\_15, Malvina\_15
- Track 78 : Button\_14
- Track 79 : SheckWes\_12
- Track 80 : Jamzy\_16
- Track 81 : Hexbug\_15
- Track 82 : RanchParmCat\_16
- Track 83 : Fribs8\_14
- Track 84 : Cleo\_13
- Track 85 : MAnor\_13
- Track 86 : Margaret\_16
- Track 87 : GTE2\_11
- Track 88 : Horseradish\_14, Yummy\_14
- Track 89 : GiKK\_16
- Track 90 : CherryonLim\_14
- Track 91 : Pollux\_14, BritBrat\_14, EMSquaredA\_14, Posh\_14, BeeGee\_14, Wrigley\_14, Floral\_14, Marteena\_14, Confidence\_14
- Track 92 : Lilas\_14, EnalisNailo\_14, Bradissa\_14
- Track 93 : Angelique\_14
- Track 94 : Jablanski\_14, Pytheas\_14
- Track 95 : Cashline\_14
- Track 96 : LonelyBoi\_14
- Track 97 : MortyNRick\_13, Birdsong\_13, BearBQ\_13
- Track 98 : Periwinkle\_13, Budski\_13, Phabuloso\_13, Kamaru\_13, Squiddly\_14, Kenna\_13, CheeseTouch\_13, Holliday\_13, Phistory\_13, BotCity\_13, Horus\_13, Getalong\_13, BENtherdunthat\_13, ShawBrad\_13, Frickyeah\_13, Lutum\_13, Whitney\_13, Leroy\_13, LitninMcQueen\_13, Asapag\_13
- Track 99 : Spooky\_13, Malisha\_13
- Track 100 : Keelan\_43
- Track 101 : Volt\_47, Fryberger\_45, Ronaldo\_48, Ziko\_48, Guey18\_50
- Track 102 : Jovita\_12
- Track 103 : Lahqtemish\_12, Didgeridoo\_13, IndyLu\_12, PastaFagioli\_12, BabyDaisy\_13, Kate33\_12
- Track 104 : BAjuniper\_12
- Track 105 : Solea\_13, Milomuff\_13, PhigPhack\_12, SansAfet\_12, Softsoap\_12, Arroyo\_13
- Track 106 : Doobus\_12, LimaBean\_12, Albright\_12, Abigail\_12, Avocadoman\_12
- Track 107 : Slay\_12, Swervy\_12, SarBear\_12
- Track 108 : Phisb\_12, BubbaBear\_12
- Track 109 : TukTuk\_12, CupcakePrincess\_12, AylexOG\_13, Finalfrontier\_13, Jabb\_12, MsUbiquitous\_12
- Track 110 : BelmontSKP\_13, CroZenni\_12, DickRichards\_12, AnnaLie\_13
- Track 111 : Pecas\_12, Eula\_12
- Track 112 : Kenzers\_12, Lynlen\_12
- Track 113 : Shayna\_11, SunnyD\_11
- Track 114 : Olliecat\_12, Squircle\_12
- Track 115 : Bernstein\_11, Coltrane\_11, Clayda5\_11, Rollins\_11, Vitas\_11, Skylord\_11, Brahms\_11
- Track 116 : CanFranMach\_12
- Track 117 : Lilo27\_12
- Track 118 : DirtyBubble\_12

- Track 119 : Armstrong\_11
- Track 120 : Celaena\_12
- Track 121 : SirBeaington\_12
- Track 122 : Akino08\_12, Stoor\_12, SanaSana\_13, Loviatar\_12
- Track 123 : Quenya\_13
- Track 124 : Rona\_12, Sharkboy\_12, Kieran\_12, ChiliPepper\_12, Dismas\_12, Kamdara\_12
- Track 125 : Buldak\_12
- Track 126 : Johnathan\_12, Bengal\_12
- Track 127 : Bachaco\_12
- Track 128 : Gack\_11
- Track 129 : WalkingDead\_12
- Track 130 : Katzastrophic\_12, FlameThrower\_12
- Track 131 : Cashington\_12
- Track 132 : PondAmelia\_15
- Track 133 : QMacho\_13
- Track 134 : Elva\_13
- Track 135 : Burritobowl\_12
- Track 136 : Albedo\_12
- Track 137 : Franklin22\_11
- Track 138 : Stromboli\_12, BabyYoda\_12
- Track 139 : Icarian\_13
- Track 140 : CliffHanger\_13
- Track 141 : Eden\_11
- Track 142 : Nicky22\_13
- Track 143 : Teagster\_11
- Track 144 : AvGardian\_12
- Track 145 : Demsculpinboyz\_14, Avani\_14, Che9d\_14, Blarby\_15, Zapner\_15, Jabbawokkie\_15, SilverChicken\_14, Yoshi\_14
- Track 146 : Soul22\_14
- Track 147 : Gibbzilla\_14
- Track 148 : AnnabelLee\_14, ChamoyPickle\_14, CardboardBox\_14, Neuville\_14, Roberts\_14, Gerri43\_14, ChipsNGuac\_14
- Track 149 : Makima\_15, LastNadiia\_17
- Track 150 : Agamoto\_16
- Track 151 : Studio\_14, Ezurina\_13
- Track 152 : TripleC\_17
- Track 153 : TMaxx\_14
- Track 154 : Mireles\_14
- Track 155 : Audell\_17
- Track 156 : PinkYoshi\_13, DingDing\_13, Jolene\_13, Rattrick\_13, CassieYates\_13, Angel\_13, TomBrady\_13, ECartman\_13, Gomashi\_13, Phloodle\_13, Periodt\_13, Schiebel\_13, Hope\_13, Hotshotbaby7\_13, Marmie\_13, Cedasite\_13, Renaissance\_13, Gideon\_13, AzulaCat\_13, BPs\_13, Jeilious\_13, ZoMa\_13, LouisV14\_13, BQuat\_13, Coleslaw\_13, DMoney\_13, Avrafan\_13, DNAlII\_0013, Maliketh\_13, Neoh\_13, Plagueis\_13, Aroostook\_13, Mowgli\_13, Kareem\_13, Chance64\_13, BruceB\_13, Crespo\_13, Darionha\_13, Frosty24\_13, Ruriko\_13, CLED96\_13, OctaviousRex\_13, Richarlison\_13, AizenPogi\_13, Remy19\_13, Sweets\_13, Kasen3\_13, Zombie\_13, MZKinsey\_13, Camri\_13, JorRay\_13, Cherrybomb426\_13, Annihilator\_13, Phreak\_13, ShaboiShabazz\_13, Jane\_13, Wendigo\_13, Jonghyun\_13, Phish\_13, Sizemore\_13, Olga\_13, GoldenAsh\_13
- Track 157 : Paito\_13
- Track 158 : Taheera\_13, Terror\_13

- Track 159 : Barkley26\_13, Liefie\_13, Grizzly\_13, Peeb\_13
- Track 160 : Halo\_13, TinaBug\_13
- Track 161 : Rabbs\_13, Sneeze\_13
- Track 162 : Avocado\_13
- Track 163 : FlagStaff\_13, Pace1224\_13
- Track 164 : GodSpeed\_13
- Track 165 : Cambiare\_14
- Track 166 : MOOREtheMARYer\_13, Pinnie\_14
- Track 167 : Cloudyecho\_13
- Track 168 : Jolie2\_13
- Track 169 : Lemuria\_13
- Track 170 : Mercurio\_14
- Track 171 : Antsirabe\_13
- Track 172 : YangYin\_13
- Track 173 : Stargaze\_13
- Track 174 : LilPharaoh\_14, Nutello\_14, Teejan\_14, SgtBeansprout\_14, Mdavu\_14, Trice\_14, Amelie\_14, Binglebops\_14, Torres\_14, Nikao\_14, Enkosi\_14
- Track 175 : Yunkel11\_18, Efra2\_18, Guanica15\_18
- Track 176 : CheetoDust\_18
- Track 177 : SamuelLPlaqson\_18, Anma\_18, Urkel\_18, TiniBug\_18, DrHayes\_18
- Track 178 : Belladonna\_18, Angelica\_18, Rosmarinus\_18, Peel\_18, CREW\_18, Ramen\_18, Inky\_18, BaghaKamala\_18, Zavala\_18, Capricorn\_18, Lunahalos\_18, CrimD\_18, Deby\_18, Durfee\_18, Mynx\_18, Rapunzel97\_18, Jarvi\_18, BGlluviae\_18, Piatt\_18, Megsy\_18, Boiiii\_18, Hyperbowlee\_18, Zabiza\_18, Joy99\_18, Slimphazie\_18, YoureAdopted\_17, Spock\_18, Twitch\_18, Llorens\_18, Jayhawk\_18, CaseJules\_18, Asayake\_18, Topper\_18, Adephagia\_18, ActinUp\_18, JAWS\_18, Blizzard\_18, HedwigODU\_18, Homura\_18, TaiwanKao\_19, MeaningOfLife\_18, ShiaSurprise\_18, Sulley\_18, BarrelRoll\_18, TruffulaTree\_18, Dalmuri\_18, Padfoot\_18, Apocalypse\_18, Jeckyll\_18, BEEST\_18
- Track 179 : Ganymede\_19, Atiba\_18, CallaLilly\_18, Tachez\_18, Beezoo\_18, Geraldini\_18, Pokerus\_17, QuincyRose\_17, Tiri\_18, Adonis\_18
- Track 180 : AlishaPH\_18, Emerson\_18, Padpat\_18, Veliki\_18
- Track 181 : Dartin\_18, Peanam\_18, Shaobing\_18, McMater\_18, Niklas\_18, Richo\_18
- Track 182 : MarkPhew\_18
- Track 183 : Prithvi\_18, TreyKay\_18, LindNT\_18
- Track 184 : Illumine\_18, Devera\_18, Dole\_18, Bern\_18
- Track 185 : Pisa4\_17, Pisa1\_17
- Track 186 : Nibb\_17
- Track 187 : LaterM\_18, Stinson\_18, Murucutumbu\_18, Ageofdapage\_18
- Track 188 : LastHope\_18
- Track 189 : KiSi\_17, Oscar\_17, LeMond\_17, Scarlett\_17
- Track 190 : Clipper\_18, MacKat\_18
- Track 191 : Bella96\_18
- Track 192 : Validus\_18
- Track 193 : TingHuaYa\_18
- Track 194 : Anaya\_19
- Track 195 : Curiosium\_19
- Track 196 : Chavito\_18
- Track 197 : Chris\_17
- Track 198 : DartGoblin\_18
- Track 199 : Findley\_14, Milly\_14, DismalFunk\_14, Strobilo\_14, DismalStressor\_14, Marcoliusprime\_14

- Track 200 : ZoeJ\_14
- Track 201 : BoostSeason\_14, Doughnut\_14
- Track 202 : TM4\_14
- Track 203 : Mufasa\_14
- Track 204 : Lea83\_17, Pixie\_17, Keshu\_17, TBond007\_17, Hurricane\_17
- Track 205 : ShedlockHolmes\_17
- Track 206 : Pharb\_17
- Track 207 : MacnCheese\_18
- Track 208 : TribbleTrouble\_16
- Track 209 : Slarp\_19, OmniCritical\_19, Fionnbharth\_19, DanSyl44\_19, YasnayaPolyana\_19, Wintermute\_19, Mitti\_19, Cheetobro\_19, Lebo14\_19, Chancellor\_19, Qhanda\_19, SamScheppers\_17
- Track 210 : Y2\_19, Y10\_19, JF1\_19
- Track 211 : Kraw\_19, Malthus\_19
- Track 212 : Juliette\_19, Taquito\_17, Eponine\_19, Ruthiejr\_18
- Track 213 : Reptar3000\_19, Patt\_19, MissDaisy\_19, Bobquesha\_19
- Track 214 : Omnicron\_16
- Track 215 : InvictusManeo\_16, ViviJ\_15, Agent47\_16, LilDirt\_15, Collard\_16, DoubleChamp\_16, BananenDer11\_16
- Track 216 : AlleyCat\_16, Neighly\_16, Psycho\_16, Dadosky\_16, Larva\_16
- Track 217 : SoSeph\_16, Heftyboy\_16
- Track 218 : Edugator\_15, Kratio\_15
- Track 219 : Miryou\_16, OkiRoe\_16, Guillsminger\_16, Leston\_16, Paola\_16, Gengar\_16
- Track 220 : Rando14\_16
- Track 221 : Thyatira\_16, Feyre\_16, Waterfoul\_16
- Track 222 : Amgine\_16
- Track 223 : Amohnition\_17
- Track 224 : Hammy\_17, November\_16, DARTH\_P\_17
- Track 225 : Ekdilam\_15
- Track 226 : Syra333\_17, Krueger\_17, Tigress9\_17
- Track 227 : TClif\_17
- Track 228 : Yuna\_18
- Track 229 : Cain\_17, Tierra\_17, Phrank\_17, Bryler\_17
- Track 230 : Shadow1\_16, Sunflower1121\_16
- Track 231 : Ellie\_15
- Track 232 : PhelpsODU\_17, Unicorn\_17
- Track 233 : Marshawn\_19
- Track 234 : Applecrisp\_16
- Track 235 : Lavahound\_16
- Track 236 : Ximenita\_18
- Track 237 : SirPhilip\_17
- Track 238 : Fefferhead\_17
- Track 239 : Aminay\_16
- Track 240 : Boilgate\_15
- Track 241 : Stellammi\_10
- Track 242 : Gaia\_10, Nebkiss\_10
- Track 243 : Hilltopfarm\_19, Typha\_19
- Track 244 : Faiyaz\_19, AuntGwenStacy\_19
- Track 245 : Bipper\_19
- Track 246 : Cracklewink\_19
- Track 247 : DS6A\_16
- Track 248 : Spartoi\_11

- Track 249 : Juicebox\_14
- Track 250 : LilSpotty\_12
- Track 251 : Sleepyhead\_13

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

The start number called the most often in the published annotations is 50, it was called in 300 of the 612 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro\_13, Abigail\_12, AdoptaAdorbs\_12, Agatha\_13, AikoCarson\_12, Akino08\_12, Albedo\_12, Albright\_12, Aledel\_11, AlexMinion\_12, Amanises\_14, Amelia\_14, AmiCi24\_12, Amok\_12, Amphitrite\_12, AndPeggy\_12, Andrew\_13, Angelique\_14, AnnaLie\_13, Antrice\_13, AppleCider\_15, Armstrong\_11, Arroyo\_13, Asapag\_13, Atlantica\_12, AustinPowers\_11, AvGardian\_12, Avocadoman\_12, Axym\_13, AylexOG\_13, Azaz\_12, Azira\_15, BAJuniper\_12, BENtherdunthat\_13, Babushka\_12, BabyDaisy\_13, BabyYoda\_12, Bachaco\_12, Balloona\_12, Basilisk\_13, Bavidard\_13, Bedetta\_14, BeeGee\_14, Beethoven\_15, BelmontSKP\_13, Bengal\_12, Bennie\_11, Bernstein\_11, Bible12\_14, BigChungus\_12, BigMack\_11, BillDoor\_15, Biskit\_14, Blondies\_14, Bodacious\_11, BotCity\_13, Bradissa\_14, Brahms\_11, BritBrat\_14, BrotherBLo\_15, Brynnie\_13, BubbaBear\_12, Bubble\_13, Budski\_13, Buldak\_12, Burnsey\_13, Burritobowl\_12, Button\_14, Buttrmlkdreams\_13, CallieOMalley\_15, Camara\_12, CanFranMach\_12, CanesSauce\_13, Canowicakte\_15, CaramelLatte\_13, Carpal\_15, Carsonalex\_14, Cashington\_12, Cashline\_14, Celaena\_12, CheeseTouch\_13, CherryonLim\_14, ChewChew\_11, Chickaboom\_12, ChickenTender\_15, Chicken\_13, ChiliPepper\_12, ChocoMunchkin\_13, Cholula\_15, Chridison\_11, Christian\_11, Clayda5\_11, Cleo\_13, CliffHanger\_13, CocoaPuff\_12, Coltrane\_11, Colusalem\_13, Confidence\_14, Coral\_13, Cote\_14, Cozz\_13, CristinaYang\_11, CroZenni\_12, CupcakePrincess\_12, Cygnet\_13, Daiboju\_11, DanHam62\_12, Daob\_14, DickRichards\_12, Didgeridoo\_13, Dino\_15, DirtyBubble\_12, Dismas\_12, Doobus\_12, DrRobert\_11, Dre3\_13, DreamTeam\_11, EMSquaredA\_14, Eden\_11, Eesa\_13, ElJefes\_12, Elinal\_14, Elliott\_13, Elva\_13, Emalyn\_12, EnalisNailo\_14, EstebanJulior\_11, Eula\_12, Eunoia\_11, Feastonyeet\_12, Finalfrontier\_13, Fingolfin\_12, FlameThrower\_12, Floral\_14, Fluke\_15, Franklin22\_11, Fribs8\_14, Frickyeah\_13, GTE2\_11, Gack\_11, Gaia\_10, Galaxy\_13, Getalong\_13, GiKK\_16, Gibbous\_13, Gisselle\_11, Glenn\_15, Glotell\_12, GoldHunter\_14, Gravel\_14, Graynor\_15, GreenHearts\_15, HamCheese\_12, HannahPhantana\_14, HeadNerd\_11, Herb\_11, Hexbug\_15, HippoPololi\_15, Holliday\_13, Horseradish\_14, Horus\_13, Huckleberry\_11, HunterDalle\_11, Icarian\_13, Immaculata\_15, IndyLu\_12, Jabb\_12, Jablanski\_14, Jamun\_13, Jamzy\_16, Jerole\_14, Johnathan\_12, Jovita\_12, Juicebox\_14, Jumboset\_15, Juno112\_12, KHumphrey\_12, Kalizoi\_15, Kamaru\_13, Kamdara\_12, Kate33\_12, Katzastrophic\_12, KayGee\_13, KendraB23\_14, Kenna\_13, Kenzers\_12, Kepler\_13, Kieran\_12, KingBob\_11, Kittykat\_11, Korra\_15, Kuleana\_13, Lahqtemish\_12, Laphuphu24k\_12, Lasagna\_11, Lauer\_12, Lennox\_11, Leona\_12, Leroy\_13, LilStuart\_11, Lilas\_14, Lilo27\_12, LimaBean\_12, LitninMcQueen\_13, Litotes\_15, LittleTokyo\_13, LonelyBoi\_14, Loviatar\_12, Lucy\_11, Lunar\_14, Lutum\_13, Lynlen\_12, MAnor\_13, MScarn\_15, MaVan\_15, Makoto\_11, Malisha\_13, Malvina\_15, MamaPearl\_11, Margaret\_16, Maria1952\_11, Marteena\_14, Mayweather\_14, McDazzle\_12, MeganNoll\_15, Melons\_14, Milomuff\_13, Moki\_11,

MrBoss\_15, MrGloopy\_15, MsUbiquitous\_12, MunkgeeRoachy\_13, Nancia\_11, Nebkiss\_10, Nibbles\_15, Niblet\_13, Nicky22\_13, Nina\_14, Nodigi\_15, OMalley\_11, Olliecat\_12, Oppalora\_12, Orcanus\_13, Orla\_15, OtsoOtso\_13, OurGirlNessie\_11, PartyCup\_15, PastaFagioli\_12, Pecas\_12, Pelletreau\_14, Periwinkle\_13, Phabuloso\_13, PhigPhack\_12, PhirstandPhine\_14, Phisb\_12, Phistory\_13, PhluffyCoco\_12, Pineda\_14, PinkFriday\_11, PitaDog\_11, Polka\_13, Pollux\_14, PondAmelia\_15, Pons\_13, Posh\_14, PotPie\_13, Potatoes\_15, Preamble\_11, PsychoKiller\_13, Pterodactyl\_11, Pumancara\_11, Pytheas\_14, QMacho\_13, Quasar\_13, Quenya\_13, RADical\_14, RAP15\_15, RSchmailzl\_14, RanchParmCat\_16, Rattail\_12, RedBaron\_14, RedFox\_12, Renna12\_13, Rivovina\_11, Riverdale\_15, Rollins\_11, Rona\_12, Rozby\_15, Ruchi\_13, SanaSana\_13, SansAfet\_12, SarBear\_12, Savage2526\_15, Scuttle\_15, Sergei\_11, Sharkboy\_12, ShawBrad\_13, Shayna\_11, SheckWes\_12, Shen\_14, SirBeanington\_12, SketchMex\_12, Skylord\_11, Slay\_12, Sleepyhead\_13, Socotra\_14, Softsoap\_12, Solea\_13, Sopespian\_13, Spooky\_13, Squiddly\_14, Squirrel\_12, Starburst\_14, SteamedHams\_15, Stellammi\_10, Stoor\_12, Stromboli\_12, StuartMinion\_12, SummitAcademy\_12, SunnyD\_11, Supakev\_11, Suppi\_15, Survivors\_15, SweatNTears\_15, Swervy\_12, Tarnish\_13, TattModd\_15, TaylorSipht\_13, Teagster\_11, Temper16\_11, Toad24\_14, Tolls\_15, Troje\_13, TukTuk\_12, Typhonmarchy\_13, Urla\_11, Vallejo\_15, Vine\_14, Vitas\_11, Vulpecula\_13, Vulture\_11, WalkingDead\_12, Wallaby\_17, Wawa\_15, Wayne\_15, Westrich\_14, Whitney\_13, WileyE\_12, Wolfwood\_17, WonderBoy\_11, Wrigley\_14, Yakult\_14, Yarn\_12, Yucky\_13, Yummy\_14, Zareef\_15, Zhuangyuan\_14, Zixiang\_13, Zorro\_15,

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

- Amelie\_14, Amohntion\_17, Applecrisp\_16, Binglebops\_14, DarthP\_17, Enkosi\_14, Hammy\_17, LilPharaoh\_14, Marshawn\_19, Mdavu\_14, Nikao\_14, November\_16, Nutello\_14, SgtBeansprout\_14, Teejan\_14, Torres\_14, Trice\_14,

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

- 8UZL\_15, ActinUp\_18, Adephegia\_18, Adonis\_18, Agamoto\_16, Agent47\_16, Ageofdapage\_18, AizenPogi\_13, Albanese\_15, AlishaPH\_18, AlleyCat\_16, Amgine\_16, Aminay\_16, Anaya\_19, Angel\_13, Angelica\_18, Anma\_18, AnnabelLee\_14, Annihilator\_13, Antsirabe\_13, Apocalypse\_18, Aroostook\_13, Asayake\_18, Atiba\_18, Audell\_17, AuntGwenStacy\_19, Avani\_14, Avocado\_13, Avrafan\_13, AzulaCat\_13, BEEST\_18, BGlluviae\_18, BPs\_13, BQuat\_13, BaghaKamala\_18, BananenDer11\_16, Barkley26\_13, BarrelRoll\_18, BearBQ\_13, Beezoo\_18, Bella96\_18, Belladonna\_18, Bern\_18, Bipper\_19, Birdsong\_13, Blarby\_15, Blizzard\_18, Bobquesha\_19, Boiiii\_18, Boilgate\_15, BoostSeason\_14, BruceB\_13, Bryler\_17, CLED96\_13, CREW\_18, Cain\_17, CallaLilly\_18, Cambiare\_14, Camri\_13, Capricorn\_18, CardboardBox\_14, CaseJules\_18, CassieYates\_13, Cedasite\_13, ChamoyPickle\_14, Chance64\_13, Chancellor\_19, Chavito\_18, Che9d\_14, CheetoDust\_18, Cheetobro\_19, Cherrybomb426\_13, ChipsNGuac\_14, Chris\_17, Clipper\_18, Cloudyecho\_13, Coleslaw\_13, Collard\_16, Cracklewink\_19, Crespo\_13, CrimD\_18, Curiosium\_19, DMoney\_13, DNAlII\_0013, DS6A\_16, Dadosky\_16, Dalmuri\_18, DanSyl44\_19, Darionha\_13, DartGoblin\_18, Dartin\_18, Deby\_18, Demsculpinboyz\_14, Devera\_18, DingDing\_13, DismalFunk\_14, DismalStressor\_14, Dole\_18, DoubleChamp\_16, Doughnut\_14, DrHayes\_18, Durfee\_18, ECartman\_13, Edugator\_15, Efra2\_18, Ekdilam\_15, Ellie\_15, Emerson\_18, Eponine\_19, Ezurina\_13, FF47\_15, Faiyaz\_19, Fefferhead\_17, Feyre\_16, Findley\_14, Fionnbharth\_19, FlagStaff\_13, Frosty24\_13, Fryberger\_45, Ganymede\_19, Gengar\_16, Geraldini\_18, Gerri43\_14, Gibzilla\_14, Gideon\_13,

GodSpeed\_13, GoldenAsh\_13, Gomashi\_13, Greenhouse\_15, Grizzly\_13,  
 Guanica15\_18, Guey18\_50, Guillsminger\_16, Halo\_13, HedwigODU\_18,  
 Heftyboy\_16, Hilltopfarm\_19, Homura\_18, Hope\_13, Hotshotbaby7\_13,  
 Huntingdon\_15, Hurricane\_17, Hyperbowlee\_18, Illumine\_18, Inky\_18,  
 InvictusManeo\_16, JAWS\_18, JF1\_19, Jabbawokkie\_15, JacoRen57\_12, Jane\_13,  
 Jarvi\_18, Jayhawk\_18, Jeckyll\_18, Jeilious\_13, Joann\_15, Jolene\_13, Jolie2\_13,  
 Jonghyun\_13, JorRay\_13, Joy99\_18, Juliette\_19, Kareem\_13, Kasen3\_13,  
 Keelan\_43, Keshu\_17, KiSi\_17, Kratio\_15, Kraw\_19, Krueger\_17, Lakshmi\_15,  
 Larva\_16, LastHope\_18, LastNadiia\_17, LaterM\_18, Lavahound\_16, LeMond\_17,  
 Lea83\_17, Lebo14\_19, Lemuria\_13, Leston\_16, Liefie\_13, LiIDirt\_15, LiISpotty\_12,  
 LindNT\_18, Llorens\_18, LongHai\_16, LouisV14\_13, Lunahalos\_18,  
 MOOREtheMARYer\_13, MZKinsey\_13, MacKat\_18, MacnCheese\_18, Maco6\_13,  
 Makima\_15, MalagasyRose\_19, Maliketh\_13, Malthus\_19, Marcoliusprime\_14,  
 MarkPhew\_18, Marmie\_13, McMater\_18, MeaningOfLife\_18, Megsy\_18,  
 Mercurio\_14, Milly\_14, Mireles\_14, Miryou\_16, Misaeng\_15, MissDaisy\_19, Mitti\_19,  
 MortyNRick\_13, Mowgli\_13, Muddy\_15, Mufasa\_14, Murucutumbu\_18, Mynx\_18,  
 Neighly\_16, Neoh\_13, Nergal\_17, Neuville\_14, Nibb\_17, Niklas\_18, NoShow\_13,  
 Nubia\_15, OctaviousRex\_13, OkiRoe\_16, Olga\_13, OmniCritical\_19, Omnicron\_16,  
 Oscar\_17, Oxynfrius\_15, Pace1224\_13, Padfoot\_18, Padpat\_18, Paito\_13,  
 Paola\_16, Patt\_19, Peanam\_18, Peeb\_13, Peel\_18, Periodt\_13, Pharb\_17,  
 PhelpsODU\_17, Phish\_13, Phloodle\_13, Phrank\_17, Phreak\_13, Piatt\_18,  
 PinkYoshi\_13, Pinnie\_14, Pisa1\_17, Pisa4\_17, Pixie\_17, Plagueis\_13, Pokerus\_17,  
 Prithvi\_18, Psycho\_16, Qhanda\_19, QuincyRose\_17, Rabbs\_13, Ramen\_18,  
 Rando14\_16, Rapunzel97\_18, Rattrick\_13, RcigaStruga\_15, Remy19\_13,  
 Renaissance\_13, Reptar3000\_19, Richarlison\_13, Richo\_18, Roberts\_14,  
 Ronaldo\_48, Rosmarinus\_18, Ruriko\_13, Ruthiejr\_18, Salvus\_16,  
 SamScheppers\_17, SamuelLPlaqson\_18, Scarlett\_17, Schiebel\_13,  
 ShaboiShabazz\_13, Shadow1\_16, Shaobing\_18, ShedlockHolmes\_17,  
 ShiaSurprise\_18, SilverChicken\_14, SirPhilip\_17, Sizemore\_13, Slarp\_19,  
 Slimphazie\_18, Sneeze\_13, SoSeph\_16, Soul22\_14, Spartoi\_11, Spock\_18,  
 Stargaze\_13, Stinson\_18, Strobilo\_14, Studio\_14, Sulley\_18, Sunflower1121\_16,  
 Sweets\_13, Syra333\_17, TBond007\_17, TClif\_17, TM4\_14, TMaxx\_14, Tachez\_18,  
 Taheera\_13, TaiwanKao\_19, Taquito\_17, Terror\_13, Thyatira\_16, Tierra\_17,  
 Tigress9\_17, TinaBug\_13, TingHuaYa\_18, TiniBug\_18, Tiri\_18, TomBrady\_13,  
 Topper\_18, TreyKay\_18, TribbleTrouble\_16, TripleC\_17, TruffulaTree\_18, Twitch\_18,  
 Typha\_19, Unicorn\_17, Urkel\_18, VWB\_13, Validus\_18, Veliki\_18, ViviJ\_15, Volt\_47,  
 Waterfoul\_16, Wendigo\_13, Wintermute\_19, Ximenita\_18, Y10\_19, Y2\_19,  
 YangYin\_13, YasnayaPolyana\_19, Yoshi\_14, YoureAdopted\_17, Yuna\_18,  
 Yunkel11\_18, Zabiza\_18, Zapner\_15, Zavala\_18, Ziko\_48, ZoMa\_13, ZoeJ\_14,  
 Zombie\_13,

### Summary by start number:

#### Start 21:

- Found in 5 of 730 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 612
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Amgine\_16 (K6),

#### Start 34:

- Found in 43 of 730 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 2 of 612
- Called 4.7% of time when present

- Phage (with cluster) where this start called: Hilltopfarm\_19 (Y), Typha\_19 (Y),

#### Start 39:

- Found in 3 of 730 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 3 of 612
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BoostSeason\_14 (K2), Doughnut\_14 (K2), Mufasa\_14 (K2),

#### Start 40:

- Found in 237 of 730 ( 32.5% ) of genes in pham
- Manual Annotations of this start: 209 of 612
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ActinUp\_18 (K1), Adephegia\_18 (K1), Adonis\_18 (K1), Agent47\_16 (K5), AizenPogi\_13 (G1), AlishaPH\_18 (K1), AlleyCat\_16 (K5), Amelie\_14 (K1), Angel\_13 (G1), Angelica\_18 (K1), Anma\_18 (K1), Annihilator\_13 (G1), Antsirabe\_13 (G5), Apocalypse\_18 (K1), Aroostook\_13 (G1), Asayake\_18 (K1), Atiba\_18 (K1), Avocado\_13 (G2), Avrafan\_13 (G1), AzulaCat\_13 (G1), BEEST\_18 (K1), BGlluviae\_18 (K1), BPs\_13 (G1), BQuat\_13 (G1), BaghaKamala\_18 (K1), BananenDer11\_16 (K5), Barkley26\_13 (G1), BarrelRoll\_18 (K1), Beezoo\_18 (K1), Bella96\_18 (K1), Belladonna\_18 (K1), Bern\_18 (K1), Binglebops\_14 (K1), Blizzard\_18 (K1), Boiii\_18 (K1), BruceB\_13 (G1), Bryler\_17 (K6), CLED96\_13 (G1), CREW\_18 (K1), Cain\_17 (K6), CallaLilly\_18 (K1), Cambiare\_14 (G2), Camri\_13 (G1), Capricorn\_18 (K1), CaseJules\_18 (K1), CassieYates\_13 (G1), Cedasite\_13 (G1), Chance64\_13 (G1), CheetoDust\_18 (K1), Cherrybomb426\_13 (G1), Chris\_17 (K1), Clipper\_18 (K1), Cloudyecho\_13 (G3), Coleslaw\_13 (G1), Collard\_16 (K5), Crespo\_13 (G1), CrimD\_18 (K1), DMoney\_13 (G1), DNAIII\_0013 (G1), Dadosky\_16 (K5), Dalmuri\_18 (K1), Darionha\_13 (G1), DartGoblin\_18 (K1), Deby\_18 (K1), Devera\_18 (K1), DingDing\_13 (G1), DismalFunk\_14 (K2), DismalStressor\_14 (K2), Dole\_18 (K1), DoubleChamp\_16 (K5), DrHayes\_18 (K1), Durfee\_18 (K1), ECartman\_13 (G1), Edugator\_15 (K5), Emerson\_18 (K1), Enkosi\_14 (K1), Feyre\_16 (K5), Findley\_14 (K2), FlagStaff\_13 (G2), Frosty24\_13 (G1), Ganymede\_19 (K1), Gengar\_16 (K5), Geraldini\_18 (K1), Gideon\_13 (G1), GodSpeed\_13 (G2), GoldenAsh\_13 (G1), Gomashi\_13 (G1), Grizzly\_13 (G1), Guillsminger\_16 (K5), Halo\_13 (G1), HedwigODU\_18 (K1), Heftyboy\_16 (K5), Homura\_18 (K1), Hope\_13 (G1), Hotshotbaby7\_13 (G1), Hyperbowlee\_18 (K1), Illumine\_18 (K1), Inky\_18 (K1), InvictusManeo\_16 (K5), JAWS\_18 (K1), Jane\_13 (G1), Jarvi\_18 (K1), Jayhawk\_18 (K1), Jeckyll\_18 (K1), Jeilious\_13 (G), Jolene\_13 (G1), Jolie2\_13 (G4), Jonghyun\_13 (G1), JorRay\_13 (G1), Joy99\_18 (K1), Kareem\_13 (G1), Kasen3\_13 (G1), KiSi\_17 (K1), Kratio\_15 (K5), Krueger\_17 (K6), Larva\_16 (K5), LeMond\_17 (K1), Lemuria\_13 (G4), Leston\_16 (K5), Liefie\_13 (G1), LilDirt\_15 (K5), LilPharaoh\_14 (K1), LindNT\_18 (K1), Llorens\_18 (K1), LouisV14\_13 (G1), Lunahalos\_18 (K1), MOOREtheMARYer\_13 (G3), MZKinsey\_13 (G1), MacKat\_18 (K1), Maliketh\_13 (G1), Marcoliusprime\_14 (K2), MarkPhew\_18 (K1), Marmie\_13 (G1), Mdavu\_14 (K1), MeaningOfLife\_18 (K1), Megsy\_18 (K1), Mercurio\_14 (G4), Milly\_14 (K2), Miryou\_16 (K5), Mowgli\_13 (G1), Mynx\_18 (K1), Neighly\_16 (K3), Neoh\_13 (G), Nibb\_17 (K1), Nikao\_14 (K1), Nutello\_14 (K1), OctaviousRex\_13 (G1), OkiRoe\_16 (K5), Olga\_13 (G1), Omnicron\_16 (K5), Oscar\_17 (K1), Pace1224\_13 (G2), Padfoot\_18 (K1), Padpat\_18 (K1), Paito\_13 (G1), Paola\_16 (K5), Peeb\_13 (G1), Peel\_18 (K1), Periodt\_13 (G1), PhelpsODU\_17 (K6), Phish\_13 (G1), Phloodle\_13 (G1), Phrank\_17 (K6), Phreak\_13 (G1), Piatt\_18 (K1), PinkYoshi\_13 (G1), Pinnie\_14 (G3), Pisa1\_17 (K1), Pisa4\_17 (K1), Plagueis\_13 (G1), Pokerus\_17 (K1), Prithvi\_18 (K1), Psycho\_16 (K5), QuincyRose\_17 (K1), Rabbs\_13

(G1), Ramen\_18 (K1), Rando14\_16 (K5), Rapunzel97\_18 (K1), Rattrick\_13 (G1), Remy19\_13 (G1), Renaissance\_13 (G1), Richarlison\_13 (G1), Rosmarinus\_18 (K1), Ruriko\_13 (G1), SamuelLPlaqson\_18 (K1), Scarlett\_17 (K1), Schiebel\_13 (G1), SgtBeansprout\_14 (K1), ShaboiShabazz\_13 (G1), Shadow1\_16 (K6), ShiaSurprise\_18 (K1), SirPhilip\_17 (K6), Sizemore\_13 (G1), Slimphazie\_18 (K1), Sneeze\_13 (G1), SoSeph\_16 (K5), Spock\_18 (K1), Stargaze\_13 (G5), Strobilo\_14 (K2), Sulley\_18 (K1), Sunflower1121\_16 (K6), Sweets\_13 (G1), Syra333\_17 (K6), TClif\_17 (K6), TM4\_14 (K2), Tachez\_18 (K1), Taheera\_13 (G1), TaiwanKao\_19 (K1), Teejan\_14 (K1), Terror\_13 (G1), Thyatira\_16 (K5), Tierra\_17 (K6), Tigress9\_17 (K6), TinaBug\_13 (G1), TiniBug\_18 (K1), Tiri\_18 (K1), TomBrady\_13 (G1), Topper\_18 (K1), Torres\_14 (K1), TreyKay\_18 (K1), Trice\_14 (K1), TruffulaTree\_18 (K1), Twitch\_18 (K1), Unicorn\_17 (K6), Urkel\_18 (K1), Veliki\_18 (K1), ViviJ\_15 (K5), Waterfoul\_16 (K5), Wendigo\_13 (G1), Ximenita\_18 (K6), YangYin\_13 (G5), YoureAdopted\_17 (K1), Zabiza\_18 (K1), Zavala\_18 (K1), ZoMa\_13 (G1), ZoeJ\_14 (K2), Zombie\_13 (G1),

#### Start 41:

- Found in 5 of 730 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 5 of 612
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ageofdapage\_18 (K1), Anaya\_19 (K1), LaterM\_18 (K1), Murucutumbu\_18 (K1), Stinson\_18 (K1),

#### Start 42:

- Found in 7 of 730 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 7 of 612
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hurricane\_17 (K3), Keshu\_17 (K3), Lea83\_17 (K3), MacnCheese\_18 (K3), Pixie\_17 (K3), ShedlockHolmes\_17 (K3), TBond007\_17 (K3),

#### Start 43:

- Found in 104 of 730 ( 14.2% ) of genes in pham
- Manual Annotations of this start: 49 of 612
- Called 59.6% of time when present
- Phage (with cluster) where this start called: 8UZL\_15 (AB), Aminay\_16 (K7), Amohnition\_17 (K6), Applecrisp\_16 (K6), Bobquesha\_19 (K4), Boilgate\_15 (K8), Chancellor\_19 (K4), Chavito\_18 (K1), Cheetobro\_19 (K4), Curiosium\_19 (K1), DanSyl44\_19 (K4), DarthP\_17 (K6), Dartin\_18 (K1), Efra2\_18 (K1), Ekdilam\_15 (K6), Ellie\_15 (K6), Eponine\_19 (K4), FF47\_15 (AB), Fefferhead\_17 (K6), Fionnbharth\_19 (K4), Guanica15\_18 (K1), Hammy\_17 (K6), JF1\_19 (K4), JacoRen57\_12 (AB), Juliette\_19 (K4), Kraw\_19 (K4), LastHope\_18 (K1), Lavahound\_16 (K6), Lebo14\_19 (K4), LongHai\_16 (AB), Maco6\_13 (AB), Malthus\_19 (K4), Marshawn\_19 (K6), McMater\_18 (K1), MissDaisy\_19 (K4), Mitti\_19 (K4), Muddy\_15 (AB), Niklas\_18 (K1), NoShow\_13 (AB), November\_16 (K6), OmniCritical\_19 (K4), Patt\_19 (K4), Peanam\_18 (K1), Pharb\_17 (K3), Qhanda\_19 (K4), Reptar3000\_19 (K4), Richo\_18 (K1), Ruthiejr\_18 (K4), Salvus\_16 (AB), SamScheppers\_17 (K4), Shaobing\_18 (K1), Slarp\_19 (K4), Taquito\_17 (K4), TingHuaYa\_18 (K1), TribbleTrouble\_16 (K3), Validus\_18 (K1), Wintermute\_19 (K4), Y10\_19 (K4), Y2\_19 (K4), YasnayaPolyana\_19 (K4), Yuna\_18 (K6), Yunkel11\_18 (K1),

#### Start 48:

- Found in 20 of 730 ( 2.7% ) of genes in pham

- Manual Annotations of this start: 5 of 612
- Called 95.0% of time when present
- Phage (with cluster) where this start called: Agamoto\_16 (FR), AnnabelleLee\_14 (FR), Audell\_17 (FR), CardboardBox\_14 (FR), ChamoyPickle\_14 (FR), ChipsNGuac\_14 (FR), Ezurina\_13 (FR), Gerri43\_14 (FR), Gibbzilla\_14 (FB), LastNadiia\_17 (FR), Makima\_15 (FR), MalagasyRose\_19 (AG), Mireles\_14 (FR), Nergal\_17 (AG), Neuville\_14 (FR), Roberts\_14 (FR), Studio\_14 (FR), TMaxx\_14 (FR), TripleC\_17 (FR),

#### Start 49:

- Found in 9 of 730 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 9 of 612
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Albanese\_15 (AK), Greenhouse\_15 (AK), Huntingdon\_15 (AK), Joann\_15 (AK), Lakshmi\_15 (AK), Misaeng\_15 (AK), Nubia\_15 (AK), Oxynfrius\_15 (AK), RcigaStruga\_15 (AK),

#### Start 50:

- Found in 376 of 730 ( 51.5% ) of genes in pham
- Manual Annotations of this start: 300 of 612
- Called 95.5% of time when present
- Phage (with cluster) where this start called: Abidatro\_13 (AS1), Abigail\_12 (EB), AdoptaAdorbs\_12 (AS3), Agatha\_13 (CT), AikoCarson\_12 (CT), Akino08\_12 (EB), Albedo\_12 (EB), Albright\_12 (EB), Aledel\_11 (AK), AlexMinion\_12 (AS3), Amanises\_14 (AS1), Amelia\_14 (AS2), AmiCi24\_12 (AS3), Amok\_12 (CT), Amphitrite\_12 (AS3), AndPeggy\_12 (CT), Andrew\_13 (AS3), Angelique\_14 (CY1), AnnaLie\_13 (EB), Antrice\_13 (AS2), AppleCider\_15 (AK), Armstrong\_11 (EB), Arroyo\_13 (EB), Asapag\_13 (DN1), Atlantica\_12 (AS3), AustinPowers\_11 (AK), AvGardian\_12 (EB), Avocadoman\_12 (EB), Axym\_13 (CT), AylexOG\_13 (EB), Azaz\_12 (AS3), Azira\_15 (CT), BAjuniper\_12 (EB), BENtherdunthat\_13 (DN1), Babushka\_12 (AS3), BabyDaisy\_13 (EB), BabyYoda\_12 (EB), Bachaco\_12 (EB), Balloona\_12 (CT), Basilisk\_13 (AS1), Bavillard\_13 (CT), Bedetta\_14 (AS2), BeeGee\_14 (CY5), Beethoven\_15 (AK), BelmontSKP\_13 (EB), Bengal\_12 (EB), Bennie\_11 (AK), Bernstein\_11 (EB), Bible12\_14 (AS2), BigChungus\_12 (CT), BigMack\_11 (AK), BillDoor\_15 (CT), Biskit\_14 (CT), Blondies\_14 (CT), Bodacious\_11 (AK), BotCity\_13 (DN), Bradissa\_14 (CY1), Brahms\_11 (EB), BritBrat\_14 (CY2), BrotherBLo\_15 (AK), Brynnie\_13 (AS1), BubbaBear\_12 (EB), Bubble\_13 (CT), Budski\_13 (DN), Buldak\_12 (EB), Burnsey\_13 (CT), Burritobowl\_12 (EB), Button\_14 (CT), Buttrmlkdreams\_13 (CT), CallieOMalley\_15 (AK), Camara\_12 (AS3), CanFranMach\_12 (EB), CanesSauce\_13 (CT), Canowicakte\_15 (AK), CaramellLatte\_13 (CT), Carpal\_15 (AK), Carsonalex\_14 (CT), Cashington\_12 (EB), Cashline\_14 (CY6), Celaena\_12 (EB), CheeseTouch\_13 (DN1), CherryonLim\_14 (CT), ChewChew\_11 (AK), Chickaboom\_12 (AS1), ChickenTender\_15 (CT), Chicken\_13 (AS1), ChiliPepper\_12 (EB), ChocoMunchkin\_13 (CT), Cholula\_15 (AK), Chridison\_11 (AK), Christian\_11 (AK), Clayda5\_11 (EB), Cleo\_13 (CT), CliffHanger\_13 (EB), CocoaPuff\_12 (CT), Coltrane\_11 (EB), Colusalem\_13 (AS2), Confidence\_14 (CY1), Coral\_13 (AS2), Cote\_14 (AS2), Cozz\_13 (CT), CristinaYang\_11 (AK), CroZenni\_12 (EB), CupcakePrincess\_12 (EB), Cygnet\_13 (AS2), Daiboju\_11 (AK), DanHam62\_12 (AS3), Daob\_14 (AS2), DickRichards\_12 (EB), Didgeridoo\_13 (EB), Dino\_15 (AK), DirtyBubble\_12 (EB), Dismas\_12 (EB), Doobus\_12 (EB), DrRobert\_11 (AK), Dre3\_13 (CT), DreamTeam\_11 (AK), EMSquaredA\_14 (CY1), Eden\_11 (EB), Eesa\_13 (AS1), ElJefes\_12 (CT), Elinal\_14 (CT), Elliott\_13 (CT), Elva\_13 (EB), Emalyn\_12 (CT), EnalisNailo\_14 (CY1),

EstebanJulior\_11 (AK), Eula\_12 (EB), Eunoia\_11 (AK), Feastonyeet\_12 (CT), Finalfrontier\_13 (EB), Fingolfin\_12 (AS3), FlameThrower\_12 (EB), Floral\_14 (CY1), Fluke\_15 (AK), Franklin22\_11 (EB), Fribs8\_14 (CT), Frickyeah\_13 (DN1), GTE2\_11 (CT), Gack\_11 (EB), Gaia\_10 (X), Galaxy\_13 (AS1), Getalong\_13 (DN1), GiKK\_16 (CT), Gibbous\_13 (CT), Gisselle\_11 (AK), Glenn\_15 (AK), Glotell\_12 (AS3), GoldHunter\_14 (CT), Gravel\_14 (AS1), Graynor\_15 (AK), GreenHearts\_15 (AK), HamCheese\_12 (AS3), HannahPhantana\_14 (AS2), HeadNerd\_11 (AK), Herb\_11 (AK), Hexbug\_15 (CT), HippoPololi\_15 (CT), Holliday\_13 (DN1), Horseradish\_14 (CT), Horus\_13 (DN1), Huckleberry\_11 (AK), HunterDalle\_11 (AK), Icarian\_13 (EB), Immaculata\_15 (AK), IndyLu\_12 (EB), Jabb\_12 (EB), Jablanski\_14 (CY3), Jamun\_13 (AS1), Jamzy\_16 (CT), Jerole\_14 (AS2), Johnathan\_12 (EB), Jovita\_12 (EB), Juicebox\_14 (singleton), Jumboset\_15 (AK), Juno112\_12 (AS3), KHumphrey\_12 (AS3), Kalizoi\_15 (AK), Kamaru\_13 (DN1), Kamdara\_12 (EB), Kate33\_12 (EB), Katzastrophic\_12 (EB), KayGee\_13 (CT), KendraB23\_14 (AS1), Kenna\_13 (DN1), Kenzers\_12 (EB), Kepler\_13 (AS2), Kieran\_12 (EB), KingBob\_11 (AK), Kittykat\_11 (AK), Korra\_15 (AK), Kuleana\_13 (AS2), Lahqtemish\_12 (EB), Laphuphu24k\_12 (AS3), Lasagna\_11 (AK), Lauer\_12 (CT), Lennox\_11 (AK), Leona\_12 (AS3), Leroy\_13 (DN1), LilStuart\_11 (AK), Lilas\_14 (CY1), Lilo27\_12 (EB), LimaBean\_12 (EB), LitninMcQueen\_13 (DN1), Litotes\_15 (AK), LittleTokyo\_13 (AS2), LonelyBoi\_14 (CY7), Loviatar\_12 (EB), Lucy\_11 (AK), Lunar\_14 (AS2), Lutum\_13 (DN1), Lynlen\_12 (EB), MAnor\_13 (CT), MScarn\_15 (CT), MaVan\_15 (CT), Makoto\_11 (AK), Malisha\_13 (DN), Malvina\_15 (CT), MamaPearl\_11 (AK), Margaret\_16 (CT), Maria1952\_11 (AK), Marteena\_14 (CY1), Mayweather\_14 (CT), McDazzle\_12 (CT), MeganNoll\_15 (AK), Melons\_14 (AS2), Milomuff\_13 (EB), Moki\_11 (AK), MrBoss\_15 (AK), MrGloopy\_15 (AK), MsUbiquitous\_12 (EB), MunkgeeRoachy\_13 (CT), Nancia\_11 (AK), Nebkiss\_10 (X), Nibbles\_15 (CT), Niblet\_13 (AS1), Nicky22\_13 (EB), Nina\_14 (CT), Nodigi\_15 (CT), OMalley\_11 (AK), Olliecat\_12 (EB), Oppalora\_12 (AS3), Orcanus\_13 (AS1), Orla\_15 (CT), OtsoOtso\_13 (AS2), OurGirlNessie\_11 (AK), PartyCup\_15 (AK), PastaFagioli\_12 (EB), Pecas\_12 (EB), Pelletreau\_14 (AS1), Periwinkle\_13 (DN1), Phabuloso\_13 (DN1), PhigPhack\_12 (EB), PhirstandPhine\_14 (AS2), Phisb\_12 (EB), Phistory\_13 (DN1), PhluffyCoco\_12 (AS3), Pineda\_14 (AS2), PinkFriday\_11 (AK), PitaDog\_11 (AK), Polka\_13 (AS2), Pollux\_14 (CY1), PondAmelia\_15 (EB), Pons\_13 (CT), Posh\_14 (CY4), PotPie\_13 (CT), Potatoes\_15 (AK), Preamble\_11 (AK), PsychoKiller\_13 (CT), Pterodactyl\_11 (AK), Pumancara\_11 (AK), Pytheas\_14 (CY3), QMacho\_13 (EB), Quasar\_13 (CT), Quenya\_13 (EB), RADical\_14 (CT), RAP15\_15 (AK), RSchmailzl\_14 (CT), RanchParmCat\_16 (CT), Rattail\_12 (AS3), RedBaron\_14 (CT), RedFox\_12 (AS3), Renna12\_13 (AS3), Rivovina\_11 (AK), Riverdale\_15 (AK), Rollins\_11 (EB), Rona\_12 (EB), Rozby\_15 (AK), Ruchi\_13 (AS1), SanaSana\_13 (EB), SansAfet\_12 (EB), SarBear\_12 (EB), Savage2526\_15 (AK), Scuttle\_15 (AK), Sergei\_11 (AK), Sharkboy\_12 (EB), ShawBrad\_13 (DN1), Shayna\_11 (EB), SheckWes\_12 (CT), Shen\_14 (AS1), SirBeanington\_12 (EB), SketchMex\_12 (CT), Skylord\_11 (EB), Slay\_12 (EB), Sleepyhead\_13 (singleton), Socotra\_14 (CT), Softsoap\_12 (EB), Solea\_13 (EB), Sopespian\_13 (CT), Spooky\_13 (DN2), Squiddly\_14 (DN2), Squirrel\_12 (EB), Starburst\_14 (CT), SteamedHams\_15 (CT), Stellammi\_10 (UNK), Stoor\_12 (EB), Stromboli\_12 (EB), StuartMinion\_12 (AS3), SummitAcademy\_12 (CT), SunnyD\_11 (EB), Supakev\_11 (AK), Suppi\_15 (AK), Survivors\_15 (CT), SweatNTears\_15 (CT), Swery\_12 (EB), Tarnish\_13 (CT), TattModd\_15 (AK), TaylorSipt\_13 (AS1), Teagster\_11 (EB), Temper16\_11 (AK), Toad24\_14 (AS1), Toils\_15 (CT), Troje\_13 (CT), TukTuk\_12 (EB), Typhonmarchy\_13 (CT), Urla\_11 (AK), Vallejo\_15 (AK), Vine\_14 (CT), Vitas\_11 (EB), Vulpecula\_13 (AS1), Vulture\_11 (AK), WalkingDead\_12 (EB), Wallaby\_17 (CT), Wawa\_15 (AK), Wayne\_15 (AK), Westrich\_14 (AS1), Whitney\_13 (DN1), WileyE\_12 (AS1), Wolfwood\_17 (CT),

WonderBoy\_11 (AK), Wrigley\_14 (CY4), Yakult\_14 (CT), Yarn\_12 (CT), Yucky\_13 (CT), Yummy\_14 (CT), Zareef\_15 (CT), Zhuangyuan\_14 (AS2), Zixiang\_13 (AS1), Zorro\_15 (AK),

Start 51:

- Found in 24 of 730 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 18 of 612
- Called 87.5% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy\_19 (Y), Avani\_14 (F2), Bipper\_19 (Y), Blarby\_15 (F), Che9d\_14 (F2), Cracklewink\_19 (Y), DS6A\_16 (singleton), Demsculpinboyz\_14 (F2), Faiyaz\_19 (Y), Fryberger\_45 (DP), Guey18\_50 (DP), Jabbawokkie\_15 (F2), Keelan\_43 (DP), LilSpotty\_12 (singleton), Ronaldo\_48 (DP), SilverChicken\_14 (F2), Soul22\_14 (F2), Volt\_47 (DP), Yoshi\_14 (F2), Zapner\_15 (F2), Ziko\_48 (DP),

Start 53:

- Found in 1 of 730 ( 0.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VWB\_13 (BA),

Start 54:

- Found in 18 of 730 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 1 of 612
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Spartoi\_11 (singleton),

Start 55:

- Found in 3 of 730 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 3 of 612
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ\_13 (DN), Birdsong\_13 (DN), MortyNRick\_13 (DN),

### **Summary by clusters:**

There are 42 clusters represented in this pham: DN, CY3, FR, BA, CY2, CY5, AS1, K3, K2, K1, K7, K6, K5, K4, K8, DP, G5, G4, G3, AG, G1, F, DN1, DN2, AS3, AS2, CY1, AB, CY7, CY6, G, CY4, AK, EB, Y, X, singleton, UNK, G2, CT, F2, FB,

Info for manual annotations of cluster AB:

- Start number 43 was manually annotated 4 times for cluster AB.

Info for manual annotations of cluster AG:

- Start number 48 was manually annotated 2 times for cluster AG.

Info for manual annotations of cluster AK:

- Start number 49 was manually annotated 9 times for cluster AK.
- Start number 50 was manually annotated 75 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 50 was manually annotated 13 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 50 was manually annotated 17 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 50 was manually annotated 14 times for cluster AS3.

Info for manual annotations of cluster CT:

- Start number 50 was manually annotated 60 times for cluster CT.

Info for manual annotations of cluster CY1:

- Start number 50 was manually annotated 9 times for cluster CY1.

Info for manual annotations of cluster CY2:

- Start number 50 was manually annotated 1 time for cluster CY2.

Info for manual annotations of cluster CY3:

- Start number 50 was manually annotated 2 times for cluster CY3.

Info for manual annotations of cluster CY4:

- Start number 50 was manually annotated 2 times for cluster CY4.

Info for manual annotations of cluster CY5:

- Start number 50 was manually annotated 1 time for cluster CY5.

Info for manual annotations of cluster CY6:

- Start number 50 was manually annotated 1 time for cluster CY6.

Info for manual annotations of cluster CY7:

- Start number 50 was manually annotated 1 time for cluster CY7.

Info for manual annotations of cluster DN:

- Start number 50 was manually annotated 3 times for cluster DN.
- Start number 55 was manually annotated 3 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 50 was manually annotated 15 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 50 was manually annotated 2 times for cluster DN2.

Info for manual annotations of cluster DP:

- Start number 51 was manually annotated 6 times for cluster DP.

Info for manual annotations of cluster EB:

- Start number 50 was manually annotated 80 times for cluster EB.

Info for manual annotations of cluster F2:

- Start number 51 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster FR:

- Start number 48 was manually annotated 3 times for cluster FR.

Info for manual annotations of cluster G1:

- Start number 40 was manually annotated 62 times for cluster G1.

Info for manual annotations of cluster G2:

- Start number 40 was manually annotated 3 times for cluster G2.

Info for manual annotations of cluster G3:

- Start number 40 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

- Start number 40 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

- Start number 40 was manually annotated 2 times for cluster G5.

Info for manual annotations of cluster K1:

- Start number 40 was manually annotated 94 times for cluster K1.
- Start number 41 was manually annotated 5 times for cluster K1.
- Start number 43 was manually annotated 9 times for cluster K1.

Info for manual annotations of cluster K2:

- Start number 39 was manually annotated 3 times for cluster K2.
- Start number 40 was manually annotated 8 times for cluster K2.

Info for manual annotations of cluster K3:

- Start number 42 was manually annotated 7 times for cluster K3.
- Start number 43 was manually annotated 2 times for cluster K3.

Info for manual annotations of cluster K4:

- Start number 43 was manually annotated 22 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 40 was manually annotated 23 times for cluster K5.

Info for manual annotations of cluster K6:

- Start number 21 was manually annotated 1 time for cluster K6.
- Start number 40 was manually annotated 13 times for cluster K6.
- Start number 43 was manually annotated 10 times for cluster K6.

Info for manual annotations of cluster K7:

- Start number 43 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster K8:

- Start number 43 was manually annotated 1 time for cluster K8.

Info for manual annotations of cluster X:

- Start number 50 was manually annotated 2 times for cluster X.

Info for manual annotations of cluster Y:

- Start number 34 was manually annotated 2 times for cluster Y.
- Start number 51 was manually annotated 3 times for cluster Y.

### **Gene Information:**

Gene: 8UZL\_15 Start: 9344, Stop: 9985, Start Num: 43

Candidate Starts for 8UZL\_15:

(32, 9311), (Start: 43 @9344 has 49 MA's), (Start: 54 @9377 has 1 MA's), (56, 9386), (62, 9404), (77, 9470), (85, 9509), (86, 9524), (104, 9629), (109, 9650), (113, 9680), (123, 9719), (134, 9764), (156, 9848), (161, 9869),

Gene: Abidatro\_13 Start: 8801, Stop: 9631, Start Num: 50

Candidate Starts for Abidatro\_13:

(Start: 50 @8801 has 300 MA's), (113, 9110), (129, 9176), (146, 9233), (153, 9269), (163, 9305), (170, 9338), (181, 9392), (190, 9437), (198, 9491), (203, 9512),

Gene: Abigail\_12 Start: 8439, Stop: 9236, Start Num: 50

Candidate Starts for Abigail\_12:

(4, 8139), (11, 8235), (12, 8253), (27, 8355), (Start: 43 @8409 has 49 MA's), (Start: 50 @8439 has 300 MA's), (52, 8445), (85, 8586), (86, 8601), (123, 8793), (147, 8880), (191, 9081), (206, 9177),

Gene: ActinUp\_18 Start: 10504, Stop: 11118, Start Num: 40

Candidate Starts for ActinUp\_18:

(Start: 40 @10504 has 209 MA's), (56, 10549), (85, 10672), (91, 10726), (101, 10783), (106, 10798), (123, 10882), (125, 10888), (134, 10927), (137, 10939), (146, 10966), (156, 11011), (159, 11026), (167, 11050), (179, 11107),

Gene: Adephagia\_18 Start: 10504, Stop: 11118, Start Num: 40

Candidate Starts for Adephagia\_18:

(Start: 40 @10504 has 209 MA's), (56, 10549), (85, 10672), (91, 10726), (101, 10783), (106, 10798), (123, 10882), (125, 10888), (134, 10927), (137, 10939), (146, 10966), (156, 11011), (159, 11026), (167, 11050), (179, 11107),

Gene: Adonis\_18 Start: 10513, Stop: 11127, Start Num: 40

Candidate Starts for Adonis\_18:

(Start: 40 @10513 has 209 MA's), (56, 10558), (85, 10681), (91, 10735), (101, 10792), (106, 10807), (123, 10891), (125, 10897), (134, 10936), (137, 10948), (146, 10975), (156, 11020), (159, 11035), (167, 11059),

Gene: AdoptaAdorbs\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for AdoptaAdorbs\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Agamoto\_16 Start: 11215, Stop: 11793, Start Num: 48

Candidate Starts for Agamoto\_16:

(Start: 48 @11215 has 5 MA's), (57, 11242), (109, 11494),

Gene: Agatha\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Agatha\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Agent47\_16 Start: 10624, Stop: 11235, Start Num: 40

Candidate Starts for Agent47\_16:

(Start: 40 @10624 has 209 MA's), (56, 10669), (91, 10846), (101, 10903), (106, 10918), (109, 10933), (123, 11002), (125, 11008), (134, 11047), (141, 11074), (156, 11131), (159, 11146), (167, 11170), (172, 11200),

Gene: Ageofdapage\_18 Start: 10435, Stop: 11046, Start Num: 41

Candidate Starts for Ageofdapage\_18:

(Start: 41 @10435 has 5 MA's), (56, 10477), (85, 10600), (91, 10654), (101, 10711), (106, 10726), (113, 10771), (123, 10810), (125, 10816), (134, 10855), (137, 10867), (146, 10894), (156, 10939), (159, 10954), (167, 10978),

Gene: AikoCarson\_12 Start: 7662, Stop: 8510, Start Num: 50

Candidate Starts for AikoCarson\_12:

(Start: 34 @7605 has 2 MA's), (Start: 50 @7662 has 300 MA's), (60, 7695), (93, 7881), (109, 7953), (152, 8118), (160, 8154), (163, 8163), (165, 8169), (173, 8202), (182, 8238), (184, 8247), (212, 8433), (213, 8439),

Gene: AizenPogi\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for AizenPogi\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Akino08\_12 Start: 8625, Stop: 9422, Start Num: 50

Candidate Starts for Akino08\_12:

(Start: 50 @8625 has 300 MA's), (52, 8631), (72, 8709), (85, 8775), (86, 8790), (115, 8949), (123, 8982), (134, 9027), (191, 9267),

Gene: Albanese\_15 Start: 10902, Stop: 11810, Start Num: 49

Candidate Starts for Albanese\_15:

(Start: 49 @10902 has 9 MA's), (86, 11058), (105, 11163), (113, 11211), (163, 11400), (195, 11574), (200, 11604), (210, 11655), (211, 11661),

Gene: Albedo\_12 Start: 8314, Stop: 9111, Start Num: 50

Candidate Starts for Albedo\_12:

(11, 8110), (12, 8128), (27, 8230), (Start: 43 @8284 has 49 MA's), (Start: 50 @8314 has 300 MA's), (52, 8320), (85, 8461), (86, 8476), (114, 8632), (123, 8668), (134, 8713), (147, 8755), (191, 8956),

Gene: Albright\_12 Start: 8320, Stop: 9117, Start Num: 50

Candidate Starts for Albright\_12:

(4, 8020), (11, 8116), (12, 8134), (27, 8236), (Start: 43 @8290 has 49 MA's), (Start: 50 @8320 has 300 MA's), (52, 8326), (85, 8467), (86, 8482), (123, 8674), (147, 8761), (191, 8962), (206, 9058),

Gene: Aledel\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for Aledel\_11:

(Start: 50 @7979 has 300 MA's), (80, 8090), (86, 8135), (116, 8297), (135, 8366), (162, 8471), (163, 8474), (168, 8489), (195, 8648), (200, 8678), (204, 8696), (211, 8735), (217, 8813),

Gene: AlexMinion\_12 Start: 8406, Stop: 8987, Start Num: 50

Candidate Starts for AlexMinion\_12:

(7, 8169), (9, 8190), (20, 8265), (35, 8355), (Start: 50 @8406 has 300 MA's), (56, 8427), (113, 8715), (115, 8721), (134, 8799), (146, 8838), (147, 8841), (177, 8973),

Gene: AlishaPH\_18 Start: 10503, Stop: 11114, Start Num: 40

Candidate Starts for AlishaPH\_18:

(Start: 40 @10503 has 209 MA's), (56, 10545), (91, 10722), (101, 10779), (106, 10794), (123, 10878), (125, 10884), (134, 10923), (137, 10935), (146, 10962), (156, 11007), (159, 11022), (167, 11046), (179, 11103),

Gene: AlleyCat\_16 Start: 10500, Stop: 11111, Start Num: 40

Candidate Starts for AlleyCat\_16:

(Start: 40 @10500 has 209 MA's), (56, 10545), (101, 10779), (106, 10794), (109, 10809), (123, 10878), (125, 10884), (134, 10923), (137, 10935), (141, 10950), (156, 11007), (159, 11022), (167, 11046), (172, 11076),

Gene: Amanises\_14 Start: 8961, Stop: 9545, Start Num: 50

Candidate Starts for Amanises\_14:

(Start: 50 @8961 has 300 MA's), (153, 9429), (170, 9498), (174, 9510),

Gene: Amelia\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Amelia\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: Amelie\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Amelie\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: Amgine\_16 Start: 10111, Stop: 10827, Start Num: 21

Candidate Starts for Amgine\_16:

(3, 9946), (Start: 21 @10111 has 1 MA's), (29, 10174), (31, 10183), (Start: 43 @10216 has 49 MA's), (56, 10258), (85, 10381), (87, 10402), (91, 10435), (101, 10492), (106, 10507), (123, 10591), (125, 10597), (134, 10636), (137, 10648), (146, 10675), (159, 10735), (167, 10759),

Gene: AmiCi24\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for AmiCi24\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Aminay\_16 Start: 10358, Stop: 10966, Start Num: 43

Candidate Starts for Aminay\_16:

(Start: 43 @10358 has 49 MA's), (66, 10433), (76, 10481), (86, 10538), (87, 10544), (101, 10634), (109, 10664), (113, 10694), (117, 10706), (123, 10733), (125, 10739), (141, 10805), (156, 10862), (159, 10877), (167, 10901),

Gene: Amohnition\_17 Start: 10531, Stop: 11145, Start Num: 43

Candidate Starts for Amohnition\_17:

(Start: 43 @10531 has 49 MA's), (Start: 48 @10552 has 5 MA's), (Start: 50 @10555 has 300 MA's), (56, 10576), (87, 10720), (91, 10753), (101, 10810), (106, 10825), (123, 10909), (125, 10915), (134, 10954), (137, 10966), (146, 10993), (159, 11053), (167, 11077), (172, 11107),

Gene: Amok\_12 Start: 7662, Stop: 8510, Start Num: 50

Candidate Starts for Amok\_12:

(Start: 34 @7605 has 2 MA's), (Start: 50 @7662 has 300 MA's), (60, 7695), (93, 7881), (109, 7953), (152, 8118), (160, 8154), (163, 8163), (165, 8169), (173, 8202), (182, 8238), (184, 8247), (212, 8433), (213, 8439),

Gene: Amphitrite\_12 Start: 8376, Stop: 8957, Start Num: 50

Candidate Starts for Amphitrite\_12:

(Start: 50 @8376 has 300 MA's), (56, 8397), (113, 8685), (134, 8769), (146, 8808), (147, 8811), (153, 8844), (170, 8913), (177, 8943),

Gene: Anaya\_19 Start: 10513, Stop: 11124, Start Num: 41

Candidate Starts for Anaya\_19:

(Start: 41 @10513 has 5 MA's), (56, 10555), (85, 10678), (101, 10789), (106, 10804), (113, 10849), (123, 10888), (125, 10894), (134, 10933), (156, 11017), (159, 11032), (167, 11056),

Gene: AndPeggy\_12 Start: 7953, Stop: 8798, Start Num: 50

Candidate Starts for AndPeggy\_12:

(Start: 34 @7896 has 2 MA's), (Start: 50 @7953 has 300 MA's), (60, 7986), (93, 8172), (109, 8244), (160, 8445), (165, 8460), (173, 8493), (182, 8529), (184, 8538), (190, 8568), (212, 8724), (213, 8730),

Gene: Andrew\_13 Start: 8753, Stop: 9334, Start Num: 50

Candidate Starts for Andrew\_13:

(Start: 50 @8753 has 300 MA's), (56, 8774), (113, 9062), (134, 9146), (145, 9182), (160, 9248), (177, 9320),

Gene: Angel\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Angel\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Angelica\_18 Start: 10475, Stop: 11089, Start Num: 40

Candidate Starts for Angelica\_18:

(Start: 40 @10475 has 209 MA's), (56, 10520), (85, 10643), (91, 10697), (101, 10754), (106, 10769), (123, 10853), (125, 10859), (134, 10898), (137, 10910), (146, 10937), (156, 10982), (159, 10997), (167, 11021), (179, 11078),

Gene: Angelique\_14 Start: 8715, Stop: 9560, Start Num: 50

Candidate Starts for Angelique\_14:

(Start: 50 @8715 has 300 MA's), (73, 8796), (134, 9105), (136, 9114), (173, 9255), (197, 9396), (208, 9447),

Gene: Anma\_18 Start: 10446, Stop: 11060, Start Num: 40

Candidate Starts for Anma\_18:

(Start: 40 @10446 has 209 MA's), (47, 10464), (56, 10491), (91, 10668), (101, 10725), (106, 10740), (109, 10755), (113, 10785), (123, 10824), (125, 10830), (134, 10869), (137, 10881), (146, 10908), (156, 10953), (159, 10968), (167, 10992),

Gene: AnnaLie\_13 Start: 8729, Stop: 9526, Start Num: 50

Candidate Starts for AnnaLie\_13:

(11, 8525), (12, 8543), (Start: 43 @8699 has 49 MA's), (Start: 50 @8729 has 300 MA's), (52, 8735), (85, 8876), (86, 8891), (123, 9083), (147, 9170), (191, 9371), (206, 9467),

Gene: AnnabelLee\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for AnnabelLee\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: Annihilator\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Annihilator\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Antrice\_13 Start: 8717, Stop: 9298, Start Num: 50

Candidate Starts for Antrice\_13:

(Start: 50 @8717 has 300 MA's), (56, 8738), (113, 9026), (134, 9110), (146, 9149), (165, 9227), (177, 9284),

Gene: Antsirabe\_13 Start: 10190, Stop: 10810, Start Num: 40

Candidate Starts for Antsirabe\_13:

(Start: 40 @10190 has 209 MA's), (47, 10214), (63, 10265), (76, 10322), (85, 10364), (86, 10379), (101, 10475), (106, 10490), (111, 10514), (113, 10535), (123, 10574), (128, 10598), (141, 10646), (149, 10670), (150, 10676), (159, 10718), (167, 10742), (172, 10772),

Gene: Apocalypse\_18 Start: 10479, Stop: 11093, Start Num: 40

Candidate Starts for Apocalypse\_18:

(Start: 40 @10479 has 209 MA's), (56, 10524), (85, 10647), (91, 10701), (101, 10758), (106, 10773), (123, 10857), (125, 10863), (134, 10902), (137, 10914), (146, 10941), (156, 10986), (159, 11001), (167, 11025), (179, 11082),

Gene: AppleCider\_15 Start: 10835, Stop: 11743, Start Num: 50

Candidate Starts for AppleCider\_15:

(Start: 50 @10835 has 300 MA's), (56, 10856), (86, 10991), (116, 11153), (123, 11183), (156, 11303), (163, 11333), (168, 11348), (178, 11411), (181, 11429), (195, 11507), (200, 11537), (202, 11543), (210, 11588), (211, 11594),

Gene: Applecrisp\_16 Start: 10618, Stop: 11232, Start Num: 43

Candidate Starts for Applecrisp\_16:

(Start: 21 @10513 has 1 MA's), (29, 10576), (31, 10585), (Start: 43 @10618 has 49 MA's), (Start: 50 @10642 has 300 MA's), (56, 10663), (85, 10786), (87, 10807), (91, 10840), (101, 10897), (106, 10912), (123, 10996), (125, 11002), (134, 11041), (137, 11053), (146, 11080), (159, 11140), (167, 11164),

Gene: Armstrong\_11 Start: 8096, Stop: 8680, Start Num: 50

Candidate Starts for Armstrong\_11:

(Start: 50 @8096 has 300 MA's), (52, 8102), (56, 8117), (58, 8123), (80, 8207), (86, 8255), (113, 8408), (115, 8414), (123, 8447), (142, 8522), (145, 8528), (147, 8534),

Gene: Aroostook\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Aroostook\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Arroyo\_13 Start: 8790, Stop: 9587, Start Num: 50

Candidate Starts for Arroyo\_13:

(11, 8586), (12, 8604), (27, 8706), (Start: 43 @8760 has 49 MA's), (Start: 50 @8790 has 300 MA's), (52, 8796), (85, 8937), (86, 8952), (123, 9144), (147, 9231), (191, 9432), (206, 9528),

Gene: Asapag\_13 Start: 7514, Stop: 8086, Start Num: 50

Candidate Starts for Asapag\_13:

(Start: 50 @7514 has 300 MA's), (56, 7535), (65, 7556), (68, 7568), (96, 7727), (104, 7769), (112, 7802), (160, 7991), (183, 8075),

Gene: Asayake\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Asayake\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Atiba\_18 Start: 10467, Stop: 11081, Start Num: 40

Candidate Starts for Atiba\_18:

(Start: 40 @10467 has 209 MA's), (56, 10512), (85, 10635), (91, 10689), (101, 10746), (106, 10761), (123, 10845), (125, 10851), (134, 10890), (137, 10902), (146, 10929), (156, 10974), (159, 10989), (167, 11013),

Gene: Atlantica\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for Atlantica\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Audell\_17 Start: 11494, Stop: 12072, Start Num: 48

Candidate Starts for Audell\_17:

(Start: 48 @11494 has 5 MA's), (129, 11869),

Gene: AuntGwenStacy\_19 Start: 12547, Stop: 13128, Start Num: 51

Candidate Starts for AuntGwenStacy\_19:

(Start: 34 @12487 has 2 MA's), (44, 12517), (Start: 51 @12547 has 18 MA's), (65, 12592), (96, 12763), (107, 12814), (109, 12826), (113, 12856), (134, 12940), (142, 12970), (156, 13024), (179, 13117),

Gene: AustinPowers\_11 Start: 7980, Stop: 8885, Start Num: 50

Candidate Starts for AustinPowers\_11:

(Start: 50 @7980 has 300 MA's), (86, 8136), (116, 8298), (135, 8367), (163, 8475), (168, 8490), (195, 8649), (200, 8679), (204, 8697), (211, 8736), (217, 8814),

Gene: AvGardian\_12 Start: 8379, Stop: 9176, Start Num: 50

Candidate Starts for AvGardian\_12:

(Start: 50 @8379 has 300 MA's), (52, 8385), (85, 8529), (86, 8544), (115, 8703), (123, 8736), (147, 8823), (150, 8838), (177, 8955), (191, 9021),

Gene: Avani\_14 Start: 7679, Stop: 8272, Start Num: 51

Candidate Starts for Avani\_14:

(Start: 51 @7679 has 18 MA's), (56, 7697), (85, 7814), (89, 7853), (99, 7919), (109, 7952), (112, 7964), (115, 7988), (134, 8060), (136, 8069), (139, 8081), (144, 8093), (150, 8117), (153, 8135),

Gene: Avocado\_13 Start: 10012, Stop: 10632, Start Num: 40

Candidate Starts for Avocado\_13:

(Start: 40 @10012 has 209 MA's), (63, 10087), (76, 10144), (85, 10186), (86, 10201), (101, 10297), (106, 10312), (111, 10336), (113, 10357), (123, 10396), (128, 10420), (134, 10441), (141, 10468), (150, 10498), (159, 10540), (167, 10564),

Gene: Avocadoman\_12 Start: 8378, Stop: 9175, Start Num: 50

Candidate Starts for Avocadoman\_12:

(4, 8078), (11, 8174), (12, 8192), (27, 8294), (Start: 43 @8348 has 49 MA's), (Start: 50 @8378 has 300 MA's), (52, 8384), (85, 8525), (86, 8540), (123, 8732), (147, 8819), (191, 9020), (206, 9116),

Gene: Avrafan\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Avrafan\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Axym\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Axym\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (128, 8308), (134, 8329), (141, 8356), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: AylexOG\_13 Start: 8665, Stop: 9462, Start Num: 50

Candidate Starts for AylexOG\_13:

(11, 8461), (12, 8479), (Start: 43 @8635 has 49 MA's), (Start: 50 @8665 has 300 MA's), (52, 8671), (85, 8812), (86, 8827), (123, 9019), (147, 9106), (191, 9307),

Gene: Azaz\_12 Start: 8429, Stop: 9010, Start Num: 50

Candidate Starts for Azaz\_12:

(Start: 50 @8429 has 300 MA's), (56, 8450), (113, 8738), (134, 8822), (146, 8861), (147, 8864), (153, 8897), (170, 8966), (177, 8996),

Gene: Azira\_15 Start: 8878, Stop: 9717, Start Num: 50

Candidate Starts for Azira\_15:

(Start: 50 @8878 has 300 MA's), (60, 8911), (104, 9139), (125, 9220), (136, 9268), (152, 9325), (154, 9337), (160, 9361), (165, 9376), (188, 9469), (193, 9502), (195, 9514), (196, 9517), (214, 9652), (219, 9700),

Gene: AzulaCat\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for AzulaCat\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: BAjuniper\_12 Start: 8258, Stop: 8848, Start Num: 50

Candidate Starts for BAjuniper\_12:

(Start: 50 @8258 has 300 MA's), (52, 8264), (56, 8279), (85, 8402), (86, 8417), (113, 8570), (123, 8609), (125, 8615), (134, 8654), (146, 8693),

Gene: BEEST\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for BEEST\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063),

(167, 11087), (179, 11144),

Gene: BENtherdunthat\_13 Start: 7514, Stop: 8086, Start Num: 50

Candidate Starts for BENtherdunthat\_13:

(Start: 50 @7514 has 300 MA's), (56, 7535), (65, 7556), (68, 7568), (96, 7727), (104, 7769), (112, 7802), (160, 7991), (183, 8075),

Gene: BGlluviae\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for BGlluviae\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: BPs\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for BPs\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: BQuat\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for BQuat\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Babushka\_12 Start: 8426, Stop: 9007, Start Num: 50

Candidate Starts for Babushka\_12:

(Start: 50 @8426 has 300 MA's), (56, 8447), (113, 8735), (134, 8819), (146, 8858), (153, 8894), (170, 8963), (177, 8993),

Gene: BabyDaisy\_13 Start: 8547, Stop: 9341, Start Num: 50

Candidate Starts for BabyDaisy\_13:

(Start: 50 @8547 has 300 MA's), (85, 8694), (86, 8709), (123, 8901), (134, 8946), (147, 8988), (191, 9186),

Gene: BabyYoda\_12 Start: 8571, Stop: 9368, Start Num: 50

Candidate Starts for BabyYoda\_12:

(Start: 50 @8571 has 300 MA's), (52, 8577), (85, 8721), (86, 8736), (115, 8895), (123, 8928), (134, 8973), (177, 9147), (191, 9213),

Gene: Bachaco\_12 Start: 8464, Stop: 9054, Start Num: 50

Candidate Starts for Bachaco\_12:

(Start: 50 @8464 has 300 MA's), (52, 8470), (56, 8485), (65, 8512), (69, 8527), (80, 8575), (85, 8608), (86, 8623), (113, 8776), (123, 8815), (125, 8821), (134, 8860), (146, 8899), (151, 8920),

Gene: BaghaKamala\_18 Start: 10470, Stop: 11084, Start Num: 40

Candidate Starts for BaghaKamala\_18:

(Start: 40 @10470 has 209 MA's), (56, 10515), (85, 10638), (91, 10692), (101, 10749), (106, 10764), (123, 10848), (125, 10854), (134, 10893), (137, 10905), (146, 10932), (156, 10977), (159, 10992), (167, 11016), (179, 11073),

Gene: Balloona\_12 Start: 7701, Stop: 8540, Start Num: 50

Candidate Starts for Balloona\_12:

(24, 7587), (Start: 34 @7647 has 2 MA's), (Start: 50 @7701 has 300 MA's), (60, 7734), (93, 7920), (107, 7980), (109, 7992), (160, 8193), (163, 8202), (165, 8208), (173, 8241), (178, 8271), (190, 8316), (205, 8406),

Gene: BananenDer11\_16 Start: 10585, Stop: 11196, Start Num: 40

Candidate Starts for BananenDer11\_16:

(Start: 40 @10585 has 209 MA's), (56, 10630), (91, 10807), (101, 10864), (106, 10879), (109, 10894), (123, 10963), (125, 10969), (134, 11008), (141, 11035), (156, 11092), (159, 11107), (167, 11131), (172, 11161),

Gene: Barkley26\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Barkley26\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (109, 10163), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: BarrelRoll\_18 Start: 10496, Stop: 11107, Start Num: 40

Candidate Starts for BarrelRoll\_18:

(Start: 40 @10496 has 209 MA's), (56, 10538), (85, 10661), (91, 10715), (101, 10772), (106, 10787), (123, 10871), (125, 10877), (134, 10916), (137, 10928), (146, 10955), (156, 11000), (159, 11015), (167, 11039), (179, 11096),

Gene: Basilisk\_13 Start: 9125, Stop: 9955, Start Num: 50

Candidate Starts for Basilisk\_13:

(Start: 50 @9125 has 300 MA's), (113, 9434), (129, 9500), (146, 9557), (163, 9629), (170, 9662), (181, 9716), (190, 9761), (203, 9836),

Gene: Bavilard\_13 Start: 8481, Stop: 9320, Start Num: 50

Candidate Starts for Bavilard\_13:

(24, 8367), (Start: 34 @8427 has 2 MA's), (Start: 50 @8481 has 300 MA's), (60, 8514), (93, 8700), (107, 8760), (109, 8772), (136, 8880), (160, 8973), (163, 8982), (165, 8988), (173, 9021), (178, 9051), (190, 9096), (205, 9186),

Gene: BearBQ\_13 Start: 7836, Stop: 8429, Start Num: 55

Candidate Starts for BearBQ\_13:

(Start: 55 @7836 has 3 MA's), (61, 7857), (67, 7881), (95, 8049), (108, 8109), (109, 8115), (115, 8151), (116, 8154), (125, 8190),

Gene: Bedetta\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Bedetta\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: BeeGee\_14 Start: 8711, Stop: 9556, Start Num: 50

Candidate Starts for BeeGee\_14:

(Start: 50 @8711 has 300 MA's), (71, 8780), (73, 8792), (123, 9056), (134, 9101), (136, 9110), (158, 9197), (173, 9251),

Gene: Beethoven\_15 Start: 10796, Stop: 11704, Start Num: 50

Candidate Starts for Beethoven\_15:

(Start: 50 @10796 has 300 MA's), (86, 10952), (105, 11057), (116, 11114), (163, 11294), (168, 11309), (195, 11468), (200, 11498), (211, 11555),

Gene: Beezoo\_18 Start: 10524, Stop: 11135, Start Num: 40

Candidate Starts for Beezoo\_18:

(Start: 40 @10524 has 209 MA's), (56, 10566), (85, 10689), (91, 10743), (101, 10800), (106, 10815), (123, 10899), (125, 10905), (134, 10944), (137, 10956), (146, 10983), (156, 11028), (159, 11043), (167, 11067),

Gene: Bella96\_18 Start: 10425, Stop: 11039, Start Num: 40

Candidate Starts for Bella96\_18:

(Start: 40 @10425 has 209 MA's), (56, 10470), (91, 10647), (101, 10704), (106, 10719), (109, 10734), (113, 10764), (123, 10803), (125, 10809), (134, 10848), (137, 10860), (146, 10887), (156, 10932), (159, 10947), (167, 10971),

Gene: Belladonna\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Belladonna\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: BelmontSKP\_13 Start: 8729, Stop: 9526, Start Num: 50

Candidate Starts for BelmontSKP\_13:

(11, 8525), (12, 8543), (Start: 43 @8699 has 49 MA's), (Start: 50 @8729 has 300 MA's), (52, 8735), (85, 8876), (86, 8891), (123, 9083), (147, 9170), (191, 9371), (206, 9467),

Gene: Bengal\_12 Start: 8320, Stop: 9117, Start Num: 50

Candidate Starts for Bengal\_12:

(4, 8020), (11, 8116), (12, 8134), (14, 8143), (27, 8236), (Start: 43 @8290 has 49 MA's), (Start: 50 @8320 has 300 MA's), (52, 8326), (85, 8467), (86, 8482), (123, 8674), (147, 8761), (191, 8962), (206, 9058),

Gene: Bennie\_11 Start: 7938, Stop: 8846, Start Num: 50

Candidate Starts for Bennie\_11:

(Start: 50 @7938 has 300 MA's), (86, 8094), (105, 8199), (116, 8256), (163, 8436), (168, 8451), (181, 8532), (195, 8610), (200, 8640), (204, 8658), (211, 8697),

Gene: Bern\_18 Start: 10456, Stop: 11070, Start Num: 40

Candidate Starts for Bern\_18:

(Start: 40 @10456 has 209 MA's), (56, 10501), (85, 10624), (91, 10678), (101, 10735), (106, 10750), (113, 10795), (123, 10834), (125, 10840), (134, 10879), (137, 10891), (146, 10918), (156, 10963), (159, 10978), (167, 11002),

Gene: Bernstein\_11 Start: 8156, Stop: 8740, Start Num: 50

Candidate Starts for Bernstein\_11:

(Start: 50 @8156 has 300 MA's), (52, 8162), (56, 8177), (58, 8183), (86, 8315), (113, 8468), (115, 8474), (123, 8507), (142, 8582), (145, 8588), (147, 8594),

Gene: Bible12\_14 Start: 8967, Stop: 9548, Start Num: 50

Candidate Starts for Bible12\_14:

(Start: 50 @8967 has 300 MA's), (56, 8988), (79, 9075), (86, 9123), (113, 9276), (134, 9360), (145, 9396), (147, 9402), (153, 9435), (170, 9504),

Gene: BigChungus\_12 Start: 7726, Stop: 8565, Start Num: 50

Candidate Starts for BigChungus\_12:

(24, 7612), (Start: 34 @7672 has 2 MA's), (Start: 50 @7726 has 300 MA's), (60, 7759), (93, 7945), (107, 8005), (109, 8017), (160, 8218), (163, 8227), (165, 8233), (173, 8266), (178, 8296), (190, 8341),

Gene: BigMack\_11 Start: 7938, Stop: 8846, Start Num: 50

Candidate Starts for BigMack\_11:

(Start: 50 @7938 has 300 MA's), (86, 8094), (105, 8199), (113, 8247), (115, 8253), (116, 8256), (163, 8436), (168, 8451), (181, 8532), (195, 8610), (200, 8640),

Gene: Biglebops\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Biglebops\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: BillDoor\_15 Start: 7918, Stop: 8763, Start Num: 50

Candidate Starts for BillDoor\_15:

(Start: 34 @7861 has 2 MA's), (Start: 50 @7918 has 300 MA's), (60, 7951), (93, 8137), (109, 8209), (160, 8410), (165, 8425), (173, 8458), (182, 8494), (184, 8503), (190, 8533), (212, 8689), (213, 8695),

Gene: Bipper\_19 Start: 12607, Stop: 13194, Start Num: 51

Candidate Starts for Bipper\_19:

(38, 12580), (Start: 51 @12607 has 18 MA's), (59, 12631), (65, 12652), (68, 12664), (94, 12817), (96, 12823), (106, 12871), (107, 12874), (109, 12886), (113, 12916), (132, 12994), (134, 13000), (142, 13030), (152, 13066), (156, 13084), (165, 13117), (178, 13174), (179, 13177), (180, 13180),

Gene: Birdsong\_13 Start: 7836, Stop: 8429, Start Num: 55

Candidate Starts for Birdsong\_13:

(Start: 55 @7836 has 3 MA's), (61, 7857), (67, 7881), (95, 8049), (108, 8109), (109, 8115), (115, 8151), (116, 8154), (125, 8190),

Gene: Biskit\_14 Start: 7925, Stop: 8770, Start Num: 50

Candidate Starts for Biskit\_14:

(24, 7808), (Start: 34 @7868 has 2 MA's), (Start: 50 @7925 has 300 MA's), (60, 7958), (93, 8144), (109, 8216), (160, 8417), (165, 8432), (173, 8465), (184, 8510), (212, 8696), (213, 8702),

Gene: Blarby\_15 Start: 8203, Stop: 8796, Start Num: 51

Candidate Starts for Blarby\_15:

(Start: 51 @8203 has 18 MA's), (56, 8221), (85, 8338), (89, 8377), (99, 8443), (109, 8476), (112, 8488), (115, 8512), (134, 8584), (136, 8593), (139, 8605), (144, 8617), (150, 8641), (153, 8659),

Gene: Blizzard\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Blizzard\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Blondies\_14 Start: 7911, Stop: 8756, Start Num: 50

Candidate Starts for Blondies\_14:

(24, 7794), (Start: 34 @7854 has 2 MA's), (Start: 50 @7911 has 300 MA's), (60, 7944), (93, 8130), (109, 8202), (160, 8403), (165, 8418), (173, 8451), (184, 8496), (212, 8682), (213, 8688),

Gene: Bobquesha\_19 Start: 11469, Stop: 12080, Start Num: 43

Candidate Starts for Bobquesha\_19:

(Start: 43 @11469 has 49 MA's), (64, 11535), (66, 11541), (68, 11550), (76, 11589), (86, 11646), (87, 11652), (90, 11673), (91, 11685), (101, 11742), (106, 11757), (123, 11841), (125, 11847), (133, 11883), (134, 11886), (137, 11898), (141, 11913), (156, 11970), (159, 11985), (167, 12009), (172, 12039),

Gene: Bodacious\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for Bodacious\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (163, 8434), (195, 8608), (200, 8638), (211, 8695),

Gene: Boiiii\_18 Start: 10546, Stop: 11157, Start Num: 40

Candidate Starts for Boiiii\_18:

(Start: 40 @10546 has 209 MA's), (56, 10588), (85, 10711), (91, 10765), (101, 10822), (106, 10837), (123, 10921), (125, 10927), (134, 10966), (137, 10978), (146, 11005), (156, 11050), (159, 11065), (167, 11089), (179, 11146),

Gene: Boilgate\_15 Start: 10475, Stop: 11086, Start Num: 43

Candidate Starts for Boilgate\_15:

(30, 10436), (Start: 43 @10475 has 49 MA's), (64, 10541), (87, 10658), (90, 10679), (91, 10691), (101, 10748), (106, 10763), (109, 10778), (113, 10808), (123, 10847), (134, 10892), (137, 10904), (141, 10919), (156, 10976), (159, 10991), (167, 11015), (168, 11018),

Gene: BoostSeason\_14 Start: 8528, Stop: 9151, Start Num: 39

Candidate Starts for BoostSeason\_14:

(25, 8462), (Start: 39 @8528 has 3 MA's), (Start: 54 @8576 has 1 MA's), (56, 8585), (86, 8723), (101, 8819), (106, 8834), (109, 8849), (113, 8879), (123, 8918), (125, 8924), (126, 8927), (134, 8963), (137, 8975), (141, 8990), (156, 9047), (159, 9062), (167, 9086),

Gene: BotCity\_13 Start: 7512, Stop: 8084, Start Num: 50

Candidate Starts for BotCity\_13:

(Start: 50 @7512 has 300 MA's), (56, 7533), (65, 7554), (68, 7566), (96, 7725), (104, 7767), (112, 7800), (160, 7989), (183, 8073),

Gene: Bradissa\_14 Start: 8715, Stop: 9560, Start Num: 50

Candidate Starts for Bradissa\_14:

(Start: 50 @8715 has 300 MA's), (73, 8796), (134, 9105), (136, 9114), (173, 9255), (194, 9372), (197, 9396), (208, 9447),

Gene: Brahms\_11 Start: 8096, Stop: 8680, Start Num: 50

Candidate Starts for Brahms\_11:

(Start: 50 @8096 has 300 MA's), (52, 8102), (56, 8117), (58, 8123), (86, 8255), (113, 8408), (115, 8414), (123, 8447), (142, 8522), (145, 8528), (147, 8534),

Gene: BritBrat\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for BritBrat\_14:

(Start: 50 @8717 has 300 MA's), (71, 8786), (73, 8798), (123, 9062), (134, 9107), (136, 9116), (158, 9203), (173, 9257),

Gene: BrotherBLo\_15 Start: 10803, Stop: 11711, Start Num: 50

Candidate Starts for BrotherBLo\_15:

(Start: 50 @10803 has 300 MA's), (86, 10959), (105, 11064), (116, 11121), (163, 11301), (168, 11316), (192, 11451), (195, 11475), (200, 11505), (211, 11562),

Gene: BruceB\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for BruceB\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Bryler\_17 Start: 9523, Stop: 10137, Start Num: 40

Candidate Starts for Bryler\_17:

(Start: 40 @9523 has 209 MA's), (46, 9535), (56, 9568), (91, 9745), (101, 9802), (106, 9817), (109, 9832), (113, 9862), (123, 9901), (125, 9907), (146, 9985), (159, 10045), (168, 10072),

Gene: Brynnie\_13 Start: 8937, Stop: 9767, Start Num: 50

Candidate Starts for Brynnie\_13:

(Start: 50 @8937 has 300 MA's), (113, 9246), (129, 9312), (146, 9369), (163, 9441), (170, 9474), (181, 9528), (190, 9573), (203, 9648),

Gene: BubbaBear\_12 Start: 8314, Stop: 9111, Start Num: 50

Candidate Starts for BubbaBear\_12:

(5, 8026), (10, 8107), (11, 8110), (12, 8128), (Start: 43 @8284 has 49 MA's), (Start: 50 @8314 has 300 MA's), (52, 8320), (85, 8461), (86, 8476), (114, 8632), (123, 8668), (134, 8713), (147, 8755), (191, 8956),

Gene: Bubble\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Bubble\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (128, 8308), (134, 8329), (141, 8356), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Budski\_13 Start: 7501, Stop: 8073, Start Num: 50

Candidate Starts for Budski\_13:

(Start: 50 @7501 has 300 MA's), (56, 7522), (65, 7543), (68, 7555), (96, 7714), (104, 7756), (112, 7789), (160, 7978), (183, 8062),

Gene: Buldak\_12 Start: 8598, Stop: 9185, Start Num: 50

Candidate Starts for Buldak\_12:

(Start: 50 @8598 has 300 MA's), (58, 8625), (80, 8706), (123, 8946), (136, 9000), (142, 9021), (147, 9033),

Gene: Burnsey\_13 Start: 7940, Stop: 8782, Start Num: 50

Candidate Starts for Burnsey\_13:

(Start: 50 @7940 has 300 MA's), (60, 7973), (93, 8159), (109, 8231), (134, 8330), (160, 8432), (163, 8441), (165, 8447), (173, 8480), (182, 8516), (184, 8525), (212, 8711), (213, 8717),

Gene: Burritobowl\_12 Start: 8347, Stop: 9144, Start Num: 50

Candidate Starts for Burritobowl\_12:

(2, 7990), (4, 8047), (11, 8143), (12, 8161), (14, 8170), (27, 8263), (Start: 43 @8317 has 49 MA's), (Start: 50 @8347 has 300 MA's), (52, 8353), (85, 8494), (86, 8509), (123, 8701), (147, 8788), (191, 8989), (206, 9085),

Gene: Button\_14 Start: 7947, Stop: 8795, Start Num: 50

Candidate Starts for Button\_14:

(Start: 50 @7947 has 300 MA's), (60, 7980), (81, 8076), (93, 8166), (125, 8307), (152, 8412), (154, 8424), (156, 8430), (160, 8448), (163, 8457), (165, 8463), (182, 8532), (188, 8556), (199, 8625), (201,

8634),

Gene: Buttrmlkdreams\_13 Start: 7910, Stop: 8755, Start Num: 50

Candidate Starts for Buttrmlkdreams\_13:

(24, 7793), (Start: 34 @7853 has 2 MA's), (Start: 50 @7910 has 300 MA's), (60, 7943), (93, 8129), (109, 8201), (160, 8402), (165, 8417), (173, 8450), (184, 8495), (212, 8681), (213, 8687),

Gene: CLED96\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for CLED96\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: CREW\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for CREW\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Cain\_17 Start: 9511, Stop: 10125, Start Num: 40

Candidate Starts for Cain\_17:

(Start: 40 @9511 has 209 MA's), (46, 9523), (56, 9556), (91, 9733), (101, 9790), (106, 9805), (109, 9820), (113, 9850), (123, 9889), (125, 9895), (146, 9973), (159, 10033), (168, 10060),

Gene: CallaLilly\_18 Start: 10471, Stop: 11082, Start Num: 40

Candidate Starts for CallaLilly\_18:

(Start: 40 @10471 has 209 MA's), (56, 10513), (85, 10636), (91, 10690), (101, 10747), (106, 10762), (123, 10846), (125, 10852), (134, 10891), (137, 10903), (146, 10930), (156, 10975), (159, 10990), (167, 11014),

Gene: CallieOMalley\_15 Start: 10835, Stop: 11743, Start Num: 50

Candidate Starts for CallieOMalley\_15:

(Start: 50 @10835 has 300 MA's), (56, 10856), (86, 10991), (116, 11153), (123, 11183), (156, 11303), (162, 11330), (163, 11333), (168, 11348), (178, 11411), (181, 11429), (195, 11507), (200, 11537), (202, 11543), (210, 11588), (211, 11594),

Gene: Camara\_12 Start: 8379, Stop: 8960, Start Num: 50

Candidate Starts for Camara\_12:

(Start: 50 @8379 has 300 MA's), (56, 8400), (113, 8688), (134, 8772), (146, 8811), (147, 8814), (153, 8847), (170, 8916), (177, 8946),

Gene: Cambiare\_14 Start: 10474, Stop: 11094, Start Num: 40

Candidate Starts for Cambiare\_14:

(Start: 40 @10474 has 209 MA's), (63, 10549), (76, 10606), (85, 10648), (86, 10663), (101, 10759), (106, 10774), (111, 10798), (113, 10819), (123, 10858), (128, 10882), (134, 10903), (141, 10930), (150, 10960), (159, 11002), (167, 11026), (172, 11056),

Gene: Camri\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Camri\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: CanFranMach\_12 Start: 8337, Stop: 9134, Start Num: 50

Candidate Starts for CanFranMach\_12:

(14, 8160), (Start: 43 @8307 has 49 MA's), (Start: 50 @8337 has 300 MA's), (52, 8343), (86, 8499), (115, 8658), (123, 8691), (147, 8778), (191, 8979), (206, 9075),

Gene: CanesSauce\_13 Start: 7954, Stop: 8799, Start Num: 50

Candidate Starts for CanesSauce\_13:

(Start: 34 @7897 has 2 MA's), (Start: 50 @7954 has 300 MA's), (60, 7987), (93, 8173), (109, 8245), (160, 8446), (165, 8461), (173, 8494), (182, 8530), (184, 8539), (190, 8569), (212, 8725), (213, 8731),

Gene: Canowicakte\_15 Start: 10870, Stop: 11778, Start Num: 50

Candidate Starts for Canowicakte\_15:

(Start: 50 @10870 has 300 MA's), (56, 10891), (86, 11026), (116, 11188), (123, 11218), (156, 11338), (162, 11365), (163, 11368), (168, 11383), (178, 11446), (181, 11464), (195, 11542), (200, 11572), (202, 11578), (210, 11623), (211, 11629),

Gene: Capricorn\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Capricorn\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: CaramellLatte\_13 Start: 7954, Stop: 8799, Start Num: 50

Candidate Starts for CaramellLatte\_13:

(Start: 34 @7897 has 2 MA's), (Start: 50 @7954 has 300 MA's), (60, 7987), (93, 8173), (109, 8245), (160, 8446), (165, 8461), (173, 8494), (182, 8530), (184, 8539), (190, 8569), (212, 8725), (213, 8731),

Gene: CardboardBox\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for CardboardBox\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: Carpal\_15 Start: 10803, Stop: 11711, Start Num: 50

Candidate Starts for Carpal\_15:

(Start: 50 @10803 has 300 MA's), (86, 10959), (105, 11064), (116, 11121), (163, 11301), (168, 11316), (195, 11475), (200, 11505), (211, 11562),

Gene: Carsonalex\_14 Start: 7996, Stop: 8838, Start Num: 50

Candidate Starts for Carsonalex\_14:

(Start: 50 @7996 has 300 MA's), (60, 8029), (93, 8215), (109, 8287), (134, 8386), (160, 8488), (163, 8497), (165, 8503), (173, 8536), (182, 8572), (184, 8581), (212, 8767), (213, 8773),

Gene: CaseJules\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for CaseJules\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Cashington\_12 Start: 8337, Stop: 9134, Start Num: 50

Candidate Starts for Cashington\_12:

(4, 8037), (12, 8151), (27, 8253), (Start: 43 @8307 has 49 MA's), (Start: 50 @8337 has 300 MA's), (52, 8343), (85, 8484), (86, 8499), (114, 8655), (123, 8691), (134, 8736), (147, 8778), (191, 8979),

Gene: Cashline\_14 Start: 8571, Stop: 9416, Start Num: 50

Candidate Starts for Cashline\_14:

(16, 8409), (Start: 50 @8571 has 300 MA's), (71, 8640), (73, 8652), (123, 8916), (134, 8961), (136, 8970), (138, 8982), (158, 9057), (173, 9111),

Gene: CassieYates\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for CassieYates\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Cedasite\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Cedasite\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Celaena\_12 Start: 8400, Stop: 8990, Start Num: 50

Candidate Starts for Celaena\_12:

(Start: 50 @8400 has 300 MA's), (52, 8406), (56, 8421), (65, 8448), (82, 8526), (85, 8544), (86, 8559), (113, 8712), (115, 8718), (123, 8751), (125, 8757), (134, 8796), (146, 8835), (151, 8856),

Gene: ChamoyPickle\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for ChamoyPickle\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: Chance64\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Chance64\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Chancellor\_19 Start: 11727, Stop: 12338, Start Num: 43

Candidate Starts for Chancellor\_19:

(Start: 43 @11727 has 49 MA's), (64, 11793), (66, 11799), (76, 11847), (86, 11904), (87, 11910), (90, 11931), (91, 11943), (101, 12000), (106, 12015), (123, 12099), (125, 12105), (134, 12144), (137, 12156), (141, 12171), (156, 12228), (159, 12243), (167, 12267), (172, 12297),

Gene: Chavito\_18 Start: 9579, Stop: 10190, Start Num: 43

Candidate Starts for Chavito\_18:

(Start: 43 @9579 has 49 MA's), (56, 9621), (76, 9702), (86, 9759), (91, 9798), (101, 9855), (106, 9870), (113, 9915), (123, 9954), (125, 9960), (126, 9963), (137, 10011), (141, 10026), (156, 10083),

Gene: Che9d\_14 Start: 7688, Stop: 8281, Start Num: 51

Candidate Starts for Che9d\_14:

(Start: 51 @7688 has 18 MA's), (56, 7706), (85, 7823), (89, 7862), (99, 7928), (109, 7961), (112, 7973), (115, 7997), (134, 8069), (136, 8078), (139, 8090), (144, 8102), (150, 8126), (153, 8144),

Gene: CheeseTouch\_13 Start: 7501, Stop: 8073, Start Num: 50

Candidate Starts for CheeseTouch\_13:

(Start: 50 @7501 has 300 MA's), (56, 7522), (65, 7543), (68, 7555), (96, 7714), (104, 7756), (112, 7789), (160, 7978), (183, 8062),

Gene: CheetoDust\_18 Start: 10521, Stop: 11132, Start Num: 40

Candidate Starts for CheetoDust\_18:

(Start: 40 @10521 has 209 MA's), (56, 10563), (85, 10686), (91, 10740), (101, 10797), (106, 10812), (119, 10881), (123, 10896), (125, 10902), (134, 10941), (146, 10980), (156, 11025), (159, 11040), (167, 11064), (179, 11121),

Gene: Cheetobro\_19 Start: 11727, Stop: 12338, Start Num: 43

Candidate Starts for Cheetobro\_19:

(Start: 43 @11727 has 49 MA's), (64, 11793), (66, 11799), (76, 11847), (86, 11904), (87, 11910), (90, 11931), (91, 11943), (101, 12000), (106, 12015), (123, 12099), (125, 12105), (134, 12144), (137, 12156), (141, 12171), (156, 12228), (159, 12243), (167, 12267), (172, 12297),

Gene: Cherrybomb426\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Cherrybomb426\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: CherryonLim\_14 Start: 8452, Stop: 9291, Start Num: 50

Candidate Starts for CherryonLim\_14:

(24, 8338), (Start: 34 @8398 has 2 MA's), (Start: 50 @8452 has 300 MA's), (60, 8485), (93, 8671), (99, 8707), (107, 8731), (154, 8920), (160, 8944), (163, 8953), (165, 8959), (173, 8992), (178, 9022), (213, 9229),

Gene: ChewChew\_11 Start: 7935, Stop: 8843, Start Num: 50

Candidate Starts for ChewChew\_11:

(Start: 50 @7935 has 300 MA's), (86, 8091), (115, 8250), (116, 8253), (163, 8433), (195, 8607), (200, 8637), (211, 8694),

Gene: Chickaboom\_12 Start: 8482, Stop: 9312, Start Num: 50

Candidate Starts for Chickaboom\_12:

(Start: 50 @8482 has 300 MA's), (113, 8791), (129, 8857), (146, 8914), (163, 8986), (170, 9019), (181, 9073), (190, 9118), (203, 9193),

Gene: ChickenTender\_15 Start: 7982, Stop: 8830, Start Num: 50

Candidate Starts for ChickenTender\_15:

(Start: 50 @7982 has 300 MA's), (60, 8015), (93, 8201), (109, 8273), (160, 8474), (163, 8483), (165, 8489), (173, 8522), (182, 8558), (184, 8567), (205, 8687), (212, 8756), (213, 8762),

Gene: Chicken\_13 Start: 8750, Stop: 9334, Start Num: 50

Candidate Starts for Chicken\_13:

(Start: 50 @8750 has 300 MA's), (113, 9059), (147, 9185), (153, 9218), (170, 9287), (174, 9299),

Gene: ChiliPepper\_12 Start: 8556, Stop: 9350, Start Num: 50

Candidate Starts for ChiliPepper\_12:

(Start: 50 @8556 has 300 MA's), (52, 8562), (70, 8631), (85, 8703), (86, 8718), (123, 8910), (134, 8955), (147, 8997), (150, 9012), (177, 9129), (191, 9195), (209, 9303),

Gene: ChipsNGuac\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for ChipsNGuac\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: ChocoMunchkin\_13 Start: 7954, Stop: 8799, Start Num: 50

Candidate Starts for ChocoMunchkin\_13:

(Start: 34 @7897 has 2 MA's), (Start: 50 @7954 has 300 MA's), (60, 7987), (93, 8173), (109, 8245), (160, 8446), (165, 8461), (173, 8494), (182, 8530), (184, 8539), (190, 8569), (212, 8725), (213, 8731),

Gene: Cholula\_15 Start: 10848, Stop: 11756, Start Num: 50

Candidate Starts for Cholula\_15:

(Start: 50 @10848 has 300 MA's), (86, 11004), (105, 11109), (116, 11166), (163, 11346), (168, 11361), (192, 11496), (195, 11520), (200, 11550), (211, 11607),

Gene: Chridison\_11 Start: 7980, Stop: 8885, Start Num: 50

Candidate Starts for Chridison\_11:

(Start: 50 @7980 has 300 MA's), (86, 8136), (100, 8226), (116, 8298), (135, 8367), (163, 8475), (168, 8490), (195, 8649), (200, 8679), (204, 8697), (211, 8736), (215, 8796), (217, 8814),

Gene: Chris\_17 Start: 9487, Stop: 10098, Start Num: 40

Candidate Starts for Chris\_17:

(Start: 40 @9487 has 209 MA's), (56, 9529), (91, 9706), (101, 9763), (106, 9778), (113, 9823), (123, 9862), (125, 9868), (150, 9964), (159, 10006), (167, 10030), (172, 10060), (176, 10081),

Gene: Christian\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for Christian\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (195, 8608), (200, 8638), (211, 8695),

Gene: Clayda5\_11 Start: 8096, Stop: 8680, Start Num: 50

Candidate Starts for Clayda5\_11:

(Start: 50 @8096 has 300 MA's), (52, 8102), (56, 8117), (58, 8123), (86, 8255), (113, 8408), (115, 8414), (123, 8447), (142, 8522), (145, 8528), (147, 8534),

Gene: Cleo\_13 Start: 8168, Stop: 9007, Start Num: 50

Candidate Starts for Cleo\_13:

(Start: 50 @8168 has 300 MA's), (60, 8201), (83, 8294), (104, 8429), (109, 8450), (110, 8453), (136, 8558), (160, 8651), (163, 8660), (165, 8666), (175, 8714), (195, 8804), (196, 8807), (214, 8942), (219, 8990),

Gene: CliffHanger\_13 Start: 8293, Stop: 8880, Start Num: 50

Candidate Starts for CliffHanger\_13:

(Start: 50 @8293 has 300 MA's), (52, 8299), (56, 8314), (85, 8434), (86, 8449), (123, 8641), (143, 8719),

Gene: Clipper\_18 Start: 10521, Stop: 11132, Start Num: 40

Candidate Starts for Clipper\_18:

(Start: 40 @10521 has 209 MA's), (56, 10563), (85, 10686), (91, 10740), (101, 10797), (106, 10812), (123, 10896), (125, 10902), (134, 10941), (146, 10980), (156, 11025), (159, 11040), (167, 11064), (179, 11121),

Gene: Cloudyecho\_13 Start: 10076, Stop: 10699, Start Num: 40

Candidate Starts for Cloudyecho\_13:

(Start: 40 @10076 has 209 MA's), (63, 10154), (76, 10211), (85, 10253), (86, 10268), (101, 10364), (106, 10379), (111, 10403), (113, 10424), (123, 10463), (128, 10487), (141, 10535), (150, 10565), (159, 10607),

Gene: CocoaPuff\_12 Start: 7701, Stop: 8540, Start Num: 50

Candidate Starts for CocoaPuff\_12:

(24, 7587), (Start: 34 @7647 has 2 MA's), (Start: 50 @7701 has 300 MA's), (60, 7734), (93, 7920), (107, 7980), (109, 7992), (160, 8193), (163, 8202), (165, 8208), (173, 8241), (178, 8271), (190, 8316), (205, 8406),

Gene: Coleslaw\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Coleslaw\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Collard\_16 Start: 10585, Stop: 11196, Start Num: 40

Candidate Starts for Collard\_16:

(Start: 40 @10585 has 209 MA's), (56, 10630), (91, 10807), (101, 10864), (106, 10879), (109, 10894), (123, 10963), (125, 10969), (134, 11008), (141, 11035), (156, 11092), (159, 11107), (167, 11131), (172, 11161),

Gene: Coltrane\_11 Start: 8096, Stop: 8680, Start Num: 50

Candidate Starts for Coltrane\_11:

(Start: 50 @8096 has 300 MA's), (52, 8102), (56, 8117), (58, 8123), (86, 8255), (113, 8408), (115, 8414), (123, 8447), (142, 8522), (145, 8528), (147, 8534),

Gene: Colusalem\_13 Start: 8803, Stop: 9384, Start Num: 50

Candidate Starts for Colusalem\_13:

(Start: 50 @8803 has 300 MA's), (56, 8824), (79, 8911), (86, 8959), (113, 9112), (134, 9196), (145, 9232), (147, 9238), (153, 9271), (170, 9340),

Gene: Confidence\_14 Start: 8711, Stop: 9556, Start Num: 50

Candidate Starts for Confidence\_14:

(Start: 50 @8711 has 300 MA's), (71, 8780), (73, 8792), (123, 9056), (134, 9101), (136, 9110), (158, 9197), (173, 9251),

Gene: Coral\_13 Start: 8803, Stop: 9384, Start Num: 50

Candidate Starts for Coral\_13:

(Start: 50 @8803 has 300 MA's), (56, 8824), (79, 8911), (86, 8959), (113, 9112), (134, 9196), (145, 9232), (147, 9238), (153, 9271), (170, 9340),

Gene: Cote\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Cote\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: Cozz\_13 Start: 7940, Stop: 8782, Start Num: 50

Candidate Starts for Cozz\_13:

(Start: 50 @7940 has 300 MA's), (60, 7973), (93, 8159), (109, 8231), (128, 8309), (134, 8330), (141, 8357), (160, 8432), (163, 8441), (165, 8447), (173, 8480), (182, 8516), (184, 8525), (212, 8711), (213, 8717),

Gene: Cracklewink\_19 Start: 12607, Stop: 13194, Start Num: 51

Candidate Starts for Cracklewink\_19:

(38, 12580), (Start: 51 @12607 has 18 MA's), (59, 12631), (65, 12652), (68, 12664), (94, 12817), (96, 12823), (106, 12871), (107, 12874), (109, 12886), (113, 12916), (134, 13000), (142, 13030), (152, 13066), (156, 13084), (165, 13117), (178, 13174), (179, 13177), (180, 13180),

Gene: Crespo\_13 Start: 9855, Stop: 10469, Start Num: 40

Candidate Starts for Crespo\_13:

(Start: 40 @9855 has 209 MA's), (56, 9900), (63, 9924), (81, 10002), (85, 10023), (86, 10038), (101, 10134), (106, 10149), (111, 10173), (113, 10194), (123, 10233), (128, 10257), (130, 10266), (134, 10278), (150, 10335), (156, 10362), (159, 10377), (167, 10401),

Gene: CrimD\_18 Start: 10473, Stop: 11087, Start Num: 40

Candidate Starts for CrimD\_18:

(Start: 40 @10473 has 209 MA's), (56, 10518), (85, 10641), (91, 10695), (101, 10752), (106, 10767), (123, 10851), (125, 10857), (134, 10896), (137, 10908), (146, 10935), (156, 10980), (159, 10995), (167, 11019), (179, 11076),

Gene: CristinaYang\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for CristinaYang\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (195, 8608), (200, 8638), (211, 8695),

Gene: CroZenni\_12 Start: 8320, Stop: 9117, Start Num: 50

Candidate Starts for CroZenni\_12:

(11, 8116), (12, 8134), (Start: 43 @8290 has 49 MA's), (Start: 50 @8320 has 300 MA's), (52, 8326), (85, 8467), (86, 8482), (123, 8674), (147, 8761), (191, 8962), (206, 9058),

Gene: CupcakePrincess\_12 Start: 8360, Stop: 9157, Start Num: 50

Candidate Starts for CupcakePrincess\_12:

(11, 8156), (12, 8174), (Start: 43 @8330 has 49 MA's), (Start: 50 @8360 has 300 MA's), (52, 8366), (85, 8507), (86, 8522), (123, 8714), (147, 8801), (191, 9002),

Gene: Curiosium\_19 Start: 9949, Stop: 10563, Start Num: 43

Candidate Starts for Curiosium\_19:

(Start: 43 @9949 has 49 MA's), (56, 9994), (86, 10132), (91, 10171), (101, 10228), (109, 10258), (113, 10288), (123, 10327), (126, 10336), (134, 10372), (156, 10456), (167, 10495), (172, 10525), (176, 10546),

Gene: Cygnet\_13 Start: 8759, Stop: 9340, Start Num: 50

Candidate Starts for Cygnet\_13:

(Start: 50 @8759 has 300 MA's), (56, 8780), (113, 9068), (146, 9191), (160, 9254), (177, 9326),

Gene: DMoney\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for DMoney\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: DNAlll\_0013 Start: 9863, Stop: 10477, Start Num: 40

Candidate Starts for DNAlll\_0013:

(Start: 40 @9863 has 209 MA's), (56, 9908), (63, 9932), (81, 10010), (85, 10031), (86, 10046), (101, 10142), (106, 10157), (111, 10181), (113, 10202), (123, 10241), (128, 10265), (130, 10274), (134, 10286), (150, 10343), (156, 10370), (159, 10385), (167, 10409),

Gene: DS6A\_16 Start: 10775, Stop: 11446, Start Num: 51

Candidate Starts for DS6A\_16:

(Start: 51 @10775 has 18 MA's), (83, 10898), (85, 10913), (102, 11027), (113, 11084), (115, 11090), (123, 11123), (134, 11168), (135, 11171), (153, 11267), (155, 11273),

Gene: Dadosky\_16 Start: 10501, Stop: 11112, Start Num: 40

Candidate Starts for Dadosky\_16:

(Start: 40 @10501 has 209 MA's), (56, 10546), (101, 10780), (106, 10795), (109, 10810), (123, 10879), (125, 10885), (134, 10924), (137, 10936), (141, 10951), (156, 11008), (159, 11023), (167, 11047), (172, 11077),

Gene: Daiboju\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for Daiboju\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (97, 8203), (105, 8242), (113, 8290), (116, 8299), (163, 8476), (181, 8572), (195, 8650), (200, 8680), (211, 8737),

Gene: Dalmuri\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Dalmuri\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: DanHam62\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for DanHam62\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: DanSyl44\_19 Start: 11730, Stop: 12341, Start Num: 43

Candidate Starts for DanSyl44\_19:

(Start: 43 @11730 has 49 MA's), (64, 11796), (66, 11802), (76, 11850), (86, 11907), (87, 11913), (90, 11934), (91, 11946), (101, 12003), (106, 12018), (123, 12102), (125, 12108), (134, 12147), (137, 12159), (141, 12174), (156, 12231), (159, 12246), (167, 12270), (172, 12300),

Gene: Daob\_14 Start: 8967, Stop: 9548, Start Num: 50

Candidate Starts for Daob\_14:

(Start: 50 @8967 has 300 MA's), (56, 8988), (79, 9075), (86, 9123), (113, 9276), (134, 9360), (145, 9396), (147, 9402), (153, 9435), (170, 9504),

Gene: Darionha\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Darionha\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: DartGoblin\_18 Start: 10425, Stop: 11039, Start Num: 40

Candidate Starts for DartGoblin\_18:

(Start: 40 @10425 has 209 MA's), (56, 10470), (91, 10647), (101, 10704), (106, 10719), (109, 10734), (113, 10764), (123, 10803), (125, 10809), (134, 10848), (146, 10887), (156, 10932), (159, 10947), (167, 10971),

Gene: DarthP\_17 Start: 10531, Stop: 11145, Start Num: 43

Candidate Starts for DarthP\_17:

(Start: 43 @10531 has 49 MA's), (Start: 50 @10555 has 300 MA's), (56, 10576), (87, 10720), (91, 10753), (101, 10810), (106, 10825), (123, 10909), (125, 10915), (134, 10954), (137, 10966), (146, 10993), (159, 11053), (167, 11077), (172, 11107),

Gene: Dartin\_18 Start: 9573, Stop: 10184, Start Num: 43

Candidate Starts for Dartin\_18:

(Start: 43 @9573 has 49 MA's), (56, 9615), (86, 9753), (91, 9792), (101, 9849), (106, 9864), (113, 9909), (123, 9948), (125, 9954), (126, 9957), (137, 10005), (141, 10020), (156, 10077),

Gene: Deby\_18 Start: 10475, Stop: 11089, Start Num: 40

Candidate Starts for Deby\_18:

(Start: 40 @10475 has 209 MA's), (56, 10520), (85, 10643), (91, 10697), (101, 10754), (106, 10769), (123, 10853), (125, 10859), (134, 10898), (137, 10910), (146, 10937), (156, 10982), (159, 10997), (167, 11021), (179, 11078),

Gene: Demsculpinboyz\_14 Start: 7679, Stop: 8272, Start Num: 51

Candidate Starts for Demsculpinboyz\_14:

(Start: 51 @7679 has 18 MA's), (56, 7697), (85, 7814), (89, 7853), (99, 7919), (109, 7952), (112, 7964), (115, 7988), (134, 8060), (136, 8069), (139, 8081), (144, 8093), (150, 8117), (153, 8135),

Gene: Devera\_18 Start: 10492, Stop: 11106, Start Num: 40

Candidate Starts for Devera\_18:

(Start: 40 @10492 has 209 MA's), (56, 10537), (85, 10660), (91, 10714), (101, 10771), (106, 10786), (113, 10831), (123, 10870), (125, 10876), (134, 10915), (137, 10927), (146, 10954), (156, 10999), (159, 11014), (167, 11038),

Gene: DickRichards\_12 Start: 8814, Stop: 9611, Start Num: 50

Candidate Starts for DickRichards\_12:

(11, 8610), (12, 8628), (Start: 43 @8784 has 49 MA's), (Start: 50 @8814 has 300 MA's), (52, 8820), (85, 8961), (86, 8976), (123, 9168), (147, 9255), (191, 9456), (206, 9552),

Gene: Didgeridoo\_13 Start: 8549, Stop: 9343, Start Num: 50

Candidate Starts for Didgeridoo\_13:

(Start: 50 @8549 has 300 MA's), (85, 8696), (86, 8711), (123, 8903), (134, 8948), (147, 8990), (191, 9188),

Gene: DingDing\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for DingDing\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Dino\_15 Start: 10802, Stop: 11710, Start Num: 50

Candidate Starts for Dino\_15:

(Start: 50 @10802 has 300 MA's), (86, 10958), (105, 11063), (116, 11120), (163, 11300), (168, 11315), (192, 11450), (195, 11474), (200, 11504), (211, 11561),

Gene: DirtyBubble\_12 Start: 8579, Stop: 9376, Start Num: 50

Candidate Starts for DirtyBubble\_12:

(Start: 50 @8579 has 300 MA's), (52, 8585), (86, 8744), (115, 8903), (123, 8936), (134, 8981), (177, 9155), (191, 9221),

Gene: DismalFunk\_14 Start: 8532, Stop: 9146, Start Num: 40

Candidate Starts for DismalFunk\_14:

(Start: 40 @8532 has 209 MA's), (Start: 54 @8571 has 1 MA's), (56, 8580), (101, 8814), (106, 8829), (109, 8844), (113, 8874), (123, 8913), (125, 8919), (133, 8955), (137, 8970), (146, 8997), (156, 9042), (159, 9057), (167, 9081),

Gene: DismalStressor\_14 Start: 8532, Stop: 9146, Start Num: 40

Candidate Starts for DismalStressor\_14:

(Start: 40 @8532 has 209 MA's), (Start: 54 @8571 has 1 MA's), (56, 8580), (101, 8814), (106, 8829), (109, 8844), (113, 8874), (123, 8913), (125, 8919), (133, 8955), (137, 8970), (146, 8997), (156, 9042), (159, 9057), (167, 9081),

Gene: Dismas\_12 Start: 8556, Stop: 9350, Start Num: 50

Candidate Starts for Dismas\_12:

(Start: 50 @8556 has 300 MA's), (52, 8562), (70, 8631), (85, 8703), (86, 8718), (123, 8910), (134, 8955), (147, 8997), (150, 9012), (177, 9129), (191, 9195), (209, 9303),

Gene: Dole\_18 Start: 10494, Stop: 11108, Start Num: 40

Candidate Starts for Dole\_18:

(Start: 40 @10494 has 209 MA's), (56, 10539), (85, 10662), (91, 10716), (101, 10773), (106, 10788), (113, 10833), (123, 10872), (125, 10878), (134, 10917), (137, 10929), (146, 10956), (156, 11001), (159, 11016), (167, 11040),

Gene: Doobus\_12 Start: 8551, Stop: 9348, Start Num: 50

Candidate Starts for Doobus\_12:

(4, 8251), (11, 8347), (12, 8365), (27, 8467), (Start: 43 @8521 has 49 MA's), (Start: 50 @8551 has 300 MA's), (52, 8557), (85, 8698), (86, 8713), (123, 8905), (147, 8992), (191, 9193), (206, 9289),

Gene: DoubleChamp\_16 Start: 10585, Stop: 11196, Start Num: 40

Candidate Starts for DoubleChamp\_16:

(Start: 40 @10585 has 209 MA's), (56, 10630), (91, 10807), (101, 10864), (106, 10879), (109, 10894), (123, 10963), (125, 10969), (134, 11008), (141, 11035), (156, 11092), (159, 11107), (167, 11131), (172, 11161),

Gene: Doughnut\_14 Start: 8522, Stop: 9145, Start Num: 39

Candidate Starts for Doughnut\_14:

(25, 8456), (Start: 39 @8522 has 3 MA's), (Start: 54 @8570 has 1 MA's), (56, 8579), (86, 8717), (101, 8813), (106, 8828), (109, 8843), (113, 8873), (123, 8912), (125, 8918), (126, 8921), (134, 8957), (137, 8969), (141, 8984), (156, 9041), (159, 9056), (167, 9080),

Gene: DrHayes\_18 Start: 10446, Stop: 11060, Start Num: 40

Candidate Starts for DrHayes\_18:

(Start: 40 @10446 has 209 MA's), (47, 10464), (56, 10491), (91, 10668), (101, 10725), (106, 10740), (109, 10755), (113, 10785), (123, 10824), (125, 10830), (134, 10869), (137, 10881), (146, 10908), (156, 10953), (159, 10968), (167, 10992),

Gene: DrRobert\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for DrRobert\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (192, 8584), (195, 8608), (200, 8638), (211, 8695),

Gene: Dre3\_13 Start: 8115, Stop: 8954, Start Num: 50

Candidate Starts for Dre3\_13:

(Start: 50 @8115 has 300 MA's), (60, 8148), (104, 8376), (109, 8397), (110, 8400), (136, 8505), (154, 8574), (160, 8598), (163, 8607), (165, 8613), (175, 8661), (195, 8751), (196, 8754), (214, 8889), (219, 8937),

Gene: DreamTeam\_11 Start: 8003, Stop: 8911, Start Num: 50

Candidate Starts for DreamTeam\_11:

(Start: 50 @8003 has 300 MA's), (86, 8159), (105, 8264), (113, 8312), (115, 8318), (116, 8321), (163, 8501), (166, 8510), (181, 8597), (186, 8621), (195, 8675), (200, 8705), (204, 8723), (211, 8762),

Gene: Durfee\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Durfee\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: ECartman\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for ECartman\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: EMSquaredA\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for EMSquaredA\_14:

(Start: 50 @8717 has 300 MA's), (71, 8786), (73, 8798), (123, 9062), (134, 9107), (136, 9116), (158, 9203), (173, 9257),

Gene: Eden\_11 Start: 8192, Stop: 8782, Start Num: 50

Candidate Starts for Eden\_11:

(17, 8039), (19, 8051), (23, 8078), (Start: 50 @8192 has 300 MA's), (56, 8213), (65, 8240), (85, 8336), (86, 8351), (123, 8543), (143, 8621), (145, 8624), (147, 8630), (163, 8699),

Gene: Edugator\_15 Start: 10501, Stop: 11112, Start Num: 40

Candidate Starts for Edugator\_15:

(Start: 40 @10501 has 209 MA's), (56, 10546), (101, 10780), (106, 10795), (109, 10810), (123, 10879), (125, 10885), (134, 10924), (141, 10951), (156, 11008), (159, 11023), (167, 11047), (172, 11077),

Gene: Eesa\_13 Start: 8964, Stop: 9548, Start Num: 50

Candidate Starts for Eesa\_13:

(Start: 50 @8964 has 300 MA's), (113, 9273), (153, 9432), (170, 9501), (174, 9513),

Gene: Efra2\_18 Start: 9439, Stop: 10053, Start Num: 43

Candidate Starts for Efra2\_18:

(Start: 43 @9439 has 49 MA's), (86, 9622), (91, 9661), (101, 9718), (109, 9748), (113, 9778), (123, 9817), (125, 9823), (134, 9862), (137, 9874), (156, 9946), (167, 9985), (172, 10015), (176, 10036),

Gene: Ekdilam\_15 Start: 10249, Stop: 10860, Start Num: 43

Candidate Starts for Ekdilam\_15:

(Start: 43 @10249 has 49 MA's), (56, 10291), (87, 10435), (91, 10468), (101, 10525), (106, 10540), (123, 10624), (125, 10630), (134, 10669), (137, 10681), (159, 10768), (167, 10792), (172, 10822),

Gene: ElJefes\_12 Start: 8178, Stop: 9014, Start Num: 50

Candidate Starts for ElJefes\_12:

(8, 7959), (16, 8016), (24, 8064), (Start: 34 @8124 has 2 MA's), (Start: 50 @8178 has 300 MA's), (60, 8211), (93, 8397), (107, 8457), (109, 8469), (160, 8670), (163, 8679), (165, 8685), (173, 8718), (178, 8748), (190, 8793), (213, 8955),

Gene: Elinal\_14 Start: 7707, Stop: 8546, Start Num: 50

Candidate Starts for Elinal\_14:

(24, 7593), (Start: 34 @7653 has 2 MA's), (Start: 50 @7707 has 300 MA's), (60, 7740), (93, 7926), (107, 7986), (109, 7998), (136, 8106), (160, 8199), (163, 8208), (165, 8214), (173, 8247), (178, 8277), (190, 8322), (205, 8412),

Gene: Elliott\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Elliott\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Ellie\_15 Start: 10291, Stop: 10902, Start Num: 43

Candidate Starts for Ellie\_15:

(Start: 21 @10186 has 1 MA's), (29, 10249), (31, 10258), (Start: 43 @10291 has 49 MA's), (56, 10333), (85, 10456), (87, 10477), (91, 10510), (101, 10567), (106, 10582), (123, 10666), (125, 10672), (134, 10711), (137, 10723), (146, 10750), (159, 10810), (167, 10834),

Gene: Elva\_13 Start: 8634, Stop: 9431, Start Num: 50

Candidate Starts for Elva\_13:

(Start: 50 @8634 has 300 MA's), (52, 8640), (72, 8718), (85, 8784), (86, 8799), (115, 8958), (123, 8991), (134, 9036), (147, 9078), (191, 9276), (209, 9384),

Gene: Emalyn\_12 Start: 7661, Stop: 8509, Start Num: 50

Candidate Starts for Emalyn\_12:

(Start: 34 @7604 has 2 MA's), (Start: 50 @7661 has 300 MA's), (60, 7694), (93, 7880), (109, 7952), (152, 8117), (160, 8153), (163, 8162), (165, 8168), (173, 8201), (182, 8237), (184, 8246), (212, 8432), (213, 8438),

Gene: Emerson\_18 Start: 10504, Stop: 11115, Start Num: 40

Candidate Starts for Emerson\_18:

(Start: 40 @10504 has 209 MA's), (56, 10546), (91, 10723), (101, 10780), (106, 10795), (123, 10879), (125, 10885), (134, 10924), (137, 10936), (146, 10963), (156, 11008), (159, 11023), (167, 11047), (179, 11104),

Gene: EnalisNailo\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for EnalisNailo\_14:

(Start: 50 @8717 has 300 MA's), (73, 8798), (134, 9107), (136, 9116), (173, 9257), (194, 9374), (197, 9398), (208, 9449),

Gene: Enkosi\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Enkosi\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: Eponine\_19 Start: 11592, Stop: 12203, Start Num: 43

Candidate Starts for Eponine\_19:

(Start: 43 @11592 has 49 MA's), (64, 11658), (66, 11664), (76, 11712), (86, 11769), (87, 11775), (90, 11796), (91, 11808), (101, 11865), (106, 11880), (109, 11895), (123, 11964), (125, 11970), (141, 12036), (156, 12093), (159, 12108), (167, 12132), (172, 12162),

Gene: EstebanJulior\_11 Start: 7982, Stop: 8890, Start Num: 50

Candidate Starts for EstebanJulior\_11:

(37, 7931), (38, 7934), (Start: 50 @7982 has 300 MA's), (56, 8003), (86, 8138), (105, 8243), (116, 8300), (157, 8453), (163, 8480), (177, 8555), (181, 8576), (195, 8654), (200, 8684), (202, 8690), (211,

8741),

Gene: Eula\_12 Start: 8321, Stop: 9118, Start Num: 50

Candidate Starts for Eula\_12:

(12, 8135), (Start: 43 @8291 has 49 MA's), (Start: 50 @8321 has 300 MA's), (52, 8327), (85, 8468), (86, 8483), (123, 8675), (134, 8720), (147, 8762), (191, 8963),

Gene: Eunoia\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for Eunoia\_11:

(Start: 50 @7979 has 300 MA's), (80, 8090), (86, 8135), (116, 8297), (135, 8366), (162, 8471), (163, 8474), (168, 8489), (195, 8648), (200, 8678), (204, 8696), (211, 8735), (217, 8813),

Gene: Ezurina\_13 Start: 7722, Stop: 8300, Start Num: 48

Candidate Starts for Ezurina\_13:

(Start: 48 @7722 has 5 MA's), (130, 8103), (147, 8157), (177, 8289),

Gene: FF47\_15 Start: 9310, Stop: 9951, Start Num: 43

Candidate Starts for FF47\_15:

(Start: 43 @9310 has 49 MA's), (Start: 54 @9343 has 1 MA's), (56, 9352), (77, 9436), (85, 9475), (86, 9490), (104, 9595), (109, 9616), (111, 9625), (113, 9646), (123, 9685), (128, 9709), (152, 9796), (156, 9814), (158, 9826), (161, 9835),

Gene: Faiyaz\_19 Start: 12547, Stop: 13128, Start Num: 51

Candidate Starts for Faiyaz\_19:

(Start: 34 @12487 has 2 MA's), (44, 12517), (Start: 51 @12547 has 18 MA's), (65, 12592), (96, 12763), (107, 12814), (109, 12826), (113, 12856), (134, 12940), (142, 12970), (156, 13024), (179, 13117),

Gene: Feastonyeet\_12 Start: 7726, Stop: 8565, Start Num: 50

Candidate Starts for Feastonyeet\_12:

(24, 7612), (Start: 34 @7672 has 2 MA's), (Start: 50 @7726 has 300 MA's), (60, 7759), (93, 7945), (107, 8005), (109, 8017), (160, 8218), (163, 8227), (165, 8233), (173, 8266), (178, 8296), (190, 8341),

Gene: Fefferhead\_17 Start: 10458, Stop: 11069, Start Num: 43

Candidate Starts for Fefferhead\_17:

(Start: 21 @10353 has 1 MA's), (29, 10416), (31, 10425), (Start: 43 @10458 has 49 MA's), (56, 10500), (85, 10623), (87, 10644), (91, 10677), (101, 10734), (106, 10749), (123, 10833), (125, 10839), (134, 10878), (137, 10890), (146, 10917), (159, 10977), (167, 11001),

Gene: Feyre\_16 Start: 10448, Stop: 11059, Start Num: 40

Candidate Starts for Feyre\_16:

(Start: 40 @10448 has 209 MA's), (56, 10493), (68, 10535), (91, 10670), (101, 10727), (106, 10742), (109, 10757), (123, 10826), (125, 10832), (134, 10871), (137, 10883), (141, 10898), (152, 10937), (156, 10955), (159, 10970), (167, 10994), (172, 11024),

Gene: Finalfrontier\_13 Start: 8833, Stop: 9630, Start Num: 50

Candidate Starts for Finalfrontier\_13:

(11, 8629), (12, 8647), (Start: 43 @8803 has 49 MA's), (Start: 50 @8833 has 300 MA's), (52, 8839), (85, 8980), (86, 8995), (123, 9187), (147, 9274), (191, 9475),

Gene: Findley\_14 Start: 8532, Stop: 9146, Start Num: 40

Candidate Starts for Findley\_14:

(Start: 40 @8532 has 209 MA's), (Start: 54 @8571 has 1 MA's), (56, 8580), (101, 8814), (106, 8829), (109, 8844), (113, 8874), (123, 8913), (125, 8919), (133, 8955), (137, 8970), (146, 8997), (156, 9042),

(159, 9057), (167, 9081),

Gene: Fingolfin\_12 Start: 8379, Stop: 8960, Start Num: 50

Candidate Starts for Fingolfin\_12:

(Start: 50 @8379 has 300 MA's), (56, 8400), (113, 8688), (134, 8772), (146, 8811), (147, 8814), (153, 8847), (170, 8916), (177, 8946),

Gene: Fionnbharth\_19 Start: 11717, Stop: 12328, Start Num: 43

Candidate Starts for Fionnbharth\_19:

(Start: 43 @11717 has 49 MA's), (64, 11783), (66, 11789), (76, 11837), (86, 11894), (87, 11900), (90, 11921), (91, 11933), (101, 11990), (106, 12005), (123, 12089), (125, 12095), (134, 12134), (137, 12146), (141, 12161), (156, 12218), (159, 12233), (167, 12257), (172, 12287),

Gene: FlagStaff\_13 Start: 9947, Stop: 10567, Start Num: 40

Candidate Starts for FlagStaff\_13:

(Start: 40 @9947 has 209 MA's), (63, 10022), (76, 10079), (85, 10121), (86, 10136), (101, 10232), (106, 10247), (111, 10271), (123, 10331), (128, 10355), (141, 10403), (150, 10433), (159, 10475), (167, 10499), (172, 10529),

Gene: FlameThrower\_12 Start: 8288, Stop: 8878, Start Num: 50

Candidate Starts for FlameThrower\_12:

(Start: 50 @8288 has 300 MA's), (52, 8294), (56, 8309), (65, 8336), (82, 8414), (85, 8432), (86, 8447), (113, 8600), (123, 8639), (125, 8645), (134, 8684), (146, 8723), (151, 8744),

Gene: Floral\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for Floral\_14:

(Start: 50 @8717 has 300 MA's), (71, 8786), (73, 8798), (123, 9062), (134, 9107), (136, 9116), (158, 9203), (173, 9257),

Gene: Fluke\_15 Start: 10844, Stop: 11752, Start Num: 50

Candidate Starts for Fluke\_15:

(Start: 50 @10844 has 300 MA's), (86, 11000), (105, 11105), (116, 11162), (163, 11342), (168, 11357), (195, 11516), (200, 11546), (211, 11603),

Gene: Franklin22\_11 Start: 8165, Stop: 8755, Start Num: 50

Candidate Starts for Franklin22\_11:

(22, 8033), (Start: 50 @8165 has 300 MA's), (52, 8171), (56, 8186), (80, 8276), (85, 8309), (86, 8324), (113, 8477), (123, 8516), (142, 8591), (145, 8597), (147, 8603),

Gene: Fribs8\_14 Start: 8691, Stop: 9530, Start Num: 50

Candidate Starts for Fribs8\_14:

(Start: 50 @8691 has 300 MA's), (60, 8724), (83, 8817), (104, 8952), (113, 9003), (136, 9081), (154, 9150), (160, 9174), (163, 9183), (165, 9189), (175, 9237), (196, 9330), (214, 9465), (216, 9483), (219, 9513),

Gene: Frickyeah\_13 Start: 7514, Stop: 8086, Start Num: 50

Candidate Starts for Frickyeah\_13:

(Start: 50 @7514 has 300 MA's), (56, 7535), (65, 7556), (68, 7568), (96, 7727), (104, 7769), (112, 7802), (160, 7991), (183, 8075),

Gene: Frosty24\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Frosty24\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Fryberger\_45 Start: 16970, Stop: 17527, Start Num: 51

Candidate Starts for Fryberger\_45:

(Start: 51 @16970 has 18 MA's), (56, 16988), (73, 17051), (113, 17276), (122, 17294), (125, 17303), (134, 17342), (137, 17354), (158, 17441),

Gene: GTE2\_11 Start: 7614, Stop: 8459, Start Num: 50

Candidate Starts for GTE2\_11:

(8, 7392), (13, 7428), (16, 7449), (24, 7497), (Start: 34 @7557 has 2 MA's), (Start: 50 @7614 has 300 MA's), (60, 7647), (93, 7833), (109, 7905), (160, 8106), (165, 8121), (173, 8154), (182, 8190), (184, 8199), (190, 8229), (212, 8385), (213, 8391),

Gene: Gack\_11 Start: 8231, Stop: 8821, Start Num: 50

Candidate Starts for Gack\_11:

(22, 8099), (Start: 50 @8231 has 300 MA's), (52, 8237), (56, 8252), (85, 8375), (86, 8390), (113, 8543), (115, 8549), (123, 8582), (145, 8663), (177, 8801),

Gene: Gaia\_10 Start: 8073, Stop: 8660, Start Num: 50

Candidate Starts for Gaia\_10:

(Start: 50 @8073 has 300 MA's), (73, 8154), (83, 8193), (88, 8235), (97, 8289), (103, 8325), (125, 8424), (131, 8454), (153, 8544), (165, 8586), (173, 8619),

Gene: Galaxy\_13 Start: 8808, Stop: 9638, Start Num: 50

Candidate Starts for Galaxy\_13:

(Start: 50 @8808 has 300 MA's), (113, 9117), (129, 9183), (146, 9240), (153, 9276), (163, 9312), (170, 9345), (181, 9399), (190, 9444), (198, 9498), (203, 9519),

Gene: Ganymede\_19 Start: 10521, Stop: 11135, Start Num: 40

Candidate Starts for Ganymede\_19:

(Start: 40 @10521 has 209 MA's), (56, 10566), (85, 10689), (91, 10743), (101, 10800), (106, 10815), (123, 10899), (125, 10905), (134, 10944), (137, 10956), (146, 10983), (156, 11028), (159, 11043), (167, 11067),

Gene: Gengar\_16 Start: 10555, Stop: 11166, Start Num: 40

Candidate Starts for Gengar\_16:

(Start: 40 @10555 has 209 MA's), (56, 10600), (91, 10777), (101, 10834), (106, 10849), (109, 10864), (123, 10933), (125, 10939), (134, 10978), (137, 10990), (141, 11005), (152, 11044), (156, 11062), (159, 11077), (167, 11101), (172, 11131),

Gene: Geraldini\_18 Start: 10524, Stop: 11135, Start Num: 40

Candidate Starts for Geraldini\_18:

(Start: 40 @10524 has 209 MA's), (56, 10566), (85, 10689), (91, 10743), (101, 10800), (106, 10815), (123, 10899), (125, 10905), (134, 10944), (137, 10956), (146, 10983), (156, 11028), (159, 11043), (167, 11067),

Gene: Gerri43\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for Gerri43\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: Getalong\_13 Start: 7496, Stop: 8068, Start Num: 50

Candidate Starts for Getalong\_13:

(Start: 50 @7496 has 300 MA's), (56, 7517), (65, 7538), (68, 7550), (96, 7709), (104, 7751), (112, 7784), (160, 7973), (183, 8057),

Gene: GiKK\_16 Start: 8250, Stop: 9098, Start Num: 50

Candidate Starts for GiKK\_16:

(Start: 50 @8250 has 300 MA's), (60, 8283), (81, 8379), (93, 8469), (109, 8541), (113, 8571), (154, 8727), (156, 8733), (160, 8751), (165, 8766), (182, 8835), (199, 8928), (201, 8937),

Gene: Gibbous\_13 Start: 8115, Stop: 8954, Start Num: 50

Candidate Starts for Gibbous\_13:

(Start: 50 @8115 has 300 MA's), (60, 8148), (104, 8376), (109, 8397), (110, 8400), (136, 8505), (154, 8574), (160, 8598), (163, 8607), (165, 8613), (175, 8661), (195, 8751), (196, 8754), (214, 8889), (219, 8937),

Gene: Gibbzilla\_14 Start: 8211, Stop: 8789, Start Num: 48

Candidate Starts for Gibbzilla\_14:

(Start: 48 @8211 has 5 MA's), (57, 8235), (86, 8361), (134, 8601), (151, 8661),

Gene: Gideon\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Gideon\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Gisselle\_11 Start: 8003, Stop: 8911, Start Num: 50

Candidate Starts for Gisselle\_11:

(Start: 50 @8003 has 300 MA's), (86, 8159), (105, 8264), (113, 8312), (115, 8318), (116, 8321), (163, 8501), (166, 8510), (181, 8597), (186, 8621), (195, 8675), (200, 8705), (204, 8723), (211, 8762),

Gene: Glenn\_15 Start: 10854, Stop: 11762, Start Num: 50

Candidate Starts for Glenn\_15:

(Start: 50 @10854 has 300 MA's), (86, 11010), (105, 11115), (116, 11172), (163, 11352), (168, 11367), (192, 11502), (195, 11526), (200, 11556), (211, 11613),

Gene: Glotell\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for Glotell\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: GodSpeed\_13 Start: 9929, Stop: 10549, Start Num: 40

Candidate Starts for GodSpeed\_13:

(1, 9530), (6, 9719), (15, 9803), (Start: 40 @9929 has 209 MA's), (63, 10004), (76, 10061), (85, 10103), (86, 10118), (101, 10214), (106, 10229), (111, 10253), (123, 10313), (128, 10337), (141, 10385), (146, 10397), (150, 10415), (159, 10457), (172, 10511),

Gene: GoldHunter\_14 Start: 7940, Stop: 8782, Start Num: 50

Candidate Starts for GoldHunter\_14:

(Start: 50 @7940 has 300 MA's), (60, 7973), (93, 8159), (109, 8231), (134, 8330), (160, 8432), (163, 8441), (165, 8447), (173, 8480), (182, 8516), (184, 8525), (212, 8711), (213, 8717),

Gene: GoldenAsh\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for GoldenAsh\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Gomashi\_13 Start: 9855, Stop: 10469, Start Num: 40

Candidate Starts for Gomashi\_13:

(Start: 40 @9855 has 209 MA's), (56, 9900), (63, 9924), (81, 10002), (85, 10023), (86, 10038), (101, 10134), (106, 10149), (111, 10173), (113, 10194), (123, 10233), (128, 10257), (130, 10266), (134, 10278), (150, 10335), (156, 10362), (159, 10377), (167, 10401),

Gene: Gravel\_14 Start: 8960, Stop: 9544, Start Num: 50

Candidate Starts for Gravel\_14:

(Start: 50 @8960 has 300 MA's), (153, 9428), (170, 9497), (174, 9509),

Gene: Graynor\_15 Start: 10856, Stop: 11764, Start Num: 50

Candidate Starts for Graynor\_15:

(Start: 50 @10856 has 300 MA's), (56, 10877), (80, 10967), (86, 11012), (116, 11174), (123, 11204), (162, 11351), (163, 11354), (168, 11369), (178, 11432), (181, 11450), (195, 11528), (200, 11558), (202, 11564), (210, 11609), (211, 11615),

Gene: GreenHearts\_15 Start: 10949, Stop: 11857, Start Num: 50

Candidate Starts for GreenHearts\_15:

(18, 10799), (33, 10892), (Start: 50 @10949 has 300 MA's), (86, 11105), (105, 11210), (113, 11258), (163, 11447), (195, 11621), (200, 11651), (210, 11702), (211, 11708),

Gene: Greenhouse\_15 Start: 10873, Stop: 11781, Start Num: 49

Candidate Starts for Greenhouse\_15:

(Start: 49 @10873 has 9 MA's), (86, 11029), (105, 11134), (113, 11182), (163, 11371), (195, 11545), (200, 11575), (210, 11626), (211, 11632),

Gene: Grizzly\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Grizzly\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (109, 10163), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Guanica15\_18 Start: 9455, Stop: 10069, Start Num: 43

Candidate Starts for Guanica15\_18:

(Start: 43 @9455 has 49 MA's), (86, 9638), (91, 9677), (101, 9734), (109, 9764), (113, 9794), (123, 9833), (125, 9839), (134, 9878), (137, 9890), (156, 9962), (167, 10001), (172, 10031), (176, 10052),

Gene: Guey18\_50 Start: 18163, Stop: 18720, Start Num: 51

Candidate Starts for Guey18\_50:

(Start: 51 @18163 has 18 MA's), (56, 18181), (73, 18244), (113, 18469), (122, 18487), (125, 18496), (134, 18535), (137, 18547), (158, 18634),

Gene: Guillsminger\_16 Start: 10530, Stop: 11141, Start Num: 40

Candidate Starts for Guillsminger\_16:

(Start: 40 @10530 has 209 MA's), (56, 10575), (91, 10752), (101, 10809), (106, 10824), (109, 10839), (123, 10908), (125, 10914), (134, 10953), (137, 10965), (141, 10980), (152, 11019), (156, 11037), (159, 11052), (167, 11076), (172, 11106),

Gene: Halo\_13 Start: 9849, Stop: 10463, Start Num: 40

Candidate Starts for Halo\_13:

(Start: 40 @9849 has 209 MA's), (56, 9894), (63, 9918), (85, 10017), (86, 10032), (101, 10128), (106, 10143), (109, 10158), (111, 10167), (113, 10188), (123, 10227), (128, 10251), (130, 10260), (134, 10272), (150, 10329), (156, 10356), (159, 10371), (167, 10395),

Gene: HamCheese\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for HamCheese\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Hammy\_17 Start: 10525, Stop: 11139, Start Num: 43

Candidate Starts for Hammy\_17:

(Start: 43 @10525 has 49 MA's), (Start: 50 @10549 has 300 MA's), (56, 10570), (87, 10714), (91, 10747), (101, 10804), (106, 10819), (123, 10903), (125, 10909), (134, 10948), (137, 10960), (146, 10987), (159, 11047), (167, 11071), (172, 11101),

Gene: HannahPhantana\_14 Start: 8967, Stop: 9548, Start Num: 50

Candidate Starts for HannahPhantana\_14:

(Start: 50 @8967 has 300 MA's), (56, 8988), (79, 9075), (86, 9123), (113, 9276), (134, 9360), (145, 9396), (147, 9402), (153, 9435), (170, 9504),

Gene: HeadNerd\_11 Start: 7938, Stop: 8846, Start Num: 50

Candidate Starts for HeadNerd\_11:

(Start: 50 @7938 has 300 MA's), (86, 8094), (105, 8199), (116, 8256), (163, 8436), (168, 8451), (181, 8532), (195, 8610), (200, 8640), (204, 8658), (211, 8697),

Gene: HedwigODU\_18 Start: 10504, Stop: 11118, Start Num: 40

Candidate Starts for HedwigODU\_18:

(Start: 40 @10504 has 209 MA's), (56, 10549), (85, 10672), (91, 10726), (101, 10783), (106, 10798), (123, 10882), (125, 10888), (134, 10927), (137, 10939), (146, 10966), (156, 11011), (159, 11026), (167, 11050), (179, 11107),

Gene: Heftyboy\_16 Start: 10657, Stop: 11268, Start Num: 40

Candidate Starts for Heftyboy\_16:

(Start: 40 @10657 has 209 MA's), (56, 10702), (91, 10879), (101, 10936), (106, 10951), (109, 10966), (123, 11035), (125, 11041), (134, 11080), (141, 11107), (152, 11146), (156, 11164), (159, 11179), (167, 11203), (172, 11233),

Gene: Herb\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for Herb\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (97, 8203), (105, 8242), (113, 8290), (116, 8299), (163, 8476), (181, 8572), (195, 8650), (200, 8680), (211, 8737),

Gene: Hexbug\_15 Start: 8936, Stop: 9784, Start Num: 50

Candidate Starts for Hexbug\_15:

(Start: 50 @8936 has 300 MA's), (60, 8969), (79, 9047), (84, 9077), (93, 9155), (109, 9227), (125, 9296), (127, 9311), (152, 9401), (154, 9413), (160, 9437), (165, 9452), (182, 9521), (190, 9560), (201, 9623), (214, 9728),

Gene: Hilltopfarm\_19 Start: 12517, Stop: 13158, Start Num: 34

Candidate Starts for Hilltopfarm\_19:

(Start: 34 @12517 has 2 MA's), (44, 12547), (Start: 51 @12577 has 18 MA's), (65, 12622), (96, 12793), (107, 12844), (109, 12856), (113, 12886), (134, 12970), (142, 13000), (156, 13054), (179, 13147),

Gene: HippoPololi\_15 Start: 8768, Stop: 9607, Start Num: 50

Candidate Starts for HippoPololi\_15:

(Start: 50 @8768 has 300 MA's), (60, 8801), (83, 8894), (104, 9029), (136, 9158), (154, 9227), (160, 9251), (163, 9260), (165, 9266), (175, 9314), (196, 9407), (214, 9542), (219, 9590),

Gene: Holliday\_13 Start: 7501, Stop: 8073, Start Num: 50

Candidate Starts for Holliday\_13:

(Start: 50 @7501 has 300 MA's), (56, 7522), (65, 7543), (68, 7555), (96, 7714), (104, 7756), (112, 7789), (160, 7978), (183, 8062),

Gene: Homura\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Homura\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Hope\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Hope\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Horseradish\_14 Start: 7821, Stop: 8666, Start Num: 50

Candidate Starts for Horseradish\_14:

(Start: 50 @7821 has 300 MA's), (60, 7854), (93, 8040), (109, 8112), (160, 8313), (165, 8328), (173, 8361), (184, 8406), (212, 8592), (213, 8598),

Gene: Horus\_13 Start: 7514, Stop: 8086, Start Num: 50

Candidate Starts for Horus\_13:

(Start: 50 @7514 has 300 MA's), (56, 7535), (65, 7556), (68, 7568), (96, 7727), (104, 7769), (112, 7802), (160, 7991), (183, 8075),

Gene: Hotshotbaby7\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Hotshotbaby7\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Huckleberry\_11 Start: 7938, Stop: 8846, Start Num: 50

Candidate Starts for Huckleberry\_11:

(Start: 50 @7938 has 300 MA's), (86, 8094), (105, 8199), (116, 8256), (163, 8436), (168, 8451), (181, 8532), (195, 8610), (200, 8640), (204, 8658), (211, 8697),

Gene: HunterDalle\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for HunterDalle\_11:

(Start: 50 @7979 has 300 MA's), (86, 8135), (116, 8297), (135, 8366), (162, 8471), (163, 8474), (168, 8489), (195, 8648), (200, 8678), (204, 8696), (211, 8735), (215, 8795), (217, 8813),

Gene: Huntingdon\_15 Start: 10859, Stop: 11767, Start Num: 49

Candidate Starts for Huntingdon\_15:

(Start: 49 @10859 has 9 MA's), (86, 11015), (105, 11120), (113, 11168), (163, 11357), (166, 11366), (177, 11432), (195, 11531), (200, 11561), (210, 11612), (211, 11618),

Gene: Hurricane\_17 Start: 10577, Stop: 11188, Start Num: 42

Candidate Starts for Hurricane\_17:

(Start: 42 @10577 has 7 MA's), (56, 10622), (91, 10799), (101, 10856), (106, 10871), (113, 10916), (123, 10955), (125, 10961), (126, 10964), (134, 11000), (137, 11012), (141, 11027), (156, 11084), (159, 11099), (167, 11123),

Gene: Hyperbowlee\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Hyperbowlee\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Icarian\_13 Start: 8561, Stop: 9358, Start Num: 50

Candidate Starts for Icarian\_13:

(Start: 50 @8561 has 300 MA's), (52, 8567), (72, 8645), (85, 8711), (86, 8726), (123, 8918), (134, 8963), (191, 9203),

Gene: Illumine\_18 Start: 10494, Stop: 11108, Start Num: 40

Candidate Starts for Illumine\_18:

(Start: 40 @10494 has 209 MA's), (56, 10539), (85, 10662), (91, 10716), (101, 10773), (106, 10788), (113, 10833), (123, 10872), (125, 10878), (134, 10917), (137, 10929), (146, 10956), (156, 11001), (159, 11016), (167, 11040),

Gene: Immaculata\_15 Start: 10848, Stop: 11756, Start Num: 50

Candidate Starts for Immaculata\_15:

(Start: 50 @10848 has 300 MA's), (86, 11004), (105, 11109), (116, 11166), (163, 11346), (168, 11361), (192, 11496), (195, 11520), (200, 11550), (211, 11607),

Gene: IndyLu\_12 Start: 8371, Stop: 9165, Start Num: 50

Candidate Starts for IndyLu\_12:

(Start: 50 @8371 has 300 MA's), (85, 8518), (86, 8533), (123, 8725), (134, 8770), (147, 8812), (191, 9010),

Gene: Inky\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Inky\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: InvictusManeo\_16 Start: 10628, Stop: 11239, Start Num: 40

Candidate Starts for InvictusManeo\_16:

(Start: 40 @10628 has 209 MA's), (56, 10673), (91, 10850), (101, 10907), (106, 10922), (109, 10937), (123, 11006), (125, 11012), (134, 11051), (141, 11078), (156, 11135), (159, 11150), (167, 11174), (172, 11204),

Gene: JAWS\_18 Start: 10498, Stop: 11109, Start Num: 40

Candidate Starts for JAWS\_18:

(Start: 40 @10498 has 209 MA's), (56, 10540), (85, 10663), (91, 10717), (101, 10774), (106, 10789), (123, 10873), (125, 10879), (134, 10918), (137, 10930), (146, 10957), (156, 11002), (159, 11017), (167, 11041), (179, 11098),

Gene: JF1\_19 Start: 11716, Stop: 12327, Start Num: 43

Candidate Starts for JF1\_19:

(Start: 43 @11716 has 49 MA's), (64, 11782), (66, 11788), (76, 11836), (86, 11893), (87, 11899), (90, 11920), (91, 11932), (106, 12004), (123, 12088), (125, 12094), (134, 12133), (137, 12145), (141, 12160), (156, 12217), (159, 12232), (167, 12256), (172, 12286),

Gene: Jabb\_12 Start: 8360, Stop: 9157, Start Num: 50

Candidate Starts for Jabb\_12:

(11, 8156), (12, 8174), (Start: 43 @8330 has 49 MA's), (Start: 50 @8360 has 300 MA's), (52, 8366), (85, 8507), (86, 8522), (123, 8714), (147, 8801), (191, 9002),

Gene: Jabbawokkie\_15 Start: 8202, Stop: 8795, Start Num: 51

Candidate Starts for Jabbawokkie\_15:

(Start: 51 @8202 has 18 MA's), (56, 8220), (85, 8337), (89, 8376), (99, 8442), (109, 8475), (112, 8487), (115, 8511), (134, 8583), (136, 8592), (139, 8604), (144, 8616), (150, 8640), (153, 8658),

Gene: Jablanski\_14 Start: 8564, Stop: 9409, Start Num: 50

Candidate Starts for Jablanski\_14:

(Start: 50 @8564 has 300 MA's), (71, 8633), (73, 8645), (123, 8909), (134, 8954), (136, 8963), (173, 9104),

Gene: JacoRen57\_12 Start: 8388, Stop: 9011, Start Num: 43

Candidate Starts for JacoRen57\_12:

(Start: 43 @8388 has 49 MA's), (85, 8550), (94, 8622), (123, 8769), (128, 8793), (134, 8814), (167, 8937), (176, 8988),

Gene: Jamun\_13 Start: 9149, Stop: 9979, Start Num: 50

Candidate Starts for Jamun\_13:

(Start: 50 @9149 has 300 MA's), (113, 9458), (129, 9524), (146, 9581), (163, 9653), (170, 9686), (181, 9740), (190, 9785), (203, 9860),

Gene: Jamzy\_16 Start: 8260, Stop: 9108, Start Num: 50

Candidate Starts for Jamzy\_16:

(Start: 50 @8260 has 300 MA's), (60, 8293), (81, 8389), (93, 8479), (125, 8620), (152, 8725), (154, 8737), (156, 8743), (160, 8761), (163, 8770), (165, 8776), (182, 8845), (188, 8869), (199, 8938), (201, 8947), (214, 9052),

Gene: Jane\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Jane\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Jarvi\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Jarvi\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Jayhawk\_18 Start: 10505, Stop: 11119, Start Num: 40

Candidate Starts for Jayhawk\_18:

(Start: 40 @10505 has 209 MA's), (56, 10550), (85, 10673), (91, 10727), (101, 10784), (106, 10799), (123, 10883), (125, 10889), (134, 10928), (137, 10940), (146, 10967), (156, 11012), (159, 11027), (167, 11051), (179, 11108),

Gene: Jeckyll\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Jeckyll\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Jeilious\_13 Start: 9853, Stop: 10467, Start Num: 40

Candidate Starts for Jeilious\_13:

(Start: 40 @9853 has 209 MA's), (56, 9898), (63, 9922), (81, 10000), (85, 10021), (86, 10036), (101, 10132), (106, 10147), (111, 10171), (113, 10192), (123, 10231), (128, 10255), (130, 10264), (134, 10276), (150, 10333), (156, 10360), (159, 10375), (167, 10399),

Gene: Jerole\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Jerole\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: Joann\_15 Start: 10851, Stop: 11759, Start Num: 49

Candidate Starts for Joann\_15:

(Start: 49 @10851 has 9 MA's), (86, 11007), (105, 11112), (113, 11160), (163, 11349), (178, 11427), (195, 11523), (200, 11553), (210, 11604), (211, 11610),

Gene: Johnathan\_12 Start: 8320, Stop: 9117, Start Num: 50

Candidate Starts for Johnathan\_12:

(4, 8020), (11, 8116), (12, 8134), (14, 8143), (27, 8236), (Start: 43 @8290 has 49 MA's), (Start: 50 @8320 has 300 MA's), (52, 8326), (85, 8467), (86, 8482), (123, 8674), (147, 8761), (191, 8962), (206, 9058),

Gene: Jolene\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Jolene\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Jolie2\_13 Start: 9130, Stop: 9750, Start Num: 40

Candidate Starts for Jolie2\_13:

(Start: 40 @9130 has 209 MA's), (63, 9205), (76, 9262), (86, 9319), (101, 9415), (106, 9430), (109, 9445), (113, 9475), (123, 9514), (128, 9538), (141, 9586), (150, 9616), (159, 9658), (171, 9709),

Gene: Jonghyun\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Jonghyun\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: JorRay\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for JorRay\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Jovita\_12 Start: 8422, Stop: 9219, Start Num: 50

Candidate Starts for Jovita\_12:

(11, 8218), (12, 8236), (Start: 43 @8392 has 49 MA's), (Start: 50 @8422 has 300 MA's), (52, 8428), (85, 8569), (86, 8584), (123, 8776), (134, 8821), (147, 8863), (191, 9064),

Gene: Joy99\_18 Start: 10470, Stop: 11084, Start Num: 40

Candidate Starts for Joy99\_18:

(Start: 40 @10470 has 209 MA's), (56, 10515), (85, 10638), (91, 10692), (101, 10749), (106, 10764), (123, 10848), (125, 10854), (134, 10893), (137, 10905), (146, 10932), (156, 10977), (159, 10992), (167, 11016), (179, 11073),

Gene: Juicebox\_14 Start: 9288, Stop: 10136, Start Num: 50

Candidate Starts for Juicebox\_14:

(Start: 50 @9288 has 300 MA's), (104, 9543), (129, 9648), (173, 9822), (187, 9879),

Gene: Juliette\_19 Start: 11592, Stop: 12203, Start Num: 43

Candidate Starts for Juliette\_19:

(Start: 43 @11592 has 49 MA's), (64, 11658), (66, 11664), (76, 11712), (86, 11769), (87, 11775), (90, 11796), (91, 11808), (101, 11865), (106, 11880), (109, 11895), (123, 11964), (125, 11970), (141, 12036), (156, 12093), (159, 12108), (167, 12132), (172, 12162),

Gene: Jumboset\_15 Start: 10797, Stop: 11705, Start Num: 50

Candidate Starts for Jumboset\_15:

(Start: 50 @10797 has 300 MA's), (86, 10953), (105, 11058), (116, 11115), (163, 11295), (168, 11310), (192, 11445), (195, 11469), (200, 11499), (211, 11556),

Gene: Juno112\_12 Start: 8379, Stop: 8960, Start Num: 50

Candidate Starts for Juno112\_12:

(Start: 50 @8379 has 300 MA's), (56, 8400), (113, 8688), (134, 8772), (146, 8811), (147, 8814), (153, 8847), (170, 8916), (177, 8946),

Gene: KHumphrey\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for KHumphrey\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Kalizoi\_15 Start: 10796, Stop: 11704, Start Num: 50

Candidate Starts for Kalizoi\_15:

(Start: 50 @10796 has 300 MA's), (86, 10952), (105, 11057), (116, 11114), (163, 11294), (168, 11309), (192, 11444), (195, 11468), (200, 11498), (211, 11555),

Gene: Kamaru\_13 Start: 7501, Stop: 8073, Start Num: 50

Candidate Starts for Kamaru\_13:

(Start: 50 @7501 has 300 MA's), (56, 7522), (65, 7543), (68, 7555), (96, 7714), (104, 7756), (112, 7789), (160, 7978), (183, 8062),

Gene: Kamdara\_12 Start: 8555, Stop: 9349, Start Num: 50

Candidate Starts for Kamdara\_12:

(Start: 50 @8555 has 300 MA's), (52, 8561), (70, 8630), (85, 8702), (86, 8717), (123, 8909), (134, 8954), (147, 8996), (150, 9011), (177, 9128), (191, 9194), (209, 9302),

Gene: Kareem\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Kareem\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Kasen3\_13 Start: 9855, Stop: 10469, Start Num: 40

Candidate Starts for Kasen3\_13:

(Start: 40 @9855 has 209 MA's), (56, 9900), (63, 9924), (81, 10002), (85, 10023), (86, 10038), (101, 10134), (106, 10149), (111, 10173), (113, 10194), (123, 10233), (128, 10257), (130, 10266), (134, 10278), (150, 10335), (156, 10362), (159, 10377), (167, 10401),

Gene: Kate33\_12 Start: 8370, Stop: 9164, Start Num: 50

Candidate Starts for Kate33\_12:

(Start: 50 @8370 has 300 MA's), (85, 8517), (86, 8532), (123, 8724), (134, 8769), (147, 8811), (191, 9009),

Gene: Katzastrophic\_12 Start: 8463, Stop: 9053, Start Num: 50

Candidate Starts for Katzastrophic\_12:

(Start: 50 @8463 has 300 MA's), (52, 8469), (56, 8484), (65, 8511), (82, 8589), (85, 8607), (86, 8622), (113, 8775), (123, 8814), (125, 8820), (134, 8859), (146, 8898), (151, 8919),

Gene: KayGee\_13 Start: 7707, Stop: 8546, Start Num: 50

Candidate Starts for KayGee\_13:

(24, 7593), (Start: 34 @7653 has 2 MA's), (Start: 50 @7707 has 300 MA's), (60, 7740), (93, 7926), (107, 7986), (109, 7998), (136, 8106), (160, 8199), (163, 8208), (165, 8214), (173, 8247), (178, 8277), (190, 8322), (205, 8412),

Gene: Keelan\_43 Start: 16946, Stop: 17503, Start Num: 51

Candidate Starts for Keelan\_43:

(Start: 51 @16946 has 18 MA's), (56, 16964), (94, 17153), (125, 17279), (134, 17318), (150, 17378), (158, 17417),

Gene: KendraB23\_14 Start: 8961, Stop: 9545, Start Num: 50

Candidate Starts for KendraB23\_14:

(Start: 50 @8961 has 300 MA's), (153, 9429), (170, 9498), (174, 9510),

Gene: Kenna\_13 Start: 7514, Stop: 8086, Start Num: 50

Candidate Starts for Kenna\_13:

(Start: 50 @7514 has 300 MA's), (56, 7535), (65, 7556), (68, 7568), (96, 7727), (104, 7769), (112, 7802), (160, 7991), (183, 8075),

Gene: Kenzers\_12 Start: 8337, Stop: 9134, Start Num: 50

Candidate Starts for Kenzers\_12:

(10, 8130), (11, 8133), (12, 8151), (27, 8253), (Start: 43 @8307 has 49 MA's), (Start: 50 @8337 has 300 MA's), (52, 8343), (85, 8484), (86, 8499), (123, 8691), (147, 8778), (191, 8979), (206, 9075),

Gene: Kepler\_13 Start: 8802, Stop: 9383, Start Num: 50

Candidate Starts for Kepler\_13:

(Start: 50 @8802 has 300 MA's), (56, 8823), (79, 8910), (86, 8958), (113, 9111), (134, 9195), (145, 9231), (147, 9237), (153, 9270), (170, 9339),

Gene: Keshu\_17 Start: 10564, Stop: 11175, Start Num: 42

Candidate Starts for Keshu\_17:

(Start: 42 @10564 has 7 MA's), (56, 10609), (91, 10786), (101, 10843), (106, 10858), (113, 10903), (123, 10942), (125, 10948), (126, 10951), (134, 10987), (137, 10999), (141, 11014), (156, 11071), (159, 11086), (167, 11110),

Gene: KiSi\_17 Start: 9433, Stop: 10044, Start Num: 40

Candidate Starts for KiSi\_17:

(Start: 40 @9433 has 209 MA's), (56, 9475), (101, 9709), (106, 9724), (109, 9739), (113, 9769), (123, 9808), (125, 9814), (134, 9853), (137, 9865), (156, 9937), (159, 9952), (167, 9976), (172, 10006), (176, 10027),

Gene: Kieran\_12 Start: 8559, Stop: 9353, Start Num: 50

Candidate Starts for Kieran\_12:

(Start: 50 @8559 has 300 MA's), (52, 8565), (70, 8634), (85, 8706), (86, 8721), (123, 8913), (134, 8958), (147, 9000), (150, 9015), (177, 9132), (191, 9198), (209, 9306),

Gene: KingBob\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for KingBob\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (97, 8203), (105, 8242), (113, 8290), (116, 8299), (163, 8476), (181, 8572), (195, 8650), (200, 8680), (211, 8737),

Gene: Kittykat\_11 Start: 7979, Stop: 8887, Start Num: 50

Candidate Starts for Kittykat\_11:

(Start: 50 @7979 has 300 MA's), (86, 8135), (105, 8240), (115, 8294), (116, 8297), (163, 8477), (166, 8486), (181, 8573), (186, 8597), (195, 8651), (200, 8681), (204, 8699), (211, 8738),

Gene: Korra\_15 Start: 10802, Stop: 11710, Start Num: 50

Candidate Starts for Korra\_15:

(Start: 50 @10802 has 300 MA's), (86, 10958), (105, 11063), (116, 11120), (163, 11300), (167, 11312), (168, 11315), (192, 11450), (195, 11474), (200, 11504), (211, 11561),

Gene: Kratio\_15 Start: 10255, Stop: 10866, Start Num: 40

Candidate Starts for Kratio\_15:

(Start: 40 @10255 has 209 MA's), (56, 10300), (101, 10534), (106, 10549), (109, 10564), (123, 10633), (125, 10639), (134, 10678), (141, 10705), (156, 10762), (159, 10777), (167, 10801), (172, 10831),

Gene: Kraw\_19 Start: 11636, Stop: 12247, Start Num: 43

Candidate Starts for Kraw\_19:

(Start: 43 @11636 has 49 MA's), (64, 11702), (66, 11708), (76, 11756), (86, 11813), (87, 11819), (90, 11840), (91, 11852), (101, 11909), (106, 11924), (123, 12008), (125, 12014), (134, 12053), (137, 12065), (141, 12080), (159, 12152), (167, 12176), (172, 12206),

Gene: Krueger\_17 Start: 9483, Stop: 10097, Start Num: 40

Candidate Starts for Krueger\_17:

(Start: 40 @9483 has 209 MA's), (56, 9528), (91, 9705), (101, 9762), (106, 9777), (109, 9792), (113, 9822), (123, 9861), (125, 9867), (159, 10005), (168, 10032), (176, 10080),

Gene: Kuleana\_13 Start: 8760, Stop: 9341, Start Num: 50

Candidate Starts for Kuleana\_13:

(Start: 50 @8760 has 300 MA's), (56, 8781), (83, 8886), (86, 8916), (113, 9069), (134, 9153), (146, 9192), (153, 9228), (165, 9270), (170, 9297),

Gene: Lahqtemish\_12 Start: 8417, Stop: 9211, Start Num: 50

Candidate Starts for Lahqtemish\_12:

(Start: 50 @8417 has 300 MA's), (85, 8564), (86, 8579), (123, 8771), (134, 8816), (147, 8858), (191, 9056),

Gene: Lakshmi\_15 Start: 10878, Stop: 11786, Start Num: 49

Candidate Starts for Lakshmi\_15:

(Start: 49 @10878 has 9 MA's), (86, 11034), (105, 11139), (113, 11187), (163, 11376), (195, 11550), (200, 11580), (210, 11631), (211, 11637),

Gene: Laphuphu24k\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for Laphuphu24k\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Larva\_16 Start: 10368, Stop: 10979, Start Num: 40

Candidate Starts for Larva\_16:

(Start: 40 @10368 has 209 MA's), (56, 10413), (101, 10647), (106, 10662), (109, 10677), (123, 10746), (125, 10752), (134, 10791), (137, 10803), (141, 10818), (156, 10875), (159, 10890), (167, 10914), (172, 10944),

Gene: Lasagna\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for Lasagna\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (195, 8608), (200, 8638), (211, 8695),

Gene: LastHope\_18 Start: 9529, Stop: 10143, Start Num: 43

Candidate Starts for LastHope\_18:

(Start: 43 @9529 has 49 MA's), (56, 9574), (73, 9640), (86, 9712), (91, 9751), (101, 9808), (109, 9838), (113, 9868), (123, 9907), (125, 9913), (126, 9916), (134, 9952), (156, 10036), (167, 10075), (172, 10105), (176, 10126),

Gene: LastNadiia\_17 Start: 10446, Stop: 11024, Start Num: 48

Candidate Starts for LastNadiia\_17:

(Start: 48 @10446 has 5 MA's),

Gene: LaterM\_18 Start: 10463, Stop: 11074, Start Num: 41

Candidate Starts for LaterM\_18:

(Start: 41 @10463 has 5 MA's), (56, 10505), (85, 10628), (91, 10682), (101, 10739), (106, 10754), (113, 10799), (123, 10838), (125, 10844), (134, 10883), (137, 10895), (146, 10922), (156, 10967), (159, 10982), (167, 11006),

Gene: Lauer\_12 Start: 7756, Stop: 8595, Start Num: 50

Candidate Starts for Lauer\_12:

(24, 7642), (Start: 34 @7702 has 2 MA's), (Start: 50 @7756 has 300 MA's), (60, 7789), (93, 7975), (107, 8035), (109, 8047), (160, 8248), (163, 8257), (165, 8263), (173, 8296), (178, 8326), (190, 8371), (205, 8461),

Gene: Lavahound\_16 Start: 10216, Stop: 10827, Start Num: 43

Candidate Starts for Lavahound\_16:

(3, 9946), (Start: 21 @10111 has 1 MA's), (29, 10174), (31, 10183), (Start: 43 @10216 has 49 MA's), (56, 10258), (85, 10381), (87, 10402), (91, 10435), (101, 10492), (106, 10507), (123, 10591), (125, 10597), (134, 10636), (137, 10648), (146, 10675), (159, 10735), (167, 10759),

Gene: LeMond\_17 Start: 9505, Stop: 10116, Start Num: 40

Candidate Starts for LeMond\_17:

(Start: 40 @9505 has 209 MA's), (56, 9547), (101, 9781), (106, 9796), (109, 9811), (113, 9841), (123, 9880), (125, 9886), (134, 9925), (137, 9937), (156, 10009), (159, 10024), (167, 10048), (172, 10078), (176, 10099),

Gene: Lea83\_17 Start: 10567, Stop: 11178, Start Num: 42

Candidate Starts for Lea83\_17:

(Start: 42 @10567 has 7 MA's), (56, 10612), (91, 10789), (101, 10846), (106, 10861), (113, 10906), (123, 10945), (125, 10951), (126, 10954), (134, 10990), (137, 11002), (141, 11017), (156, 11074), (159, 11089), (167, 11113),

Gene: Lebo14\_19 Start: 11730, Stop: 12341, Start Num: 43

Candidate Starts for Lebo14\_19:

(Start: 43 @11730 has 49 MA's), (64, 11796), (66, 11802), (76, 11850), (86, 11907), (87, 11913), (90, 11934), (91, 11946), (101, 12003), (106, 12018), (123, 12102), (125, 12108), (134, 12147), (137, 12159), (141, 12174), (156, 12231), (159, 12246), (167, 12270), (172, 12300),

Gene: Lemuria\_13 Start: 9183, Stop: 9803, Start Num: 40

Candidate Starts for Lemuria\_13:

(Start: 40 @9183 has 209 MA's), (56, 9234), (63, 9258), (76, 9315), (85, 9357), (86, 9372), (101, 9468), (106, 9483), (109, 9498), (111, 9507), (113, 9528), (123, 9567), (128, 9591), (134, 9612), (141, 9639), (149, 9663), (150, 9669), (159, 9711),

Gene: Lennox\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for Lennox\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (163, 8434), (192, 8584), (195, 8608), (200, 8638), (211, 8695),

Gene: Leona\_12 Start: 8429, Stop: 9010, Start Num: 50

Candidate Starts for Leona\_12:

(Start: 50 @8429 has 300 MA's), (56, 8450), (113, 8738), (134, 8822), (146, 8861), (147, 8864), (153, 8897), (170, 8966), (177, 8996),

Gene: Leroy\_13 Start: 7515, Stop: 8087, Start Num: 50

Candidate Starts for Leroy\_13:

(Start: 50 @7515 has 300 MA's), (56, 7536), (65, 7557), (68, 7569), (96, 7728), (104, 7770), (112, 7803), (160, 7992), (183, 8076),

Gene: Leston\_16 Start: 10660, Stop: 11271, Start Num: 40

Candidate Starts for Leston\_16:

(Start: 40 @10660 has 209 MA's), (56, 10705), (91, 10882), (101, 10939), (106, 10954), (109, 10969), (123, 11038), (125, 11044), (134, 11083), (137, 11095), (141, 11110), (152, 11149), (156, 11167), (159, 11182), (167, 11206), (172, 11236),

Gene: Liefie\_13 Start: 9853, Stop: 10467, Start Num: 40

Candidate Starts for Liefie\_13:

(Start: 40 @9853 has 209 MA's), (56, 9898), (63, 9922), (81, 10000), (85, 10021), (86, 10036), (101, 10132), (106, 10147), (109, 10162), (111, 10171), (113, 10192), (123, 10231), (128, 10255), (130, 10264), (134, 10276), (150, 10333), (156, 10360), (159, 10375), (167, 10399),

Gene: LilDirt\_15 Start: 10385, Stop: 10996, Start Num: 40

Candidate Starts for LilDirt\_15:

(Start: 40 @10385 has 209 MA's), (56, 10430), (91, 10607), (101, 10664), (106, 10679), (109, 10694), (123, 10763), (125, 10769), (134, 10808), (141, 10835), (156, 10892), (159, 10907), (167, 10931), (172, 10961),

Gene: LilPharaoh\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for LilPharaoh\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: LilSpotty\_12 Start: 7545, Stop: 8324, Start Num: 51

Candidate Starts for LilSpotty\_12:

(Start: 51 @7545 has 18 MA's), (75, 7632), (85, 7683), (96, 7761), (102, 7797), (109, 7824), (113, 7854), (115, 7860), (123, 7893), (131, 7929), (134, 7938), (153, 8034), (163, 8070), (173, 8109), (189, 8196), (207, 8304),

Gene: LilStuart\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for LilStuart\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (195, 8608), (200, 8638), (211, 8695),

Gene: Lilas\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for Lilas\_14:

(Start: 50 @8717 has 300 MA's), (73, 8798), (134, 9107), (136, 9116), (173, 9257), (194, 9374), (197, 9398), (208, 9449),

Gene: Lilo27\_12 Start: 8297, Stop: 9094, Start Num: 50

Candidate Starts for Lilo27\_12:

(10, 8090), (11, 8093), (12, 8111), (14, 8120), (Start: 43 @8267 has 49 MA's), (Start: 50 @8297 has 300 MA's), (52, 8303), (85, 8444), (86, 8459), (114, 8615), (123, 8651), (134, 8696), (147, 8738), (191, 8939),

Gene: LimaBean\_12 Start: 8320, Stop: 9117, Start Num: 50

Candidate Starts for LimaBean\_12:

(4, 8020), (11, 8116), (12, 8134), (27, 8236), (Start: 43 @8290 has 49 MA's), (Start: 50 @8320 has 300 MA's), (52, 8326), (85, 8467), (86, 8482), (123, 8674), (147, 8761), (191, 8962), (206, 9058),

Gene: LindNT\_18 Start: 10468, Stop: 11082, Start Num: 40

Candidate Starts for LindNT\_18:

(Start: 40 @10468 has 209 MA's), (56, 10513), (85, 10636), (91, 10690), (101, 10747), (106, 10762), (123, 10846), (125, 10852), (134, 10891), (137, 10903), (156, 10975), (159, 10990), (167, 11014), (179, 11071),

Gene: LitninMcQueen\_13 Start: 7501, Stop: 8073, Start Num: 50

Candidate Starts for LitninMcQueen\_13:

(Start: 50 @7501 has 300 MA's), (56, 7522), (65, 7543), (68, 7555), (96, 7714), (104, 7756), (112, 7789), (160, 7978), (183, 8062),

Gene: Litotes\_15 Start: 10820, Stop: 11728, Start Num: 50

Candidate Starts for Litotes\_15:

(Start: 50 @10820 has 300 MA's), (56, 10841), (80, 10931), (86, 10976), (116, 11138), (123, 11168), (156, 11288), (162, 11315), (163, 11318), (168, 11333), (178, 11396), (181, 11414), (195, 11492), (200, 11522), (202, 11528), (210, 11573), (211, 11579),

Gene: LittleTokyo\_13 Start: 8714, Stop: 9298, Start Num: 50

Candidate Starts for LittleTokyo\_13:

(Start: 50 @8714 has 300 MA's), (56, 8735), (80, 8825), (113, 9023), (134, 9107), (146, 9146), (153, 9182), (160, 9209), (165, 9224), (177, 9281),

Gene: Llorens\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Llorens\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: LonelyBoi\_14 Start: 8564, Stop: 9409, Start Num: 50

Candidate Starts for LonelyBoi\_14:

(Start: 50 @8564 has 300 MA's), (73, 8645), (134, 8954), (136, 8963), (158, 9050), (173, 9104),

Gene: LongHai\_16 Start: 9646, Stop: 10287, Start Num: 43

Candidate Starts for LongHai\_16:

(32, 9613), (Start: 43 @9646 has 49 MA's), (Start: 54 @9679 has 1 MA's), (56, 9688), (62, 9706), (77, 9772), (85, 9811), (86, 9826), (104, 9931), (109, 9952), (113, 9982), (123, 10021), (134, 10066), (156, 10150), (161, 10171),

Gene: LouisV14\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for LouisV14\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Loviatar\_12 Start: 8640, Stop: 9437, Start Num: 50

Candidate Starts for Loviatar\_12:

(Start: 50 @8640 has 300 MA's), (52, 8646), (72, 8724), (85, 8790), (86, 8805), (115, 8964), (123, 8997), (134, 9042), (191, 9282),

Gene: Lucy\_11 Start: 7927, Stop: 8835, Start Num: 50

Candidate Starts for Lucy\_11:

(Start: 50 @7927 has 300 MA's), (86, 8083), (115, 8242), (116, 8245), (163, 8425), (192, 8575), (195, 8599), (200, 8629), (211, 8686),

Gene: Lunahalos\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Lunahalos\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Lunar\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Lunar\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: Lutum\_13 Start: 7514, Stop: 8086, Start Num: 50

Candidate Starts for Lutum\_13:

(Start: 50 @7514 has 300 MA's), (56, 7535), (65, 7556), (68, 7568), (96, 7727), (104, 7769), (112, 7802), (160, 7991), (183, 8075),

Gene: Lynlen\_12 Start: 8337, Stop: 9134, Start Num: 50

Candidate Starts for Lynlen\_12:

(10, 8130), (11, 8133), (12, 8151), (27, 8253), (Start: 43 @8307 has 49 MA's), (Start: 50 @8337 has 300 MA's), (52, 8343), (85, 8484), (86, 8499), (123, 8691), (147, 8778), (191, 8979), (206, 9075),

Gene: MAnor\_13 Start: 7697, Stop: 8536, Start Num: 50

Candidate Starts for MAnor\_13:

(24, 7583), (Start: 34 @7643 has 2 MA's), (Start: 50 @7697 has 300 MA's), (60, 7730), (93, 7916), (99, 7952), (107, 7976), (109, 7988), (160, 8189), (163, 8198), (165, 8204), (173, 8237), (178, 8267), (190, 8312), (213, 8474),

Gene: MOOREtheMARYer\_13 Start: 10071, Stop: 10694, Start Num: 40

Candidate Starts for MOOREtheMARYer\_13:

(Start: 40 @10071 has 209 MA's), (47, 10098), (63, 10149), (76, 10206), (85, 10248), (86, 10263), (101, 10359), (106, 10374), (111, 10398), (113, 10419), (123, 10458), (128, 10482), (141, 10530), (149, 10554), (150, 10560), (159, 10602),

Gene: MScarn\_15 Start: 7910, Stop: 8755, Start Num: 50

Candidate Starts for MScarn\_15:

(24, 7793), (Start: 34 @7853 has 2 MA's), (Start: 50 @7910 has 300 MA's), (60, 7943), (93, 8129), (109, 8201), (160, 8402), (165, 8417), (173, 8450), (184, 8495), (212, 8681), (213, 8687),

Gene: MZKinsey\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for MZKinsey\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: MaVan\_15 Start: 8878, Stop: 9717, Start Num: 50

Candidate Starts for MaVan\_15:

(Start: 50 @8878 has 300 MA's), (60, 8911), (104, 9139), (125, 9220), (136, 9268), (152, 9325), (154, 9337), (160, 9361), (165, 9376), (188, 9469), (193, 9502), (195, 9514), (196, 9517), (214, 9652), (219, 9700),

Gene: MacKat\_18 Start: 10521, Stop: 11132, Start Num: 40

Candidate Starts for MacKat\_18:

(Start: 40 @10521 has 209 MA's), (56, 10563), (85, 10686), (91, 10740), (101, 10797), (106, 10812), (123, 10896), (125, 10902), (134, 10941), (146, 10980), (156, 11025), (159, 11040), (167, 11064), (179, 11121),

Gene: MacnCheese\_18 Start: 10792, Stop: 11403, Start Num: 42

Candidate Starts for MacnCheese\_18:

(Start: 42 @10792 has 7 MA's), (56, 10837), (91, 11014), (101, 11071), (106, 11086), (113, 11131), (123, 11170), (125, 11176), (126, 11179), (134, 11215), (137, 11227), (141, 11242), (159, 11314), (167, 11338),

Gene: Maco6\_13 Start: 8602, Stop: 9243, Start Num: 43

Candidate Starts for Maco6\_13:

(32, 8569), (Start: 43 @8602 has 49 MA's), (Start: 54 @8635 has 1 MA's), (56, 8644), (62, 8662), (77, 8728), (85, 8767), (86, 8782), (104, 8887), (109, 8908), (113, 8938), (123, 8977), (134, 9022), (156, 9106), (161, 9127),

Gene: Makima\_15 Start: 9530, Stop: 10108, Start Num: 48

Candidate Starts for Makima\_15:

(Start: 48 @9530 has 5 MA's),

Gene: Makoto\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for Makoto\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (116, 8254), (163, 8434), (192, 8584), (195, 8608), (200, 8638), (211, 8695),

Gene: MalagasyRose\_19 Start: 10934, Stop: 11524, Start Num: 48

Candidate Starts for MalagasyRose\_19:

(Start: 48 @10934 has 5 MA's), (Start: 54 @10949 has 1 MA's), (63, 10982), (74, 11027), (113, 11249), (130, 11321), (142, 11366), (148, 11384), (164, 11450), (165, 11453),

Gene: Maliketh\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Maliketh\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Malisha\_13 Start: 8564, Stop: 9133, Start Num: 50

Candidate Starts for Malisha\_13:

(Start: 50 @8564 has 300 MA's), (56, 8585), (65, 8606), (68, 8618), (96, 8777), (104, 8819), (112, 8852), (138, 8960), (160, 9041),

Gene: Malthus\_19 Start: 11636, Stop: 12247, Start Num: 43

Candidate Starts for Malthus\_19:

(Start: 43 @11636 has 49 MA's), (64, 11702), (66, 11708), (76, 11756), (86, 11813), (87, 11819), (90, 11840), (91, 11852), (101, 11909), (106, 11924), (123, 12008), (125, 12014), (134, 12053), (137, 12065), (141, 12080), (159, 12152), (167, 12176), (172, 12206),

Gene: Malvina\_15 Start: 8771, Stop: 9610, Start Num: 50

Candidate Starts for Malvina\_15:

(Start: 50 @8771 has 300 MA's), (60, 8804), (83, 8897), (104, 9032), (136, 9161), (154, 9230), (160, 9254), (163, 9263), (165, 9269), (175, 9317), (196, 9410), (214, 9545), (219, 9593),

Gene: MamaPearl\_11 Start: 7982, Stop: 8890, Start Num: 50

Candidate Starts for MamaPearl\_11:

(37, 7931), (38, 7934), (Start: 50 @7982 has 300 MA's), (56, 8003), (86, 8138), (105, 8243), (116, 8300), (157, 8453), (163, 8480), (177, 8555), (181, 8576), (195, 8654), (200, 8684), (202, 8690), (211, 8741),

Gene: Marcoliusprime\_14 Start: 8532, Stop: 9146, Start Num: 40

Candidate Starts for Marcoliusprime\_14:

(Start: 40 @8532 has 209 MA's), (Start: 54 @8571 has 1 MA's), (56, 8580), (101, 8814), (106, 8829), (109, 8844), (113, 8874), (123, 8913), (125, 8919), (133, 8955), (137, 8970), (146, 8997), (156, 9042), (159, 9057), (167, 9081),

Gene: Margaret\_16 Start: 8645, Stop: 9493, Start Num: 50

Candidate Starts for Margaret\_16:

(Start: 50 @8645 has 300 MA's), (60, 8678), (93, 8864), (127, 9020), (152, 9110), (154, 9122), (160, 9146), (165, 9161), (182, 9230), (188, 9254), (199, 9323), (201, 9332), (218, 9476),

Gene: Maria1952\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for Maria1952\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (97, 8203), (105, 8242), (113, 8290), (116, 8299), (163, 8476), (181, 8572), (195, 8650), (200, 8680), (211, 8737),

Gene: MarkPhew\_18 Start: 9393, Stop: 10004, Start Num: 40

Candidate Starts for MarkPhew\_18:

(Start: 40 @9393 has 209 MA's), (56, 9435), (86, 9573), (101, 9669), (106, 9684), (113, 9729), (123, 9768), (125, 9774), (159, 9912), (167, 9936), (172, 9966), (176, 9987),

Gene: Marmie\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Marmie\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Marshawn\_19 Start: 10081, Stop: 10695, Start Num: 43

Candidate Starts for Marshawn\_19:

(Start: 43 @10081 has 49 MA's), (Start: 50 @10105 has 300 MA's), (56, 10126), (85, 10249), (87, 10270), (101, 10360), (106, 10375), (123, 10459), (125, 10465), (134, 10504), (137, 10516), (146, 10543), (156, 10588), (159, 10603), (167, 10627),

Gene: Marteena\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for Marteena\_14:

(Start: 50 @8717 has 300 MA's), (71, 8786), (73, 8798), (123, 9062), (134, 9107), (136, 9116), (158, 9203), (173, 9257),

Gene: Mayweather\_14 Start: 8330, Stop: 9166, Start Num: 50

Candidate Starts for Mayweather\_14:

(8, 8111), (16, 8168), (24, 8216), (Start: 34 @8276 has 2 MA's), (Start: 50 @8330 has 300 MA's), (60, 8363), (93, 8549), (107, 8609), (160, 8822), (163, 8831), (165, 8837), (173, 8870), (178, 8900), (190, 8945), (213, 9107),

Gene: McDazzle\_12 Start: 8172, Stop: 9008, Start Num: 50

Candidate Starts for McDazzle\_12:

(8, 7953), (16, 8010), (24, 8058), (Start: 34 @8118 has 2 MA's), (Start: 50 @8172 has 300 MA's), (60, 8205), (93, 8391), (107, 8451), (109, 8463), (160, 8664), (163, 8673), (165, 8679), (173, 8712), (178, 8742), (190, 8787), (213, 8949),

Gene: McMater\_18 Start: 9573, Stop: 10184, Start Num: 43

Candidate Starts for McMater\_18:

(Start: 43 @9573 has 49 MA's), (56, 9615), (86, 9753), (91, 9792), (101, 9849), (106, 9864), (113, 9909), (123, 9948), (125, 9954), (126, 9957), (137, 10005), (141, 10020), (156, 10077),

Gene: Mdavu\_14 Start: 9765, Stop: 10376, Start Num: 40

Candidate Starts for Mdavu\_14:

(Start: 40 @9765 has 209 MA's), (Start: 50 @9786 has 300 MA's), (56, 9807), (85, 9930), (86, 9945), (91, 9984), (101, 10041), (106, 10056), (113, 10101), (123, 10140), (125, 10146), (134, 10185), (137, 10197), (156, 10269), (159, 10284), (167, 10308), (172, 10338),

Gene: MeaningOfLife\_18 Start: 10477, Stop: 11091, Start Num: 40

Candidate Starts for MeaningOfLife\_18:

(Start: 40 @10477 has 209 MA's), (56, 10522), (85, 10645), (91, 10699), (101, 10756), (106, 10771), (123, 10855), (125, 10861), (134, 10900), (137, 10912), (146, 10939), (156, 10984), (159, 10999), (167, 11023), (179, 11080),

Gene: MeganNoll\_15 Start: 10854, Stop: 11762, Start Num: 50

Candidate Starts for MeganNoll\_15:

(Start: 50 @10854 has 300 MA's), (86, 11010), (105, 11115), (116, 11172), (163, 11352), (168, 11367), (192, 11502), (195, 11526), (200, 11556), (211, 11613),

Gene: Megsy\_18 Start: 10471, Stop: 11085, Start Num: 40

Candidate Starts for Megsy\_18:

(Start: 40 @10471 has 209 MA's), (56, 10516), (85, 10639), (91, 10693), (101, 10750), (106, 10765), (123, 10849), (125, 10855), (134, 10894), (137, 10906), (146, 10933), (156, 10978), (159, 10993), (167, 11017), (179, 11074),

Gene: Melons\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Melons\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: Mercurio\_14 Start: 9826, Stop: 10446, Start Num: 40

Candidate Starts for Mercurio\_14:

(Start: 40 @9826 has 209 MA's), (63, 9901), (76, 9958), (86, 10015), (101, 10111), (106, 10126), (109, 10141), (113, 10171), (123, 10210), (128, 10234), (134, 10255), (141, 10282), (149, 10306), (150, 10312), (159, 10354), (172, 10408),

Gene: Milly\_14 Start: 8532, Stop: 9146, Start Num: 40

Candidate Starts for Milly\_14:

(Start: 40 @8532 has 209 MA's), (Start: 54 @8571 has 1 MA's), (56, 8580), (101, 8814), (106, 8829), (109, 8844), (113, 8874), (123, 8913), (125, 8919), (133, 8955), (137, 8970), (146, 8997), (156, 9042), (159, 9057), (167, 9081),

Gene: Milomuff\_13 Start: 8706, Stop: 9503, Start Num: 50

Candidate Starts for Milomuff\_13:

(11, 8502), (12, 8520), (27, 8622), (Start: 43 @8676 has 49 MA's), (Start: 50 @8706 has 300 MA's), (52, 8712), (85, 8853), (86, 8868), (123, 9060), (147, 9147), (191, 9348), (206, 9444),

Gene: Mireles\_14 Start: 7926, Stop: 8504, Start Num: 48

Candidate Starts for Mireles\_14:

(Start: 48 @7926 has 5 MA's), (57, 7953), (107, 8193), (142, 8349), (147, 8361),

Gene: Miryou\_16 Start: 10508, Stop: 11119, Start Num: 40

Candidate Starts for Miryou\_16:

(Start: 40 @10508 has 209 MA's), (56, 10553), (91, 10730), (101, 10787), (106, 10802), (109, 10817), (123, 10886), (125, 10892), (134, 10931), (137, 10943), (141, 10958), (152, 10997), (156, 11015), (159, 11030), (167, 11054), (172, 11084),

Gene: Misaeng\_15 Start: 10924, Stop: 11832, Start Num: 49

Candidate Starts for Misaeng\_15:

(Start: 49 @10924 has 9 MA's), (86, 11080), (105, 11185), (113, 11233), (156, 11392), (163, 11422), (166, 11431), (177, 11497), (195, 11596), (200, 11626), (210, 11677), (211, 11683),

Gene: MissDaisy\_19 Start: 11490, Stop: 12101, Start Num: 43

Candidate Starts for MissDaisy\_19:

(Start: 43 @11490 has 49 MA's), (64, 11556), (66, 11562), (68, 11571), (76, 11610), (86, 11667), (87, 11673), (90, 11694), (91, 11706), (101, 11763), (106, 11778), (123, 11862), (125, 11868), (133, 11904), (134, 11907), (137, 11919), (141, 11934), (156, 11991), (159, 12006), (167, 12030), (172, 12060),

Gene: Mitti\_19 Start: 11640, Stop: 12251, Start Num: 43

Candidate Starts for Mitti\_19:

(Start: 43 @11640 has 49 MA's), (64, 11706), (66, 11712), (76, 11760), (86, 11817), (87, 11823), (90, 11844), (91, 11856), (101, 11913), (106, 11928), (123, 12012), (125, 12018), (134, 12057), (137, 12069), (141, 12084), (156, 12141), (159, 12156), (167, 12180), (172, 12210),

Gene: Moki\_11 Start: 7938, Stop: 8846, Start Num: 50

Candidate Starts for Moki\_11:

(Start: 50 @7938 has 300 MA's), (86, 8094), (105, 8199), (116, 8256), (163, 8436), (168, 8451), (181, 8532), (195, 8610), (200, 8640), (204, 8658), (211, 8697),

Gene: MortyNRick\_13 Start: 7836, Stop: 8429, Start Num: 55

Candidate Starts for MortyNRick\_13:

(Start: 55 @7836 has 3 MA's), (61, 7857), (67, 7881), (95, 8049), (108, 8109), (109, 8115), (115, 8151), (116, 8154), (125, 8190),

Gene: Mowgli\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Mowgli\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: MrBoss\_15 Start: 10820, Stop: 11728, Start Num: 50

Candidate Starts for MrBoss\_15:

(Start: 50 @10820 has 300 MA's), (56, 10841), (86, 10976), (116, 11138), (123, 11168), (156, 11288), (162, 11315), (163, 11318), (168, 11333), (178, 11396), (181, 11414), (195, 11492), (200, 11522), (202, 11528), (210, 11573), (211, 11579),

Gene: MrGloopy\_15 Start: 10787, Stop: 11695, Start Num: 50

Candidate Starts for MrGloopy\_15:

(Start: 50 @10787 has 300 MA's), (86, 10943), (105, 11048), (116, 11105), (163, 11285), (168, 11300), (195, 11459), (200, 11489), (211, 11546),

Gene: MsUbiquitous\_12 Start: 8360, Stop: 9157, Start Num: 50

Candidate Starts for MsUbiquitous\_12:

(11, 8156), (12, 8174), (Start: 43 @8330 has 49 MA's), (Start: 50 @8360 has 300 MA's), (52, 8366), (85, 8507), (86, 8522), (123, 8714), (147, 8801), (191, 9002),

Gene: Muddy\_15 Start: 9552, Stop: 10193, Start Num: 43

Candidate Starts for Muddy\_15:

(32, 9519), (Start: 43 @9552 has 49 MA's), (Start: 54 @9585 has 1 MA's), (56, 9594), (62, 9612), (77, 9678), (85, 9717), (86, 9732), (104, 9837), (109, 9858), (113, 9888), (123, 9927), (134, 9972), (156, 10056), (161, 10077),

Gene: Mufasa\_14 Start: 8522, Stop: 9145, Start Num: 39

Candidate Starts for Mufasa\_14:

(25, 8456), (Start: 39 @8522 has 3 MA's), (Start: 54 @8570 has 1 MA's), (86, 8717), (101, 8813), (106, 8828), (109, 8843), (113, 8873), (123, 8912), (125, 8918), (126, 8921), (134, 8957), (137, 8969), (141, 8984), (156, 9041), (159, 9056), (167, 9080),

Gene: MunkgeeRoachy\_13 Start: 7987, Stop: 8829, Start Num: 50

Candidate Starts for MunkgeeRoachy\_13:

(Start: 50 @7987 has 300 MA's), (60, 8020), (93, 8206), (109, 8278), (134, 8377), (160, 8479), (163, 8488), (165, 8494), (173, 8527), (182, 8563), (184, 8572), (212, 8758), (213, 8764),

Gene: Murucutumbu\_18 Start: 10456, Stop: 11067, Start Num: 41

Candidate Starts for Murucutumbu\_18:

(Start: 41 @10456 has 5 MA's), (56, 10498), (85, 10621), (91, 10675), (101, 10732), (106, 10747), (113, 10792), (123, 10831), (125, 10837), (134, 10876), (137, 10888), (146, 10915), (156, 10960), (159, 10975), (167, 10999),

Gene: Mynx\_18 Start: 10524, Stop: 11138, Start Num: 40

Candidate Starts for Mynx\_18:

(Start: 40 @10524 has 209 MA's), (56, 10569), (85, 10692), (91, 10746), (101, 10803), (106, 10818), (123, 10902), (125, 10908), (134, 10947), (137, 10959), (146, 10986), (156, 11031), (159, 11046), (167, 11070), (179, 11127),

Gene: Nancia\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for Nancia\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (195, 8608), (200, 8638), (211, 8695),

Gene: Nebkiss\_10 Start: 8074, Stop: 8661, Start Num: 50

Candidate Starts for Nebkiss\_10:

(Start: 50 @8074 has 300 MA's), (73, 8155), (83, 8194), (88, 8236), (97, 8290), (103, 8326), (125, 8425), (131, 8455), (153, 8545), (165, 8587), (173, 8620),

Gene: Neighly\_16 Start: 10367, Stop: 10978, Start Num: 40

Candidate Starts for Neighly\_16:

(Start: 40 @10367 has 209 MA's), (56, 10412), (101, 10646), (106, 10661), (109, 10676), (123, 10745), (125, 10751), (134, 10790), (137, 10802), (141, 10817), (156, 10874), (159, 10889), (167, 10913), (172, 10943),

Gene: Neoh\_13 Start: 9855, Stop: 10469, Start Num: 40

Candidate Starts for Neoh\_13:

(Start: 40 @9855 has 209 MA's), (56, 9900), (63, 9924), (81, 10002), (85, 10023), (86, 10038), (101, 10134), (106, 10149), (111, 10173), (113, 10194), (123, 10233), (128, 10257), (130, 10266), (134, 10278), (150, 10335), (156, 10362), (159, 10377), (167, 10401),

Gene: Nergal\_17 Start: 11411, Stop: 12001, Start Num: 48

Candidate Starts for Nergal\_17:

(Start: 48 @11411 has 5 MA's), (Start: 54 @11426 has 1 MA's), (58, 11441), (63, 11459), (81, 11537), (94, 11627), (104, 11675), (130, 11798), (142, 11843), (164, 11927), (165, 11930),

Gene: Neuville\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for Neuville\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: Nibb\_17 Start: 9545, Stop: 10156, Start Num: 40

Candidate Starts for Nibb\_17:

(Start: 40 @9545 has 209 MA's), (56, 9587), (86, 9725), (91, 9764), (101, 9821), (106, 9836), (113, 9881), (123, 9920), (125, 9926), (137, 9977), (159, 10064), (167, 10088), (176, 10139),

Gene: Nibbles\_15 Start: 8878, Stop: 9717, Start Num: 50

Candidate Starts for Nibbles\_15:

(Start: 50 @8878 has 300 MA's), (60, 8911), (104, 9139), (125, 9220), (136, 9268), (152, 9325), (154, 9337), (160, 9361), (165, 9376), (188, 9469), (193, 9502), (195, 9514), (196, 9517), (214, 9652), (219, 9700),

Gene: Niblet\_13 Start: 8750, Stop: 9334, Start Num: 50

Candidate Starts for Niblet\_13:

(Start: 50 @8750 has 300 MA's), (113, 9059), (147, 9185), (153, 9218), (170, 9287), (174, 9299),

Gene: Nicky22\_13 Start: 8768, Stop: 9565, Start Num: 50

Candidate Starts for Nicky22\_13:

(11, 8564), (12, 8582), (Start: 43 @8738 has 49 MA's), (Start: 50 @8768 has 300 MA's), (52, 8774), (85, 8915), (86, 8930), (114, 9086), (123, 9122), (134, 9167), (191, 9410),

Gene: Nikao\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Nikao\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: Niklas\_18 Start: 9573, Stop: 10184, Start Num: 43

Candidate Starts for Niklas\_18:

(Start: 43 @9573 has 49 MA's), (56, 9615), (86, 9753), (91, 9792), (101, 9849), (106, 9864), (113, 9909), (123, 9948), (125, 9954), (126, 9957), (137, 10005), (141, 10020), (156, 10077),

Gene: Nina\_14 Start: 8973, Stop: 9815, Start Num: 50

Candidate Starts for Nina\_14:

(Start: 50 @8973 has 300 MA's), (60, 9006), (109, 9264), (134, 9363), (160, 9465), (163, 9474), (165, 9480), (173, 9513), (182, 9549), (184, 9558), (212, 9744), (213, 9750),

Gene: NoShow\_13 Start: 8694, Stop: 9302, Start Num: 43

Candidate Starts for NoShow\_13:

(Start: 43 @8694 has 49 MA's), (65, 8763), (94, 8928), (109, 8997), (118, 9048), (123, 9066), (124, 9069), (128, 9090), (142, 9141), (156, 9195),

Gene: Nodigi\_15 Start: 8929, Stop: 9777, Start Num: 50

Candidate Starts for Nodigi\_15:

(Start: 50 @8929 has 300 MA's), (60, 8962), (84, 9070), (93, 9148), (109, 9220), (127, 9304), (152, 9394), (154, 9406), (160, 9430), (165, 9445), (182, 9514), (190, 9553), (201, 9616), (214, 9721),

Gene: November\_16 Start: 10373, Stop: 10987, Start Num: 43

Candidate Starts for November\_16:

(Start: 43 @10373 has 49 MA's), (Start: 50 @10397 has 300 MA's), (56, 10418), (87, 10562), (91, 10595), (101, 10652), (106, 10667), (123, 10751), (125, 10757), (134, 10796), (137, 10808), (146, 10835), (159, 10895), (167, 10919), (172, 10949),

Gene: Nubia\_15 Start: 10838, Stop: 11746, Start Num: 49

Candidate Starts for Nubia\_15:

(Start: 49 @10838 has 9 MA's), (86, 10994), (105, 11099), (113, 11147), (163, 11336), (195, 11510), (200, 11540), (210, 11591), (211, 11597),

Gene: Nutello\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Nutello\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: OMalley\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for OMalley\_11:

(Start: 50 @7979 has 300 MA's), (80, 8090), (86, 8135), (116, 8297), (135, 8366), (162, 8471), (163, 8474), (168, 8489), (195, 8648), (200, 8678), (204, 8696), (211, 8735), (217, 8813),

Gene: OctaviousRex\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for OctaviousRex\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: OkiRoe\_16 Start: 10530, Stop: 11141, Start Num: 40

Candidate Starts for OkiRoe\_16:

(Start: 40 @10530 has 209 MA's), (56, 10575), (91, 10752), (101, 10809), (106, 10824), (109, 10839), (123, 10908), (125, 10914), (134, 10953), (137, 10965), (141, 10980), (152, 11019), (156, 11037), (159, 11052), (167, 11076), (172, 11106),

Gene: Olga\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Olga\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Olliecat\_12 Start: 8550, Stop: 9137, Start Num: 50

Candidate Starts for Olliecat\_12:

(Start: 50 @8550 has 300 MA's), (58, 8577), (85, 8691), (123, 8898), (130, 8931), (142, 8973), (143, 8976), (147, 8985),

Gene: OmniCritical\_19 Start: 11627, Stop: 12238, Start Num: 43

Candidate Starts for OmniCritical\_19:

(Start: 43 @11627 has 49 MA's), (64, 11693), (66, 11699), (76, 11747), (86, 11804), (87, 11810), (90, 11831), (91, 11843), (101, 11900), (106, 11915), (123, 11999), (125, 12005), (134, 12044), (137, 12056), (141, 12071), (156, 12128), (159, 12143), (167, 12167), (172, 12197),

Gene: Omnicron\_16 Start: 9598, Stop: 10209, Start Num: 40

Candidate Starts for Omnicron\_16:

(Start: 40 @9598 has 209 MA's), (56, 9643), (76, 9724), (91, 9820), (101, 9877), (106, 9892), (109, 9907), (123, 9976), (125, 9982), (134, 10021), (141, 10048), (156, 10105), (159, 10120), (167, 10144), (172, 10174), (178, 10195),

Gene: Oppalora\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for Oppalora\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Orcanus\_13 Start: 8754, Stop: 9338, Start Num: 50  
Candidate Starts for Orcanus\_13:  
(Start: 50 @8754 has 300 MA's), (153, 9222), (170, 9291), (174, 9303),

Gene: Orla\_15 Start: 8933, Stop: 9781, Start Num: 50  
Candidate Starts for Orla\_15:  
(Start: 50 @8933 has 300 MA's), (60, 8966), (84, 9074), (93, 9152), (109, 9224), (127, 9308), (152, 9398), (154, 9410), (160, 9434), (165, 9449), (182, 9518), (190, 9557), (201, 9620), (214, 9725),

Gene: Oscar\_17 Start: 9506, Stop: 10117, Start Num: 40  
Candidate Starts for Oscar\_17:  
(Start: 40 @9506 has 209 MA's), (56, 9548), (101, 9782), (106, 9797), (109, 9812), (113, 9842), (123, 9881), (125, 9887), (134, 9926), (137, 9938), (156, 10010), (159, 10025), (167, 10049), (172, 10079), (176, 10100),

Gene: OtsoOtso\_13 Start: 8803, Stop: 9384, Start Num: 50  
Candidate Starts for OtsoOtso\_13:  
(Start: 50 @8803 has 300 MA's), (56, 8824), (79, 8911), (86, 8959), (113, 9112), (134, 9196), (145, 9232), (147, 9238), (153, 9271), (170, 9340),

Gene: OurGirlNessie\_11 Start: 7927, Stop: 8835, Start Num: 50  
Candidate Starts for OurGirlNessie\_11:  
(Start: 50 @7927 has 300 MA's), (86, 8083), (115, 8242), (116, 8245), (163, 8425), (192, 8575), (195, 8599), (200, 8629), (211, 8686),

Gene: Oxynfrius\_15 Start: 10851, Stop: 11759, Start Num: 49  
Candidate Starts for Oxynfrius\_15:  
(Start: 49 @10851 has 9 MA's), (86, 11007), (105, 11112), (113, 11160), (163, 11349), (195, 11523), (200, 11553), (210, 11604), (211, 11610),

Gene: Pace1224\_13 Start: 9947, Stop: 10567, Start Num: 40  
Candidate Starts for Pace1224\_13:  
(Start: 40 @9947 has 209 MA's), (63, 10022), (76, 10079), (85, 10121), (86, 10136), (101, 10232), (106, 10247), (111, 10271), (123, 10331), (128, 10355), (141, 10403), (150, 10433), (159, 10475), (167, 10499), (172, 10529),

Gene: Padfoot\_18 Start: 10544, Stop: 11155, Start Num: 40  
Candidate Starts for Padfoot\_18:  
(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Padpat\_18 Start: 10504, Stop: 11115, Start Num: 40  
Candidate Starts for Padpat\_18:  
(Start: 40 @10504 has 209 MA's), (56, 10546), (91, 10723), (101, 10780), (106, 10795), (123, 10879), (125, 10885), (134, 10924), (137, 10936), (146, 10963), (156, 11008), (159, 11023), (167, 11047), (179, 11104),

Gene: Paito\_13 Start: 9962, Stop: 10582, Start Num: 40  
Candidate Starts for Paito\_13:  
(Start: 40 @9962 has 209 MA's), (63, 10037), (85, 10136), (86, 10151), (101, 10247), (106, 10262), (109, 10277), (111, 10286), (113, 10307), (123, 10346), (128, 10370), (130, 10379), (134, 10391),

(149, 10442), (150, 10448), (156, 10475), (159, 10490), (167, 10514),

Gene: Paola\_16 Start: 10530, Stop: 11141, Start Num: 40

Candidate Starts for Paola\_16:

(Start: 40 @10530 has 209 MA's), (56, 10575), (91, 10752), (101, 10809), (106, 10824), (109, 10839), (123, 10908), (125, 10914), (134, 10953), (137, 10965), (141, 10980), (152, 11019), (156, 11037), (159, 11052), (167, 11076), (172, 11106),

Gene: PartyCup\_15 Start: 10867, Stop: 11775, Start Num: 50

Candidate Starts for PartyCup\_15:

(Start: 50 @10867 has 300 MA's), (56, 10888), (80, 10978), (86, 11023), (113, 11176), (116, 11185), (123, 11215), (156, 11335), (162, 11362), (163, 11365), (168, 11380), (178, 11443), (181, 11461), (195, 11539), (200, 11569), (202, 11575), (210, 11620), (211, 11626),

Gene: PastaFagioli\_12 Start: 8405, Stop: 9199, Start Num: 50

Candidate Starts for PastaFagioli\_12:

(Start: 50 @8405 has 300 MA's), (85, 8552), (86, 8567), (123, 8759), (134, 8804), (147, 8846), (191, 9044),

Gene: Patt\_19 Start: 11466, Stop: 12077, Start Num: 43

Candidate Starts for Patt\_19:

(Start: 43 @11466 has 49 MA's), (64, 11532), (66, 11538), (68, 11547), (76, 11586), (86, 11643), (87, 11649), (90, 11670), (91, 11682), (101, 11739), (106, 11754), (123, 11838), (125, 11844), (133, 11880), (134, 11883), (137, 11895), (141, 11910), (156, 11967), (159, 11982), (167, 12006), (172, 12036),

Gene: Peanam\_18 Start: 9573, Stop: 10184, Start Num: 43

Candidate Starts for Peanam\_18:

(Start: 43 @9573 has 49 MA's), (56, 9615), (86, 9753), (91, 9792), (101, 9849), (106, 9864), (113, 9909), (123, 9948), (125, 9954), (126, 9957), (137, 10005), (141, 10020), (156, 10077),

Gene: Pecas\_12 Start: 8321, Stop: 9118, Start Num: 50

Candidate Starts for Pecas\_12:

(12, 8135), (Start: 43 @8291 has 49 MA's), (Start: 50 @8321 has 300 MA's), (52, 8327), (85, 8468), (86, 8483), (123, 8675), (134, 8720), (147, 8762), (191, 8963),

Gene: Peeb\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Peeb\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (109, 10163), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Peel\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Peel\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Pelletreau\_14 Start: 8960, Stop: 9544, Start Num: 50

Candidate Starts for Pelletreau\_14:

(Start: 50 @8960 has 300 MA's), (153, 9428), (170, 9497), (174, 9509),

Gene: Periodt\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Periodt\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Periwinkle\_13 Start: 7496, Stop: 8068, Start Num: 50

Candidate Starts for Periwinkle\_13:

(Start: 50 @7496 has 300 MA's), (56, 7517), (65, 7538), (68, 7550), (96, 7709), (104, 7751), (112, 7784), (160, 7973), (183, 8057),

Gene: Phabuloso\_13 Start: 7501, Stop: 8073, Start Num: 50

Candidate Starts for Phabuloso\_13:

(Start: 50 @7501 has 300 MA's), (56, 7522), (65, 7543), (68, 7555), (96, 7714), (104, 7756), (112, 7789), (160, 7978), (183, 8062),

Gene: Pharb\_17 Start: 10403, Stop: 11017, Start Num: 43

Candidate Starts for Pharb\_17:

(Start: 43 @10403 has 49 MA's), (56, 10451), (101, 10685), (106, 10700), (113, 10745), (123, 10784), (125, 10790), (126, 10793), (134, 10829), (137, 10841), (141, 10856), (156, 10913), (159, 10928), (167, 10952),

Gene: PhelpsODU\_17 Start: 9556, Stop: 10170, Start Num: 40

Candidate Starts for PhelpsODU\_17:

(Start: 40 @9556 has 209 MA's), (46, 9568), (56, 9601), (91, 9778), (101, 9835), (106, 9850), (109, 9865), (113, 9895), (123, 9934), (125, 9940), (137, 9991), (146, 10018), (159, 10078), (168, 10105),

Gene: PhigPhack\_12 Start: 8349, Stop: 9146, Start Num: 50

Candidate Starts for PhigPhack\_12:

(11, 8145), (12, 8163), (27, 8265), (Start: 43 @8319 has 49 MA's), (Start: 50 @8349 has 300 MA's), (52, 8355), (85, 8496), (86, 8511), (123, 8703), (147, 8790), (191, 8991), (206, 9087),

Gene: PhirstandPhine\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for PhirstandPhine\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: Phisb\_12 Start: 8314, Stop: 9111, Start Num: 50

Candidate Starts for Phisb\_12:

(5, 8026), (10, 8107), (11, 8110), (12, 8128), (Start: 43 @8284 has 49 MA's), (Start: 50 @8314 has 300 MA's), (52, 8320), (85, 8461), (86, 8476), (114, 8632), (123, 8668), (134, 8713), (147, 8755), (191, 8956),

Gene: Phish\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Phish\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Phistory\_13 Start: 7485, Stop: 8057, Start Num: 50

Candidate Starts for Phistory\_13:

(Start: 50 @7485 has 300 MA's), (56, 7506), (65, 7527), (68, 7539), (96, 7698), (104, 7740), (112, 7773), (160, 7962), (183, 8046),

Gene: Phloodle\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Phloodle\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: PhluffyCoco\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for PhluffyCoco\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Phrank\_17 Start: 9499, Stop: 10113, Start Num: 40

Candidate Starts for Phrank\_17:

(Start: 40 @9499 has 209 MA's), (46, 9511), (56, 9544), (91, 9721), (101, 9778), (106, 9793), (109, 9808), (113, 9838), (123, 9877), (125, 9883), (146, 9961), (159, 10021), (168, 10048),

Gene: Phreak\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Phreak\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Piatt\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Piatt\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Pineda\_14 Start: 8964, Stop: 9545, Start Num: 50

Candidate Starts for Pineda\_14:

(Start: 50 @8964 has 300 MA's), (56, 8985), (79, 9072), (86, 9120), (113, 9273), (134, 9357), (145, 9393), (147, 9399), (153, 9432), (170, 9501),

Gene: PinkFriday\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for PinkFriday\_11:

(Start: 50 @7979 has 300 MA's), (70, 8054), (86, 8135), (97, 8201), (98, 8204), (105, 8240), (113, 8288), (115, 8294), (116, 8297), (135, 8366), (163, 8474), (181, 8570), (195, 8648), (200, 8678), (211, 8735),

Gene: PinkYoshi\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for PinkYoshi\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Pinnie\_14 Start: 10537, Stop: 11160, Start Num: 40

Candidate Starts for Pinnie\_14:

(Start: 40 @10537 has 209 MA's), (47, 10564), (63, 10615), (76, 10672), (85, 10714), (86, 10729), (101, 10825), (106, 10840), (111, 10864), (113, 10885), (123, 10924), (128, 10948), (141, 10996), (149, 11020), (150, 11026), (159, 11068),

Gene: Pisa1\_17 Start: 10259, Stop: 10870, Start Num: 40

Candidate Starts for Pisa1\_17:

(36, 10244), (Start: 40 @10259 has 209 MA's), (56, 10301), (91, 10478), (101, 10535), (106, 10550), (113, 10595), (123, 10634), (125, 10640), (134, 10679), (137, 10691), (146, 10718), (156, 10763), (159, 10778), (167, 10802),

Gene: Pisa4\_17 Start: 10259, Stop: 10870, Start Num: 40

Candidate Starts for Pisa4\_17:

(36, 10244), (Start: 40 @10259 has 209 MA's), (56, 10301), (91, 10478), (101, 10535), (106, 10550), (113, 10595), (123, 10634), (125, 10640), (134, 10679), (137, 10691), (146, 10718), (156, 10763), (159, 10778), (167, 10802),

Gene: PitaDog\_11 Start: 7927, Stop: 8835, Start Num: 50

Candidate Starts for PitaDog\_11:

(Start: 50 @7927 has 300 MA's), (86, 8083), (115, 8242), (116, 8245), (163, 8425), (192, 8575), (195, 8599), (200, 8629), (211, 8686),

Gene: Pixie\_17 Start: 10319, Stop: 10930, Start Num: 42

Candidate Starts for Pixie\_17:

(Start: 42 @10319 has 7 MA's), (56, 10364), (91, 10541), (101, 10598), (106, 10613), (113, 10658), (123, 10697), (125, 10703), (126, 10706), (134, 10742), (137, 10754), (141, 10769), (156, 10826), (159, 10841), (167, 10865),

Gene: Plagueis\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Plagueis\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Pokerus\_17 Start: 10458, Stop: 11072, Start Num: 40

Candidate Starts for Pokerus\_17:

(Start: 40 @10458 has 209 MA's), (56, 10503), (85, 10626), (91, 10680), (101, 10737), (106, 10752), (123, 10836), (125, 10842), (134, 10881), (137, 10893), (146, 10920), (156, 10965), (159, 10980), (167, 11004),

Gene: Polka\_13 Start: 8803, Stop: 9384, Start Num: 50

Candidate Starts for Polka\_13:

(Start: 50 @8803 has 300 MA's), (56, 8824), (79, 8911), (86, 8959), (113, 9112), (134, 9196), (145, 9232), (147, 9238), (153, 9271), (170, 9340),

Gene: Pollux\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for Pollux\_14:

(Start: 50 @8717 has 300 MA's), (71, 8786), (73, 8798), (123, 9062), (134, 9107), (136, 9116), (158, 9203), (173, 9257),

Gene: PondAmelia\_15 Start: 8569, Stop: 9366, Start Num: 50

Candidate Starts for PondAmelia\_15:

(Start: 50 @8569 has 300 MA's), (52, 8575), (72, 8653), (85, 8719), (115, 8893), (123, 8926), (134, 8971), (147, 9013), (191, 9211),

Gene: Pons\_13 Start: 7709, Stop: 8545, Start Num: 50

Candidate Starts for Pons\_13:

(8, 7490), (16, 7547), (24, 7595), (Start: 34 @7655 has 2 MA's), (Start: 50 @7709 has 300 MA's), (60, 7742), (93, 7928), (107, 7988), (109, 8000), (160, 8201), (163, 8210), (165, 8216), (173, 8249), (178, 8279), (190, 8324), (213, 8486),

Gene: Posh\_14 Start: 8717, Stop: 9562, Start Num: 50

Candidate Starts for Posh\_14:

(Start: 50 @8717 has 300 MA's), (71, 8786), (73, 8798), (123, 9062), (134, 9107), (136, 9116), (158, 9203), (173, 9257),

Gene: PotPie\_13 Start: 8560, Stop: 9399, Start Num: 50

Candidate Starts for PotPie\_13:

(24, 8446), (Start: 34 @8506 has 2 MA's), (Start: 50 @8560 has 300 MA's), (60, 8593), (93, 8779), (107, 8839), (109, 8851), (160, 9052), (163, 9061), (165, 9067), (173, 9100), (178, 9130), (190, 9175), (205, 9265),

Gene: Potatoes\_15 Start: 10848, Stop: 11756, Start Num: 50

Candidate Starts for Potatoes\_15:

(Start: 50 @10848 has 300 MA's), (86, 11004), (105, 11109), (116, 11166), (163, 11346), (168, 11361), (192, 11496), (195, 11520), (200, 11550), (211, 11607),

Gene: Preamble\_11 Start: 7937, Stop: 8845, Start Num: 50

Candidate Starts for Preamble\_11:

(Start: 50 @7937 has 300 MA's), (86, 8093), (105, 8198), (113, 8246), (115, 8252), (116, 8255), (163, 8435), (166, 8444), (177, 8510), (181, 8531), (195, 8609), (200, 8639), (204, 8657), (211, 8696),

Gene: Prithvi\_18 Start: 10468, Stop: 11082, Start Num: 40

Candidate Starts for Prithvi\_18:

(Start: 40 @10468 has 209 MA's), (56, 10513), (85, 10636), (91, 10690), (101, 10747), (106, 10762), (123, 10846), (125, 10852), (134, 10891), (137, 10903), (156, 10975), (159, 10990), (167, 11014), (179, 11071),

Gene: Psycho\_16 Start: 10498, Stop: 11109, Start Num: 40

Candidate Starts for Psycho\_16:

(Start: 40 @10498 has 209 MA's), (56, 10543), (101, 10777), (106, 10792), (109, 10807), (123, 10876), (125, 10882), (134, 10921), (137, 10933), (141, 10948), (156, 11005), (159, 11020), (167, 11044), (172, 11074),

Gene: PsychoKiller\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for PsychoKiller\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Pterodactyl\_11 Start: 7928, Stop: 8836, Start Num: 50

Candidate Starts for Pterodactyl\_11:

(Start: 50 @7928 has 300 MA's), (86, 8084), (115, 8243), (116, 8246), (120, 8264), (163, 8426), (192, 8576), (195, 8600), (200, 8630), (211, 8687),

Gene: Pumancara\_11 Start: 7978, Stop: 8883, Start Num: 50

Candidate Starts for Pumancara\_11:

(Start: 50 @7978 has 300 MA's), (70, 8053), (86, 8134), (97, 8200), (105, 8239), (113, 8287), (116, 8296), (135, 8365), (163, 8473), (181, 8569), (195, 8647), (200, 8677), (211, 8734),

Gene: Pytheas\_14 Start: 8564, Stop: 9409, Start Num: 50

Candidate Starts for Pytheas\_14:

(Start: 50 @8564 has 300 MA's), (71, 8633), (73, 8645), (123, 8909), (134, 8954), (136, 8963), (173, 9104),

Gene: QMacho\_13 Start: 8804, Stop: 9601, Start Num: 50

Candidate Starts for QMacho\_13:

(12, 8618), (27, 8720), (Start: 43 @8774 has 49 MA's), (Start: 50 @8804 has 300 MA's), (52, 8810), (85, 8951), (86, 8966), (123, 9158), (134, 9203), (147, 9245), (191, 9446),

Gene: Qhanda\_19 Start: 11736, Stop: 12347, Start Num: 43

Candidate Starts for Qhanda\_19:

(Start: 43 @11736 has 49 MA's), (64, 11802), (66, 11808), (76, 11856), (86, 11913), (87, 11919), (90, 11940), (91, 11952), (101, 12009), (106, 12024), (123, 12108), (125, 12114), (134, 12153), (137, 12165), (141, 12180), (156, 12237), (159, 12252), (167, 12276), (172, 12306),

Gene: Quasar\_13 Start: 8548, Stop: 9390, Start Num: 50

Candidate Starts for Quasar\_13:

(Start: 50 @8548 has 300 MA's), (60, 8581), (109, 8839), (134, 8938), (160, 9040), (163, 9049), (165, 9055), (173, 9088), (182, 9124), (184, 9133), (212, 9319), (213, 9325),

Gene: Quenya\_13 Start: 8462, Stop: 9052, Start Num: 50

Candidate Starts for Quenya\_13:

(Start: 50 @8462 has 300 MA's), (52, 8468), (56, 8483), (65, 8510), (80, 8573), (85, 8606), (86, 8621), (113, 8774), (123, 8813), (125, 8819), (134, 8858), (136, 8867), (146, 8897), (151, 8918),

Gene: QuincyRose\_17 Start: 10521, Stop: 11135, Start Num: 40

Candidate Starts for QuincyRose\_17:

(Start: 40 @10521 has 209 MA's), (56, 10566), (85, 10689), (91, 10743), (101, 10800), (106, 10815), (123, 10899), (125, 10905), (134, 10944), (137, 10956), (146, 10983), (156, 11028), (159, 11043), (167, 11067),

Gene: RADical\_14 Start: 7940, Stop: 8782, Start Num: 50

Candidate Starts for RADical\_14:

(Start: 50 @7940 has 300 MA's), (60, 7973), (93, 8159), (109, 8231), (134, 8330), (160, 8432), (163, 8441), (165, 8447), (173, 8480), (182, 8516), (184, 8525), (212, 8711), (213, 8717),

Gene: RAP15\_15 Start: 10854, Stop: 11762, Start Num: 50

Candidate Starts for RAP15\_15:

(Start: 50 @10854 has 300 MA's), (86, 11010), (105, 11115), (116, 11172), (163, 11352), (168, 11367), (192, 11502), (195, 11526), (200, 11556), (211, 11613),

Gene: RSchmailzl\_14 Start: 8080, Stop: 8925, Start Num: 50

Candidate Starts for RSchmailzl\_14:

(Start: 50 @8080 has 300 MA's), (60, 8113), (93, 8299), (109, 8371), (134, 8470), (160, 8572), (163, 8581), (165, 8587), (173, 8620), (182, 8656), (184, 8665), (212, 8851), (213, 8857),

Gene: Rabbs\_13 Start: 9837, Stop: 10457, Start Num: 40

Candidate Starts for Rabbs\_13:

(Start: 40 @9837 has 209 MA's), (63, 9912), (85, 10011), (86, 10026), (101, 10122), (106, 10137), (109, 10152), (111, 10161), (113, 10182), (123, 10221), (128, 10245), (130, 10254), (134, 10266), (149, 10317), (150, 10323), (155, 10347), (159, 10365), (167, 10389),

Gene: Ramen\_18 Start: 10504, Stop: 11118, Start Num: 40

Candidate Starts for Ramen\_18:

(Start: 40 @10504 has 209 MA's), (56, 10549), (85, 10672), (91, 10726), (101, 10783), (106, 10798), (123, 10882), (125, 10888), (134, 10927), (137, 10939), (146, 10966), (156, 11011), (159, 11026),

(167, 11050), (179, 11107),

Gene: RanchParmCat\_16 Start: 8645, Stop: 9493, Start Num: 50

Candidate Starts for RanchParmCat\_16:

(Start: 50 @8645 has 300 MA's), (60, 8678), (93, 8864), (152, 9110), (154, 9122), (160, 9146), (165, 9161), (182, 9230), (199, 9323), (201, 9332), (218, 9476),

Gene: Rando14\_16 Start: 9500, Stop: 10111, Start Num: 40

Candidate Starts for Rando14\_16:

(Start: 40 @9500 has 209 MA's), (56, 9545), (91, 9722), (101, 9779), (106, 9794), (109, 9809), (113, 9839), (123, 9878), (125, 9884), (134, 9923), (137, 9935), (141, 9950), (146, 9962), (156, 10007), (159, 10022), (167, 10046), (172, 10076), (178, 10097),

Gene: Rapunzel97\_18 Start: 10505, Stop: 11119, Start Num: 40

Candidate Starts for Rapunzel97\_18:

(Start: 40 @10505 has 209 MA's), (56, 10550), (85, 10673), (91, 10727), (101, 10784), (106, 10799), (123, 10883), (125, 10889), (134, 10928), (137, 10940), (146, 10967), (156, 11012), (159, 11027), (167, 11051), (179, 11108),

Gene: Rattail\_12 Start: 8429, Stop: 9010, Start Num: 50

Candidate Starts for Rattail\_12:

(Start: 50 @8429 has 300 MA's), (56, 8450), (113, 8738), (134, 8822), (146, 8861), (147, 8864), (153, 8897), (170, 8966), (177, 8996),

Gene: Rattrick\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Rattrick\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: RcigaStruga\_15 Start: 10859, Stop: 11767, Start Num: 49

Candidate Starts for RcigaStruga\_15:

(Start: 49 @10859 has 9 MA's), (86, 11015), (105, 11120), (113, 11168), (163, 11357), (166, 11366), (177, 11432), (195, 11531), (200, 11561), (210, 11612), (211, 11618),

Gene: RedBaron\_14 Start: 7984, Stop: 8826, Start Num: 50

Candidate Starts for RedBaron\_14:

(Start: 50 @7984 has 300 MA's), (60, 8017), (93, 8203), (109, 8275), (134, 8374), (160, 8476), (163, 8485), (165, 8491), (173, 8524), (182, 8560), (184, 8569), (212, 8755), (213, 8761),

Gene: RedFox\_12 Start: 8378, Stop: 8959, Start Num: 50

Candidate Starts for RedFox\_12:

(Start: 50 @8378 has 300 MA's), (56, 8399), (113, 8687), (134, 8771), (146, 8810), (147, 8813), (153, 8846), (170, 8915), (177, 8945),

Gene: Remy19\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Remy19\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Renaissance\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Renaissance\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Renna12\_13 Start: 8581, Stop: 9165, Start Num: 50

Candidate Starts for Renna12\_13:

(Start: 50 @8581 has 300 MA's), (56, 8602), (113, 8890), (134, 8974), (146, 9013), (147, 9016), (170, 9118),

Gene: Reptar3000\_19 Start: 11468, Stop: 12079, Start Num: 43

Candidate Starts for Reptar3000\_19:

(Start: 43 @11468 has 49 MA's), (64, 11534), (66, 11540), (68, 11549), (76, 11588), (86, 11645), (87, 11651), (90, 11672), (91, 11684), (101, 11741), (106, 11756), (123, 11840), (125, 11846), (133, 11882), (134, 11885), (137, 11897), (141, 11912), (156, 11969), (159, 11984), (167, 12008), (172, 12038),

Gene: Richarlison\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Richarlison\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Richo\_18 Start: 9573, Stop: 10184, Start Num: 43

Candidate Starts for Richo\_18:

(Start: 43 @9573 has 49 MA's), (56, 9615), (86, 9753), (91, 9792), (101, 9849), (106, 9864), (113, 9909), (123, 9948), (125, 9954), (126, 9957), (137, 10005), (141, 10020), (156, 10077),

Gene: Riovina\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for Riovina\_11:

(Start: 50 @7979 has 300 MA's), (80, 8090), (86, 8135), (116, 8297), (135, 8366), (162, 8471), (163, 8474), (168, 8489), (195, 8648), (200, 8678), (204, 8696), (211, 8735), (217, 8813),

Gene: Riverdale\_15 Start: 10785, Stop: 11693, Start Num: 50

Candidate Starts for Riverdale\_15:

(Start: 50 @10785 has 300 MA's), (86, 10941), (105, 11046), (116, 11103), (163, 11283), (168, 11298), (195, 11457), (200, 11487), (211, 11544),

Gene: Roberts\_14 Start: 8154, Stop: 8732, Start Num: 48

Candidate Starts for Roberts\_14:

(Start: 48 @8154 has 5 MA's), (109, 8433), (130, 8535), (147, 8589), (177, 8721),

Gene: Rollins\_11 Start: 8156, Stop: 8740, Start Num: 50

Candidate Starts for Rollins\_11:

(Start: 50 @8156 has 300 MA's), (52, 8162), (56, 8177), (58, 8183), (86, 8315), (113, 8468), (115, 8474), (123, 8507), (142, 8582), (145, 8588), (147, 8594),

Gene: Rona\_12 Start: 8556, Stop: 9350, Start Num: 50

Candidate Starts for Rona\_12:

(Start: 50 @8556 has 300 MA's), (52, 8562), (70, 8631), (85, 8703), (86, 8718), (123, 8910), (134, 8955), (147, 8997), (150, 9012), (177, 9129), (191, 9195), (209, 9303),

Gene: Ronaldo\_48 Start: 17900, Stop: 18457, Start Num: 51

Candidate Starts for Ronaldo\_48:

(Start: 51 @17900 has 18 MA's), (56, 17918), (73, 17981), (113, 18206), (122, 18224), (125, 18233), (134, 18272), (137, 18284), (158, 18371),

Gene: Rosmarinus\_18 Start: 10532, Stop: 11143, Start Num: 40

Candidate Starts for Rosmarinus\_18:

(Start: 40 @10532 has 209 MA's), (56, 10574), (85, 10697), (91, 10751), (101, 10808), (106, 10823), (123, 10907), (125, 10913), (134, 10952), (137, 10964), (146, 10991), (156, 11036), (159, 11051), (167, 11075), (179, 11132),

Gene: Rozby\_15 Start: 10785, Stop: 11693, Start Num: 50

Candidate Starts for Rozby\_15:

(Start: 50 @10785 has 300 MA's), (86, 10941), (105, 11046), (116, 11103), (163, 11283), (168, 11298), (192, 11433), (195, 11457), (200, 11487), (211, 11544),

Gene: Ruchi\_13 Start: 9071, Stop: 9901, Start Num: 50

Candidate Starts for Ruchi\_13:

(Start: 50 @9071 has 300 MA's), (113, 9380), (129, 9446), (146, 9503), (163, 9575), (170, 9608), (181, 9662), (190, 9707), (203, 9782),

Gene: Ruriko\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Ruriko\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Ruthiejr\_18 Start: 11323, Stop: 11934, Start Num: 43

Candidate Starts for Ruthiejr\_18:

(Start: 43 @11323 has 49 MA's), (64, 11389), (66, 11395), (76, 11443), (86, 11500), (87, 11506), (90, 11527), (91, 11539), (101, 11596), (106, 11611), (109, 11626), (123, 11695), (125, 11701), (141, 11767), (156, 11824), (159, 11839), (167, 11863), (172, 11893),

Gene: Salvus\_16 Start: 9646, Stop: 10287, Start Num: 43

Candidate Starts for Salvus\_16:

(32, 9613), (Start: 43 @9646 has 49 MA's), (Start: 54 @9679 has 1 MA's), (56, 9688), (62, 9706), (77, 9772), (85, 9811), (86, 9826), (104, 9931), (109, 9952), (113, 9982), (123, 10021), (134, 10066), (156, 10150), (161, 10171),

Gene: SamScheppers\_17 Start: 11243, Stop: 11854, Start Num: 43

Candidate Starts for SamScheppers\_17:

(Start: 43 @11243 has 49 MA's), (64, 11309), (66, 11315), (76, 11363), (86, 11420), (87, 11426), (90, 11447), (91, 11459), (101, 11516), (106, 11531), (123, 11615), (125, 11621), (134, 11660), (137, 11672), (141, 11687), (156, 11744), (159, 11759), (167, 11783), (172, 11813),

Gene: SamuelLPlaqson\_18 Start: 10446, Stop: 11060, Start Num: 40

Candidate Starts for SamuelLPlaqson\_18:

(Start: 40 @10446 has 209 MA's), (47, 10464), (56, 10491), (91, 10668), (101, 10725), (106, 10740), (109, 10755), (113, 10785), (123, 10824), (125, 10830), (134, 10869), (137, 10881), (146, 10908), (156, 10953), (159, 10968), (167, 10992),

Gene: SanaSana\_13 Start: 8569, Stop: 9366, Start Num: 50

Candidate Starts for SanaSana\_13:

(Start: 50 @8569 has 300 MA's), (52, 8575), (72, 8653), (85, 8719), (86, 8734), (115, 8893), (123, 8926), (134, 8971), (191, 9211),

Gene: SansAfet\_12 Start: 8331, Stop: 9128, Start Num: 50

Candidate Starts for SansAfet\_12:

(11, 8127), (12, 8145), (27, 8247), (Start: 43 @8301 has 49 MA's), (Start: 50 @8331 has 300 MA's), (52, 8337), (85, 8478), (86, 8493), (123, 8685), (147, 8772), (191, 8973), (206, 9069),

Gene: SarBear\_12 Start: 8297, Stop: 9094, Start Num: 50

Candidate Starts for SarBear\_12:

(11, 8093), (12, 8111), (Start: 43 @8267 has 49 MA's), (Start: 50 @8297 has 300 MA's), (52, 8303), (85, 8444), (86, 8459), (123, 8651), (147, 8738), (191, 8939), (206, 9035),

Gene: Savage2526\_15 Start: 10848, Stop: 11756, Start Num: 50

Candidate Starts for Savage2526\_15:

(Start: 50 @10848 has 300 MA's), (86, 11004), (105, 11109), (116, 11166), (163, 11346), (168, 11361), (192, 11496), (195, 11520), (200, 11550), (211, 11607),

Gene: Scarlett\_17 Start: 9505, Stop: 10116, Start Num: 40

Candidate Starts for Scarlett\_17:

(Start: 40 @9505 has 209 MA's), (56, 9547), (101, 9781), (106, 9796), (109, 9811), (113, 9841), (123, 9880), (125, 9886), (134, 9925), (137, 9937), (156, 10009), (159, 10024), (167, 10048), (172, 10078), (176, 10099),

Gene: Schiebel\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Schiebel\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Scuttle\_15 Start: 10854, Stop: 11762, Start Num: 50

Candidate Starts for Scuttle\_15:

(Start: 50 @10854 has 300 MA's), (86, 11010), (105, 11115), (116, 11172), (163, 11352), (168, 11367), (195, 11526), (200, 11556), (211, 11613),

Gene: Sergei\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for Sergei\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (97, 8203), (105, 8242), (113, 8290), (116, 8299), (163, 8476), (181, 8572), (195, 8650), (200, 8680), (211, 8737),

Gene: SgtBeansprout\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for SgtBeansprout\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: ShaboiShabazz\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for ShaboiShabazz\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Shadow1\_16 Start: 9392, Stop: 10006, Start Num: 40

Candidate Starts for Shadow1\_16:

(Start: 40 @9392 has 209 MA's), (56, 9437), (91, 9614), (101, 9671), (106, 9686), (113, 9731), (123, 9770), (125, 9776), (159, 9914), (168, 9941),

Gene: Shaobing\_18 Start: 9573, Stop: 10184, Start Num: 43

Candidate Starts for Shaobing\_18:

(Start: 43 @9573 has 49 MA's), (56, 9615), (86, 9753), (91, 9792), (101, 9849), (106, 9864), (113, 9909), (123, 9948), (125, 9954), (126, 9957), (137, 10005), (141, 10020), (156, 10077),

Gene: Sharkboy\_12 Start: 8555, Stop: 9349, Start Num: 50

Candidate Starts for Sharkboy\_12:

(Start: 50 @8555 has 300 MA's), (52, 8561), (70, 8630), (85, 8702), (86, 8717), (123, 8909), (134, 8954), (147, 8996), (150, 9011), (177, 9128), (191, 9194), (209, 9302),

Gene: ShawBrad\_13 Start: 7519, Stop: 8091, Start Num: 50

Candidate Starts for ShawBrad\_13:

(Start: 50 @7519 has 300 MA's), (56, 7540), (65, 7561), (68, 7573), (96, 7732), (104, 7774), (112, 7807), (160, 7996), (183, 8080),

Gene: Shayna\_11 Start: 8161, Stop: 8745, Start Num: 50

Candidate Starts for Shayna\_11:

(Start: 50 @8161 has 300 MA's), (56, 8182), (85, 8299), (113, 8467), (123, 8506), (143, 8584),

Gene: SheckWes\_12 Start: 7697, Stop: 8533, Start Num: 50

Candidate Starts for SheckWes\_12:

(24, 7583), (Start: 34 @7643 has 2 MA's), (Start: 50 @7697 has 300 MA's), (60, 7730), (93, 7916), (107, 7976), (109, 7988), (160, 8189), (163, 8198), (165, 8204), (173, 8237), (178, 8267), (190, 8312), (213, 8474),

Gene: ShedlockHolmes\_17 Start: 10567, Stop: 11178, Start Num: 42

Candidate Starts for ShedlockHolmes\_17:

(Start: 42 @10567 has 7 MA's), (56, 10612), (91, 10789), (101, 10846), (106, 10861), (113, 10906), (117, 10918), (123, 10945), (125, 10951), (126, 10954), (134, 10990), (137, 11002), (141, 11017), (156, 11074), (159, 11089), (167, 11113),

Gene: Shen\_14 Start: 8961, Stop: 9545, Start Num: 50

Candidate Starts for Shen\_14:

(Start: 50 @8961 has 300 MA's), (153, 9429), (170, 9498), (174, 9510),

Gene: ShiaSurprise\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for ShiaSurprise\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: SilverChicken\_14 Start: 7679, Stop: 8272, Start Num: 51

Candidate Starts for SilverChicken\_14:

(Start: 51 @7679 has 18 MA's), (56, 7697), (85, 7814), (89, 7853), (99, 7919), (109, 7952), (112, 7964), (115, 7988), (134, 8060), (136, 8069), (139, 8081), (144, 8093), (150, 8117), (153, 8135),

Gene: SirBeanington\_12 Start: 8323, Stop: 9120, Start Num: 50

Candidate Starts for SirBeanington\_12:

(5, 8035), (10, 8116), (11, 8119), (12, 8137), (14, 8146), (Start: 43 @8293 has 49 MA's), (Start: 50 @8323 has 300 MA's), (52, 8329), (85, 8470), (86, 8485), (114, 8641), (123, 8677), (134, 8722), (147,

8764), (191, 8965),

Gene: SirPhilip\_17 Start: 9268, Stop: 9879, Start Num: 40

Candidate Starts for SirPhilip\_17:

(Start: 40 @9268 has 209 MA's), (73, 9376), (86, 9448), (91, 9487), (101, 9544), (106, 9559), (113, 9604), (119, 9628), (123, 9643), (125, 9649), (134, 9688), (137, 9700), (159, 9787), (167, 9811), (176, 9862),

Gene: Sizemore\_13 Start: 9855, Stop: 10469, Start Num: 40

Candidate Starts for Sizemore\_13:

(Start: 40 @9855 has 209 MA's), (56, 9900), (63, 9924), (81, 10002), (85, 10023), (86, 10038), (101, 10134), (106, 10149), (111, 10173), (113, 10194), (123, 10233), (128, 10257), (130, 10266), (134, 10278), (150, 10335), (156, 10362), (159, 10377), (167, 10401),

Gene: SketchMex\_12 Start: 7925, Stop: 8770, Start Num: 50

Candidate Starts for SketchMex\_12:

(24, 7808), (Start: 34 @7868 has 2 MA's), (Start: 50 @7925 has 300 MA's), (60, 7958), (93, 8144), (109, 8216), (160, 8417), (165, 8432), (173, 8465), (184, 8510), (212, 8696), (213, 8702),

Gene: Skylord\_11 Start: 8096, Stop: 8680, Start Num: 50

Candidate Starts for Skylord\_11:

(Start: 50 @8096 has 300 MA's), (52, 8102), (56, 8117), (58, 8123), (86, 8255), (113, 8408), (115, 8414), (123, 8447), (142, 8522), (145, 8528), (147, 8534),

Gene: Slarp\_19 Start: 11727, Stop: 12338, Start Num: 43

Candidate Starts for Slarp\_19:

(Start: 43 @11727 has 49 MA's), (64, 11793), (66, 11799), (76, 11847), (86, 11904), (87, 11910), (90, 11931), (91, 11943), (101, 12000), (106, 12015), (123, 12099), (125, 12105), (134, 12144), (137, 12156), (141, 12171), (156, 12228), (159, 12243), (167, 12267), (172, 12297),

Gene: Slay\_12 Start: 8773, Stop: 9570, Start Num: 50

Candidate Starts for Slay\_12:

(11, 8569), (12, 8587), (Start: 43 @8743 has 49 MA's), (Start: 50 @8773 has 300 MA's), (52, 8779), (85, 8920), (86, 8935), (123, 9127), (147, 9214), (191, 9415), (206, 9511),

Gene: Sleepyhead\_13 Start: 8334, Stop: 9200, Start Num: 50

Candidate Starts for Sleepyhead\_13:

(Start: 50 @8334 has 300 MA's), (58, 8361), (68, 8388), (91, 8526), (156, 8811), (184, 8949),

Gene: Slimphazie\_18 Start: 10505, Stop: 11119, Start Num: 40

Candidate Starts for Slimphazie\_18:

(Start: 40 @10505 has 209 MA's), (56, 10550), (85, 10673), (91, 10727), (101, 10784), (106, 10799), (123, 10883), (125, 10889), (134, 10928), (137, 10940), (146, 10967), (156, 11012), (159, 11027), (167, 11051), (179, 11108),

Gene: Sneeze\_13 Start: 9836, Stop: 10456, Start Num: 40

Candidate Starts for Sneeze\_13:

(Start: 40 @9836 has 209 MA's), (63, 9911), (85, 10010), (86, 10025), (101, 10121), (106, 10136), (109, 10151), (111, 10160), (113, 10181), (123, 10220), (128, 10244), (130, 10253), (134, 10265), (149, 10316), (150, 10322), (155, 10346), (159, 10364), (167, 10388),

Gene: SoSeph\_16 Start: 10657, Stop: 11268, Start Num: 40

Candidate Starts for SoSeph\_16:

(Start: 40 @10657 has 209 MA's), (56, 10702), (91, 10879), (101, 10936), (106, 10951), (109, 10966), (123, 11035), (125, 11041), (134, 11080), (141, 11107), (152, 11146), (156, 11164), (159, 11179), (167, 11203), (172, 11233),

Gene: Socotra\_14 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Socotra\_14:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Softsoap\_12 Start: 8320, Stop: 9117, Start Num: 50

Candidate Starts for Softsoap\_12:

(11, 8116), (12, 8134), (27, 8236), (Start: 43 @8290 has 49 MA's), (Start: 50 @8320 has 300 MA's), (52, 8326), (85, 8467), (86, 8482), (123, 8674), (147, 8761), (191, 8962), (206, 9058),

Gene: Solea\_13 Start: 8706, Stop: 9503, Start Num: 50

Candidate Starts for Solea\_13:

(11, 8502), (12, 8520), (27, 8622), (Start: 43 @8676 has 49 MA's), (Start: 50 @8706 has 300 MA's), (52, 8712), (85, 8853), (86, 8868), (123, 9060), (147, 9147), (191, 9348), (206, 9444),

Gene: Sopespian\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Sopespian\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Soul22\_14 Start: 7679, Stop: 8272, Start Num: 51

Candidate Starts for Soul22\_14:

(26, 7577), (Start: 51 @7679 has 18 MA's), (56, 7697), (85, 7814), (89, 7853), (99, 7919), (109, 7952), (112, 7964), (115, 7988), (134, 8060), (135, 8063), (139, 8081), (144, 8093), (150, 8117), (153, 8135),

Gene: Spartoi\_11 Start: 7044, Stop: 7571, Start Num: 54

Candidate Starts for Spartoi\_11:

(Start: 54 @7044 has 1 MA's), (71, 7104), (101, 7290), (103, 7296), (150, 7458), (178, 7563),

Gene: Spock\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Spock\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Spooky\_13 Start: 7512, Stop: 8081, Start Num: 50

Candidate Starts for Spooky\_13:

(Start: 50 @7512 has 300 MA's), (56, 7533), (65, 7554), (68, 7566), (96, 7725), (104, 7767), (112, 7800), (138, 7908), (160, 7989),

Gene: Squiddly\_14 Start: 8181, Stop: 8753, Start Num: 50

Candidate Starts for Squiddly\_14:

(Start: 50 @8181 has 300 MA's), (56, 8202), (65, 8223), (68, 8235), (96, 8394), (104, 8436), (112, 8469), (160, 8658), (183, 8742),

Gene: Squircle\_12 Start: 8549, Stop: 9136, Start Num: 50

Candidate Starts for Squircle\_12:

(Start: 50 @8549 has 300 MA's), (58, 8576), (85, 8690), (123, 8897), (130, 8930), (142, 8972), (143, 8975), (147, 8984),

Gene: Starburst\_14 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Starburst\_14:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Stargaze\_13 Start: 10149, Stop: 10772, Start Num: 40

Candidate Starts for Stargaze\_13:

(Start: 40 @10149 has 209 MA's), (63, 10227), (76, 10284), (85, 10326), (86, 10341), (101, 10437), (106, 10452), (111, 10476), (113, 10497), (123, 10536), (128, 10560), (141, 10608), (150, 10638), (159, 10680), (167, 10704),

Gene: SteamedHams\_15 Start: 7954, Stop: 8799, Start Num: 50

Candidate Starts for SteamedHams\_15:

(Start: 34 @7897 has 2 MA's), (Start: 50 @7954 has 300 MA's), (60, 7987), (93, 8173), (109, 8245), (160, 8446), (165, 8461), (173, 8494), (182, 8530), (184, 8539), (190, 8569), (212, 8725), (213, 8731),

Gene: Stellammi\_10 Start: 6989, Stop: 7576, Start Num: 50

Candidate Starts for Stellammi\_10:

(45, 6965), (Start: 50 @6989 has 300 MA's), (68, 7043), (79, 7094), (88, 7151), (104, 7244), (109, 7265), (115, 7301), (121, 7328), (125, 7340), (129, 7361), (131, 7370), (153, 7460), (163, 7496), (165, 7502), (167, 7508), (173, 7535),

Gene: Stinson\_18 Start: 10468, Stop: 11079, Start Num: 41

Candidate Starts for Stinson\_18:

(Start: 41 @10468 has 5 MA's), (56, 10510), (85, 10633), (91, 10687), (101, 10744), (106, 10759), (113, 10804), (123, 10843), (125, 10849), (134, 10888), (137, 10900), (146, 10927), (156, 10972), (159, 10987), (167, 11011),

Gene: Stoor\_12 Start: 8566, Stop: 9363, Start Num: 50

Candidate Starts for Stoor\_12:

(Start: 50 @8566 has 300 MA's), (52, 8572), (72, 8650), (85, 8716), (86, 8731), (115, 8890), (123, 8923), (134, 8968), (191, 9208),

Gene: Strobilo\_14 Start: 8532, Stop: 9146, Start Num: 40

Candidate Starts for Strobilo\_14:

(Start: 40 @8532 has 209 MA's), (Start: 54 @8571 has 1 MA's), (56, 8580), (101, 8814), (106, 8829), (109, 8844), (113, 8874), (123, 8913), (125, 8919), (133, 8955), (137, 8970), (146, 8997), (156, 9042), (159, 9057), (167, 9081),

Gene: Stromboli\_12 Start: 8570, Stop: 9367, Start Num: 50

Candidate Starts for Stromboli\_12:

(Start: 50 @8570 has 300 MA's), (52, 8576), (85, 8720), (86, 8735), (115, 8894), (123, 8927), (134, 8972), (177, 9146), (191, 9212),

Gene: StuartMinion\_12 Start: 8406, Stop: 8987, Start Num: 50

Candidate Starts for StuartMinion\_12:

(7, 8169), (9, 8190), (20, 8265), (35, 8355), (Start: 50 @8406 has 300 MA's), (56, 8427), (113, 8715), (115, 8721), (134, 8799), (146, 8838), (147, 8841), (177, 8973),

Gene: Studio\_14 Start: 7913, Stop: 8494, Start Num: 48

Candidate Starts for Studio\_14:

(Start: 48 @7913 has 5 MA's), (130, 8294), (147, 8348), (177, 8480),

Gene: Sulley\_18 Start: 10474, Stop: 11088, Start Num: 40

Candidate Starts for Sulley\_18:

(Start: 40 @10474 has 209 MA's), (56, 10519), (85, 10642), (91, 10696), (101, 10753), (106, 10768), (123, 10852), (125, 10858), (134, 10897), (137, 10909), (146, 10936), (156, 10981), (159, 10996), (167, 11020), (179, 11077),

Gene: SummitAcademy\_12 Start: 7775, Stop: 8614, Start Num: 50

Candidate Starts for SummitAcademy\_12:

(24, 7661), (Start: 34 @7721 has 2 MA's), (Start: 50 @7775 has 300 MA's), (60, 7808), (93, 7994), (107, 8054), (109, 8066), (160, 8267), (163, 8276), (165, 8282), (173, 8315), (178, 8345), (190, 8390), (205, 8480),

Gene: Sunflower1121\_16 Start: 9403, Stop: 10017, Start Num: 40

Candidate Starts for Sunflower1121\_16:

(Start: 40 @9403 has 209 MA's), (56, 9448), (91, 9625), (101, 9682), (106, 9697), (113, 9742), (123, 9781), (125, 9787), (159, 9925), (168, 9952),

Gene: SunnyD\_11 Start: 8161, Stop: 8745, Start Num: 50

Candidate Starts for SunnyD\_11:

(Start: 50 @8161 has 300 MA's), (56, 8182), (85, 8299), (113, 8467), (123, 8506), (143, 8584),

Gene: Supakev\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for Supakev\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (116, 8299), (135, 8368), (163, 8476), (168, 8491), (195, 8650), (200, 8680), (204, 8698), (211, 8737), (215, 8797), (217, 8815),

Gene: Suppi\_15 Start: 10870, Stop: 11778, Start Num: 50

Candidate Starts for Suppi\_15:

(Start: 50 @10870 has 300 MA's), (56, 10891), (86, 11026), (116, 11188), (123, 11218), (156, 11338), (162, 11365), (163, 11368), (168, 11383), (178, 11446), (181, 11464), (195, 11542), (200, 11572), (202, 11578), (210, 11623), (211, 11629),

Gene: Survivors\_15 Start: 8732, Stop: 9571, Start Num: 50

Candidate Starts for Survivors\_15:

(Start: 50 @8732 has 300 MA's), (60, 8765), (104, 8993), (125, 9074), (136, 9122), (152, 9179), (154, 9191), (160, 9215), (165, 9230), (188, 9323), (193, 9356), (195, 9368), (196, 9371), (214, 9506), (219, 9554),

Gene: SweatNTears\_15 Start: 8436, Stop: 9281, Start Num: 50

Candidate Starts for SweatNTears\_15:

(24, 8319), (Start: 34 @8379 has 2 MA's), (Start: 50 @8436 has 300 MA's), (60, 8469), (93, 8655), (109, 8727), (160, 8928), (165, 8943), (173, 8976), (184, 9021), (212, 9207), (213, 9213),

Gene: Sweets\_13 Start: 9849, Stop: 10463, Start Num: 40

Candidate Starts for Sweets\_13:

(Start: 40 @9849 has 209 MA's), (56, 9894), (63, 9918), (81, 9996), (85, 10017), (86, 10032), (101, 10128), (106, 10143), (111, 10167), (113, 10188), (123, 10227), (128, 10251), (130, 10260), (134, 10272), (150, 10329), (156, 10356), (159, 10371), (167, 10395),

Gene: Swervy\_12 Start: 8297, Stop: 9094, Start Num: 50

Candidate Starts for Swervy\_12:

(11, 8093), (12, 8111), (Start: 43 @8267 has 49 MA's), (Start: 50 @8297 has 300 MA's), (52, 8303), (85, 8444), (86, 8459), (123, 8651), (147, 8738), (191, 8939), (206, 9035),

Gene: Syra333\_17 Start: 9500, Stop: 10114, Start Num: 40

Candidate Starts for Syra333\_17:

(Start: 40 @9500 has 209 MA's), (56, 9545), (91, 9722), (101, 9779), (106, 9794), (109, 9809), (113, 9839), (123, 9878), (125, 9884), (159, 10022), (168, 10049), (176, 10097),

Gene: TBond007\_17 Start: 10318, Stop: 10929, Start Num: 42

Candidate Starts for TBond007\_17:

(Start: 42 @10318 has 7 MA's), (56, 10363), (91, 10540), (101, 10597), (106, 10612), (113, 10657), (123, 10696), (125, 10702), (126, 10705), (134, 10741), (137, 10753), (141, 10768), (156, 10825), (159, 10840), (167, 10864),

Gene: TClif\_17 Start: 9491, Stop: 10102, Start Num: 40

Candidate Starts for TClif\_17:

(28, 9443), (Start: 40 @9491 has 209 MA's), (Start: 51 @9515 has 18 MA's), (86, 9671), (91, 9710), (101, 9767), (106, 9782), (109, 9797), (113, 9827), (123, 9866), (125, 9872), (134, 9911), (137, 9923), (146, 9950), (159, 10010), (167, 10034), (171, 10061), (176, 10085),

Gene: TM4\_14 Start: 8590, Stop: 9204, Start Num: 40

Candidate Starts for TM4\_14:

(Start: 40 @8590 has 209 MA's), (56, 8638), (101, 8872), (106, 8887), (109, 8902), (113, 8932), (119, 8956), (123, 8971), (125, 8977), (134, 9016), (137, 9028), (141, 9043), (156, 9100), (159, 9115), (167, 9139), (172, 9169),

Gene: TMaxx\_14 Start: 8024, Stop: 8605, Start Num: 48

Candidate Starts for TMaxx\_14:

(Start: 48 @8024 has 5 MA's), (57, 8051), (142, 8447),

Gene: Tachez\_18 Start: 10467, Stop: 11081, Start Num: 40

Candidate Starts for Tachez\_18:

(Start: 40 @10467 has 209 MA's), (56, 10512), (85, 10635), (91, 10689), (101, 10746), (106, 10761), (123, 10845), (125, 10851), (134, 10890), (137, 10902), (146, 10929), (156, 10974), (159, 10989), (167, 11013),

Gene: Taheera\_13 Start: 9846, Stop: 10466, Start Num: 40

Candidate Starts for Taheera\_13:

(Start: 40 @9846 has 209 MA's), (63, 9921), (86, 10035), (101, 10131), (106, 10146), (109, 10161), (113, 10191), (123, 10230), (128, 10254), (130, 10263), (134, 10275), (149, 10326), (150, 10332), (155, 10356), (159, 10374), (167, 10398),

Gene: TaiwanKao\_19 Start: 10474, Stop: 11088, Start Num: 40

Candidate Starts for TaiwanKao\_19:

(Start: 40 @10474 has 209 MA's), (56, 10519), (85, 10642), (91, 10696), (101, 10753), (106, 10768), (123, 10852), (125, 10858), (134, 10897), (137, 10909), (146, 10936), (156, 10981), (159, 10996), (167, 11020), (179, 11077),

Gene: Taquito\_17 Start: 11314, Stop: 11925, Start Num: 43

Candidate Starts for Taquito\_17:

(Start: 43 @11314 has 49 MA's), (64, 11380), (66, 11386), (76, 11434), (86, 11491), (87, 11497), (90, 11518), (91, 11530), (101, 11587), (106, 11602), (109, 11617), (123, 11686), (125, 11692), (141, 11758), (156, 11815), (159, 11830), (167, 11854), (172, 11884),

Gene: Tarnish\_13 Start: 8074, Stop: 8913, Start Num: 50

Candidate Starts for Tarnish\_13:

(24, 7960), (Start: 34 @8020 has 2 MA's), (Start: 50 @8074 has 300 MA's), (60, 8107), (93, 8293), (107, 8353), (109, 8365), (160, 8566), (163, 8575), (165, 8581), (173, 8614), (178, 8644), (190, 8689), (205, 8779),

Gene: TattModd\_15 Start: 10848, Stop: 11756, Start Num: 50

Candidate Starts for TattModd\_15:

(Start: 50 @10848 has 300 MA's), (86, 11004), (105, 11109), (116, 11166), (168, 11361), (195, 11520), (200, 11550), (211, 11607),

Gene: TaylorSipht\_13 Start: 8839, Stop: 9423, Start Num: 50

Candidate Starts for TaylorSipht\_13:

(Start: 50 @8839 has 300 MA's), (76, 8938), (146, 9271), (170, 9376), (174, 9388),

Gene: Teagster\_11 Start: 8161, Stop: 8745, Start Num: 50

Candidate Starts for Teagster\_11:

(Start: 50 @8161 has 300 MA's), (56, 8182), (113, 8467), (123, 8506), (143, 8584),

Gene: Teejan\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Teejan\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: Temper16\_11 Start: 7981, Stop: 8886, Start Num: 50

Candidate Starts for Temper16\_11:

(Start: 50 @7981 has 300 MA's), (86, 8137), (97, 8203), (105, 8242), (113, 8290), (116, 8299), (163, 8476), (181, 8572), (195, 8650), (200, 8680), (211, 8737),

Gene: Terror\_13 Start: 9846, Stop: 10466, Start Num: 40

Candidate Starts for Terror\_13:

(Start: 40 @9846 has 209 MA's), (63, 9921), (86, 10035), (101, 10131), (106, 10146), (109, 10161), (113, 10191), (123, 10230), (128, 10254), (130, 10263), (134, 10275), (149, 10326), (150, 10332), (155, 10356), (159, 10374), (167, 10398),

Gene: Thyatira\_16 Start: 10529, Stop: 11140, Start Num: 40

Candidate Starts for Thyatira\_16:

(Start: 40 @10529 has 209 MA's), (56, 10574), (68, 10616), (91, 10751), (101, 10808), (106, 10823), (109, 10838), (123, 10907), (125, 10913), (134, 10952), (137, 10964), (141, 10979), (152, 11018), (156, 11036), (159, 11051), (167, 11075), (172, 11105),

Gene: Tierra\_17 Start: 10220, Stop: 10834, Start Num: 40

Candidate Starts for Tierra\_17:

(Start: 40 @10220 has 209 MA's), (46, 10232), (56, 10265), (91, 10442), (101, 10499), (106, 10514), (109, 10529), (113, 10559), (123, 10598), (125, 10604), (146, 10682), (159, 10742), (168, 10769),

Gene: Tigress9\_17 Start: 9483, Stop: 10097, Start Num: 40

Candidate Starts for Tigress9\_17:

(Start: 40 @9483 has 209 MA's), (56, 9528), (91, 9705), (101, 9762), (106, 9777), (109, 9792), (113, 9822), (123, 9861), (125, 9867), (159, 10005), (168, 10032), (176, 10080),

Gene: TinaBug\_13 Start: 9849, Stop: 10463, Start Num: 40

Candidate Starts for TinaBug\_13:

(Start: 40 @9849 has 209 MA's), (56, 9894), (63, 9918), (85, 10017), (86, 10032), (101, 10128), (106, 10143), (109, 10158), (111, 10167), (113, 10188), (123, 10227), (128, 10251), (130, 10260), (134, 10272), (150, 10329), (156, 10356), (159, 10371), (167, 10395),

Gene: TingHuaYa\_18 Start: 9532, Stop: 10146, Start Num: 43

Candidate Starts for TingHuaYa\_18:

(Start: 43 @9532 has 49 MA's), (56, 9577), (86, 9715), (91, 9754), (101, 9811), (109, 9841), (113, 9871), (123, 9910), (125, 9916), (134, 9955), (156, 10039), (167, 10078), (172, 10108), (176, 10129),

Gene: TiniBug\_18 Start: 10446, Stop: 11060, Start Num: 40

Candidate Starts for TiniBug\_18:

(Start: 40 @10446 has 209 MA's), (47, 10464), (56, 10491), (91, 10668), (101, 10725), (106, 10740), (109, 10755), (113, 10785), (123, 10824), (125, 10830), (134, 10869), (137, 10881), (146, 10908), (156, 10953), (159, 10968), (167, 10992),

Gene: Tiri\_18 Start: 10513, Stop: 11127, Start Num: 40

Candidate Starts for Tiri\_18:

(Start: 40 @10513 has 209 MA's), (56, 10558), (85, 10681), (91, 10735), (101, 10792), (106, 10807), (123, 10891), (125, 10897), (134, 10936), (137, 10948), (146, 10975), (156, 11020), (159, 11035), (167, 11059),

Gene: Toad24\_14 Start: 8961, Stop: 9545, Start Num: 50

Candidate Starts for Toad24\_14:

(Start: 50 @8961 has 300 MA's), (153, 9429), (170, 9498), (174, 9510),

Gene: Tolls\_15 Start: 7957, Stop: 8802, Start Num: 50

Candidate Starts for Tolls\_15:

(Start: 34 @7900 has 2 MA's), (Start: 50 @7957 has 300 MA's), (60, 7990), (93, 8176), (109, 8248), (160, 8449), (165, 8464), (173, 8497), (182, 8533), (184, 8542), (190, 8572), (212, 8728), (213, 8734),

Gene: TomBrady\_13 Start: 9855, Stop: 10469, Start Num: 40

Candidate Starts for TomBrady\_13:

(Start: 40 @9855 has 209 MA's), (56, 9900), (63, 9924), (81, 10002), (85, 10023), (86, 10038), (101, 10134), (106, 10149), (111, 10173), (113, 10194), (123, 10233), (128, 10257), (130, 10266), (134, 10278), (150, 10335), (156, 10362), (159, 10377), (167, 10401),

Gene: Topper\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Topper\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Torres\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Torres\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: TreyKay\_18 Start: 10468, Stop: 11082, Start Num: 40

Candidate Starts for TreyKay\_18:

(Start: 40 @10468 has 209 MA's), (56, 10513), (85, 10636), (91, 10690), (101, 10747), (106, 10762), (123, 10846), (125, 10852), (134, 10891), (137, 10903), (156, 10975), (159, 10990), (167, 11014), (179, 11071),

Gene: TribelTrouble\_16 Start: 10378, Stop: 10989, Start Num: 43

Candidate Starts for TribelTrouble\_16:

(Start: 43 @10378 has 49 MA's), (56, 10423), (91, 10600), (101, 10657), (106, 10672), (113, 10717), (123, 10756), (125, 10762), (126, 10765), (137, 10813), (141, 10828), (156, 10885), (159, 10900), (167, 10924),

Gene: Trice\_14 Start: 9777, Stop: 10388, Start Num: 40

Candidate Starts for Trice\_14:

(Start: 40 @9777 has 209 MA's), (Start: 50 @9798 has 300 MA's), (56, 9819), (85, 9942), (86, 9957), (91, 9996), (101, 10053), (106, 10068), (113, 10113), (123, 10152), (125, 10158), (134, 10197), (137, 10209), (156, 10281), (159, 10296), (167, 10320), (172, 10350),

Gene: TripleC\_17 Start: 11530, Stop: 12108, Start Num: 48

Candidate Starts for TripleC\_17:

(Start: 48 @11530 has 5 MA's), (57, 11557), (142, 11953), (169, 12058),

Gene: Troje\_13 Start: 7910, Stop: 8755, Start Num: 50

Candidate Starts for Troje\_13:

(24, 7793), (Start: 34 @7853 has 2 MA's), (Start: 50 @7910 has 300 MA's), (60, 7943), (93, 8129), (109, 8201), (160, 8402), (165, 8417), (173, 8450), (184, 8495), (212, 8681), (213, 8687),

Gene: TruffulaTree\_18 Start: 10501, Stop: 11115, Start Num: 40

Candidate Starts for TruffulaTree\_18:

(Start: 40 @10501 has 209 MA's), (56, 10546), (85, 10669), (91, 10723), (101, 10780), (106, 10795), (123, 10879), (125, 10885), (134, 10924), (137, 10936), (146, 10963), (156, 11008), (159, 11023), (167, 11047), (179, 11104),

Gene: TukTuk\_12 Start: 8357, Stop: 9154, Start Num: 50

Candidate Starts for TukTuk\_12:

(11, 8153), (12, 8171), (Start: 43 @8327 has 49 MA's), (Start: 50 @8357 has 300 MA's), (52, 8363), (85, 8504), (86, 8519), (123, 8711), (147, 8798), (191, 8999),

Gene: Twitch\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Twitch\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (85, 10709), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Typha\_19 Start: 12487, Stop: 13128, Start Num: 34

Candidate Starts for Typha\_19:

(Start: 34 @12487 has 2 MA's), (44, 12517), (Start: 51 @12547 has 18 MA's), (65, 12592), (96, 12763), (107, 12814), (109, 12826), (113, 12856), (134, 12940), (142, 12970), (156, 13024), (179, 13117),

Gene: Typhonomachy\_13 Start: 7939, Stop: 8781, Start Num: 50

Candidate Starts for Typhonomachy\_13:

(Start: 50 @7939 has 300 MA's), (60, 7972), (93, 8158), (109, 8230), (134, 8329), (160, 8431), (163, 8440), (165, 8446), (173, 8479), (182, 8515), (184, 8524), (212, 8710), (213, 8716),

Gene: Unicorn\_17 Start: 9556, Stop: 10170, Start Num: 40

Candidate Starts for Unicorn\_17:

(Start: 40 @9556 has 209 MA's), (46, 9568), (56, 9601), (91, 9778), (101, 9835), (106, 9850), (109, 9865), (113, 9895), (123, 9934), (125, 9940), (137, 9991), (146, 10018), (159, 10078), (168, 10105),

Gene: Urkel\_18 Start: 10446, Stop: 11060, Start Num: 40

Candidate Starts for Urkel\_18:

(Start: 40 @10446 has 209 MA's), (47, 10464), (56, 10491), (91, 10668), (101, 10725), (106, 10740), (109, 10755), (113, 10785), (123, 10824), (125, 10830), (134, 10869), (137, 10881), (146, 10908), (156, 10953), (159, 10968), (167, 10992),

Gene: Urla\_11 Start: 7985, Stop: 8893, Start Num: 50

Candidate Starts for Urla\_11:

(37, 7934), (38, 7937), (Start: 50 @7985 has 300 MA's), (56, 8006), (86, 8141), (105, 8246), (113, 8294), (116, 8303), (163, 8483), (177, 8558), (178, 8561), (181, 8579), (186, 8603), (195, 8657), (200, 8687), (202, 8693), (211, 8744),

Gene: VWB\_13 Start: 8668, Stop: 9222, Start Num: 53

Candidate Starts for VWB\_13:

(53, 8668), (92, 8860), (109, 8932), (116, 8965), (140, 9052), (146, 9067),

Gene: Validus\_18 Start: 9492, Stop: 10103, Start Num: 43

Candidate Starts for Validus\_18:

(Start: 43 @9492 has 49 MA's), (56, 9534), (74, 9603), (76, 9615), (86, 9672), (91, 9711), (101, 9768), (106, 9783), (113, 9828), (123, 9867), (125, 9873), (126, 9876), (134, 9912), (141, 9939), (156, 9996), (168, 10038),

Gene: Vallejo\_15 Start: 10786, Stop: 11694, Start Num: 50

Candidate Starts for Vallejo\_15:

(Start: 50 @10786 has 300 MA's), (86, 10942), (105, 11047), (116, 11104), (163, 11284), (168, 11299), (192, 11434), (195, 11458), (200, 11488), (211, 11545),

Gene: Veliki\_18 Start: 10544, Stop: 11155, Start Num: 40

Candidate Starts for Veliki\_18:

(Start: 40 @10544 has 209 MA's), (56, 10586), (91, 10763), (101, 10820), (106, 10835), (123, 10919), (125, 10925), (134, 10964), (137, 10976), (146, 11003), (156, 11048), (159, 11063), (167, 11087), (179, 11144),

Gene: Vine\_14 Start: 8704, Stop: 9543, Start Num: 50

Candidate Starts for Vine\_14:

(24, 8590), (Start: 34 @8650 has 2 MA's), (Start: 50 @8704 has 300 MA's), (60, 8737), (93, 8923), (107, 8983), (109, 8995), (160, 9196), (163, 9205), (165, 9211), (173, 9244), (178, 9274), (190, 9319), (205, 9409),

Gene: Vitas\_11 Start: 8096, Stop: 8680, Start Num: 50

Candidate Starts for Vitas\_11:

(Start: 50 @8096 has 300 MA's), (52, 8102), (56, 8117), (58, 8123), (86, 8255), (113, 8408), (115, 8414), (123, 8447), (142, 8522), (145, 8528), (147, 8534),

Gene: ViviJ\_15 Start: 10385, Stop: 10996, Start Num: 40

Candidate Starts for ViviJ\_15:

(Start: 40 @10385 has 209 MA's), (56, 10430), (91, 10607), (101, 10664), (106, 10679), (109, 10694), (123, 10763), (125, 10769), (134, 10808), (141, 10835), (156, 10892), (159, 10907), (167, 10931), (172, 10961),

Gene: Volt\_47 Start: 17900, Stop: 18457, Start Num: 51

Candidate Starts for Volt\_47:

(Start: 51 @17900 has 18 MA's), (56, 17918), (73, 17981), (113, 18206), (122, 18224), (125, 18233), (134, 18272), (137, 18284), (158, 18371),

Gene: Vulpecula\_13 Start: 9147, Stop: 9977, Start Num: 50

Candidate Starts for Vulpecula\_13:

(Start: 50 @9147 has 300 MA's), (113, 9456), (129, 9522), (146, 9579), (163, 9651), (170, 9684), (174, 9696), (181, 9738), (188, 9768), (190, 9783), (203, 9858),

Gene: Vulture\_11 Start: 7979, Stop: 8884, Start Num: 50

Candidate Starts for Vulture\_11:

(Start: 50 @7979 has 300 MA's), (86, 8135), (116, 8297), (135, 8366), (162, 8471), (163, 8474), (168, 8489), (195, 8648), (200, 8678), (204, 8696), (211, 8735), (215, 8795), (217, 8813),

Gene: WalkingDead\_12 Start: 8557, Stop: 9354, Start Num: 50

Candidate Starts for WalkingDead\_12:

(Start: 50 @8557 has 300 MA's), (52, 8563), (85, 8707), (86, 8722), (115, 8881), (123, 8914), (134, 8959), (147, 9001), (177, 9133), (191, 9199),

Gene: Wallaby\_17 Start: 8877, Stop: 9716, Start Num: 50

Candidate Starts for Wallaby\_17:

(Start: 50 @8877 has 300 MA's), (60, 8910), (104, 9138), (125, 9219), (136, 9267), (152, 9324), (154, 9336), (160, 9360), (165, 9375), (188, 9468), (193, 9501), (195, 9513), (196, 9516), (214, 9651), (219, 9699),

Gene: Waterfoul\_16 Start: 10551, Stop: 11162, Start Num: 40

Candidate Starts for Waterfoul\_16:

(Start: 40 @10551 has 209 MA's), (56, 10596), (68, 10638), (91, 10773), (101, 10830), (106, 10845), (109, 10860), (123, 10929), (125, 10935), (134, 10974), (137, 10986), (141, 11001), (152, 11040), (156, 11058), (159, 11073), (167, 11097), (172, 11127),

Gene: Wawa\_15 Start: 10823, Stop: 11731, Start Num: 50

Candidate Starts for Wawa\_15:

(Start: 50 @10823 has 300 MA's), (86, 10979), (105, 11084), (116, 11141), (163, 11321), (168, 11336), (192, 11471), (195, 11495), (200, 11525), (211, 11582),

Gene: Wayne\_15 Start: 10916, Stop: 11824, Start Num: 50

Candidate Starts for Wayne\_15:

(Start: 50 @10916 has 300 MA's), (56, 10937), (86, 11072), (116, 11234), (123, 11264), (156, 11384), (162, 11411), (163, 11414), (168, 11429), (178, 11492), (181, 11510), (195, 11588), (200, 11618), (202, 11624), (210, 11669), (211, 11675),

Gene: Wendigo\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Wendigo\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Westrich\_14 Start: 8949, Stop: 9533, Start Num: 50

Candidate Starts for Westrich\_14:

(Start: 50 @8949 has 300 MA's), (153, 9417), (170, 9486), (174, 9498),

Gene: Whitney\_13 Start: 7496, Stop: 8068, Start Num: 50

Candidate Starts for Whitney\_13:

(Start: 50 @7496 has 300 MA's), (56, 7517), (65, 7538), (68, 7550), (96, 7709), (104, 7751), (112, 7784), (160, 7973), (183, 8057),

Gene: WileyE\_12 Start: 8482, Stop: 9312, Start Num: 50

Candidate Starts for WileyE\_12:

(Start: 50 @8482 has 300 MA's), (113, 8791), (129, 8857), (146, 8914), (163, 8986), (170, 9019), (181, 9073), (190, 9118), (203, 9193),

Gene: Wintermute\_19 Start: 11716, Stop: 12327, Start Num: 43

Candidate Starts for Wintermute\_19:

(Start: 43 @11716 has 49 MA's), (64, 11782), (66, 11788), (76, 11836), (86, 11893), (87, 11899), (90, 11920), (91, 11932), (101, 11989), (106, 12004), (123, 12088), (125, 12094), (134, 12133), (137, 12145), (141, 12160), (156, 12217), (159, 12232), (167, 12256), (172, 12286),

Gene: Wolfwood\_17 Start: 8877, Stop: 9716, Start Num: 50

Candidate Starts for Wolfwood\_17:

(Start: 50 @8877 has 300 MA's), (60, 8910), (104, 9138), (125, 9219), (136, 9267), (152, 9324), (154, 9336), (160, 9360), (165, 9375), (188, 9468), (193, 9501), (195, 9513), (196, 9516), (214, 9651), (219, 9699),

Gene: WonderBoy\_11 Start: 7936, Stop: 8844, Start Num: 50

Candidate Starts for WonderBoy\_11:

(Start: 50 @7936 has 300 MA's), (86, 8092), (105, 8197), (115, 8251), (116, 8254), (120, 8272), (163, 8434), (168, 8449), (181, 8530), (195, 8608), (200, 8638), (211, 8695),

Gene: Wrigley\_14 Start: 8561, Stop: 9406, Start Num: 50

Candidate Starts for Wrigley\_14:

(Start: 50 @8561 has 300 MA's), (71, 8630), (73, 8642), (123, 8906), (134, 8951), (136, 8960), (158, 9047), (173, 9101),

Gene: Ximenita\_18 Start: 9678, Stop: 10292, Start Num: 40

Candidate Starts for Ximenita\_18:

(Start: 40 @9678 has 209 MA's), (56, 9723), (91, 9900), (101, 9957), (106, 9972), (109, 9987), (113, 10017), (123, 10056), (125, 10062), (137, 10113), (159, 10200), (168, 10227), (176, 10275),

Gene: Y10\_19 Start: 11716, Stop: 12327, Start Num: 43

Candidate Starts for Y10\_19:

(Start: 43 @11716 has 49 MA's), (64, 11782), (66, 11788), (76, 11836), (86, 11893), (87, 11899), (90, 11920), (91, 11932), (106, 12004), (123, 12088), (125, 12094), (134, 12133), (137, 12145), (141, 12160), (156, 12217), (159, 12232), (167, 12256), (172, 12286),

Gene: Y2\_19 Start: 11716, Stop: 12327, Start Num: 43

Candidate Starts for Y2\_19:

(Start: 43 @11716 has 49 MA's), (64, 11782), (66, 11788), (76, 11836), (86, 11893), (87, 11899), (90, 11920), (91, 11932), (106, 12004), (123, 12088), (125, 12094), (134, 12133), (137, 12145), (141, 12160), (156, 12217), (159, 12232), (167, 12256), (172, 12286),

Gene: Yakult\_14 Start: 7841, Stop: 8674, Start Num: 50

Candidate Starts for Yakult\_14:

(Start: 50 @7841 has 300 MA's), (60, 7874), (78, 7946), (83, 7964), (84, 7970), (93, 8048), (125, 8189), (127, 8204), (152, 8294), (154, 8306), (156, 8312), (160, 8330), (165, 8345), (185, 8423), (188, 8435), (201, 8513), (212, 8609), (218, 8657),

Gene: YangYin\_13 Start: 10149, Stop: 10772, Start Num: 40

Candidate Starts for YangYin\_13:

(Start: 40 @10149 has 209 MA's), (47, 10176), (63, 10227), (76, 10284), (85, 10326), (86, 10341), (101, 10437), (106, 10452), (111, 10476), (113, 10497), (123, 10536), (128, 10560), (141, 10608), (150, 10638), (159, 10680), (167, 10704),

Gene: Yarn\_12 Start: 7947, Stop: 8792, Start Num: 50

Candidate Starts for Yarn\_12:

(Start: 34 @7890 has 2 MA's), (Start: 50 @7947 has 300 MA's), (60, 7980), (93, 8166), (109, 8238), (160, 8439), (165, 8454), (173, 8487), (182, 8523), (184, 8532), (190, 8562), (212, 8718), (213, 8724),

Gene: YasnayaPolyana\_19 Start: 11717, Stop: 12328, Start Num: 43

Candidate Starts for YasnayaPolyana\_19:

(Start: 43 @11717 has 49 MA's), (64, 11783), (66, 11789), (76, 11837), (86, 11894), (87, 11900), (90, 11921), (91, 11933), (101, 11990), (106, 12005), (123, 12089), (125, 12095), (134, 12134), (137, 12146), (141, 12161), (156, 12218), (159, 12233), (167, 12257), (172, 12287),

Gene: Yoshi\_14 Start: 7678, Stop: 8271, Start Num: 51

Candidate Starts for Yoshi\_14:

(Start: 51 @7678 has 18 MA's), (56, 7696), (85, 7813), (89, 7852), (99, 7918), (109, 7951), (112, 7963), (115, 7987), (134, 8059), (136, 8068), (139, 8080), (144, 8092), (150, 8116), (153, 8134),

Gene: YoureAdopted\_17 Start: 10477, Stop: 11088, Start Num: 40

Candidate Starts for YoureAdopted\_17:

(Start: 40 @10477 has 209 MA's), (56, 10519), (85, 10642), (91, 10696), (101, 10753), (106, 10768), (123, 10852), (125, 10858), (134, 10897), (137, 10909), (146, 10936), (156, 10981), (159, 10996), (167, 11020), (179, 11077),

Gene: Yucky\_13 Start: 8564, Stop: 9403, Start Num: 50

Candidate Starts for Yucky\_13:

(24, 8450), (Start: 34 @8510 has 2 MA's), (Start: 50 @8564 has 300 MA's), (60, 8597), (93, 8783), (107, 8843), (109, 8855), (136, 8963), (160, 9056), (163, 9065), (165, 9071), (173, 9104), (178, 9134), (190, 9179), (205, 9269),

Gene: Yummy\_14 Start: 7821, Stop: 8666, Start Num: 50

Candidate Starts for Yummy\_14:

(Start: 50 @7821 has 300 MA's), (60, 7854), (93, 8040), (109, 8112), (160, 8313), (165, 8328), (173, 8361), (184, 8406), (212, 8592), (213, 8598),

Gene: Yuna\_18 Start: 9613, Stop: 10227, Start Num: 43

Candidate Starts for Yuna\_18:

(Start: 43 @9613 has 49 MA's), (56, 9658), (91, 9835), (101, 9892), (109, 9922), (113, 9952), (123, 9991), (125, 9997), (134, 10036), (137, 10048), (154, 10114), (167, 10159), (172, 10189), (176, 10210),

Gene: Yunkel11\_18 Start: 9455, Stop: 10069, Start Num: 43

Candidate Starts for Yunkel11\_18:

(Start: 43 @9455 has 49 MA's), (86, 9638), (91, 9677), (101, 9734), (109, 9764), (113, 9794), (123, 9833), (125, 9839), (134, 9878), (137, 9890), (156, 9962), (167, 10001), (172, 10031), (176, 10052),

Gene: Zabiza\_18 Start: 10502, Stop: 11116, Start Num: 40

Candidate Starts for Zabiza\_18:

(Start: 40 @10502 has 209 MA's), (56, 10547), (85, 10670), (91, 10724), (101, 10781), (106, 10796), (123, 10880), (125, 10886), (134, 10925), (137, 10937), (146, 10964), (156, 11009), (159, 11024), (167, 11048), (179, 11105),

Gene: Zapner\_15 Start: 8203, Stop: 8796, Start Num: 51

Candidate Starts for Zapner\_15:

(Start: 51 @8203 has 18 MA's), (56, 8221), (85, 8338), (89, 8377), (99, 8443), (109, 8476), (112, 8488), (115, 8512), (134, 8584), (136, 8593), (139, 8605), (144, 8617), (150, 8641), (153, 8659),

Gene: Zareef\_15 Start: 8879, Stop: 9718, Start Num: 50

Candidate Starts for Zareef\_15:

(Start: 50 @8879 has 300 MA's), (60, 8912), (104, 9140), (125, 9221), (136, 9269), (152, 9326), (154, 9338), (160, 9362), (165, 9377), (188, 9470), (193, 9503), (195, 9515), (196, 9518), (214, 9653), (219, 9701),

Gene: Zavala\_18 Start: 10483, Stop: 11097, Start Num: 40

Candidate Starts for Zavala\_18:

(Start: 40 @10483 has 209 MA's), (56, 10528), (85, 10651), (91, 10705), (101, 10762), (106, 10777), (123, 10861), (125, 10867), (134, 10906), (137, 10918), (146, 10945), (156, 10990), (159, 11005), (167, 11029), (179, 11086),

Gene: Zhuangyuan\_14 Start: 9137, Stop: 9718, Start Num: 50

Candidate Starts for Zhuangyuan\_14:

(Start: 50 @9137 has 300 MA's), (56, 9158), (113, 9446), (134, 9530), (146, 9569), (153, 9605), (160, 9632), (177, 9704),

Gene: Ziko\_48 Start: 17840, Stop: 18397, Start Num: 51

Candidate Starts for Ziko\_48:

(Start: 51 @17840 has 18 MA's), (56, 17858), (73, 17921), (113, 18146), (122, 18164), (125, 18173), (134, 18212), (137, 18224), (158, 18311),

Gene: Zixiang\_13 Start: 8750, Stop: 9334, Start Num: 50

Candidate Starts for Zixiang\_13:

(Start: 50 @8750 has 300 MA's), (113, 9059), (147, 9185), (153, 9218), (170, 9287), (174, 9299),

Gene: ZoMa\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for ZoMa\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: ZoeJ\_14 Start: 8484, Stop: 9104, Start Num: 40

Candidate Starts for ZoeJ\_14:

(Start: 40 @8484 has 209 MA's), (56, 8538), (86, 8676), (101, 8772), (106, 8787), (109, 8802), (113, 8832), (123, 8871), (125, 8877), (126, 8880), (134, 8916), (137, 8928), (141, 8943), (156, 9000), (159, 9015), (167, 9039), (178, 9090),

Gene: Zombie\_13 Start: 9854, Stop: 10468, Start Num: 40

Candidate Starts for Zombie\_13:

(Start: 40 @9854 has 209 MA's), (56, 9899), (63, 9923), (81, 10001), (85, 10022), (86, 10037), (101, 10133), (106, 10148), (111, 10172), (113, 10193), (123, 10232), (128, 10256), (130, 10265), (134, 10277), (150, 10334), (156, 10361), (159, 10376), (167, 10400),

Gene: Zorro\_15 Start: 10802, Stop: 11710, Start Num: 50

Candidate Starts for Zorro\_15:

(Start: 50 @10802 has 300 MA's), (86, 10958), (105, 11063), (116, 11120), (163, 11300), (168, 11315), (192, 11450), (195, 11474), (200, 11504), (211, 11561),