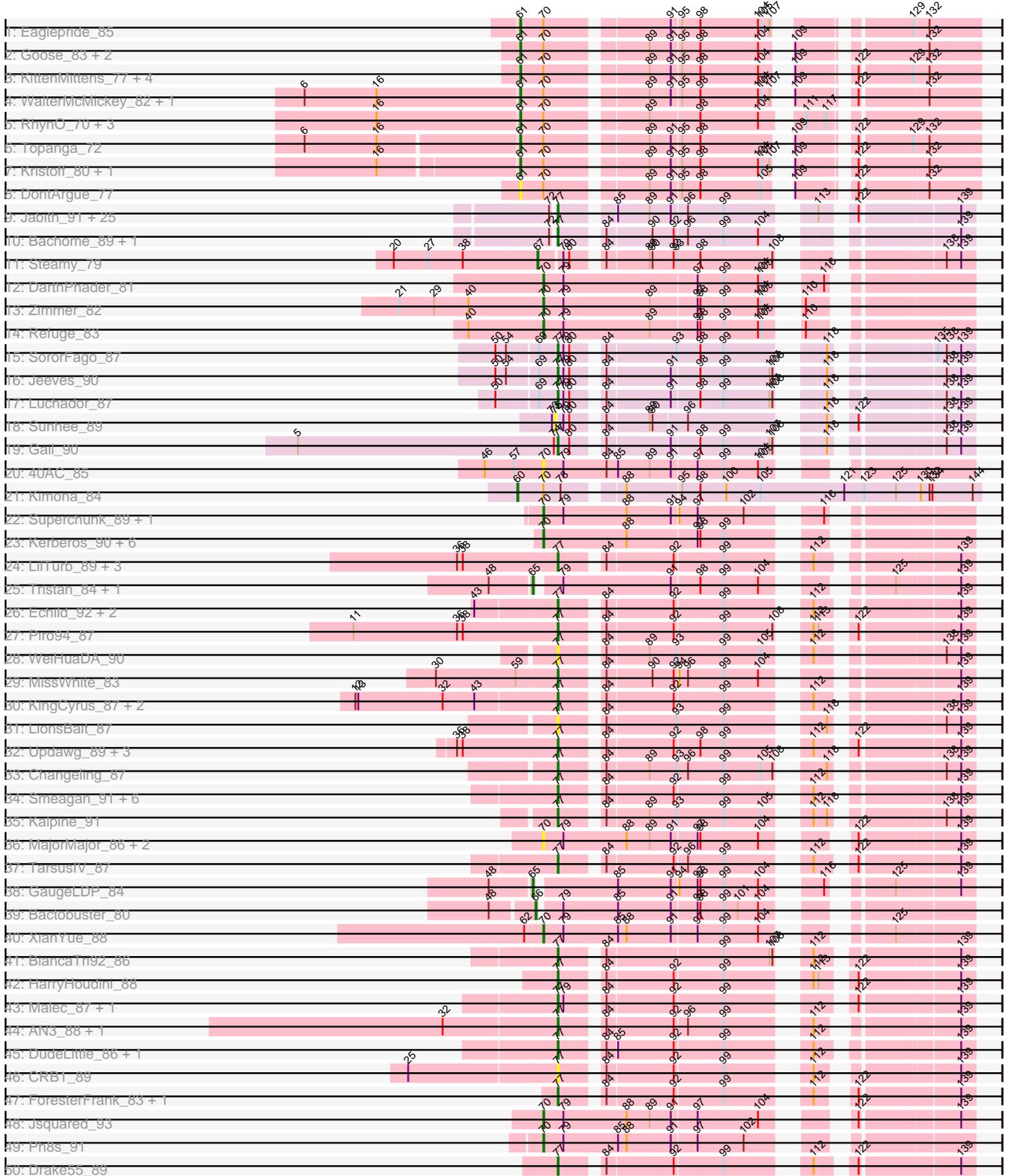
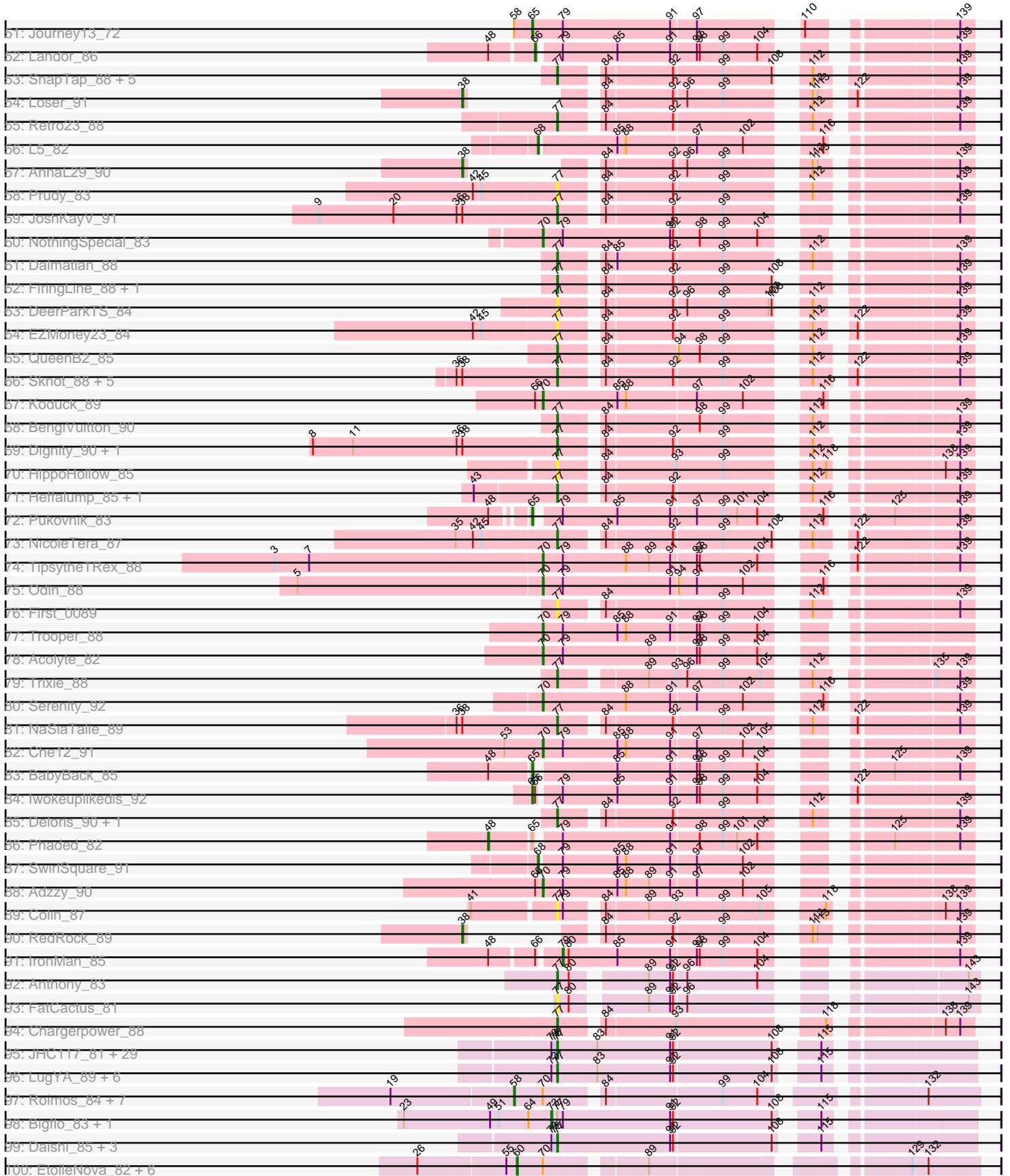


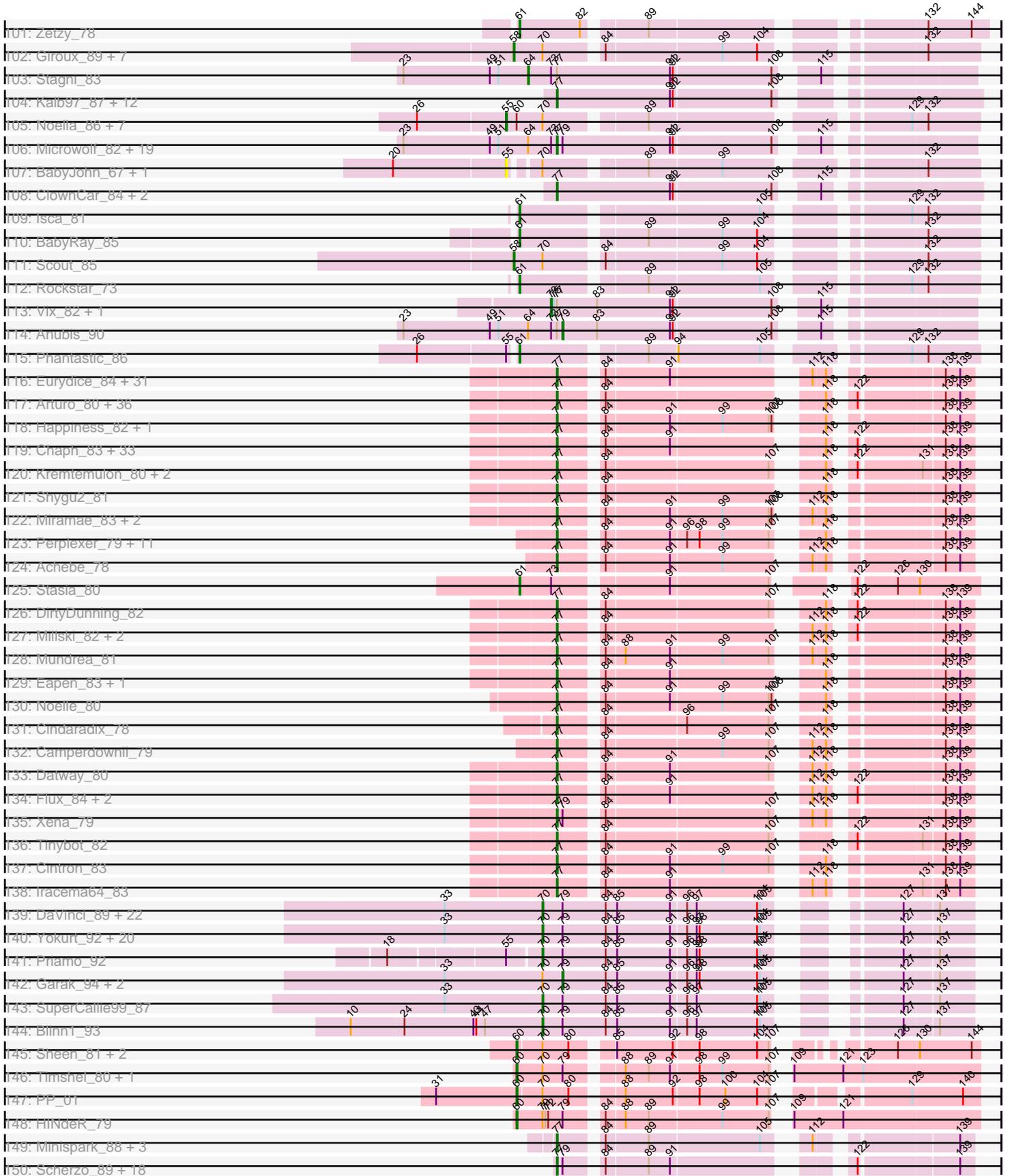
Pham 288940



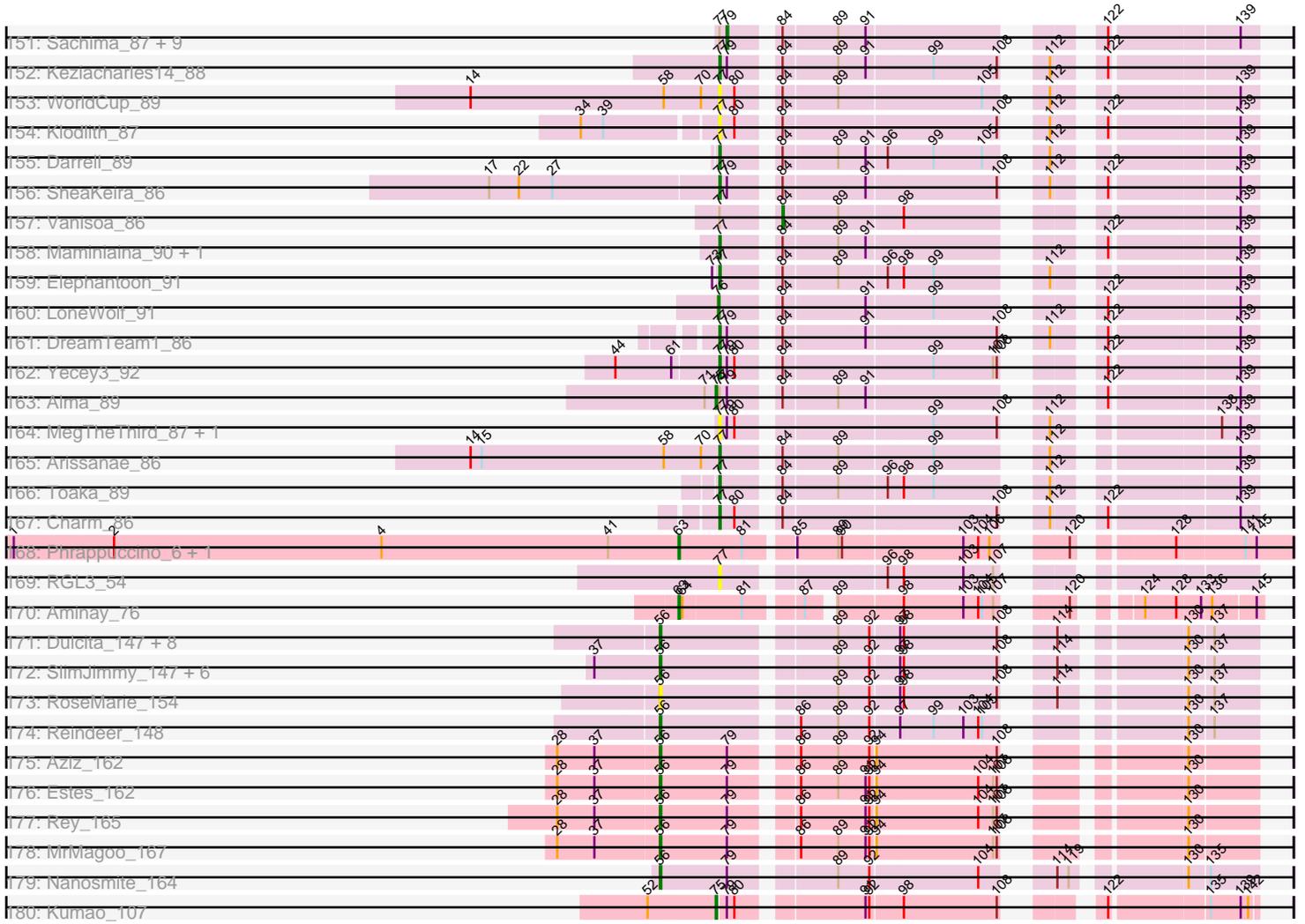
Pham 288940



Pham 288940



Pham 288940



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 288940 Report

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

Pham number 288940 has 577 members, 78 are drafts.

Phages represented in each track:

- Track 1 : Eaglepride\_85
- Track 2 : Goose\_83, Chupacabra\_79, OKCentral2016\_81
- Track 3 : KittenMittens\_77, Poompha\_79, Severus\_80, PeaceMeal1\_79, Drake94\_79
- Track 4 : WalterMcMickey\_82, Twister\_83
- Track 5 : RhynO\_70, DustyMartin\_85, Shapes\_85, Rowdy\_85
- Track 6 : Topanga\_72
- Track 7 : Kristoff\_80, Rebeuca\_83
- Track 8 : DontArgue\_77
- Track 9 : Jabith\_91, Petersenfast\_85, Gilberta\_89, Wolpertinger\_91, Mabel\_91, Aneem\_92, Joselito\_89, Kimba\_88, Bud\_84, Bowtie\_87, Mulciber\_90, Timothy\_91, Orange\_91, Salz\_87, Munch\_90, Et2Brutus\_91, Ebony\_90, Flaverint\_92, Snape\_91, Fibonacci\_91, Hutc2\_88, TinyTimmy\_89, Sham4\_88, Lucivia\_92, Insomnia\_91, MaCh\_91
- Track 10 : Bachome\_89, Saskia\_88
- Track 11 : Steamy\_79
- Track 12 : DarthPhader\_81
- Track 13 : Zimmer\_82
- Track 14 : Refuge\_83
- Track 15 : SororFago\_87
- Track 16 : Jeeves\_90
- Track 17 : Luchador\_87
- Track 18 : Sunhee\_89
- Track 19 : Gail\_90
- Track 20 : 40AC\_85
- Track 21 : Kimona\_84
- Track 22 : Superchunk\_89, Caraxes\_90
- Track 23 : Kerberos\_90, Pomar16\_90, Tomathan\_90, Duplo\_91, StarStuff\_90, DBQu4n\_90, Travvers\_90
- Track 24 : LilTurb\_89, AbbyPaige\_90, Turbido\_89, Whabigail7\_87
- Track 25 : Tristan\_84, Jaan\_87
- Track 26 : Echild\_92, Benvolio\_87, Leviathan\_90
- Track 27 : Piro94\_87
- Track 28 : WeiHuaDA\_90
- Track 29 : MissWhite\_83
- Track 30 : KingCyrus\_87, ChipMunk\_89, EvilGenius\_88
- Track 31 : LionsBait\_87

- Track 32 : Updawg\_89, WideWale\_89, Equemioh13\_88, Gratitude\_86
- Track 33 : Changeling\_87
- Track 34 : Smeagan\_91, Jerm\_90, Miko\_85, BobSwaget\_83, Rachaly\_86, LadyBird\_92, Lokk\_84
- Track 35 : Kalpine\_91
- Track 36 : MajorMajor\_86, Bradman\_92, Quokka\_91
- Track 37 : TarsusIV\_87
- Track 38 : GaugeLDP\_84
- Track 39 : Bactobuster\_80
- Track 40 : XianYue\_88
- Track 41 : BiancaTri92\_86
- Track 42 : HarryHoudini\_88
- Track 43 : Malec\_87, Larenn\_87
- Track 44 : AN3\_88, VA6\_88
- Track 45 : DudeLittle\_86, Anselm\_90
- Track 46 : CRB1\_89
- Track 47 : ForesterFrank\_83, ArcherNM\_84
- Track 48 : Jsquared\_93
- Track 49 : Ph8s\_91
- Track 50 : Drake55\_89
- Track 51 : Journey13\_72
- Track 52 : Landor\_86
- Track 53 : SnapTap\_88, Crucio\_88, SemperFi\_88, Georgie2\_90, SweetiePie\_88, Power\_88
- Track 54 : Loser\_91
- Track 55 : Retro23\_88
- Track 56 : L5\_82
- Track 57 : AnnaL29\_90
- Track 58 : Prudy\_83
- Track 59 : JoshKayV\_91
- Track 60 : NothingSpecial\_83
- Track 61 : Dalmatian\_88
- Track 62 : FiringLine\_88, QueenBeesly\_88
- Track 63 : DeerParkTS\_84
- Track 64 : EZMoney23\_84
- Track 65 : QueenB2\_85
- Track 66 : Sknot\_88, Baehexic\_87, MiculUcigas\_88, Terrific\_89, Centaur\_88, Flare16\_88
- Track 67 : Koduck\_89
- Track 68 : BengiVuitton\_90
- Track 69 : Dignity\_90, Agape74\_90
- Track 70 : HippoHollow\_85
- Track 71 : Heffalump\_85, Fameo\_87
- Track 72 : Pukovnik\_83
- Track 73 : NicoleTera\_87
- Track 74 : TipsytheTRex\_88
- Track 75 : Odin\_88
- Track 76 : First\_0089
- Track 77 : Trooper\_88
- Track 78 : Acolyte\_82
- Track 79 : Trixie\_88
- Track 80 : Serenity\_92
- Track 81 : NaSiaTalie\_89

- Track 82 : Che12\_91
- Track 83 : BabyBack\_85
- Track 84 : Iwokeuplikedis\_92
- Track 85 : Deloris\_90, 20ES\_90
- Track 86 : Phaded\_82
- Track 87 : SwirlSquare\_91
- Track 88 : Adzzy\_90
- Track 89 : Colin\_87
- Track 90 : RedRock\_89
- Track 91 : IronMan\_85
- Track 92 : Anthony\_83
- Track 93 : FatCactus\_81
- Track 94 : Chargerpower\_88
- Track 95 : JHC117\_81, Gwennie\_81, Grum1\_86, Hercules11\_86, SoYo\_83, Colbster\_82, P28Green\_86, Phoebe\_87, Grif\_84, HashRod\_87, Beauxregard13\_85, TinyPebbles\_85, Tiffany\_85, Sabinator\_84, KADY\_83, Croquant\_83, Montavir\_81, Rummer\_85, Dieselweasel\_87, LarryKay\_86, Wooldri\_88, Penny1\_86, Soshari\_88, Methuselah\_79, EpicPhail\_87, PotatoSplit\_87, MarQuardt\_86, Misomonster\_82, Aglet\_87, BuzzBuzz\_80
- Track 96 : LugYA\_89, Marie\_84, JenCasNa\_87, Taurus\_87, MoneyMay\_86, Fernando\_87, Cullens\_87
- Track 97 : Roimos\_84, Zarafa\_83, Kachowdy\_83, Fred313\_83, DropBear\_83, HelDan\_85, Heathen\_85, Marchesa\_85
- Track 98 : Bigflo\_83, StepMih\_86
- Track 99 : Daishi\_85, Louie6\_85, Bxz2\_81, AgronaGT15\_78
- Track 100 : EtoileNova\_82, Todacoro\_85, QuinnKiro\_84, Veracruz\_82, Panamaxus\_81, Texage\_83, Margo\_85
- Track 101 : Zetzy\_78
- Track 102 : Giroux\_89, Bugatti\_87, Puppy\_87, Pistachio\_86, SaturnRing\_87, Clammy\_87, TNguyen7\_87, BlueBird\_88
- Track 103 : Stagni\_83
- Track 104 : Kalb97\_87, Heliosoles\_84, HaveUMetTed\_87, Groupthink\_87, PhishRPhriends\_83, Pawn\_85, Marius\_87, Manu\_86, Kalnoky\_87, Phranny\_79, Calvinny\_84, JeppNRM\_87, Reba\_82
- Track 105 : Noella\_86, Hookmount\_85, Caviar\_74, Popcicle\_85, ResDef\_83, Norbert\_81, Pocahontas\_84, Lambert1\_85
- Track 106 : Microwolf\_82, Mainiac\_85, Sabia\_84, PGHhamlin\_88, Pembroke\_86, Watson\_85, BreSam8\_86, Jobu08\_82, Malinsilva\_89, SoilDragon\_86, Lowa\_83, Spike509\_86, DaHudson\_85, Grub\_84, MadMarie\_84, GtownJaz\_86, LBerry\_87, Ollie\_86, Lilith\_84, Snickers\_86
- Track 107 : BabyJohn\_67, Chiqui\_67
- Track 108 : ClownCar\_84, OlanP\_85, Gemma\_84
- Track 109 : Isca\_81
- Track 110 : BabyRay\_85
- Track 111 : Scout\_85
- Track 112 : Rockstar\_73
- Track 113 : Vix\_82, GingkoMaracino\_86
- Track 114 : Anubis\_90
- Track 115 : Phantastic\_86
- Track 116 : Eurydice\_84, Romney\_82, NorthStar\_80, ICleared\_82, Wilbur\_83, BangNhom\_80, Phelipe\_83, Lemur\_83, Jaykayelowell\_80, Nebs\_84, CentreCat\_83, SheldonCooper\_83, Cerulean\_85, Relief\_82, LochMonster\_84, Scamp\_83, ChampagnePapi\_86, Kye\_83, Sparxx\_84, LittleB\_83, Spino\_82, KekoraPapaka\_80,

Ruin\_83, JetBlade\_84, Sabertooth\_83, PeterPeter\_83, Ohfah\_84, Citius\_83, Abdiel\_82, TroyPia\_84, Lunsford\_83, Skipitt\_82

- Track 117 : Arturo\_80, Burger\_81, Albee\_83, Taquarus\_82, OKaNui\_82, RockieBear\_80, Alberto7\_84, LHTSCC\_85, Deano\_80, Obama12\_84, LittleGuy\_83, Polymorphads\_84, Florean\_83, Medusa\_82, Eros\_83, Annyong\_82, BubbleTrouble\_82, Baby16\_83, YoSam321\_83, Commander\_81, Roosevelt\_81, Phontbonne\_83, TiroTheta9\_82, KFPoly\_82, BellusTerra\_83, LappelDuVide\_83, Blackmoor\_82, Holli\_82, Broseidon\_83, Iceman\_81, HamSlice\_79, TinaFeyge\_81, Dhanush\_83, Morrow\_85, Bartimeaus\_83, Connomayer\_83, Clarenza\_82
- Track 118 : Happiness\_82, Rosa24\_79
- Track 119 : Chaph\_83, Pumbaa\_83, Koreni\_82, Mazhar510\_83, JoongJeon\_82, SteMason\_79, Melvin\_85, Bombshell\_83, SenorClean\_84, Koan\_80, Eris\_82, Huxley\_72, Funston\_82, Caelakin\_81, Lorenzo\_83, Bruiser\_82, Nyxis\_82, Eagle\_82, Palestino\_82, Maverick\_82, Houdini22\_82, Ulysses\_82, TygerBlood\_83, Pipcraft\_79, Avle17\_83, Phacado\_83, NotAPhaseMom\_82, Peaches\_81, Nemo27\_82, Kingmustik0402\_83, Sultana\_83, Wander\_83, Cocoaberry\_83, Gadost\_83
- Track 120 : Kremtemulon\_80, Phighter1804\_83, Kratak\_82
- Track 121 : Shygu2\_81
- Track 122 : Miramae\_83, Stink\_83, AvatarAhPeg\_83
- Track 123 : Perplexer\_79, Wile\_78, Morpher26\_79, Druantia\_81, Katalie136\_79, Bumblebee11\_78, AbbysRanger\_79, Backyardigan\_77, Wizard007\_79, Badger\_78, Cici\_79, PetiteSangsue\_79
- Track 124 : Achebe\_78
- Track 125 : Stasia\_80
- Track 126 : DirtyDunning\_82
- Track 127 : Millski\_82, Thanksgivukkah\_82, MeeZee\_82
- Track 128 : Mundrea\_81
- Track 129 : Eapen\_83, Shaka\_81
- Track 130 : Noelle\_80
- Track 131 : Cindaradix\_78
- Track 132 : Camperdownii\_79
- Track 133 : Datway\_80
- Track 134 : Flux\_84, Maxo\_85, Kampy\_82
- Track 135 : Xena\_79
- Track 136 : Tinybot\_82
- Track 137 : Cintron\_83
- Track 138 : Iracema64\_83
- Track 139 : DaVinci\_89, McFly\_91, Neeharika16\_90, Jordennis\_89, Cookiedough\_91, Pmask\_90, Kazan\_92, EricB\_89, SuperAwesome\_91, Chartreuse\_90, Dorothea\_91, DelvinSonDorr\_86, BABullseye\_84, Candra\_89, Isiphiwo\_87, Kipper29\_91, VohminGhazi\_91, JewelBug\_83, Hoot\_86, Newrala\_90, Polyphemus\_84, GreedyLawyer\_84, SmellyB\_91
- Track 140 : Yokurt\_92, Indra\_96, Rifter\_93, Wiks\_92, Artemis2UCLA\_92, Blue7\_94, Hexamo\_92, BlessJoy\_93, Jeffabunny\_81, Gruunaga\_93, Koko\_94, Lilbunny\_89, Temprado\_94, Hammer\_93, Zulu\_94, Zaka\_93, ToneTone\_90, Helmet\_95, Tucker\_93, Gladiator\_89, CloudWang3\_93
- Track 141 : Priamo\_92
- Track 142 : Garak\_94, Roksolana\_93, BennyP\_92
- Track 143 : SuperCallie99\_87
- Track 144 : Blinn1\_93
- Track 145 : Sheen\_81, FlyCatcher\_84, Toro\_82
- Track 146 : Timshel\_80, DroogsArmy\_79
- Track 147 : PP\_01

- Track 148 : HINdeR\_79
- Track 149 : Minispark\_88, Bellris\_88, CogOmlette\_88, Rahalelujah\_90
- Track 150 : Scherzo\_89, HortumSL17\_92, Qobbit\_89, Fayely\_89, Horex\_90, Lilleskat\_88, Tubs\_91, Spouty\_89, RyeScarlet\_92, Aliter\_84, Catalina\_93, Myxus\_91, Eidsmoe\_89, EmyBug\_88, Conquerage\_89, Jiawan\_89, Phaeder\_91, Priya\_89, PackMan\_86
- Track 151 : Sachima\_87, Pioneer\_91, ExplosioNervosa\_89, Beemo\_91, Hanray\_89, Ayanochan\_89, EdogawaKiddo\_90, Onglai\_89, Ugenie5\_78, Phonnegut\_91
- Track 152 : Keziacharles14\_88
- Track 153 : WorldCup\_89
- Track 154 : Klodlith\_87
- Track 155 : Darrell\_89
- Track 156 : SheaKeira\_86
- Track 157 : Vanisoa\_86
- Track 158 : Maminiaina\_90, BogosyJay\_90
- Track 159 : Elephantoon\_91
- Track 160 : LoneWolf\_91
- Track 161 : DreamTeam1\_86
- Track 162 : Yecey3\_92
- Track 163 : Alma\_89
- Track 164 : MegTheThird\_87, Celestialunch\_86
- Track 165 : Arissanae\_86
- Track 166 : Toaka\_89
- Track 167 : Charm\_86
- Track 168 : Phrappuccino\_6, Settecandela\_6
- Track 169 : RGL3\_54
- Track 170 : Aminay\_76
- Track 171 : Dulcita\_147, LilhomieP\_146, Diminimus\_147, Glaske16\_149, PegLeg\_150, Bricole\_152, Skinny\_153, Izel\_146, Bongo\_144
- Track 172 : SlimJimmy\_147, KleverKiS\_152, TpudiCK\_150, FreakyGoo\_149, IPhane7\_147, TyDawg\_143, Auspice\_150
- Track 173 : RoseMarie\_154
- Track 174 : Reindeer\_148
- Track 175 : Aziz\_162
- Track 176 : Estes\_162
- Track 177 : Rey\_165
- Track 178 : MrMagoo\_167
- Track 179 : Nanosmite\_164
- Track 180 : Kumao\_107

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

The start number called the most often in the published annotations is 77, it was called in 327 of the 499 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 20ES\_90, AN3\_88, AbbyPaige\_90, AbbysRanger\_79, Abdiel\_82, Achebe\_78, Agape74\_90, Aglet\_87, AgronaGT15\_78, Albee\_83, Alberto7\_84, Aliter\_84, Aneem\_92, Annyong\_82, Anselm\_90, Anthony\_83, ArcherNM\_84, Arissanae\_86, Arturo\_80, AvatarAhPeg\_83, Avle17\_83, Baby16\_83, Bachome\_89,

Backyardigan\_77, Badger\_78, Baehexic\_87, BangNhom\_80, Bartimeaus\_83, Beauxregard13\_85, Bellris\_88, BellusTerra\_83, BengiVuitton\_90, Benvolio\_87, BiancaTri92\_86, Blackmoor\_82, BobSwaget\_83, BogosyJay\_90, Bombshell\_83, Bowtie\_87, BreSam8\_86, Broseidon\_83, Bruiser\_82, BubbleTrouble\_82, Bud\_84, Bumblebee11\_78, Burger\_81, BuzzBuzz\_80, Bxz2\_81, CRB1\_89, Caelakin\_81, Calvinny\_84, Camperdownii\_79, Catalina\_93, Celestialunch\_86, Centaur\_88, CentreCat\_83, Cerulean\_85, ChampagnePapi\_86, Changeling\_87, Chaph\_83, Chargerpower\_88, Charm\_86, ChipMunk\_89, Cici\_79, Cindaradix\_78, Cintron\_83, Citius\_83, Clarenza\_82, ClownCar\_84, Cocoaberry\_83, CogOmlette\_88, Colbster\_82, Colin\_87, Commander\_81, Connomayer\_83, Conquerage\_89, Croquant\_83, Crucio\_88, Cullens\_87, DaHudson\_85, Daishi\_85, Dalmatian\_88, Darrell\_89, Datway\_80, Deano\_80, DeerParkTS\_84, Deloris\_90, Dhanush\_83, Dieselweasel\_87, Dignity\_90, DirtyDunning\_82, Drake55\_89, DreamTeam1\_86, Druantia\_81, DudeLittle\_86, EZMoney23\_84, Eagle\_82, Eapen\_83, Ebony\_90, Echild\_92, Eidsmoe\_89, Elephantoon\_91, EmyBug\_88, EpicPhail\_87, Equemioh13\_88, Eris\_82, Eros\_83, Et2Brutus\_91, Eurydice\_84, EvilGenius\_88, Fameo\_87, FatCactus\_81, Fayely\_89, Fernando\_87, Fibonacci\_91, FiringLine\_88, First\_0089, Flare16\_88, Flaverint\_92, Florean\_83, Flux\_84, ForesterFrank\_83, Funston\_82, Gadost\_83, Gail\_90, Gemma\_84, Georgie2\_90, Gilberta\_89, Gratitude\_86, Grif\_84, Groupthink\_87, Grub\_84, Grum1\_86, GtownJaz\_86, Gwennie\_81, HamSlice\_79, Happiness\_82, HarryHoudini\_88, HashRod\_87, HaveUMetTed\_87, Heffalump\_85, Heliosoles\_84, Hercules11\_86, HippoHollow\_85, Horex\_90, Holli\_82, HortumSL17\_92, Houdini22\_82, Hutc2\_88, Huxley\_72, ICleared\_82, Iceman\_81, Insomnia\_91, Iracema64\_83, JHC117\_81, Jabith\_91, Jaykayelowell\_80, Jeeves\_90, JenCasNa\_87, JeppNRM\_87, Jerm\_90, JetBlade\_84, Jiawan\_89, Jobu08\_82, JoongJeon\_82, Joselito\_89, JoshKayV\_91, KADY\_83, KFPoly\_82, Kalb97\_87, Kalnoky\_87, Kalpine\_91, Kamy\_82, Katalie136\_79, KekoraPapaka\_80, Keziacharles14\_88, Kimba\_88, KingCyrus\_87, Kingmustik0402\_83, Klodlith\_87, Koan\_80, Koreni\_82, Kratark\_82, Kremtemulon\_80, Kyee\_83, LBerry\_87, LHTSCC\_85, LadyBird\_92, LappelDuVide\_83, Larenn\_87, LarryKay\_86, Lemur\_83, Leviathan\_90, LilTurb\_89, Lilith\_84, Lilleskat\_88, LionsBait\_87, LittleB\_83, LittleGuy\_83, LochMonster\_84, Lokk\_84, Lorenzo\_83, Louie6\_85, Lowa\_83, Luchador\_87, Lucivia\_92, LugYA\_89, Lunsford\_83, MaCh\_91, Mabel\_91, MadMarie\_84, Mainiac\_85, Malec\_87, Malinsilva\_89, Maminiaina\_90, Manu\_86, MarQuardt\_86, Marie\_84, Marius\_87, Maverick\_82, Maxo\_85, Mazhar510\_83, Medusa\_82, MeeZee\_82, MegTheThird\_87, Melvin\_85, Methuselah\_79, Microwolf\_82, MiculUcigas\_88, Miko\_85, Millski\_82, Minispark\_88, Miramae\_83, Misomonster\_82, MissWhite\_83, MoneyMay\_86, Montavir\_81, Morpher26\_79, Morrow\_85, Mulciber\_90, Munch\_90, Mundrea\_81, Myxus\_91, NaSiaTalie\_89, Nebs\_84, Nemo27\_82, NicoleTera\_87, Noelle\_80, NorthStar\_80, NotAPhaseMom\_82, Nyxis\_82, OKaNui\_82, Obama12\_84, Ohfah\_84, OlanP\_85, Ollie\_86, Orange\_91, P28Green\_86, PGHhamlin\_88, PackMan\_86, Palestino\_82, Pawn\_85, Peaches\_81, Pembroke\_86, Penny1\_86, Perplexer\_79, PeterPeter\_83, Petersenfast\_85, PetiteSangsue\_79, Phacado\_83, Phaeder\_91, Phelipe\_83, Phighter1804\_83, PhishRPhriends\_83, Phoebe\_87, Phontbonne\_83, Phranny\_79, Pipcraft\_79, Piro94\_87, Polymorphads\_84, PotatoSplit\_87, Power\_88, Priya\_89, Prudy\_83, Pumbaa\_83, Qobbit\_89, QueenB2\_85, QueenBeesly\_88, RGL3\_54, Rachaly\_86, Rahalelujah\_90, Reba\_82, Relief\_82, Retro23\_88, RockieBear\_80, Romney\_82, Roosevelt\_81, Rosa24\_79, Ruin\_83, Rummer\_85, RyeScarlet\_92, Sabertooth\_83, Sabia\_84, Sabinator\_84, Salz\_87, Saskia\_88, Scamp\_83, Scherzo\_89, SemperFi\_88, SeniorClean\_84, Shaka\_81, Sham4\_88, SheaKeira\_86, SheldonCooper\_83, Shygu2\_81, Skipitt\_82, Sknot\_88, Smeagan\_91, SnapTap\_88, Snape\_91, Snickers\_86, SoYo\_83, SoilDragon\_86, SororFago\_87, Soshari\_88,

Sparxx\_84, Spike509\_86, Spino\_82, Spouty\_89, SteMason\_79, Stink\_83, Sultana\_83, SweetiePie\_88, Taquarus\_82, TarsusIV\_87, Taurus\_87, Terrific\_89, Thanksgivukkah\_82, Tiffany\_85, Timothy\_91, TinaFeyge\_81, TinyPebbles\_85, TinyTimmy\_89, Tinybot\_82, TiroTheta9\_82, Toaka\_89, Trixie\_88, TroyPia\_84, Tubs\_91, Turbido\_89, TygerBlood\_83, Ulysses\_82, Updawg\_89, VA6\_88, Wander\_83, Watson\_85, WeiHuaDA\_90, Whabigail7\_87, WideWale\_89, Wilbur\_83, Wile\_78, Wizard007\_79, Wolpertinger\_91, Wooldri\_88, WorldCup\_89, Xena\_79, Yecey3\_92, YoSam321\_83,

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

- Alma\_89, Anubis\_90, Ayanochan\_89, Beemo\_91, Bigflo\_83, EdogawaKiddo\_90, ExplosioNervosa\_89, GingkoMaracino\_86, Hanray\_89, Onglai\_89, Phonnegut\_91, Pioneer\_91, Sachima\_87, Stagni\_83, StepMih\_86, Ugenie5\_78, Vanisoa\_86, Vix\_82,

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

- 40AC\_85, Acolyte\_82, Adzzy\_90, Aminay\_76, AnnaL29\_90, Artemis2UCLA\_92, Auspice\_150, Aziz\_162, BABullseye\_84, BabyBack\_85, BabyJohn\_67, BabyRay\_85, Bactobuster\_80, BennyP\_92, BlessJoy\_93, Blinn1\_93, Blue7\_94, BlueBird\_88, Bongo\_144, Bradman\_92, Bricole\_152, Bugatti\_87, Candra\_89, Caraxes\_90, Caviar\_74, Chartreuse\_90, Che12\_91, Chiqui\_67, Chupacabra\_79, Clammy\_87, CloudWang3\_93, Cookiedough\_91, DBQu4n\_90, DaVinci\_89, DarthPhader\_81, DelvinSonDorr\_86, Diminimus\_147, DontArgue\_77, Dorothea\_91, Drake94\_79, DroogsArmy\_79, DropBear\_83, Dulcita\_147, Duplo\_91, DustyMartin\_85, Eaglepride\_85, EricB\_89, Estes\_162, EtoileNova\_82, FlyCatcher\_84, FreakyGoo\_149, Fred313\_83, Garak\_94, GaugeLDP\_84, Giroux\_89, Gladiator\_89, Glaske16\_149, Goose\_83, GreedyLawyer\_84, Gruunaga\_93, HINder\_79, Hammer\_93, Heathen\_85, HelDan\_85, Helmet\_95, Hexamo\_92, Hookmount\_85, Hoot\_86, iPhone7\_147, Indra\_96, IronMan\_85, Isca\_81, Isiphiwo\_87, Iwokeuplikedis\_92, Izel\_146, Jaan\_87, Jeffabunny\_81, JewelBug\_83, Jordennis\_89, Journey13\_72, Jsquared\_93, Kachowdy\_83, Kazan\_92, Kerberos\_90, Kimona\_84, Kipper29\_91, KittenMittens\_77, KleverKiS\_152, Koduck\_89, Koko\_94, Kristoff\_80, Kumao\_107, L5\_82, Lambert1\_85, Landor\_86, Lilbunny\_89, LilhomieP\_146, LoneWolf\_91, Loser\_91, MajorMajor\_86, Marchesa\_85, Margo\_85, McFly\_91, MrMagoo\_167, Nanosmite\_164, Neeharika16\_90, Newrala\_90, Noella\_86, Norbert\_81, NothingSpecial\_83, OKCentral2016\_81, Odin\_88, PP\_01, Panamaxus\_81, PeaceMeal1\_79, PegLeg\_150, Ph8s\_91, Phaded\_82, Phantastic\_86, Phrappuccino\_6, Pistachio\_86, Pmask\_90, Pocahontas\_84, Polyphemus\_84, Pomar16\_90, Poompha\_79, Popcicle\_85, Priamo\_92, Pukovnik\_83, Puppy\_87, QuinnKiro\_84, Quokka\_91, Rebeuca\_83, RedRock\_89, Refuge\_83, Reindeer\_148, ResDef\_83, Rey\_165, RhynO\_70, Rifter\_93, Rockstar\_73, Roimos\_84, Roksolana\_93, RoseMarie\_154, Rowdy\_85, SaturnRing\_87, Scout\_85, Serenity\_92, Settecandela\_6, Severus\_80, Shapes\_85, Sheen\_81, Skinny\_153, SlimJimmy\_147, SmellyB\_91, StarStuff\_90, Stasia\_80, Steamy\_79, Sunhee\_89, SuperAwesome\_91, SuperCallie99\_87, Superchunk\_89, SwirlSquare\_91, TNguyen7\_87, Temprado\_94, Texage\_83, Timshel\_80, TipsytheTRex\_88, Todacoro\_85, Tomathan\_90, ToneTone\_90, Topanga\_72, Toro\_82, TpudiCK\_150, Travvers\_90, Tristan\_84, Trooper\_88, Tucker\_93, Twister\_83, TyDawg\_143, Veracruz\_82, VohminGhazi\_91, WalterMcMickey\_82, Wiks\_92, XianYue\_88, Yokurt\_92, Zaka\_93, Zarafa\_83, Zetzy\_78, Zimmer\_82, Zulu\_94,

### Summary by start number:

Start 38:

- Found in 23 of 577 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 3 of 499
- Called 13.0% of time when present
- Phage (with cluster) where this start called: AnnaL29\_90 (A2), Loser\_91 (A2), RedRock\_89 (A2),

#### Start 48:

- Found in 9 of 577 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 1 of 499
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Phaded\_82 (A2),

#### Start 55:

- Found in 19 of 577 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 8 of 499
- Called 52.6% of time when present
- Phage (with cluster) where this start called: BabyJohn\_67 (A3), Caviar\_74 (A3), Chiqui\_67 (A3), Hookmount\_85 (A3), Lambert1\_85 (A3), Noella\_86 (A3), Norbert\_81 (A3), Pocahontas\_84 (A3), Popcicle\_85 (A3), ResDef\_83 (A3),

#### Start 56:

- Found in 23 of 577 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 20 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Auspice\_150 (M1), Aziz\_162 (M2), Bongo\_144 (M1), Bricole\_152 (M1), Diminimus\_147 (M1), Dulcita\_147 (M1), Estes\_162 (M2), FreakyGoo\_149 (M1), Glaske16\_149 (M1), IPhane7\_147 (M1), Izel\_146 (M1), KleverKiS\_152 (M1), LilhomieP\_146 (M1), MrMagoo\_167 (M2), Nanosmite\_164 (M3), PegLeg\_150 (M1), Reindeer\_148 (M1), Rey\_165 (M2), RoseMarie\_154 (M1), Skinny\_153 (M1), SlimJimmy\_147 (M1), TpudiCK\_150 (M1), TyDawg\_143 (M1),

#### Start 58:

- Found in 20 of 577 ( 3.5% ) of genes in pham
- Manual Annotations of this start: 9 of 499
- Called 85.0% of time when present
- Phage (with cluster) where this start called: BlueBird\_88 (A3), Bugatti\_87 (A3), Clammy\_87 (A3), DropBear\_83 (A3), Fred313\_83 (A3), Giroux\_89 (A3), Heathen\_85 (A3), HeiDan\_85 (A3), Kachowdy\_83 (A3), Marchesa\_85 (A3), Pistachio\_86 (A3), Puppy\_87 (A3), Roimos\_84 (A3), SaturnRing\_87 (A3), Scout\_85 (A3), TNguyen7\_87 (A3), Zarafa\_83 (A3),

#### Start 60:

- Found in 23 of 577 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 12 of 499
- Called 65.2% of time when present
- Phage (with cluster) where this start called: DroogsArmy\_79 (A7), EtoileNova\_82 (A3), FlyCatcher\_84 (A7), HINdeR\_79 (A7), Kimona\_84 (A19), Margo\_85 (A3), PP\_01 (A7), Panamaxus\_81 (A3), QuinnKiro\_84 (A3), Sheen\_81 (A7), Texage\_83 (A3), Timshel\_80 (A7), Todacoro\_85 (A3), Toro\_82 (A7), Veracruz\_82 (A3),

#### Start 61:

- Found in 26 of 577 ( 4.5% ) of genes in pham

- Manual Annotations of this start: 21 of 499
- Called 96.2% of time when present
- Phage (with cluster) where this start called: BabyRay\_85 (A3), Chupacabra\_79 (A10), DontArgue\_77 (A10), Drake94\_79 (A10), DustyMartin\_85 (A10), Eaglepride\_85 (A10), Goose\_83 (A10), Isca\_81 (A3), KittenMittens\_77 (A10), Kristoff\_80 (A10), OKCentral2016\_81 (A10), PeaceMeal1\_79 (A10), Phantastic\_86 (A3), Poompha\_79 (A10), Rebeuca\_83 (A10), RhynO\_70 (A10), Rockstar\_73 (A3), Rowdy\_85 (A10), Severus\_80 (A10), Shapes\_85 (A10), Stasia\_80 (A4), Topanga\_72 (A10), Twister\_83 (A10), WalterMcMickey\_82 (A10), Zetzy\_78 (A3),

#### Start 63:

- Found in 3 of 577 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 3 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aminay\_76 (K7), Phrappuccino\_6 (AA), Settecandela\_6 (AA),

#### Start 64:

- Found in 25 of 577 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 499
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Stagni\_83 (A3),

#### Start 65:

- Found in 8 of 577 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 7 of 499
- Called 87.5% of time when present
- Phage (with cluster) where this start called: BabyBack\_85 (A2), GaugeLDP\_84 (A2), Iwokeuplikedis\_92 (A2), Jaan\_87 (A2), Journey13\_72 (A2), Pukovnik\_83 (A2), Tristan\_84 (A2),

#### Start 66:

- Found in 6 of 577 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 2 of 499
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Bactobuster\_80 (A2), Landor\_86 (A2),

#### Start 67:

- Found in 1 of 577 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Steamy\_79 (A12),

#### Start 68:

- Found in 2 of 577 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: L5\_82 (A2), SwirlSquare\_91 (A2),

#### Start 70:

- Found in 141 of 577 ( 24.4% ) of genes in pham
- Manual Annotations of this start: 67 of 499
- Called 53.2% of time when present

- Phage (with cluster) where this start called: 40AC\_85 (A17), Acolyte\_82 (A2), Adzzy\_90 (A2), Artemis2UCLA\_92 (A6), BABullseye\_84 (A6), BlessJoy\_93 (A6), Blinn1\_93 (A6), Blue7\_94 (A6), Bradman\_92 (A2), Candra\_89 (A6), Caraxes\_90 (A2), Chartreuse\_90 (A6), Che12\_91 (A2), CloudWang3\_93 (A6), Cookiedough\_91 (A6), DBQu4n\_90 (A2), DaVinci\_89 (A6), DarthPhader\_81 (A12), DelvinSonDorr\_86 (A6), Dorothea\_91 (A6), Duplo\_91 (A2), EricB\_89 (A6), Gladiator\_89 (A6), GreedyLawyer\_84 (A6), Gruunaga\_93 (A6), Hammer\_93 (A6), Helmet\_95 (A6), Hexamo\_92 (A6), Hoot\_86 (A6), Indra\_96 (A6), Isiphiwo\_87 (A6), Jeffabunny\_81 (A6), JewelBug\_83 (A6), Jordennis\_89 (A6), Jsquared\_93 (A2), Kazan\_92 (A6), Kerberos\_90 (A2), Kipper29\_91 (A6), Koduck\_89 (A2), Koko\_94 (A6), Lilbunny\_89 (A6), MajorMajor\_86 (A2), McFly\_91 (A6), Neeharika16\_90 (A6), Newrala\_90 (A6), NothingSpecial\_83 (A2), Odin\_88 (A2), Ph8s\_91 (A2), Pmask\_90 (A6), Polyphemos\_84 (A6), Pomar16\_90 (A2), Priamo\_92 (A6), Quokka\_91 (A2), Refuge\_83 (A12), Rifter\_93 (A6), Serenity\_92 (A2), SmellyB\_91 (A6), StarStuff\_90 (A2), SuperAwesome\_91 (A6), SuperCallie99\_87 (A6), Superchunk\_89 (A2), Temprado\_94 (A6), TipsytheTRex\_88 (A2), Tomathan\_90 (A2), ToneTone\_90 (A6), Travvers\_90 (A2), Trooper\_88 (A2), Tucker\_93 (A6), VohminGhazi\_91 (A6), Wiks\_92 (A6), XianYue\_88 (A2), Yokurt\_92 (A6), Zaka\_93 (A6), Zimmer\_82 (A12), Zulu\_94 (A6),

#### Start 73:

- Found in 70 of 577 ( 12.1% ) of genes in pham
- Manual Annotations of this start: 3 of 499
- Called 5.7% of time when present
- Phage (with cluster) where this start called: Bigflo\_83 (A3), GingkoMaracino\_86 (A3), StepMih\_86 (A3), Vix\_82 (A3),

#### Start 75:

- Found in 39 of 577 ( 6.8% ) of genes in pham
- Manual Annotations of this start: 2 of 499
- Called 7.7% of time when present
- Phage (with cluster) where this start called: Alma\_89 (A9), Kumao\_107 (singleton), Sunhee\_89 (A14),

#### Start 76:

- Found in 1 of 577 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 499
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LoneWolf\_91 (A9),

#### Start 77:

- Found in 386 of 577 ( 66.9% ) of genes in pham
- Manual Annotations of this start: 327 of 499
- Called 95.3% of time when present
- Phage (with cluster) where this start called: 20ES\_90 (A2), AN3\_88 (A2), AbbyPaige\_90 (A2), AbbysRanger\_79 (A4), Abdiel\_82 (A4), Achebe\_78 (A4), Agape74\_90 (A2), Aglet\_87 (A3), AgronaGT15\_78 (A3), Albee\_83 (A4), Alberto7\_84 (A4), Aliter\_84 (A9), Aneem\_92 (A11), Annyong\_82 (A4), Anselm\_90 (A2), Anthony\_83 (A20), ArcherNM\_84 (A2), Arissanae\_86 (A9), Arturo\_80 (A4), AvatarAhPeg\_83 (A4), Avle17\_83 (A4), Baby16\_83 (A4), Bachome\_89 (A11), Backyardigan\_77 (A4), Badger\_78 (A4), Baehexic\_87 (A2), BangNhom\_80 (A4), Bartimeaus\_83 (A4), Beauxregard13\_85 (A3), Bellris\_88 (A9), BellusTerra\_83 (A4), BengiVuitton\_90 (A2), Benvolio\_87 (A2), BiancaTri92\_86 (A2), Blackmoor\_82 (A4),

BobSwaget\_83 (A2), BogosyJay\_90 (A9), Bombshell\_83 (A4), Bowtie\_87 (A11), BreSam8\_86 (A3), Broseidon\_83 (A4), Bruiser\_82 (A4), BubbleTrouble\_82 (A4), Bud\_84 (A11), Bumblebee11\_78 (A4), Burger\_81 (A4), BuzzBuzz\_80 (A3), Bxz2\_81 (A3), CRB1\_89 (A2), Caelakin\_81 (A4), Calvinny\_84 (A3), Camperdownii\_79 (A4), Catalina\_93 (A9), Celestiallunch\_86 (A9), Centaur\_88 (A2), CentreCat\_83 (A4), Cerulean\_85 (A4), ChampagnePapi\_86 (A4), Changeling\_87 (A2), Chaph\_83 (A4), Chargerpower\_88 (A22), Charm\_86 (A9), ChipMunk\_89 (A2), Cici\_79 (A4), Cindaradix\_78 (A4), Cintron\_83 (A4), Citius\_83 (A4), Clarenza\_82 (A4), ClownCar\_84 (A3), Cocoaberry\_83 (A4), CogOmlette\_88 (A9), Colbster\_82 (A3), Colin\_87 (A2), Commander\_81 (A4), Connomayer\_83 (A4), Conquerage\_89 (A9), Croquant\_83 (A3), Crucio\_88 (A2), Cullens\_87 (A3), DaHudson\_85 (A3), Daishi\_85 (A3), Dalmatian\_88 (A2), Darrell\_89 (A9), Datway\_80 (A4), Deano\_80 (A4), DeerParkTS\_84 (A2), Deloris\_90 (A2), Dhanush\_83 (A4), Dieselweasel\_87 (A3), Dignity\_90 (A2), DirtyDunning\_82 (A4), Drake55\_89 (A2), DreamTeam1\_86 (A9), Druantia\_81 (A4), DudeLittle\_86 (A2), EZMoney23\_84 (A2), Eagle\_82 (A4), Eapen\_83 (A4), Ebony\_90 (A11), Echild\_92 (A2), Eidsmoe\_89 (A9), Elephantoon\_91 (A9), EmyBug\_88 (A9), EpicPhail\_87 (A3), Equemioh13\_88 (A2), Eris\_82 (A4), Eros\_83 (A4), Et2Brutus\_91 (A11), Eurydice\_84 (A4), EvilGenius\_88 (A2), Fameo\_87 (A2), FatCactus\_81 (A20), Fayely\_89 (A9), Fernando\_87 (A3), Fibonacci\_91 (A11), FiringLine\_88 (A2), First\_0089 (A2), Flare16\_88 (A2), Flaverint\_92 (A11), Florean\_83 (A4), Flux\_84 (A4), ForesterFrank\_83 (A2), Funston\_82 (A4), Gadost\_83 (A4), Gail\_90 (A14), Gemma\_84 (A3), Georgie2\_90 (A2), Gilberta\_89 (A11), Gratitude\_86 (A2), Grif\_84 (A3), Groupthink\_87 (A3), Grub\_84 (A3), Grum1\_86 (A3), GtownJaz\_86 (A3), Gwennie\_81 (A3), HamSlice\_79 (A4), Happiness\_82 (A4), HarryHoudini\_88 (A2), HashRod\_87 (A3), HaveUMetTed\_87 (A3), Heffalump\_85 (A2), Heliosoles\_84 (A3), Hercules11\_86 (A3), HippoHollow\_85 (A2), Horex\_90 (A9), Holli\_82 (A4), HortumSL17\_92 (A9), Houdini22\_82 (A4), Hutc2\_88 (A11), Huxley\_72 (A4), ICleared\_82 (A4), Iceman\_81 (A4), Insomnia\_91 (A11), Iracema64\_83 (A4), JHC117\_81 (A3), Jabith\_91 (A11), Jaykayelowell\_80 (A4), Jeeves\_90 (A14), JenCasNa\_87 (A3), JeppNRM\_87 (A3), Jerm\_90 (A2), JetBlade\_84 (A4), Jiawan\_89 (A9), Jobu08\_82 (A3), JoongJeon\_82 (A4), Joselito\_89 (A11), JoshKayV\_91 (A2), KADY\_83 (A3), KFPoly\_82 (A4), Kalb97\_87 (A3), Kalnoky\_87 (A3), Kalpine\_91 (A2), Kampy\_82 (A4), Katalie136\_79 (A4), KekoraPapaka\_80 (A4), Keziacharles14\_88 (A9), Kimba\_88 (A11), KingCyrus\_87 (A2), Kingmustik0402\_83 (A4), Klodlith\_87 (A9), Koan\_80 (A4), Koreni\_82 (A4), Kratark\_82 (A4), Kremtemulon\_80 (A4), Kyee\_83 (A4), LBerry\_87 (A3), LHTSCC\_85 (A4), LadyBird\_92 (A2), LappelDuVide\_83 (A4), Larenn\_87 (A2), LarryKay\_86 (A3), Lemur\_83 (A4), Leviathan\_90 (A2), LilTurb\_89 (A2), Lilith\_84 (A3), Lilleskat\_88 (A9), LionsBait\_87 (A2), LittleB\_83 (A4), LittleGuy\_83 (A4), LochMonster\_84 (A4), Lokk\_84 (A2), Lorenzo\_83 (A4), Louie6\_85 (A3), Iowa\_83 (A3), Luchador\_87 (A14), Lucivia\_92 (A11), LugYA\_89 (A3), Lunsford\_83 (A4), MaCh\_91 (A11), Mabel\_91 (A11), MadMarie\_84 (A3), Mainiac\_85 (A3), Malec\_87 (A2), Malinsilva\_89 (A3), Maminiaina\_90 (A9), Manu\_86 (A3), MarQuardt\_86 (A3), Marie\_84 (A3), Marius\_87 (A3), Maverick\_82 (A4), Maxo\_85 (A4), Mazhar510\_83 (A4), Medusa\_82 (A4), MeeZee\_82 (A4), MegTheThird\_87 (A9), Melvin\_85 (A4), Methuselah\_79 (A3), Microwolf\_82 (A3), MiculUcigas\_88 (A2), Miko\_85 (A2), Millski\_82 (A4), Minispark\_88 (A9), Miramae\_83 (A4), Misomonster\_82 (A3), MissWhite\_83 (A2), MoneyMay\_86 (A3), Montavir\_81 (A3), Morpher26\_79 (A4), Morrow\_85 (A4), Mulciber\_90 (A11), Munch\_90 (A11), Mundrea\_81 (A4), Myxus\_91 (A9), NaSiaTalie\_89 (A2), Nebs\_84 (A4), Nemo27\_82 (A4), NicoleTera\_87 (A2), Noelle\_80 (A4), NorthStar\_80 (A4), NotAPhaseMom\_82 (A4), Nyxis\_82 (A4), OKaNui\_82 (A4), Obama12\_84 (A4), Ohfah\_84 (A4), OlanP\_85 (A3), Ollie\_86 (A3), Orange\_91 (A11), P28Green\_86 (A3), PGHhamlin\_88 (A3), PackMan\_86 (A9), Palestino\_82 (A4), Pawn\_85 (A3),

Peaches\_81 (A4), Pembroke\_86 (A3), Penny1\_86 (A3), Perplexer\_79 (A4), PeterPeter\_83 (A4), Petersenfast\_85 (A11), PetiteSangsue\_79 (A4), Phacado\_83 (A4), Phaeder\_91 (A9), Phelipe\_83 (A4), Phighter1804\_83 (A4), PhishRPhriends\_83 (A3), Phoebe\_87 (A3), Phontbonne\_83 (A4), Phranny\_79 (A3), Pipcraft\_79 (A4), Piro94\_87 (A2), Polymorphads\_84 (A4), PotatoSplit\_87 (A3), Power\_88 (A2), Priya\_89 (A9), Prudy\_83 (A2), Pumbaa\_83 (A4), Qobbit\_89 (A9), QueenB2\_85 (A2), QueenBeesly\_88 (A2), RGL3\_54 (CA), Rachaly\_86 (A2), Rahalelujah\_90 (A9), Reba\_82 (A3), Relief\_82 (A4), Retro23\_88 (A2), RockieBear\_80 (A4), Romney\_82 (A4), Roosevelt\_81 (A4), Rosa24\_79 (A4), Ruin\_83 (A4), Rummer\_85 (A3), RyeScarlet\_92 (A9), Sabertooth\_83 (A4), Sabia\_84 (A3), Sabinator\_84 (A3), Salz\_87 (A11), Saskia\_88 (A11), Scamp\_83 (A4), Scherzo\_89 (A9), SemperFi\_88 (A2), SenorClean\_84 (A4), Shaka\_81 (A4), Sham4\_88 (A11), SheaKeira\_86 (A9), SheldonCooper\_83 (A4), Shygu2\_81 (A4), Skipitt\_82 (A4), Sknot\_88 (A2), Smeagan\_91 (A2), SnapTap\_88 (A2), Snape\_91 (A11), Snickers\_86 (A3), SoYo\_83 (A3), SoilDragon\_86 (A3), SororFago\_87 (A14), Soshari\_88 (A3), Sparxx\_84 (A4), Spike509\_86 (A3), Spino\_82 (A4), Spouty\_89 (A9), SteMason\_79 (A4), Stink\_83 (A4), Sultana\_83 (A4), SweetiePie\_88 (A2), Taquarus\_82 (A4), TarsusIV\_87 (A2), Taurus\_87 (A3), Terrific\_89 (A2), Thanksgivukkah\_82 (A4), Tiffany\_85 (A3), Timothy\_91 (A11), TinaFeyge\_81 (A4), TinyPebbles\_85 (A3), TinyTimmy\_89 (A11), Tinybot\_82 (A4), TiroTheta9\_82 (A4), Toaka\_89 (A9), Trixie\_88 (A2), TroyPia\_84 (A4), Tubs\_91 (A9), Turbido\_89 (A2), TygerBlood\_83 (A4), Ulysses\_82 (A4), Updawg\_89 (A2), VA6\_88 (A2), Wander\_83 (A4), Watson\_85 (A3), WeiHuaDA\_90 (A2), Whabigail7\_87 (A2), WideWale\_89 (A2), Wilbur\_83 (A4), Wile\_78 (A4), Wizard007\_79 (A4), Wolpertinger\_91 (A11), Wooldri\_88 (A3), WorldCup\_89 (A9), Xena\_79 (A4), Yecey3\_92 (A9), YoSam321\_83 (A4),

Start 79:

- Found in 156 of 577 ( 27.0% ) of genes in pham
- Manual Annotations of this start: 8 of 499
- Called 9.6% of time when present
- Phage (with cluster) where this start called: Anubis\_90 (A3), Ayanochan\_89 (A9), Beemo\_91 (A9), BennyP\_92 (A6), EdogawaKiddo\_90 (A9), ExplosioNervosa\_89 (A9), Garak\_94 (A6), Hanray\_89 (A9), IronMan\_85 (A2), Onglai\_89 (A9), Phonnegut\_91 (A9), Pioneer\_91 (A9), Roksolana\_93 (A6), Sachima\_87 (A9), Ugenie5\_78 (A9),

Start 84:

- Found in 346 of 577 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 1 of 499
- Called 0.3% of time when present
- Phage (with cluster) where this start called: Vanisoa\_86 (A9),

### Summary by clusters:

There are 21 clusters represented in this pham: A20, AA, singleton, A11, A10, A14, CA, M2, A19, A17, A22, A12, A3, A2, M1, A4, A7, A6, A9, K7, M3,

Info for manual annotations of cluster A10:

- Start number 61 was manually annotated 15 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 77 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 67 was manually annotated 1 time for cluster A12.
- Start number 70 was manually annotated 3 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 77 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A19:

- Start number 60 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 38 was manually annotated 3 times for cluster A2.
- Start number 48 was manually annotated 1 time for cluster A2.
- Start number 65 was manually annotated 7 times for cluster A2.
- Start number 66 was manually annotated 2 times for cluster A2.
- Start number 68 was manually annotated 2 times for cluster A2.
- Start number 70 was manually annotated 19 times for cluster A2.
- Start number 77 was manually annotated 61 times for cluster A2.
- Start number 79 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 77 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A22:

- Start number 77 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A3:

- Start number 55 was manually annotated 8 times for cluster A3.
- Start number 58 was manually annotated 9 times for cluster A3.
- Start number 60 was manually annotated 6 times for cluster A3.
- Start number 61 was manually annotated 5 times for cluster A3.
- Start number 64 was manually annotated 1 time for cluster A3.
- Start number 73 was manually annotated 3 times for cluster A3.
- Start number 77 was manually annotated 71 times for cluster A3.
- Start number 79 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A4:

- Start number 61 was manually annotated 1 time for cluster A4.
- Start number 77 was manually annotated 138 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 70 was manually annotated 45 times for cluster A6.
- Start number 79 was manually annotated 1 time for cluster A6.

Info for manual annotations of cluster A7:

- Start number 60 was manually annotated 5 times for cluster A7.

Info for manual annotations of cluster A9:

- Start number 75 was manually annotated 1 time for cluster A9.
- Start number 76 was manually annotated 1 time for cluster A9.
- Start number 77 was manually annotated 27 times for cluster A9.
- Start number 79 was manually annotated 5 times for cluster A9.

- Start number 84 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AA:

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

Info for manual annotations of cluster K7:

- Start number 63 was manually annotated 1 time for cluster K7.

Info for manual annotations of cluster M1:

- Start number 56 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 56 was manually annotated 4 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 56 was manually annotated 1 time for cluster M3.

### **Gene Information:**

Gene: 20ES\_90 Start: 49778, Stop: 49425, Start Num: 77

Candidate Starts for 20ES\_90:

(Start: 77 @49778 has 327 MA's), (Start: 84 @49742 has 1 MA's), (92, 49676), (99, 49628), (112, 49562), (139, 49439),

Gene: 40AC\_85 Start: 50012, Stop: 49629, Start Num: 70

Candidate Starts for 40AC\_85:

(46, 50072), (57, 50042), (Start: 70 @50012 has 67 MA's), (Start: 79 @49991 has 8 MA's), (Start: 84 @49946 has 1 MA's), (85, 49934), (89, 49901), (91, 49880), (97, 49856), (99, 49829), (104, 49793), (105, 49790),

Gene: AN3\_88 Start: 48036, Stop: 47689, Start Num: 77

Candidate Starts for AN3\_88:

(32, 48150), (Start: 77 @48036 has 327 MA's), (Start: 84 @48000 has 1 MA's), (92, 47934), (96, 47922), (99, 47886), (112, 47820), (139, 47703),

Gene: AbbyPaige\_90 Start: 49905, Stop: 49552, Start Num: 77

Candidate Starts for AbbyPaige\_90:

(36, 50007), (Start: 38 @50001 has 3 MA's), (Start: 77 @49905 has 327 MA's), (Start: 84 @49869 has 1 MA's), (92, 49803), (99, 49755), (112, 49689), (139, 49566),

Gene: AbbysRanger\_79 Start: 48052, Stop: 47699, Start Num: 77

Candidate Starts for AbbysRanger\_79:

(Start: 77 @48052 has 327 MA's), (Start: 84 @48016 has 1 MA's), (91, 47953), (96, 47938), (98, 47926), (99, 47902), (107, 47854), (118, 47824), (138, 47728), (139, 47713),

Gene: Abdiel\_82 Start: 48428, Stop: 48075, Start Num: 77

Candidate Starts for Abdiel\_82:

(Start: 77 @48428 has 327 MA's), (Start: 84 @48392 has 1 MA's), (91, 48329), (112, 48212), (118, 48200), (138, 48104), (139, 48089),

Gene: Achebe\_78 Start: 48031, Stop: 47678, Start Num: 77

Candidate Starts for Achebe\_78:

(Start: 77 @48031 has 327 MA's), (Start: 84 @47995 has 1 MA's), (91, 47932), (99, 47881), (112, 47815), (118, 47803), (138, 47707), (139, 47692),

Gene: Acolyte\_82 Start: 48841, Stop: 48461, Start Num: 70

Candidate Starts for Acolyte\_82:

(Start: 70 @48841 has 67 MA's), (Start: 79 @48820 has 8 MA's), (89, 48730), (97, 48685), (98, 48682), (99, 48658), (104, 48622),

Gene: Adzzy\_90 Start: 48766, Stop: 48386, Start Num: 70

Candidate Starts for Adzzy\_90:

(Start: 66 @48772 has 2 MA's), (Start: 70 @48766 has 67 MA's), (Start: 79 @48745 has 8 MA's), (85, 48688), (88, 48679), (89, 48655), (91, 48634), (97, 48610), (102, 48562),

Gene: Agape74\_90 Start: 49881, Stop: 49528, Start Num: 77

Candidate Starts for Agape74\_90:

(8, 50133), (11, 50091), (36, 49983), (Start: 38 @49977 has 3 MA's), (Start: 77 @49881 has 327 MA's), (Start: 84 @49845 has 1 MA's), (92, 49779), (99, 49731), (112, 49665), (139, 49542),

Gene: Aglet\_87 Start: 47779, Stop: 47396, Start Num: 77

Candidate Starts for Aglet\_87:

(Start: 73 @47785 has 3 MA's), (Start: 75 @47782 has 2 MA's), (Start: 77 @47779 has 327 MA's), (83, 47737), (91, 47662), (92, 47659), (108, 47560), (115, 47530),

Gene: AgronaGT15\_78 Start: 45756, Stop: 45373, Start Num: 77

Candidate Starts for AgronaGT15\_78:

(Start: 73 @45762 has 3 MA's), (Start: 75 @45759 has 2 MA's), (Start: 77 @45756 has 327 MA's), (91, 45639), (92, 45636), (108, 45537), (115, 45507),

Gene: Albee\_83 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Albee\_83:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Alberto7\_84 Start: 48753, Stop: 48400, Start Num: 77

Candidate Starts for Alberto7\_84:

(Start: 77 @48753 has 327 MA's), (Start: 84 @48717 has 1 MA's), (118, 48525), (122, 48510), (138, 48429), (139, 48414),

Gene: Aliter\_84 Start: 46628, Stop: 46275, Start Num: 77

Candidate Starts for Aliter\_84:

(Start: 77 @46628 has 327 MA's), (Start: 79 @46622 has 8 MA's), (Start: 84 @46592 has 1 MA's), (89, 46550), (91, 46529), (122, 46385), (139, 46289),

Gene: Alma\_89 Start: 49473, Stop: 49117, Start Num: 75

Candidate Starts for Alma\_89:

(71, 49482), (Start: 75 @49473 has 2 MA's), (Start: 77 @49470 has 327 MA's), (Start: 79 @49464 has 8 MA's), (Start: 84 @49434 has 1 MA's), (89, 49392), (91, 49371), (122, 49227), (139, 49131),

Gene: Aminay\_76 Start: 49123, Stop: 49491, Start Num: 63

Candidate Starts for Aminay\_76:

(Start: 63 @49123 has 3 MA's), (Start: 64 @49126 has 1 MA's), (81, 49171), (87, 49210), (89, 49225), (98, 49273), (103, 49321), (104, 49333), (105, 49336), (107, 49345), (120, 49375), (124, 49408), (128, 49432), (133, 49450), (136, 49456), (145, 49486),

Gene: Aneem\_92 Start: 48945, Stop: 48592, Start Num: 77

Candidate Starts for Aneem\_92:

(72, 48948), (Start: 77 @48945 has 327 MA's), (85, 48900), (89, 48867), (91, 48846), (96, 48831), (99, 48795), (113, 48726), (122, 48702), (139, 48606),

Gene: AnnaL29\_90 Start: 49983, Stop: 49630, Start Num: 38

Candidate Starts for AnnaL29\_90:

(Start: 38 @49983 has 3 MA's), (Start: 84 @49947 has 1 MA's), (92, 49881), (96, 49869), (99, 49833), (112, 49767), (113, 49764), (139, 49644),

Gene: Annyong\_82 Start: 48461, Stop: 48108, Start Num: 77

Candidate Starts for Annyong\_82:

(Start: 77 @48461 has 327 MA's), (Start: 84 @48425 has 1 MA's), (118, 48233), (122, 48218), (138, 48137), (139, 48122),

Gene: Anselm\_90 Start: 49888, Stop: 49535, Start Num: 77

Candidate Starts for Anselm\_90:

(Start: 77 @49888 has 327 MA's), (Start: 84 @49852 has 1 MA's), (85, 49843), (92, 49786), (99, 49738), (112, 49672), (139, 49549),

Gene: Anthony\_83 Start: 48707, Stop: 48354, Start Num: 77

Candidate Starts for Anthony\_83:

(Start: 77 @48707 has 327 MA's), (80, 48695), (89, 48629), (91, 48608), (92, 48605), (96, 48593), (104, 48521), (143, 48365),

Gene: Anubis\_90 Start: 47664, Stop: 47287, Start Num: 79

Candidate Starts for Anubis\_90:

(23, 47829), (49, 47739), (51, 47730), (Start: 64 @47700 has 1 MA's), (Start: 73 @47676 has 3 MA's), (Start: 77 @47670 has 327 MA's), (Start: 79 @47664 has 8 MA's), (83, 47628), (91, 47553), (92, 47550), (108, 47451), (115, 47421),

Gene: ArcherNM\_84 Start: 49422, Stop: 49075, Start Num: 77

Candidate Starts for ArcherNM\_84:

(Start: 77 @49422 has 327 MA's), (Start: 84 @49386 has 1 MA's), (92, 49320), (99, 49272), (112, 49206), (122, 49185), (139, 49089),

Gene: Arissanae\_86 Start: 49335, Stop: 48982, Start Num: 77

Candidate Starts for Arissanae\_86:

(14, 49536), (15, 49527), (Start: 58 @49380 has 9 MA's), (Start: 70 @49350 has 67 MA's), (Start: 77 @49335 has 327 MA's), (Start: 84 @49299 has 1 MA's), (89, 49257), (99, 49185), (112, 49119), (139, 48996),

Gene: Artemis2UCLA\_92 Start: 48310, Stop: 47930, Start Num: 70

Candidate Starts for Artemis2UCLA\_92:

(33, 48412), (Start: 70 @48310 has 67 MA's), (Start: 79 @48289 has 8 MA's), (Start: 84 @48244 has 1 MA's), (85, 48232), (91, 48178), (96, 48163), (97, 48154), (98, 48151), (104, 48091), (105, 48088), (127, 47998), (137, 47965),

Gene: Arturo\_80 Start: 48544, Stop: 48191, Start Num: 77

Candidate Starts for Arturo\_80:

(Start: 77 @48544 has 327 MA's), (Start: 84 @48508 has 1 MA's), (118, 48316), (122, 48301), (138, 48220), (139, 48205),

Gene: Auspice\_150 Start: 76253, Stop: 75846, Start Num: 56

Candidate Starts for Auspice\_150:

(37, 76304), (Start: 56 @76253 has 20 MA's), (89, 76127), (92, 76103), (97, 76082), (98, 76079), (108, 76004), (114, 75983), (130, 75899), (137, 75881),

Gene: AvatarAhPeg\_83 Start: 48669, Stop: 48316, Start Num: 77

Candidate Starts for AvatarAhPeg\_83:

(Start: 77 @48669 has 327 MA's), (Start: 84 @48633 has 1 MA's), (91, 48570), (99, 48519), (107, 48471), (108, 48468), (112, 48453), (118, 48441), (138, 48345), (139, 48330),

Gene: Avle17\_83 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for Avle17\_83:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (91, 48311), (118, 48182), (122, 48167), (138, 48086), (139, 48071),

Gene: Ayanochan\_89 Start: 49245, Stop: 48898, Start Num: 79

Candidate Starts for Ayanochan\_89:

(Start: 77 @49251 has 327 MA's), (Start: 79 @49245 has 8 MA's), (Start: 84 @49215 has 1 MA's), (89, 49173), (91, 49152), (122, 49008), (139, 48912),

Gene: Aziz\_162 Start: 78171, Stop: 77764, Start Num: 56

Candidate Starts for Aziz\_162:

(28, 78252), (37, 78222), (Start: 56 @78171 has 20 MA's), (Start: 79 @78117 has 8 MA's), (86, 78075), (89, 78045), (92, 78021), (94, 78018), (108, 77922), (130, 77817),

Gene: BABullseye\_84 Start: 46645, Stop: 46265, Start Num: 70

Candidate Starts for BABullseye\_84:

(33, 46747), (Start: 70 @46645 has 67 MA's), (Start: 79 @46624 has 8 MA's), (Start: 84 @46579 has 1 MA's), (85, 46567), (91, 46513), (96, 46498), (97, 46489), (104, 46426), (105, 46423), (127, 46333), (137, 46300),

Gene: Baby16\_83 Start: 48427, Stop: 48074, Start Num: 77

Candidate Starts for Baby16\_83:

(Start: 77 @48427 has 327 MA's), (Start: 84 @48391 has 1 MA's), (118, 48199), (122, 48184), (138, 48103), (139, 48088),

Gene: BabyBack\_85 Start: 50269, Stop: 49889, Start Num: 65

Candidate Starts for BabyBack\_85:

(Start: 48 @50311 has 1 MA's), (Start: 65 @50269 has 7 MA's), (85, 50191), (91, 50137), (97, 50113), (98, 50110), (99, 50086), (104, 50050), (125, 49966), (139, 49903),

Gene: BabyJohn\_67 Start: 44193, Stop: 43780, Start Num: 55

Candidate Starts for BabyJohn\_67:

(20, 44307), (Start: 55 @44193 has 8 MA's), (Start: 70 @44169 has 67 MA's), (89, 44076), (99, 44004), (132, 43833),

Gene: BabyRay\_85 Start: 47530, Stop: 47117, Start Num: 61

Candidate Starts for BabyRay\_85:

(Start: 61 @47530 has 21 MA's), (89, 47413), (99, 47341), (104, 47305), (132, 47170),

Gene: Bachome\_89 Start: 47993, Stop: 47640, Start Num: 77

Candidate Starts for Bachome\_89:

(72, 47996), (Start: 77 @47993 has 327 MA's), (Start: 84 @47957 has 1 MA's), (90, 47912), (92, 47891), (96, 47879), (99, 47843), (104, 47807), (139, 47654),

Gene: Backyardigan\_77 Start: 48068, Stop: 47715, Start Num: 77

Candidate Starts for Backyardigan\_77:

(Start: 77 @48068 has 327 MA's), (Start: 84 @48032 has 1 MA's), (91, 47969), (96, 47954), (98, 47942), (99, 47918), (107, 47870), (118, 47840), (138, 47744), (139, 47729),

Gene: Bactobuster\_80 Start: 48766, Stop: 48386, Start Num: 66

Candidate Starts for Bactobuster\_80:

(Start: 48 @48808 has 1 MA's), (Start: 66 @48766 has 2 MA's), (Start: 79 @48745 has 8 MA's), (85, 48688), (91, 48634), (97, 48610), (98, 48607), (99, 48583), (101, 48568), (104, 48547),

Gene: Badger\_78 Start: 48034, Stop: 47681, Start Num: 77

Candidate Starts for Badger\_78:

(Start: 77 @48034 has 327 MA's), (Start: 84 @47998 has 1 MA's), (91, 47935), (96, 47920), (98, 47908), (99, 47884), (107, 47836), (118, 47806), (138, 47710), (139, 47695),

Gene: Baehexic\_87 Start: 49162, Stop: 48815, Start Num: 77

Candidate Starts for Baehexic\_87:

(36, 49264), (Start: 38 @49258 has 3 MA's), (Start: 77 @49162 has 327 MA's), (Start: 84 @49126 has 1 MA's), (92, 49060), (99, 49012), (112, 48946), (122, 48925), (139, 48829),

Gene: BangNhom\_80 Start: 48853, Stop: 48500, Start Num: 77

Candidate Starts for BangNhom\_80:

(Start: 77 @48853 has 327 MA's), (Start: 84 @48817 has 1 MA's), (91, 48754), (112, 48637), (118, 48625), (138, 48529), (139, 48514),

Gene: Bartimeaus\_83 Start: 48418, Stop: 48065, Start Num: 77

Candidate Starts for Bartimeaus\_83:

(Start: 77 @48418 has 327 MA's), (Start: 84 @48382 has 1 MA's), (118, 48190), (122, 48175), (138, 48094), (139, 48079),

Gene: Beauxregard13\_85 Start: 47787, Stop: 47404, Start Num: 77

Candidate Starts for Beauxregard13\_85:

(Start: 73 @47793 has 3 MA's), (Start: 75 @47790 has 2 MA's), (Start: 77 @47787 has 327 MA's), (83, 47745), (91, 47670), (92, 47667), (108, 47568), (115, 47538),

Gene: Beemo\_91 Start: 49455, Stop: 49108, Start Num: 79

Candidate Starts for Beemo\_91:

(Start: 77 @49461 has 327 MA's), (Start: 79 @49455 has 8 MA's), (Start: 84 @49425 has 1 MA's), (89, 49383), (91, 49362), (122, 49218), (139, 49122),

Gene: Bellris\_88 Start: 48983, Stop: 48630, Start Num: 77

Candidate Starts for Bellris\_88:

(Start: 77 @48983 has 327 MA's), (Start: 84 @48947 has 1 MA's), (89, 48905), (105, 48794), (112, 48767), (139, 48644),

Gene: BellusTerra\_83 Start: 48281, Stop: 47928, Start Num: 77

Candidate Starts for BellusTerra\_83:

(Start: 77 @48281 has 327 MA's), (Start: 84 @48245 has 1 MA's), (118, 48053), (122, 48038), (138, 47957), (139, 47942),

Gene: BengiVuitton\_90 Start: 49877, Stop: 49530, Start Num: 77

Candidate Starts for BengiVuitton\_90:

(Start: 77 @49877 has 327 MA's), (Start: 84 @49841 has 1 MA's), (98, 49751), (99, 49727), (112, 49661), (139, 49544),

Gene: BennyP\_92 Start: 48466, Stop: 48107, Start Num: 79

Candidate Starts for BennyP\_92:

(33, 48589), (Start: 70 @48487 has 67 MA's), (Start: 79 @48466 has 8 MA's), (Start: 84 @48421 has 1 MA's), (85, 48409), (91, 48355), (96, 48340), (97, 48331), (98, 48328), (104, 48268), (105, 48265), (127, 48175), (137, 48142),

Gene: Benvolio\_87 Start: 49504, Stop: 49151, Start Num: 77

Candidate Starts for Benvolio\_87:

(43, 49585), (Start: 77 @49504 has 327 MA's), (Start: 84 @49468 has 1 MA's), (92, 49402), (99, 49354), (112, 49288), (139, 49165),

Gene: BiancaTri92\_86 Start: 49338, Stop: 48985, Start Num: 77

Candidate Starts for BiancaTri92\_86:

(Start: 77 @49338 has 327 MA's), (Start: 84 @49302 has 1 MA's), (99, 49188), (107, 49140), (108, 49137), (112, 49122), (139, 48999),

Gene: Bigflo\_83 Start: 47784, Stop: 47395, Start Num: 73

Candidate Starts for Bigflo\_83:

(23, 47937), (49, 47847), (51, 47838), (Start: 64 @47808 has 1 MA's), (Start: 73 @47784 has 3 MA's), (Start: 77 @47778 has 327 MA's), (Start: 79 @47772 has 8 MA's), (91, 47661), (92, 47658), (108, 47559), (115, 47529),

Gene: Blackmoor\_82 Start: 48418, Stop: 48065, Start Num: 77

Candidate Starts for Blackmoor\_82:

(Start: 77 @48418 has 327 MA's), (Start: 84 @48382 has 1 MA's), (118, 48190), (122, 48175), (138, 48094), (139, 48079),

Gene: BlessJoy\_93 Start: 48834, Stop: 48454, Start Num: 70

Candidate Starts for BlessJoy\_93:

(33, 48936), (Start: 70 @48834 has 67 MA's), (Start: 79 @48813 has 8 MA's), (Start: 84 @48768 has 1 MA's), (85, 48756), (91, 48702), (96, 48687), (97, 48678), (98, 48675), (104, 48615), (105, 48612), (127, 48522), (137, 48489),

Gene: Blinn1\_93 Start: 48557, Stop: 48177, Start Num: 70

Candidate Starts for Blinn1\_93:

(10, 48755), (24, 48701), (43, 48629), (44, 48626), (47, 48617), (Start: 70 @48557 has 67 MA's), (Start: 79 @48536 has 8 MA's), (Start: 84 @48491 has 1 MA's), (85, 48479), (91, 48425), (96, 48410), (97, 48401), (104, 48338), (105, 48335), (127, 48245), (137, 48212),

Gene: Blue7\_94 Start: 48544, Stop: 48164, Start Num: 70

Candidate Starts for Blue7\_94:

(33, 48646), (Start: 70 @48544 has 67 MA's), (Start: 79 @48523 has 8 MA's), (Start: 84 @48478 has 1 MA's), (85, 48466), (91, 48412), (96, 48397), (97, 48388), (98, 48385), (104, 48325), (105, 48322), (127, 48232), (137, 48199),

Gene: BlueBird\_88 Start: 47971, Stop: 47552, Start Num: 58

Candidate Starts for BlueBird\_88:

(Start: 58 @47971 has 9 MA's), (Start: 70 @47941 has 67 MA's), (Start: 84 @47890 has 1 MA's), (99, 47776), (104, 47740), (132, 47605),

Gene: BobSwaget\_83 Start: 47356, Stop: 47003, Start Num: 77

Candidate Starts for BobSwaget\_83:

(Start: 77 @47356 has 327 MA's), (Start: 84 @47320 has 1 MA's), (92, 47254), (99, 47206), (112, 47140), (139, 47017),

Gene: BogosyJay\_90 Start: 49514, Stop: 49161, Start Num: 77

Candidate Starts for BogosyJay\_90:

(Start: 77 @49514 has 327 MA's), (Start: 84 @49478 has 1 MA's), (89, 49436), (91, 49415), (122, 49271), (139, 49175),

Gene: Bombshell\_83 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Bombshell\_83:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: Bongo\_144 Start: 75110, Stop: 74703, Start Num: 56

Candidate Starts for Bongo\_144:

(Start: 56 @75110 has 20 MA's), (89, 74984), (92, 74960), (97, 74939), (98, 74936), (108, 74861), (114, 74840), (130, 74756), (137, 74738),

Gene: Bowtie\_87 Start: 47552, Stop: 47199, Start Num: 77

Candidate Starts for Bowtie\_87:

(72, 47555), (Start: 77 @47552 has 327 MA's), (85, 47507), (89, 47474), (91, 47453), (96, 47438), (99, 47402), (113, 47333), (122, 47309), (139, 47213),

Gene: Bradman\_92 Start: 49070, Stop: 48690, Start Num: 70

Candidate Starts for Bradman\_92:

(Start: 70 @49070 has 67 MA's), (Start: 79 @49049 has 8 MA's), (88, 48983), (89, 48959), (91, 48938), (97, 48914), (98, 48911), (104, 48851), (122, 48800), (139, 48704),

Gene: BreSam8\_86 Start: 47772, Stop: 47389, Start Num: 77

Candidate Starts for BreSam8\_86:

(23, 47931), (49, 47841), (51, 47832), (Start: 64 @47802 has 1 MA's), (Start: 73 @47778 has 3 MA's), (Start: 77 @47772 has 327 MA's), (Start: 79 @47766 has 8 MA's), (91, 47655), (92, 47652), (108, 47553), (115, 47523),

Gene: Bricole\_152 Start: 76016, Stop: 75609, Start Num: 56

Candidate Starts for Bricole\_152:

(Start: 56 @76016 has 20 MA's), (89, 75890), (92, 75866), (97, 75845), (98, 75842), (108, 75767), (114, 75746), (130, 75662), (137, 75644),

Gene: Broseidon\_83 Start: 48419, Stop: 48066, Start Num: 77

Candidate Starts for Broseidon\_83:

(Start: 77 @48419 has 327 MA's), (Start: 84 @48383 has 1 MA's), (118, 48191), (122, 48176), (138, 48095), (139, 48080),

Gene: Bruiser\_82 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Bruiser\_82:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: BubbleTrouble\_82 Start: 48443, Stop: 48090, Start Num: 77

Candidate Starts for BubbleTrouble\_82:

(Start: 77 @48443 has 327 MA's), (Start: 84 @48407 has 1 MA's), (118, 48215), (122, 48200), (138, 48119), (139, 48104),

Gene: Bud\_84 Start: 47651, Stop: 47298, Start Num: 77

Candidate Starts for Bud\_84:

(72, 47654), (Start: 77 @47651 has 327 MA's), (85, 47606), (89, 47573), (91, 47552), (96, 47537), (99, 47501), (113, 47432), (122, 47408), (139, 47312),

Gene: Bugatti\_87 Start: 47971, Stop: 47552, Start Num: 58

Candidate Starts for Bugatti\_87:

(Start: 58 @47971 has 9 MA's), (Start: 70 @47941 has 67 MA's), (Start: 84 @47890 has 1 MA's), (99, 47776), (104, 47740), (132, 47605),

Gene: Bumblebee11\_78 Start: 48034, Stop: 47681, Start Num: 77

Candidate Starts for Bumblebee11\_78:

(Start: 77 @48034 has 327 MA's), (Start: 84 @47998 has 1 MA's), (91, 47935), (96, 47920), (98, 47908), (99, 47884), (107, 47836), (118, 47806), (138, 47710), (139, 47695),

Gene: Burger\_81 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Burger\_81:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: BuzzBuzz\_80 Start: 47812, Stop: 47429, Start Num: 77

Candidate Starts for BuzzBuzz\_80:

(Start: 73 @47818 has 3 MA's), (Start: 75 @47815 has 2 MA's), (Start: 77 @47812 has 327 MA's), (83, 47770), (91, 47695), (92, 47692), (108, 47593), (115, 47563),

Gene: Bxz2\_81 Start: 47819, Stop: 47436, Start Num: 77

Candidate Starts for Bxz2\_81:

(Start: 73 @47825 has 3 MA's), (Start: 75 @47822 has 2 MA's), (Start: 77 @47819 has 327 MA's), (91, 47702), (92, 47699), (108, 47600), (115, 47570),

Gene: CRB1\_89 Start: 49969, Stop: 49622, Start Num: 77

Candidate Starts for CRB1\_89:

(25, 50119), (Start: 77 @49969 has 327 MA's), (Start: 84 @49933 has 1 MA's), (92, 49867), (99, 49819), (112, 49753), (139, 49636),

Gene: Caelakin\_81 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Caelakin\_81:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Calvinny\_84 Start: 47828, Stop: 47439, Start Num: 77

Candidate Starts for Calvinny\_84:

(Start: 77 @47828 has 327 MA's), (91, 47711), (92, 47708), (108, 47609),

Gene: Camperdownii\_79 Start: 47659, Stop: 47306, Start Num: 77

Candidate Starts for Camperdownii\_79:

(Start: 77 @47659 has 327 MA's), (Start: 84 @47623 has 1 MA's), (99, 47509), (107, 47461), (112, 47443), (118, 47431), (138, 47335), (139, 47320),

Gene: Candra\_89 Start: 48349, Stop: 47969, Start Num: 70

Candidate Starts for Candra\_89:

(33, 48451), (Start: 70 @48349 has 67 MA's), (Start: 79 @48328 has 8 MA's), (Start: 84 @48283 has 1 MA's), (85, 48271), (91, 48217), (96, 48202), (97, 48193), (104, 48130), (105, 48127), (127, 48037), (137, 48004),

Gene: Caraxes\_90 Start: 48723, Stop: 48343, Start Num: 70

Candidate Starts for Caraxes\_90:

(Start: 70 @48723 has 67 MA's), (Start: 79 @48702 has 8 MA's), (88, 48636), (91, 48591), (94, 48585), (97, 48567), (102, 48519), (116, 48465),

Gene: Catalina\_93 Start: 49575, Stop: 49222, Start Num: 77

Candidate Starts for Catalina\_93:

(Start: 77 @49575 has 327 MA's), (Start: 79 @49569 has 8 MA's), (Start: 84 @49539 has 1 MA's), (89, 49497), (91, 49476), (122, 49332), (139, 49236),

Gene: Caviar\_74 Start: 44633, Stop: 44208, Start Num: 55

Candidate Starts for Caviar\_74:

(26, 44723), (Start: 55 @44633 has 8 MA's), (Start: 60 @44624 has 12 MA's), (Start: 70 @44597 has 67 MA's), (89, 44504), (129, 44276), (132, 44261),

Gene: Celestiallunch\_86 Start: 48715, Stop: 48362, Start Num: 77

Candidate Starts for Celestiallunch\_86:

(Start: 77 @48715 has 327 MA's), (Start: 79 @48709 has 8 MA's), (80, 48703), (99, 48565), (108, 48514), (112, 48499), (138, 48391), (139, 48376),

Gene: Centaur\_88 Start: 49029, Stop: 48682, Start Num: 77

Candidate Starts for Centaur\_88:

(36, 49131), (Start: 38 @49125 has 3 MA's), (Start: 77 @49029 has 327 MA's), (Start: 84 @48993 has 1 MA's), (92, 48927), (99, 48879), (112, 48813), (122, 48792), (139, 48696),

Gene: CentreCat\_83 Start: 48456, Stop: 48103, Start Num: 77

Candidate Starts for CentreCat\_83:

(Start: 77 @48456 has 327 MA's), (Start: 84 @48420 has 1 MA's), (91, 48357), (112, 48240), (118, 48228), (138, 48132), (139, 48117),

Gene: Cerulean\_85 Start: 48854, Stop: 48501, Start Num: 77

Candidate Starts for Cerulean\_85:

(Start: 77 @48854 has 327 MA's), (Start: 84 @48818 has 1 MA's), (91, 48755), (112, 48638), (118, 48626), (138, 48530), (139, 48515),

Gene: ChampagnePapi\_86 Start: 48856, Stop: 48503, Start Num: 77

Candidate Starts for ChampagnePapi\_86:

(Start: 77 @48856 has 327 MA's), (Start: 84 @48820 has 1 MA's), (91, 48757), (112, 48640), (118, 48628), (138, 48532), (139, 48517),

Gene: Changeling\_87 Start: 49974, Stop: 49618, Start Num: 77

Candidate Starts for Changeling\_87:

(Start: 77 @49974 has 327 MA's), (Start: 84 @49938 has 1 MA's), (89, 49896), (93, 49869), (96, 49857), (99, 49821), (105, 49782), (108, 49770), (118, 49743), (138, 49647), (139, 49632),

Gene: Chaph\_83 Start: 48427, Stop: 48074, Start Num: 77

Candidate Starts for Chaph\_83:

(Start: 77 @48427 has 327 MA's), (Start: 84 @48391 has 1 MA's), (91, 48328), (118, 48199), (122, 48184), (138, 48103), (139, 48088),

Gene: Chargerpower\_88 Start: 48024, Stop: 47668, Start Num: 77

Candidate Starts for Chargerpower\_88:

(Start: 77 @48024 has 327 MA's), (Start: 84 @47988 has 1 MA's), (93, 47919), (118, 47793), (138, 47697), (139, 47682),

Gene: Charm\_86 Start: 48867, Stop: 48514, Start Num: 77

Candidate Starts for Charm\_86:

(Start: 77 @48867 has 327 MA's), (80, 48855), (Start: 84 @48831 has 1 MA's), (108, 48666), (112, 48651), (122, 48624), (139, 48528),

Gene: Chartreuse\_90 Start: 47650, Stop: 47270, Start Num: 70

Candidate Starts for Chartreuse\_90:

(33, 47752), (Start: 70 @47650 has 67 MA's), (Start: 79 @47629 has 8 MA's), (Start: 84 @47584 has 1 MA's), (85, 47572), (91, 47518), (96, 47503), (97, 47494), (104, 47431), (105, 47428), (127, 47338), (137, 47305),

Gene: Che12\_91 Start: 48845, Stop: 48465, Start Num: 70

Candidate Starts for Che12\_91:

(53, 48884), (Start: 70 @48845 has 67 MA's), (Start: 79 @48824 has 8 MA's), (85, 48767), (88, 48758), (91, 48713), (97, 48689), (102, 48641), (105, 48623),

Gene: ChipMunk\_89 Start: 50944, Stop: 50591, Start Num: 77

Candidate Starts for ChipMunk\_89:

(12, 51148), (13, 51145), (32, 51058), (43, 51025), (Start: 77 @50944 has 327 MA's), (Start: 84 @50908 has 1 MA's), (92, 50842), (99, 50794), (112, 50728), (139, 50605),

Gene: Chiqui\_67 Start: 44202, Stop: 43789, Start Num: 55

Candidate Starts for Chiqui\_67:

(20, 44316), (Start: 55 @44202 has 8 MA's), (Start: 70 @44178 has 67 MA's), (89, 44085), (99, 44013), (132, 43842),

Gene: Chupacabra\_79 Start: 48067, Stop: 47660, Start Num: 61

Candidate Starts for Chupacabra\_79:

(Start: 61 @48067 has 21 MA's), (Start: 70 @48043 has 67 MA's), (89, 47950), (91, 47929), (95, 47920), (98, 47902), (104, 47842), (109, 47827), (132, 47713),

Gene: Cici\_79 Start: 48047, Stop: 47694, Start Num: 77

Candidate Starts for Cici\_79:

(Start: 77 @48047 has 327 MA's), (Start: 84 @48011 has 1 MA's), (91, 47948), (96, 47933), (98, 47921), (99, 47897), (107, 47849), (118, 47819), (138, 47723), (139, 47708),

Gene: Cindaradix\_78 Start: 48629, Stop: 48276, Start Num: 77

Candidate Starts for Cindaradix\_78:

(Start: 77 @48629 has 327 MA's), (Start: 84 @48593 has 1 MA's), (96, 48515), (107, 48431), (118, 48401), (138, 48305), (139, 48290),

Gene: Cintron\_83 Start: 48532, Stop: 48179, Start Num: 77

Candidate Starts for Cintron\_83:

(Start: 77 @48532 has 327 MA's), (Start: 84 @48496 has 1 MA's), (91, 48433), (99, 48382), (107, 48334), (118, 48304), (138, 48208), (139, 48193),

Gene: Citius\_83 Start: 48437, Stop: 48084, Start Num: 77

Candidate Starts for Citius\_83:

(Start: 77 @48437 has 327 MA's), (Start: 84 @48401 has 1 MA's), (91, 48338), (112, 48221), (118, 48209), (138, 48113), (139, 48098),

Gene: Clammy\_87 Start: 47971, Stop: 47552, Start Num: 58

Candidate Starts for Clammy\_87:

(Start: 58 @47971 has 9 MA's), (Start: 70 @47941 has 67 MA's), (Start: 84 @47890 has 1 MA's), (99, 47776), (104, 47740), (132, 47605),

Gene: Clarenza\_82 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Clarenza\_82:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: CloudWang3\_93 Start: 48839, Stop: 48459, Start Num: 70

Candidate Starts for CloudWang3\_93:

(33, 48941), (Start: 70 @48839 has 67 MA's), (Start: 79 @48818 has 8 MA's), (Start: 84 @48773 has 1 MA's), (85, 48761), (91, 48707), (96, 48692), (97, 48683), (98, 48680), (104, 48620), (105, 48617), (127, 48527), (137, 48494),

Gene: ClownCar\_84 Start: 47822, Stop: 47433, Start Num: 77

Candidate Starts for ClownCar\_84:

(Start: 77 @47822 has 327 MA's), (91, 47705), (92, 47702), (108, 47603), (115, 47573),

Gene: Cocoaberry\_83 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for Cocoaberry\_83:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (91, 48318), (118, 48189), (122, 48174), (138, 48093), (139, 48078),

Gene: CogOmlette\_88 Start: 48980, Stop: 48627, Start Num: 77

Candidate Starts for CogOmlette\_88:

(Start: 77 @48980 has 327 MA's), (Start: 84 @48944 has 1 MA's), (89, 48902), (105, 48791), (112, 48764), (139, 48641),

Gene: Colbster\_82 Start: 47787, Stop: 47404, Start Num: 77

Candidate Starts for Colbster\_82:

(Start: 73 @47793 has 3 MA's), (Start: 75 @47790 has 2 MA's), (Start: 77 @47787 has 327 MA's), (83, 47745), (91, 47670), (92, 47667), (108, 47568), (115, 47538),

Gene: Colin\_87 Start: 50113, Stop: 49757, Start Num: 77

Candidate Starts for Colin\_87:

(41, 50194), (Start: 77 @50113 has 327 MA's), (Start: 79 @50107 has 8 MA's), (Start: 84 @50077 has 1 MA's), (89, 50035), (93, 50008), (99, 49960), (105, 49921), (118, 49882), (138, 49786), (139, 49771),

Gene: Commander\_81 Start: 48420, Stop: 48067, Start Num: 77

Candidate Starts for Commander\_81:

(Start: 77 @48420 has 327 MA's), (Start: 84 @48384 has 1 MA's), (118, 48192), (122, 48177), (138, 48096), (139, 48081),

Gene: Connomayer\_83 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Connomayer\_83:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Conquerage\_89 Start: 49236, Stop: 48883, Start Num: 77

Candidate Starts for Conquerage\_89:

(Start: 77 @49236 has 327 MA's), (Start: 79 @49230 has 8 MA's), (Start: 84 @49200 has 1 MA's), (89, 49158), (91, 49137), (122, 48993), (139, 48897),

Gene: Cookiedough\_91 Start: 48964, Stop: 48584, Start Num: 70

Candidate Starts for Cookiedough\_91:

(33, 49066), (Start: 70 @48964 has 67 MA's), (Start: 79 @48943 has 8 MA's), (Start: 84 @48898 has 1 MA's), (85, 48886), (91, 48832), (96, 48817), (97, 48808), (104, 48745), (105, 48742), (127, 48652), (137, 48619),

Gene: Croquant\_83 Start: 47784, Stop: 47401, Start Num: 77

Candidate Starts for Croquant\_83:

(Start: 73 @47790 has 3 MA's), (Start: 75 @47787 has 2 MA's), (Start: 77 @47784 has 327 MA's), (83, 47742), (91, 47667), (92, 47664), (108, 47565), (115, 47535),

Gene: Crucio\_88 Start: 49737, Stop: 49384, Start Num: 77

Candidate Starts for Crucio\_88:

(Start: 77 @49737 has 327 MA's), (Start: 84 @49701 has 1 MA's), (92, 49635), (99, 49587), (108, 49536), (112, 49521), (139, 49398),

Gene: Cullens\_87 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for Cullens\_87:

(Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: DBQu4n\_90 Start: 49509, Stop: 49129, Start Num: 70

Candidate Starts for DBQu4n\_90:

(Start: 70 @49509 has 67 MA's), (88, 49422), (97, 49353), (98, 49350), (99, 49326),

Gene: DaHudson\_85 Start: 47771, Stop: 47388, Start Num: 77

Candidate Starts for DaHudson\_85:

(23, 47930), (49, 47840), (51, 47831), (Start: 64 @47801 has 1 MA's), (Start: 73 @47777 has 3 MA's), (Start: 77 @47771 has 327 MA's), (Start: 79 @47765 has 8 MA's), (91, 47654), (92, 47651), (108, 47552), (115, 47522),

Gene: DaVinci\_89 Start: 47704, Stop: 47324, Start Num: 70

Candidate Starts for DaVinci\_89:

(33, 47806), (Start: 70 @47704 has 67 MA's), (Start: 79 @47683 has 8 MA's), (Start: 84 @47638 has 1 MA's), (85, 47626), (91, 47572), (96, 47557), (97, 47548), (104, 47485), (105, 47482), (127, 47392), (137, 47359),

Gene: Daishi\_85 Start: 46653, Stop: 46270, Start Num: 77

Candidate Starts for Daishi\_85:

(Start: 73 @46659 has 3 MA's), (Start: 75 @46656 has 2 MA's), (Start: 77 @46653 has 327 MA's), (91, 46536), (92, 46533), (108, 46434), (115, 46404),

Gene: Dalmatian\_88 Start: 49536, Stop: 49183, Start Num: 77

Candidate Starts for Dalmatian\_88:

(Start: 77 @49536 has 327 MA's), (Start: 84 @49500 has 1 MA's), (85, 49491), (92, 49434), (99, 49386), (112, 49320), (139, 49197),

Gene: Darrell\_89 Start: 48667, Stop: 48314, Start Num: 77

Candidate Starts for Darrell\_89:

(Start: 77 @48667 has 327 MA's), (Start: 84 @48631 has 1 MA's), (89, 48589), (91, 48568), (96, 48553), (99, 48517), (105, 48478), (112, 48451), (139, 48328),

Gene: DarthPhader\_81 Start: 48465, Stop: 48082, Start Num: 70

Candidate Starts for DarthPhader\_81:

(Start: 70 @48465 has 67 MA's), (Start: 79 @48444 has 8 MA's), (97, 48309), (99, 48282), (104, 48246), (105, 48243), (116, 48207),

Gene: Datway\_80 Start: 48227, Stop: 47874, Start Num: 77

Candidate Starts for Datway\_80:

(Start: 77 @48227 has 327 MA's), (Start: 84 @48191 has 1 MA's), (91, 48128), (107, 48029), (112, 48011), (118, 47999), (138, 47903), (139, 47888),

Gene: Deano\_80 Start: 48424, Stop: 48071, Start Num: 77

Candidate Starts for Deano\_80:

(Start: 77 @48424 has 327 MA's), (Start: 84 @48388 has 1 MA's), (118, 48196), (122, 48181), (138, 48100), (139, 48085),

Gene: DeerParkTS\_84 Start: 48245, Stop: 47898, Start Num: 77

Candidate Starts for DeerParkTS\_84:

(Start: 77 @48245 has 327 MA's), (Start: 84 @48209 has 1 MA's), (92, 48143), (96, 48131), (99, 48095), (107, 48047), (108, 48044), (112, 48029), (139, 47912),

Gene: Deloris\_90 Start: 49570, Stop: 49223, Start Num: 77

Candidate Starts for Deloris\_90:

(Start: 77 @49570 has 327 MA's), (Start: 84 @49534 has 1 MA's), (92, 49468), (99, 49420), (112, 49354), (139, 49237),

Gene: DelvinSonDorr\_86 Start: 47913, Stop: 47533, Start Num: 70

Candidate Starts for DelvinSonDorr\_86:

(33, 48015), (Start: 70 @47913 has 67 MA's), (Start: 79 @47892 has 8 MA's), (Start: 84 @47847 has 1 MA's), (85, 47835), (91, 47781), (96, 47766), (97, 47757), (104, 47694), (105, 47691), (127, 47601), (137, 47568),

Gene: Dhanush\_83 Start: 48419, Stop: 48066, Start Num: 77

Candidate Starts for Dhanush\_83:

(Start: 77 @48419 has 327 MA's), (Start: 84 @48383 has 1 MA's), (118, 48191), (122, 48176), (138, 48095), (139, 48080),

Gene: Dieselweasel\_87 Start: 47785, Stop: 47402, Start Num: 77

Candidate Starts for Dieselweasel\_87:

(Start: 73 @47791 has 3 MA's), (Start: 75 @47788 has 2 MA's), (Start: 77 @47785 has 327 MA's), (83, 47743), (91, 47668), (92, 47665), (108, 47566), (115, 47536),

Gene: Dignity\_90 Start: 49988, Stop: 49635, Start Num: 77

Candidate Starts for Dignity\_90:

(8, 50240), (11, 50198), (36, 50090), (Start: 38 @50084 has 3 MA's), (Start: 77 @49988 has 327 MA's), (Start: 84 @49952 has 1 MA's), (92, 49886), (99, 49838), (112, 49772), (139, 49649),

Gene: Diminimus\_147 Start: 74926, Stop: 74519, Start Num: 56

Candidate Starts for Diminimus\_147:

(Start: 56 @74926 has 20 MA's), (89, 74800), (92, 74776), (97, 74755), (98, 74752), (108, 74677), (114, 74656), (130, 74572), (137, 74554),

Gene: DirtyDunning\_82 Start: 48428, Stop: 48075, Start Num: 77

Candidate Starts for DirtyDunning\_82:

(Start: 77 @48428 has 327 MA's), (Start: 84 @48392 has 1 MA's), (107, 48230), (118, 48200), (122, 48185), (138, 48104), (139, 48089),

Gene: DontArgue\_77 Start: 46933, Stop: 46526, Start Num: 61

Candidate Starts for DontArgue\_77:

(Start: 61 @46933 has 21 MA's), (Start: 70 @46909 has 67 MA's), (89, 46816), (91, 46795), (95, 46786), (98, 46768), (105, 46705), (109, 46693), (122, 46645), (132, 46579),

Gene: Dorothea\_91 Start: 48956, Stop: 48576, Start Num: 70

Candidate Starts for Dorothea\_91:

(33, 49058), (Start: 70 @48956 has 67 MA's), (Start: 79 @48935 has 8 MA's), (Start: 84 @48890 has 1 MA's), (85, 48878), (91, 48824), (96, 48809), (97, 48800), (104, 48737), (105, 48734), (127, 48644), (137, 48611),

Gene: Drake55\_89 Start: 49285, Stop: 48932, Start Num: 77

Candidate Starts for Drake55\_89:

(Start: 77 @49285 has 327 MA's), (Start: 84 @49249 has 1 MA's), (92, 49183), (99, 49135), (112, 49069), (122, 49042), (139, 48946),

Gene: Drake94\_79 Start: 47227, Stop: 46820, Start Num: 61

Candidate Starts for Drake94\_79:

(Start: 61 @47227 has 21 MA's), (Start: 70 @47203 has 67 MA's), (89, 47110), (91, 47089), (95, 47080), (98, 47062), (104, 47002), (109, 46987), (122, 46939), (129, 46888), (132, 46873),

Gene: DreamTeam1\_86 Start: 48715, Stop: 48362, Start Num: 77

Candidate Starts for DreamTeam1\_86:

(Start: 77 @48715 has 327 MA's), (Start: 79 @48709 has 8 MA's), (Start: 84 @48679 has 1 MA's), (91, 48616), (108, 48514), (112, 48499), (122, 48472), (139, 48376),

Gene: DroogsArmy\_79 Start: 50479, Stop: 50045, Start Num: 60

Candidate Starts for DroogsArmy\_79:

(Start: 60 @50479 has 12 MA's), (Start: 70 @50452 has 67 MA's), (Start: 79 @50431 has 8 MA's), (88, 50383), (89, 50359), (91, 50338), (98, 50311), (99, 50287), (107, 50239), (109, 50236), (121, 50185), (123, 50164),

Gene: DropBear\_83 Start: 47810, Stop: 47391, Start Num: 58

Candidate Starts for DropBear\_83:

(19, 47936), (Start: 58 @47810 has 9 MA's), (Start: 70 @47780 has 67 MA's), (Start: 84 @47729 has 1 MA's), (99, 47615), (104, 47579), (132, 47444),

Gene: Druantia\_81 Start: 48243, Stop: 47890, Start Num: 77

Candidate Starts for Druantia\_81:

(Start: 77 @48243 has 327 MA's), (Start: 84 @48207 has 1 MA's), (91, 48144), (96, 48129), (98, 48117), (99, 48093), (107, 48045), (118, 48015), (138, 47919), (139, 47904),

Gene: DudeLittle\_86 Start: 49255, Stop: 48902, Start Num: 77

Candidate Starts for DudeLittle\_86:

(Start: 77 @49255 has 327 MA's), (Start: 84 @49219 has 1 MA's), (85, 49210), (92, 49153), (99, 49105), (112, 49039), (139, 48916),

Gene: Dulcita\_147 Start: 74927, Stop: 74520, Start Num: 56

Candidate Starts for Dulcita\_147:

(Start: 56 @74927 has 20 MA's), (89, 74801), (92, 74777), (97, 74756), (98, 74753), (108, 74678), (114, 74657), (130, 74573), (137, 74555),

Gene: Duplo\_91 Start: 49566, Stop: 49186, Start Num: 70

Candidate Starts for Duplo\_91:

(Start: 70 @49566 has 67 MA's), (88, 49479), (97, 49410), (98, 49407), (99, 49383),

Gene: DustyMartin\_85 Start: 48324, Stop: 47917, Start Num: 61

Candidate Starts for DustyMartin\_85:

(16, 48471), (Start: 61 @48324 has 21 MA's), (Start: 70 @48300 has 67 MA's), (89, 48207), (98, 48159), (104, 48099), (111, 48069), (117, 48051),

Gene: EZMoney23\_84 Start: 48736, Stop: 48389, Start Num: 77

Candidate Starts for EZMoney23\_84:

(42, 48820), (45, 48811), (Start: 77 @48736 has 327 MA's), (Start: 84 @48700 has 1 MA's), (92, 48634), (99, 48586), (112, 48520), (122, 48499), (139, 48403),

Gene: Eagle\_82 Start: 48478, Stop: 48125, Start Num: 77

Candidate Starts for Eagle\_82:

(Start: 77 @48478 has 327 MA's), (Start: 84 @48442 has 1 MA's), (91, 48379), (118, 48250), (122, 48235), (138, 48154), (139, 48139),

Gene: Eaglepride\_85 Start: 48147, Stop: 47740, Start Num: 61

Candidate Starts for Eaglepride\_85:

(Start: 61 @48147 has 21 MA's), (Start: 70 @48123 has 67 MA's), (91, 48009), (95, 48000), (98, 47982), (104, 47922), (105, 47919), (107, 47910), (129, 47808), (132, 47793),

Gene: Eapen\_83 Start: 48411, Stop: 48058, Start Num: 77

Candidate Starts for Eapen\_83:

(Start: 77 @48411 has 327 MA's), (Start: 84 @48375 has 1 MA's), (91, 48312), (118, 48183), (138, 48087), (139, 48072),

Gene: Ebony\_90 Start: 48516, Stop: 48163, Start Num: 77

Candidate Starts for Ebony\_90:

(72, 48519), (Start: 77 @48516 has 327 MA's), (85, 48471), (89, 48438), (91, 48417), (96, 48402), (99, 48366), (113, 48297), (122, 48273), (139, 48177),

Gene: Echild\_92 Start: 49528, Stop: 49175, Start Num: 77

Candidate Starts for Echild\_92:

(43, 49609), (Start: 77 @49528 has 327 MA's), (Start: 84 @49492 has 1 MA's), (92, 49426), (99, 49378), (112, 49312), (139, 49189),

Gene: EdogawaKiddo\_90 Start: 49532, Stop: 49185, Start Num: 79

Candidate Starts for EdogawaKiddo\_90:

(Start: 77 @49538 has 327 MA's), (Start: 79 @49532 has 8 MA's), (Start: 84 @49502 has 1 MA's), (89, 49460), (91, 49439), (122, 49295), (139, 49199),

Gene: Eidsmoe\_89 Start: 49229, Stop: 48876, Start Num: 77

Candidate Starts for Eidsmoe\_89:

(Start: 77 @49229 has 327 MA's), (Start: 79 @49223 has 8 MA's), (Start: 84 @49193 has 1 MA's), (89, 49151), (91, 49130), (122, 48986), (139, 48890),

Gene: Elephantoon\_91 Start: 49394, Stop: 49041, Start Num: 77

Candidate Starts for Elephantoon\_91:

(Start: 73 @49397 has 3 MA's), (Start: 77 @49394 has 327 MA's), (Start: 84 @49358 has 1 MA's), (89, 49316), (96, 49280), (98, 49268), (99, 49244), (112, 49178), (139, 49055),

Gene: EmyBug\_88 Start: 49231, Stop: 48878, Start Num: 77

Candidate Starts for EmyBug\_88:

(Start: 77 @49231 has 327 MA's), (Start: 79 @49225 has 8 MA's), (Start: 84 @49195 has 1 MA's), (89, 49153), (91, 49132), (122, 48988), (139, 48892),

Gene: EpicPhail\_87 Start: 47787, Stop: 47404, Start Num: 77

Candidate Starts for EpicPhail\_87:

(Start: 73 @47793 has 3 MA's), (Start: 75 @47790 has 2 MA's), (Start: 77 @47787 has 327 MA's), (83, 47745), (91, 47670), (92, 47667), (108, 47568), (115, 47538),

Gene: Equemioh13\_88 Start: 49264, Stop: 48911, Start Num: 77

Candidate Starts for Equemioh13\_88:

(36, 49366), (Start: 38 @49360 has 3 MA's), (Start: 77 @49264 has 327 MA's), (Start: 84 @49228 has 1 MA's), (92, 49162), (98, 49138), (99, 49114), (112, 49048), (122, 49021), (139, 48925),

Gene: EricB\_89 Start: 47853, Stop: 47473, Start Num: 70

Candidate Starts for EricB\_89:

(33, 47955), (Start: 70 @47853 has 67 MA's), (Start: 79 @47832 has 8 MA's), (Start: 84 @47787 has 1 MA's), (85, 47775), (91, 47721), (96, 47706), (97, 47697), (104, 47634), (105, 47631), (127, 47541), (137, 47508),

Gene: Eris\_82 Start: 48428, Stop: 48075, Start Num: 77

Candidate Starts for Eris\_82:

(Start: 77 @48428 has 327 MA's), (Start: 84 @48392 has 1 MA's), (91, 48329), (118, 48200), (122, 48185), (138, 48104), (139, 48089),

Gene: Eros\_83 Start: 48424, Stop: 48071, Start Num: 77

Candidate Starts for Eros\_83:

(Start: 77 @48424 has 327 MA's), (Start: 84 @48388 has 1 MA's), (118, 48196), (122, 48181), (138, 48100), (139, 48085),

Gene: Estes\_162 Start: 78376, Stop: 77969, Start Num: 56

Candidate Starts for Estes\_162:

(28, 78457), (37, 78427), (Start: 56 @78376 has 20 MA's), (Start: 79 @78322 has 8 MA's), (86, 78280), (89, 78250), (91, 78229), (92, 78226), (94, 78223), (104, 78142), (107, 78130), (108, 78127), (130, 78022),

Gene: Et2Brutus\_91 Start: 48793, Stop: 48440, Start Num: 77

Candidate Starts for Et2Brutus\_91:

(72, 48796), (Start: 77 @48793 has 327 MA's), (85, 48748), (89, 48715), (91, 48694), (96, 48679), (99, 48643), (113, 48574), (122, 48550), (139, 48454),

Gene: EtoileNova\_82 Start: 47631, Stop: 47215, Start Num: 60

Candidate Starts for EtoileNova\_82:

(26, 47730), (Start: 55 @47640 has 8 MA's), (Start: 60 @47631 has 12 MA's), (Start: 70 @47604 has 67 MA's), (89, 47511), (129, 47283), (132, 47268),

Gene: Eurydice\_84 Start: 48453, Stop: 48100, Start Num: 77

Candidate Starts for Eurydice\_84:

(Start: 77 @48453 has 327 MA's), (Start: 84 @48417 has 1 MA's), (91, 48354), (112, 48237), (118, 48225), (138, 48129), (139, 48114),

Gene: EvilGenius\_88 Start: 50945, Stop: 50592, Start Num: 77

Candidate Starts for EvilGenius\_88:

(12, 51149), (13, 51146), (32, 51059), (43, 51026), (Start: 77 @50945 has 327 MA's), (Start: 84 @50909 has 1 MA's), (92, 50843), (99, 50795), (112, 50729), (139, 50606),

Gene: ExplosioNervosa\_89 Start: 49291, Stop: 48944, Start Num: 79

Candidate Starts for ExplosioNervosa\_89:

(Start: 77 @49297 has 327 MA's), (Start: 79 @49291 has 8 MA's), (Start: 84 @49261 has 1 MA's), (89, 49219), (91, 49198), (122, 49054), (139, 48958),

Gene: Fameo\_87 Start: 49308, Stop: 48955, Start Num: 77

Candidate Starts for Fameo\_87:

(43, 49389), (Start: 77 @49308 has 327 MA's), (Start: 84 @49272 has 1 MA's), (92, 49206), (112, 49092), (139, 48969),

Gene: FatCactus\_81 Start: 48170, Stop: 47817, Start Num: 77

Candidate Starts for FatCactus\_81:

(Start: 77 @48170 has 327 MA's), (80, 48158), (89, 48092), (91, 48071), (92, 48068), (96, 48056), (143, 47828),

Gene: Fayely\_89 Start: 49205, Stop: 48852, Start Num: 77

Candidate Starts for Fayely\_89:

(Start: 77 @49205 has 327 MA's), (Start: 79 @49199 has 8 MA's), (Start: 84 @49169 has 1 MA's), (89, 49127), (91, 49106), (122, 48962), (139, 48866),

Gene: Fernando\_87 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for Fernando\_87:

(Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: Fibonacci\_91 Start: 48799, Stop: 48446, Start Num: 77

Candidate Starts for Fibonacci\_91:

(72, 48802), (Start: 77 @48799 has 327 MA's), (85, 48754), (89, 48721), (91, 48700), (96, 48685), (99, 48649), (113, 48580), (122, 48556), (139, 48460),

Gene: FiringLine\_88 Start: 49833, Stop: 49480, Start Num: 77

Candidate Starts for FiringLine\_88:

(Start: 77 @49833 has 327 MA's), (Start: 84 @49797 has 1 MA's), (92, 49731), (99, 49683), (108, 49632), (139, 49494),

Gene: First\_0089 Start: 49681, Stop: 49328, Start Num: 77

Candidate Starts for First\_0089:

(Start: 77 @49681 has 327 MA's), (Start: 84 @49645 has 1 MA's), (99, 49531), (112, 49465), (139, 49342),

Gene: Flare16\_88 Start: 49079, Stop: 48726, Start Num: 77

Candidate Starts for Flare16\_88:

(36, 49181), (Start: 38 @49175 has 3 MA's), (Start: 77 @49079 has 327 MA's), (Start: 84 @49043 has 1 MA's), (92, 48977), (99, 48929), (112, 48863), (122, 48836), (139, 48740),

Gene: Flaverint\_92 Start: 48943, Stop: 48590, Start Num: 77

Candidate Starts for Flaverint\_92:

(72, 48946), (Start: 77 @48943 has 327 MA's), (85, 48898), (89, 48865), (91, 48844), (96, 48829), (99, 48793), (113, 48724), (122, 48700), (139, 48604),

Gene: Florean\_83 Start: 48415, Stop: 48062, Start Num: 77

Candidate Starts for Florean\_83:

(Start: 77 @48415 has 327 MA's), (Start: 84 @48379 has 1 MA's), (118, 48187), (122, 48172), (138, 48091), (139, 48076),

Gene: Flux\_84 Start: 48414, Stop: 48061, Start Num: 77

Candidate Starts for Flux\_84:

(Start: 77 @48414 has 327 MA's), (Start: 84 @48378 has 1 MA's), (91, 48315), (112, 48198), (118, 48186), (122, 48171), (138, 48090), (139, 48075),

Gene: FlyCatcher\_84 Start: 51171, Stop: 50770, Start Num: 60

Candidate Starts for FlyCatcher\_84:

(Start: 60 @51171 has 12 MA's), (Start: 70 @51147 has 67 MA's), (80, 51120), (85, 51087), (92, 51030), (98, 51006), (104, 50946), (107, 50934), (126, 50853), (130, 50832), (144, 50778),

Gene: ForesterFrank\_83 Start: 49352, Stop: 49005, Start Num: 77

Candidate Starts for ForesterFrank\_83:

(Start: 77 @49352 has 327 MA's), (Start: 84 @49316 has 1 MA's), (92, 49250), (99, 49202), (112, 49136), (122, 49115), (139, 49019),

Gene: FreakyGoo\_149 Start: 76168, Stop: 75761, Start Num: 56

Candidate Starts for FreakyGoo\_149:

(37, 76219), (Start: 56 @76168 has 20 MA's), (89, 76042), (92, 76018), (97, 75997), (98, 75994), (108, 75919), (114, 75898), (130, 75814), (137, 75796),

Gene: Fred313\_83 Start: 47601, Stop: 47182, Start Num: 58

Candidate Starts for Fred313\_83:

(19, 47727), (Start: 58 @47601 has 9 MA's), (Start: 70 @47571 has 67 MA's), (Start: 84 @47520 has 1 MA's), (99, 47406), (104, 47370), (132, 47235),

Gene: Funston\_82 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Funston\_82:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: Gadost\_83 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for Gadost\_83:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (91, 48318), (118, 48189), (122, 48174), (138, 48093), (139, 48078),

Gene: Gail\_90 Start: 49237, Stop: 48884, Start Num: 77

Candidate Starts for Gail\_90:

(5, 49504), (74, 49240), (Start: 77 @49237 has 327 MA's), (80, 49225), (Start: 84 @49201 has 1 MA's), (91, 49138), (98, 49111), (99, 49087), (107, 49039), (108, 49036), (118, 49009), (138, 48913), (139, 48898),

Gene: Garak\_94 Start: 48763, Stop: 48404, Start Num: 79

Candidate Starts for Garak\_94:

(33, 48886), (Start: 70 @48784 has 67 MA's), (Start: 79 @48763 has 8 MA's), (Start: 84 @48718 has 1 MA's), (85, 48706), (91, 48652), (96, 48637), (97, 48628), (98, 48625), (104, 48565), (105, 48562), (127, 48472), (137, 48439),

Gene: GaugeLDP\_84 Start: 49819, Stop: 49439, Start Num: 65

Candidate Starts for GaugeLDP\_84:

(Start: 48 @49861 has 1 MA's), (Start: 65 @49819 has 7 MA's), (85, 49741), (91, 49687), (94, 49681), (97, 49663), (98, 49660), (99, 49636), (104, 49600), (116, 49561), (125, 49516), (139, 49453),

Gene: Gemma\_84 Start: 47825, Stop: 47436, Start Num: 77

Candidate Starts for Gemma\_84:

(Start: 77 @47825 has 327 MA's), (91, 47708), (92, 47705), (108, 47606), (115, 47576),

Gene: Georgie2\_90 Start: 49881, Stop: 49528, Start Num: 77

Candidate Starts for Georgie2\_90:

(Start: 77 @49881 has 327 MA's), (Start: 84 @49845 has 1 MA's), (92, 49779), (99, 49731), (108, 49680), (112, 49665), (139, 49542),

Gene: Gilberta\_89 Start: 47819, Stop: 47466, Start Num: 77

Candidate Starts for Gilberta\_89:

(72, 47822), (Start: 77 @47819 has 327 MA's), (85, 47774), (89, 47741), (91, 47720), (96, 47705), (99, 47669), (113, 47600), (122, 47576), (139, 47480),

Gene: GingkoMaracino\_86 Start: 47670, Stop: 47281, Start Num: 73

Candidate Starts for GingkoMaracino\_86:

(Start: 73 @47670 has 3 MA's), (Start: 75 @47667 has 2 MA's), (Start: 77 @47664 has 327 MA's), (83, 47622), (91, 47547), (92, 47544), (108, 47445), (115, 47415),

Gene: Giroux\_89 Start: 47970, Stop: 47551, Start Num: 58

Candidate Starts for Giroux\_89:

(Start: 58 @47970 has 9 MA's), (Start: 70 @47940 has 67 MA's), (Start: 84 @47889 has 1 MA's), (99, 47775), (104, 47739), (132, 47604),

Gene: Gladiator\_89 Start: 48504, Stop: 48124, Start Num: 70

Candidate Starts for Gladiator\_89:

(33, 48606), (Start: 70 @48504 has 67 MA's), (Start: 79 @48483 has 8 MA's), (Start: 84 @48438 has 1 MA's), (85, 48426), (91, 48372), (96, 48357), (97, 48348), (98, 48345), (104, 48285), (105, 48282), (127, 48192), (137, 48159),

Gene: Glaske16\_149 Start: 76045, Stop: 75638, Start Num: 56

Candidate Starts for Glaske16\_149:

(Start: 56 @76045 has 20 MA's), (89, 75919), (92, 75895), (97, 75874), (98, 75871), (108, 75796), (114, 75775), (130, 75691), (137, 75673),

Gene: Goose\_83 Start: 47878, Stop: 47471, Start Num: 61

Candidate Starts for Goose\_83:

(Start: 61 @47878 has 21 MA's), (Start: 70 @47854 has 67 MA's), (89, 47761), (91, 47740), (95, 47731), (98, 47713), (104, 47653), (109, 47638), (132, 47524),

Gene: Gratitude\_86 Start: 49264, Stop: 48911, Start Num: 77

Candidate Starts for Gratitude\_86:

(36, 49366), (Start: 38 @49360 has 3 MA's), (Start: 77 @49264 has 327 MA's), (Start: 84 @49228 has 1 MA's), (92, 49162), (98, 49138), (99, 49114), (112, 49048), (122, 49021), (139, 48925),

Gene: GreedyLawyer\_84 Start: 48286, Stop: 47906, Start Num: 70

Candidate Starts for GreedyLawyer\_84:

(33, 48388), (Start: 70 @48286 has 67 MA's), (Start: 79 @48265 has 8 MA's), (Start: 84 @48220 has 1 MA's), (85, 48208), (91, 48154), (96, 48139), (97, 48130), (104, 48067), (105, 48064), (127, 47974), (137, 47941),

Gene: Grif\_84 Start: 47860, Stop: 47477, Start Num: 77

Candidate Starts for Grif\_84:

(Start: 73 @47866 has 3 MA's), (Start: 75 @47863 has 2 MA's), (Start: 77 @47860 has 327 MA's), (83, 47818), (91, 47743), (92, 47740), (108, 47641), (115, 47611),

Gene: Groupthink\_87 Start: 47827, Stop: 47438, Start Num: 77

Candidate Starts for Groupthink\_87:

(Start: 77 @47827 has 327 MA's), (91, 47710), (92, 47707), (108, 47608),

Gene: Grub\_84 Start: 47771, Stop: 47388, Start Num: 77

Candidate Starts for Grub\_84:

(23, 47930), (49, 47840), (51, 47831), (Start: 64 @47801 has 1 MA's), (Start: 73 @47777 has 3 MA's), (Start: 77 @47771 has 327 MA's), (Start: 79 @47765 has 8 MA's), (91, 47654), (92, 47651), (108, 47552), (115, 47522),

Gene: Grum1\_86 Start: 47786, Stop: 47403, Start Num: 77

Candidate Starts for Grum1\_86:

(Start: 73 @47792 has 3 MA's), (Start: 75 @47789 has 2 MA's), (Start: 77 @47786 has 327 MA's), (83, 47744), (91, 47669), (92, 47666), (108, 47567), (115, 47537),

Gene: Gruunaga\_93 Start: 48460, Stop: 48080, Start Num: 70

Candidate Starts for Gruunaga\_93:

(33, 48562), (Start: 70 @48460 has 67 MA's), (Start: 79 @48439 has 8 MA's), (Start: 84 @48394 has 1 MA's), (85, 48382), (91, 48328), (96, 48313), (97, 48304), (98, 48301), (104, 48241), (105, 48238), (127, 48148), (137, 48115),

Gene: GtownJaz\_86 Start: 47779, Stop: 47396, Start Num: 77

Candidate Starts for GtownJaz\_86:

(23, 47938), (49, 47848), (51, 47839), (Start: 64 @47809 has 1 MA's), (Start: 73 @47785 has 3 MA's), (Start: 77 @47779 has 327 MA's), (Start: 79 @47773 has 8 MA's), (91, 47662), (92, 47659), (108, 47560), (115, 47530),

Gene: Gwennie\_81 Start: 47787, Stop: 47404, Start Num: 77

Candidate Starts for Gwennie\_81:

(Start: 73 @47793 has 3 MA's), (Start: 75 @47790 has 2 MA's), (Start: 77 @47787 has 327 MA's), (83, 47745), (91, 47670), (92, 47667), (108, 47568), (115, 47538),

Gene: HINdeR\_79 Start: 49892, Stop: 49458, Start Num: 60

Candidate Starts for HINdeR\_79:

(Start: 60 @49892 has 12 MA's), (Start: 70 @49865 has 67 MA's), (71, 49862), (72, 49859), (Start: 79 @49844 has 8 MA's), (Start: 84 @49814 has 1 MA's), (88, 49796), (89, 49772), (99, 49700), (107, 49652), (109, 49649), (121, 49598),

Gene: HamSlice\_79 Start: 48415, Stop: 48062, Start Num: 77

Candidate Starts for HamSlice\_79:

(Start: 77 @48415 has 327 MA's), (Start: 84 @48379 has 1 MA's), (118, 48187), (122, 48172), (138, 48091), (139, 48076),

Gene: Hammer\_93 Start: 48157, Stop: 47777, Start Num: 70

Candidate Starts for Hammer\_93:

(33, 48259), (Start: 70 @48157 has 67 MA's), (Start: 79 @48136 has 8 MA's), (Start: 84 @48091 has 1 MA's), (85, 48079), (91, 48025), (96, 48010), (97, 48001), (98, 47998), (104, 47938), (105, 47935), (127, 47845), (137, 47812),

Gene: Hanray\_89 Start: 49520, Stop: 49173, Start Num: 79

Candidate Starts for Hanray\_89:

(Start: 77 @49526 has 327 MA's), (Start: 79 @49520 has 8 MA's), (Start: 84 @49490 has 1 MA's), (89, 49448), (91, 49427), (122, 49283), (139, 49187),

Gene: Happiness\_82 Start: 48439, Stop: 48086, Start Num: 77

Candidate Starts for Happiness\_82:

(Start: 77 @48439 has 327 MA's), (Start: 84 @48403 has 1 MA's), (91, 48340), (99, 48289), (107, 48241), (108, 48238), (118, 48211), (138, 48115), (139, 48100),

Gene: HarryHoudini\_88 Start: 49289, Stop: 48936, Start Num: 77

Candidate Starts for HarryHoudini\_88:

(Start: 77 @49289 has 327 MA's), (Start: 84 @49253 has 1 MA's), (92, 49187), (99, 49139), (112, 49073), (113, 49070), (122, 49046), (139, 48950),

Gene: HashRod\_87 Start: 47808, Stop: 47425, Start Num: 77

Candidate Starts for HashRod\_87:

(Start: 73 @47814 has 3 MA's), (Start: 75 @47811 has 2 MA's), (Start: 77 @47808 has 327 MA's), (83, 47766), (91, 47691), (92, 47688), (108, 47589), (115, 47559),

Gene: HaveUMetTed\_87 Start: 47815, Stop: 47426, Start Num: 77

Candidate Starts for HaveUMetTed\_87:

(Start: 77 @47815 has 327 MA's), (91, 47698), (92, 47695), (108, 47596),

Gene: Heathen\_85 Start: 47689, Stop: 47270, Start Num: 58

Candidate Starts for Heathen\_85:

(19, 47815), (Start: 58 @47689 has 9 MA's), (Start: 70 @47659 has 67 MA's), (Start: 84 @47608 has 1 MA's), (99, 47494), (104, 47458), (132, 47323),

Gene: Heffalump\_85 Start: 49776, Stop: 49423, Start Num: 77

Candidate Starts for Heffalump\_85:

(43, 49857), (Start: 77 @49776 has 327 MA's), (Start: 84 @49740 has 1 MA's), (92, 49674), (112, 49560), (139, 49437),

Gene: HelDan\_85 Start: 47912, Stop: 47493, Start Num: 58

Candidate Starts for HelDan\_85:

(19, 48038), (Start: 58 @47912 has 9 MA's), (Start: 70 @47882 has 67 MA's), (Start: 84 @47831 has 1 MA's), (99, 47717), (104, 47681), (132, 47546),

Gene: Heliosoles\_84 Start: 47831, Stop: 47442, Start Num: 77

Candidate Starts for Heliosoles\_84:

(Start: 77 @47831 has 327 MA's), (91, 47714), (92, 47711), (108, 47612),

Gene: Helmet\_95 Start: 48784, Stop: 48404, Start Num: 70

Candidate Starts for Helmet\_95:

(33, 48886), (Start: 70 @48784 has 67 MA's), (Start: 79 @48763 has 8 MA's), (Start: 84 @48718 has 1 MA's), (85, 48706), (91, 48652), (96, 48637), (97, 48628), (98, 48625), (104, 48565), (105, 48562), (127, 48472), (137, 48439),

Gene: Hercules11\_86 Start: 47795, Stop: 47412, Start Num: 77

Candidate Starts for Hercules11\_86:

(Start: 73 @47801 has 3 MA's), (Start: 75 @47798 has 2 MA's), (Start: 77 @47795 has 327 MA's), (83, 47753), (91, 47678), (92, 47675), (108, 47576), (115, 47546),

Gene: Hexamo\_92 Start: 48325, Stop: 47945, Start Num: 70

Candidate Starts for Hexamo\_92:

(33, 48427), (Start: 70 @48325 has 67 MA's), (Start: 79 @48304 has 8 MA's), (Start: 84 @48259 has 1 MA's), (85, 48247), (91, 48193), (96, 48178), (97, 48169), (98, 48166), (104, 48106), (105, 48103), (127, 48013), (137, 47980),

Gene: HippoHollow\_85 Start: 50493, Stop: 50137, Start Num: 77

Candidate Starts for HippoHollow\_85:

(Start: 77 @50493 has 327 MA's), (Start: 84 @50457 has 1 MA's), (93, 50388), (99, 50340), (112, 50274), (118, 50262), (138, 50166), (139, 50151),

Gene: Horex\_90 Start: 49539, Stop: 49186, Start Num: 77

Candidate Starts for Horex\_90:

(Start: 77 @49539 has 327 MA's), (Start: 79 @49533 has 8 MA's), (Start: 84 @49503 has 1 MA's), (89, 49461), (91, 49440), (122, 49296), (139, 49200),

Gene: Holli\_82 Start: 48206, Stop: 47853, Start Num: 77

Candidate Starts for Holli\_82:

(Start: 77 @48206 has 327 MA's), (Start: 84 @48170 has 1 MA's), (118, 47978), (122, 47963), (138, 47882), (139, 47867),

Gene: Hookmount\_85 Start: 47636, Stop: 47211, Start Num: 55

Candidate Starts for Hookmount\_85:

(26, 47726), (Start: 55 @47636 has 8 MA's), (Start: 60 @47627 has 12 MA's), (Start: 70 @47600 has 67 MA's), (89, 47507), (129, 47279), (132, 47264),

Gene: Hoot\_86 Start: 46170, Stop: 45790, Start Num: 70

Candidate Starts for Hoot\_86:

(33, 46272), (Start: 70 @46170 has 67 MA's), (Start: 79 @46149 has 8 MA's), (Start: 84 @46104 has 1 MA's), (85, 46092), (91, 46038), (96, 46023), (97, 46014), (104, 45951), (105, 45948), (127, 45858),

(137, 45825),

Gene: HortumSL17\_92 Start: 49573, Stop: 49220, Start Num: 77

Candidate Starts for HortumSL17\_92:

(Start: 77 @49573 has 327 MA's), (Start: 79 @49567 has 8 MA's), (Start: 84 @49537 has 1 MA's), (89, 49495), (91, 49474), (122, 49330), (139, 49234),

Gene: Houdini22\_82 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for Houdini22\_82:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (91, 48318), (118, 48189), (122, 48174), (138, 48093), (139, 48078),

Gene: Hutc2\_88 Start: 47683, Stop: 47330, Start Num: 77

Candidate Starts for Hutc2\_88:

(72, 47686), (Start: 77 @47683 has 327 MA's), (85, 47638), (89, 47605), (91, 47584), (96, 47569), (99, 47533), (113, 47464), (122, 47440), (139, 47344),

Gene: Huxley\_72 Start: 46309, Stop: 45956, Start Num: 77

Candidate Starts for Huxley\_72:

(Start: 77 @46309 has 327 MA's), (Start: 84 @46273 has 1 MA's), (91, 46210), (118, 46081), (122, 46066), (138, 45985), (139, 45970),

Gene: ICleared\_82 Start: 48484, Stop: 48131, Start Num: 77

Candidate Starts for ICleared\_82:

(Start: 77 @48484 has 327 MA's), (Start: 84 @48448 has 1 MA's), (91, 48385), (112, 48268), (118, 48256), (138, 48160), (139, 48145),

Gene: IPhane7\_147 Start: 75869, Stop: 75462, Start Num: 56

Candidate Starts for IPhane7\_147:

(37, 75920), (Start: 56 @75869 has 20 MA's), (89, 75743), (92, 75719), (97, 75698), (98, 75695), (108, 75620), (114, 75599), (130, 75515), (137, 75497),

Gene: Iceman\_81 Start: 48706, Stop: 48353, Start Num: 77

Candidate Starts for Iceman\_81:

(Start: 77 @48706 has 327 MA's), (Start: 84 @48670 has 1 MA's), (118, 48478), (122, 48463), (138, 48382), (139, 48367),

Gene: Indra\_96 Start: 48785, Stop: 48405, Start Num: 70

Candidate Starts for Indra\_96:

(33, 48887), (Start: 70 @48785 has 67 MA's), (Start: 79 @48764 has 8 MA's), (Start: 84 @48719 has 1 MA's), (85, 48707), (91, 48653), (96, 48638), (97, 48629), (98, 48626), (104, 48566), (105, 48563), (127, 48473), (137, 48440),

Gene: Insomnia\_91 Start: 48977, Stop: 48624, Start Num: 77

Candidate Starts for Insomnia\_91:

(72, 48980), (Start: 77 @48977 has 327 MA's), (85, 48932), (89, 48899), (91, 48878), (96, 48863), (99, 48827), (113, 48758), (122, 48734), (139, 48638),

Gene: Iracema64\_83 Start: 48680, Stop: 48327, Start Num: 77

Candidate Starts for Iracema64\_83:

(Start: 77 @48680 has 327 MA's), (Start: 84 @48644 has 1 MA's), (91, 48581), (112, 48464), (118, 48452), (131, 48377), (138, 48356), (139, 48341),

Gene: IronMan\_85 Start: 50258, Stop: 49899, Start Num: 79

Candidate Starts for IronMan\_85:

(Start: 48 @50321 has 1 MA's), (Start: 66 @50279 has 2 MA's), (Start: 79 @50258 has 8 MA's), (80, 50252), (85, 50201), (91, 50147), (97, 50123), (98, 50120), (99, 50096), (104, 50060), (139, 49913),

Gene: Isca\_81 Start: 46810, Stop: 46397, Start Num: 61

Candidate Starts for Isca\_81:

(Start: 61 @46810 has 21 MA's), (105, 46582), (129, 46465), (132, 46450),

Gene: Isiphiwo\_87 Start: 47875, Stop: 47495, Start Num: 70

Candidate Starts for Isiphiwo\_87:

(33, 47977), (Start: 70 @47875 has 67 MA's), (Start: 79 @47854 has 8 MA's), (Start: 84 @47809 has 1 MA's), (85, 47797), (91, 47743), (96, 47728), (97, 47719), (104, 47656), (105, 47653), (127, 47563), (137, 47530),

Gene: Iwokeuplikedis\_92 Start: 50075, Stop: 49692, Start Num: 65

Candidate Starts for Iwokeuplikedis\_92:

(Start: 65 @50075 has 7 MA's), (Start: 66 @50072 has 2 MA's), (Start: 79 @50051 has 8 MA's), (85, 49994), (91, 49940), (97, 49916), (98, 49913), (99, 49889), (104, 49853), (122, 49802),

Gene: Izel\_146 Start: 74926, Stop: 74519, Start Num: 56

Candidate Starts for Izel\_146:

(Start: 56 @74926 has 20 MA's), (89, 74800), (92, 74776), (97, 74755), (98, 74752), (108, 74677), (114, 74656), (130, 74572), (137, 74554),

Gene: JHC117\_81 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for JHC117\_81:

(Start: 73 @47787 has 3 MA's), (Start: 75 @47784 has 2 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: Jaan\_87 Start: 50396, Stop: 50016, Start Num: 65

Candidate Starts for Jaan\_87:

(Start: 48 @50438 has 1 MA's), (Start: 65 @50396 has 7 MA's), (Start: 79 @50375 has 8 MA's), (91, 50264), (98, 50237), (99, 50213), (104, 50177), (125, 50093), (139, 50030),

Gene: Jabith\_91 Start: 48991, Stop: 48638, Start Num: 77

Candidate Starts for Jabith\_91:

(72, 48994), (Start: 77 @48991 has 327 MA's), (85, 48946), (89, 48913), (91, 48892), (96, 48877), (99, 48841), (113, 48772), (122, 48748), (139, 48652),

Gene: Jaykayelowell\_80 Start: 48409, Stop: 48056, Start Num: 77

Candidate Starts for Jaykayelowell\_80:

(Start: 77 @48409 has 327 MA's), (Start: 84 @48373 has 1 MA's), (91, 48310), (112, 48193), (118, 48181), (138, 48085), (139, 48070),

Gene: Jeeves\_90 Start: 48017, Stop: 47664, Start Num: 77

Candidate Starts for Jeeves\_90:

(50, 48074), (54, 48065), (69, 48035), (Start: 77 @48017 has 327 MA's), (Start: 79 @48011 has 8 MA's), (80, 48005), (Start: 84 @47981 has 1 MA's), (91, 47918), (98, 47891), (99, 47867), (107, 47819), (108, 47816), (118, 47789), (138, 47693), (139, 47678),

Gene: Jeffabunny\_81 Start: 44928, Stop: 44548, Start Num: 70

Candidate Starts for Jeffabunny\_81:

(33, 45030), (Start: 70 @44928 has 67 MA's), (Start: 79 @44907 has 8 MA's), (Start: 84 @44862 has 1 MA's), (85, 44850), (91, 44796), (96, 44781), (97, 44772), (98, 44769), (104, 44709), (105, 44706), (127, 44616), (137, 44583),

Gene: JenCasNa\_87 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for JenCasNa\_87:

(Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: JeppNRM\_87 Start: 47829, Stop: 47440, Start Num: 77

Candidate Starts for JeppNRM\_87:

(Start: 77 @47829 has 327 MA's), (91, 47712), (92, 47709), (108, 47610),

Gene: Jerm\_90 Start: 49956, Stop: 49603, Start Num: 77

Candidate Starts for Jerm\_90:

(Start: 77 @49956 has 327 MA's), (Start: 84 @49920 has 1 MA's), (92, 49854), (99, 49806), (112, 49740), (139, 49617),

Gene: JetBlade\_84 Start: 48444, Stop: 48091, Start Num: 77

Candidate Starts for JetBlade\_84:

(Start: 77 @48444 has 327 MA's), (Start: 84 @48408 has 1 MA's), (91, 48345), (112, 48228), (118, 48216), (138, 48120), (139, 48105),

Gene: JewelBug\_83 Start: 46649, Stop: 46269, Start Num: 70

Candidate Starts for JewelBug\_83:

(33, 46751), (Start: 70 @46649 has 67 MA's), (Start: 79 @46628 has 8 MA's), (Start: 84 @46583 has 1 MA's), (85, 46571), (91, 46517), (96, 46502), (97, 46493), (104, 46430), (105, 46427), (127, 46337), (137, 46304),

Gene: Jiawan\_89 Start: 49556, Stop: 49203, Start Num: 77

Candidate Starts for Jiawan\_89:

(Start: 77 @49556 has 327 MA's), (Start: 79 @49550 has 8 MA's), (Start: 84 @49520 has 1 MA's), (89, 49478), (91, 49457), (122, 49313), (139, 49217),

Gene: Jobu08\_82 Start: 47605, Stop: 47222, Start Num: 77

Candidate Starts for Jobu08\_82:

(23, 47764), (49, 47674), (51, 47665), (Start: 64 @47635 has 1 MA's), (Start: 73 @47611 has 3 MA's), (Start: 77 @47605 has 327 MA's), (Start: 79 @47599 has 8 MA's), (91, 47488), (92, 47485), (108, 47386), (115, 47356),

Gene: JoongJeon\_82 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for JoongJeon\_82:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (91, 48311), (118, 48182), (122, 48167), (138, 48086), (139, 48071),

Gene: Jordennis\_89 Start: 48553, Stop: 48173, Start Num: 70

Candidate Starts for Jordennis\_89:

(33, 48655), (Start: 70 @48553 has 67 MA's), (Start: 79 @48532 has 8 MA's), (Start: 84 @48487 has 1 MA's), (85, 48475), (91, 48421), (96, 48406), (97, 48397), (104, 48334), (105, 48331), (127, 48241), (137, 48208),

Gene: Joselito\_89 Start: 48697, Stop: 48344, Start Num: 77

Candidate Starts for Joselito\_89:

(72, 48700), (Start: 77 @48697 has 327 MA's), (85, 48652), (89, 48619), (91, 48598), (96, 48583), (99, 48547), (113, 48478), (122, 48454), (139, 48358),

Gene: JoshKayV\_91 Start: 50301, Stop: 49948, Start Num: 77

Candidate Starts for JoshKayV\_91:

(9, 50547), (20, 50469), (36, 50403), (Start: 38 @50397 has 3 MA's), (Start: 77 @50301 has 327 MA's), (Start: 84 @50265 has 1 MA's), (92, 50199), (99, 50151), (139, 49962),

Gene: Journey13\_72 Start: 44230, Stop: 43841, Start Num: 65

Candidate Starts for Journey13\_72:

(Start: 58 @44248 has 9 MA's), (Start: 65 @44230 has 7 MA's), (Start: 79 @44200 has 8 MA's), (91, 44089), (97, 44065), (110, 43981), (139, 43855),

Gene: Jsquared\_93 Start: 49313, Stop: 48933, Start Num: 70

Candidate Starts for Jsquared\_93:

(Start: 70 @49313 has 67 MA's), (Start: 79 @49292 has 8 MA's), (88, 49226), (89, 49202), (91, 49181), (97, 49157), (104, 49094), (122, 49043), (139, 48947),

Gene: KADY\_83 Start: 47813, Stop: 47430, Start Num: 77

Candidate Starts for KADY\_83:

(Start: 73 @47819 has 3 MA's), (Start: 75 @47816 has 2 MA's), (Start: 77 @47813 has 327 MA's), (83, 47771), (91, 47696), (92, 47693), (108, 47594), (115, 47564),

Gene: KFPoly\_82 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for KFPoly\_82:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (118, 48182), (122, 48167), (138, 48086), (139, 48071),

Gene: Kachowdy\_83 Start: 47941, Stop: 47522, Start Num: 58

Candidate Starts for Kachowdy\_83:

(19, 48067), (Start: 58 @47941 has 9 MA's), (Start: 70 @47911 has 67 MA's), (Start: 84 @47860 has 1 MA's), (99, 47746), (104, 47710), (132, 47575),

Gene: Kalb97\_87 Start: 47197, Stop: 46808, Start Num: 77

Candidate Starts for Kalb97\_87:

(Start: 77 @47197 has 327 MA's), (91, 47080), (92, 47077), (108, 46978),

Gene: Kalnoky\_87 Start: 47824, Stop: 47435, Start Num: 77

Candidate Starts for Kalnoky\_87:

(Start: 77 @47824 has 327 MA's), (91, 47707), (92, 47704), (108, 47605),

Gene: Kalpine\_91 Start: 50068, Stop: 49712, Start Num: 77

Candidate Starts for Kalpine\_91:

(Start: 77 @50068 has 327 MA's), (Start: 84 @50032 has 1 MA's), (89, 49990), (93, 49963), (99, 49915), (105, 49876), (112, 49849), (118, 49837), (138, 49741), (139, 49726),

Gene: Kampy\_82 Start: 48419, Stop: 48066, Start Num: 77

Candidate Starts for Kampy\_82:

(Start: 77 @48419 has 327 MA's), (Start: 84 @48383 has 1 MA's), (91, 48320), (112, 48203), (118, 48191), (122, 48176), (138, 48095), (139, 48080),

Gene: Katalie136\_79 Start: 48034, Stop: 47681, Start Num: 77

Candidate Starts for Katalie136\_79:

(Start: 77 @48034 has 327 MA's), (Start: 84 @47998 has 1 MA's), (91, 47935), (96, 47920), (98, 47908), (99, 47884), (107, 47836), (118, 47806), (138, 47710), (139, 47695),

Gene: Kazan\_92 Start: 48319, Stop: 47939, Start Num: 70

Candidate Starts for Kazan\_92:

(33, 48421), (Start: 70 @48319 has 67 MA's), (Start: 79 @48298 has 8 MA's), (Start: 84 @48253 has 1 MA's), (85, 48241), (91, 48187), (96, 48172), (97, 48163), (104, 48100), (105, 48097), (127, 48007), (137, 47974),

Gene: KekoraPapaka\_80 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for KekoraPapaka\_80:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (112, 48200), (118, 48188), (138, 48092), (139, 48077),

Gene: Kerberos\_90 Start: 49529, Stop: 49149, Start Num: 70

Candidate Starts for Kerberos\_90:

(Start: 70 @49529 has 67 MA's), (88, 49442), (97, 49373), (98, 49370), (99, 49346),

Gene: Keziacharles14\_88 Start: 50027, Stop: 49674, Start Num: 77

Candidate Starts for Keziacharles14\_88:

(Start: 77 @50027 has 327 MA's), (Start: 79 @50021 has 8 MA's), (Start: 84 @49991 has 1 MA's), (89, 49949), (91, 49928), (99, 49877), (108, 49826), (112, 49811), (122, 49784),

Gene: Kimba\_88 Start: 48000, Stop: 47647, Start Num: 77

Candidate Starts for Kimba\_88:

(72, 48003), (Start: 77 @48000 has 327 MA's), (85, 47955), (89, 47922), (91, 47901), (96, 47886), (99, 47850), (113, 47781), (122, 47757), (139, 47661),

Gene: Kimona\_84 Start: 47534, Stop: 47076, Start Num: 60

Candidate Starts for Kimona\_84:

(Start: 60 @47534 has 12 MA's), (Start: 70 @47507 has 67 MA's), (78, 47489), (88, 47438), (95, 47384), (98, 47366), (100, 47339), (105, 47303), (121, 47216), (123, 47195), (125, 47162), (130, 47138), (132, 47129), (134, 47126), (144, 47084),

Gene: KingCyrus\_87 Start: 50958, Stop: 50605, Start Num: 77

Candidate Starts for KingCyrus\_87:

(12, 51162), (13, 51159), (32, 51072), (43, 51039), (Start: 77 @50958 has 327 MA's), (Start: 84 @50922 has 1 MA's), (92, 50856), (99, 50808), (112, 50742), (139, 50619),

Gene: Kingmustik0402\_83 Start: 48405, Stop: 48052, Start Num: 77

Candidate Starts for Kingmustik0402\_83:

(Start: 77 @48405 has 327 MA's), (Start: 84 @48369 has 1 MA's), (91, 48306), (118, 48177), (122, 48162), (138, 48081), (139, 48066),

Gene: Kipper29\_91 Start: 48328, Stop: 47948, Start Num: 70

Candidate Starts for Kipper29\_91:

(33, 48430), (Start: 70 @48328 has 67 MA's), (Start: 79 @48307 has 8 MA's), (Start: 84 @48262 has 1 MA's), (85, 48250), (91, 48196), (96, 48181), (97, 48172), (104, 48109), (105, 48106), (127, 48016), (137, 47983),

Gene: KittenMittens\_77 Start: 47234, Stop: 46827, Start Num: 61

Candidate Starts for KittenMittens\_77:

(Start: 61 @47234 has 21 MA's), (Start: 70 @47210 has 67 MA's), (89, 47117), (91, 47096), (95, 47087), (98, 47069), (104, 47009), (109, 46994), (122, 46946), (129, 46895), (132, 46880),

Gene: KleverKiS\_152 Start: 76926, Stop: 76519, Start Num: 56

Candidate Starts for KleverKiS\_152:

(37, 76977), (Start: 56 @76926 has 20 MA's), (89, 76800), (92, 76776), (97, 76755), (98, 76752), (108, 76677), (114, 76656), (130, 76572), (137, 76554),

Gene: Klodlith\_87 Start: 48937, Stop: 48584, Start Num: 77

Candidate Starts for Klodlith\_87:

(34, 49039), (39, 49021), (Start: 77 @48937 has 327 MA's), (80, 48925), (Start: 84 @48901 has 1 MA's), (108, 48736), (112, 48721), (122, 48694), (139, 48598),

Gene: Koan\_80 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Koan\_80:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Koduck\_89 Start: 48626, Stop: 48246, Start Num: 70

Candidate Starts for Koduck\_89:

(Start: 66 @48632 has 2 MA's), (Start: 70 @48626 has 67 MA's), (85, 48548), (88, 48539), (97, 48470), (102, 48422), (116, 48368),

Gene: Koko\_94 Start: 49174, Stop: 48794, Start Num: 70

Candidate Starts for Koko\_94:

(33, 49276), (Start: 70 @49174 has 67 MA's), (Start: 79 @49153 has 8 MA's), (Start: 84 @49108 has 1 MA's), (85, 49096), (91, 49042), (96, 49027), (97, 49018), (98, 49015), (104, 48955), (105, 48952), (127, 48862), (137, 48829),

Gene: Koreni\_82 Start: 48097, Stop: 47744, Start Num: 77

Candidate Starts for Koreni\_82:

(Start: 77 @48097 has 327 MA's), (Start: 84 @48061 has 1 MA's), (91, 47998), (118, 47869), (122, 47854), (138, 47773), (139, 47758),

Gene: Kratak\_82 Start: 48450, Stop: 48097, Start Num: 77

Candidate Starts for Kratak\_82:

(Start: 77 @48450 has 327 MA's), (Start: 84 @48414 has 1 MA's), (107, 48252), (118, 48222), (122, 48207), (131, 48147), (138, 48126), (139, 48111),

Gene: Kremtemulon\_80 Start: 48296, Stop: 47943, Start Num: 77

Candidate Starts for Kremtemulon\_80:

(Start: 77 @48296 has 327 MA's), (Start: 84 @48260 has 1 MA's), (107, 48098), (118, 48068), (122, 48053), (131, 47993), (138, 47972), (139, 47957),

Gene: Kristoff\_80 Start: 48502, Stop: 48095, Start Num: 61

Candidate Starts for Kristoff\_80:

(16, 48640), (Start: 61 @48502 has 21 MA's), (Start: 70 @48478 has 67 MA's), (89, 48385), (91, 48364), (95, 48355), (98, 48337), (104, 48277), (105, 48274), (107, 48265), (109, 48262), (122, 48214), (132, 48148),

Gene: Kumao\_107 Start: 64881, Stop: 64531, Start Num: 75

Candidate Starts for Kumao\_107:

(52, 64935), (Start: 75 @64881 has 2 MA's), (Start: 79 @64875 has 8 MA's), (80, 64869), (91, 64782), (92, 64779), (98, 64755), (108, 64680), (122, 64638), (135, 64566), (139, 64542), (142, 64536),

Gene: Kyee\_83 Start: 48411, Stop: 48058, Start Num: 77

Candidate Starts for Kyee\_83:

(Start: 77 @48411 has 327 MA's), (Start: 84 @48375 has 1 MA's), (91, 48312), (112, 48195), (118, 48183), (138, 48087), (139, 48072),

Gene: L5\_82 Start: 48517, Stop: 48137, Start Num: 68

Candidate Starts for L5\_82:

(Start: 68 @48517 has 2 MA's), (85, 48439), (88, 48430), (97, 48361), (102, 48313), (116, 48259),

Gene: LBerry\_87 Start: 47782, Stop: 47399, Start Num: 77

Candidate Starts for LBerry\_87:

(23, 47941), (49, 47851), (51, 47842), (Start: 64 @47812 has 1 MA's), (Start: 73 @47788 has 3 MA's), (Start: 77 @47782 has 327 MA's), (Start: 79 @47776 has 8 MA's), (91, 47665), (92, 47662), (108, 47563), (115, 47533),

Gene: LHTSCC\_85 Start: 48856, Stop: 48503, Start Num: 77

Candidate Starts for LHTSCC\_85:

(Start: 77 @48856 has 327 MA's), (Start: 84 @48820 has 1 MA's), (118, 48628), (122, 48613), (138, 48532), (139, 48517),

Gene: LadyBird\_92 Start: 50113, Stop: 49766, Start Num: 77

Candidate Starts for LadyBird\_92:

(Start: 77 @50113 has 327 MA's), (Start: 84 @50077 has 1 MA's), (92, 50011), (99, 49963), (112, 49897), (139, 49780),

Gene: Lambert1\_85 Start: 47637, Stop: 47212, Start Num: 55

Candidate Starts for Lambert1\_85:

(26, 47727), (Start: 55 @47637 has 8 MA's), (Start: 60 @47628 has 12 MA's), (Start: 70 @47601 has 67 MA's), (89, 47508), (129, 47280), (132, 47265),

Gene: Landor\_86 Start: 50312, Stop: 49932, Start Num: 66

Candidate Starts for Landor\_86:

(Start: 48 @50354 has 1 MA's), (Start: 66 @50312 has 2 MA's), (Start: 79 @50291 has 8 MA's), (85, 50234), (91, 50180), (97, 50156), (98, 50153), (99, 50129), (104, 50093), (139, 49946),

Gene: LappelDuVide\_83 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for LappelDuVide\_83:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Larenn\_87 Start: 49449, Stop: 49096, Start Num: 77

Candidate Starts for Larenn\_87:

(Start: 77 @49449 has 327 MA's), (Start: 79 @49443 has 8 MA's), (Start: 84 @49413 has 1 MA's), (92, 49347), (99, 49299), (122, 49206), (139, 49110),

Gene: LarryKay\_86 Start: 47817, Stop: 47434, Start Num: 77

Candidate Starts for LarryKay\_86:

(Start: 73 @47823 has 3 MA's), (Start: 75 @47820 has 2 MA's), (Start: 77 @47817 has 327 MA's), (83, 47775), (91, 47700), (92, 47697), (108, 47598), (115, 47568),

Gene: Lemur\_83 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Lemur\_83:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (112, 48197), (118, 48185), (138, 48089), (139, 48074),

Gene: Leviathan\_90 Start: 50037, Stop: 49684, Start Num: 77

Candidate Starts for Leviathan\_90:

(43, 50118), (Start: 77 @50037 has 327 MA's), (Start: 84 @50001 has 1 MA's), (92, 49935), (99, 49887), (112, 49821), (139, 49698),

Gene: LilTurb\_89 Start: 49833, Stop: 49480, Start Num: 77

Candidate Starts for LilTurb\_89:

(36, 49935), (Start: 38 @49929 has 3 MA's), (Start: 77 @49833 has 327 MA's), (Start: 84 @49797 has 1 MA's), (92, 49731), (99, 49683), (112, 49617), (139, 49494),

Gene: Lilbunny\_89 Start: 47032, Stop: 46652, Start Num: 70

Candidate Starts for Lilbunny\_89:

(33, 47134), (Start: 70 @47032 has 67 MA's), (Start: 79 @47011 has 8 MA's), (Start: 84 @46966 has 1 MA's), (85, 46954), (91, 46900), (96, 46885), (97, 46876), (98, 46873), (104, 46813), (105, 46810), (127, 46720), (137, 46687),

Gene: LilhomieP\_146 Start: 75956, Stop: 75549, Start Num: 56

Candidate Starts for LilhomieP\_146:

(Start: 56 @75956 has 20 MA's), (89, 75830), (92, 75806), (97, 75785), (98, 75782), (108, 75707), (114, 75686), (130, 75602), (137, 75584),

Gene: Lilith\_84 Start: 47771, Stop: 47388, Start Num: 77

Candidate Starts for Lilith\_84:

(23, 47930), (49, 47840), (51, 47831), (Start: 64 @47801 has 1 MA's), (Start: 73 @47777 has 3 MA's), (Start: 77 @47771 has 327 MA's), (Start: 79 @47765 has 8 MA's), (91, 47654), (92, 47651), (108, 47552), (115, 47522),

Gene: Lilleskat\_88 Start: 49527, Stop: 49174, Start Num: 77

Candidate Starts for Lilleskat\_88:

(Start: 77 @49527 has 327 MA's), (Start: 79 @49521 has 8 MA's), (Start: 84 @49491 has 1 MA's), (89, 49449), (91, 49428), (122, 49284), (139, 49188),

Gene: LionsBait\_87 Start: 50433, Stop: 50077, Start Num: 77

Candidate Starts for LionsBait\_87:

(Start: 77 @50433 has 327 MA's), (Start: 84 @50397 has 1 MA's), (93, 50328), (99, 50280), (118, 50202), (138, 50106), (139, 50091),

Gene: LittleB\_83 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for LittleB\_83:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (91, 48318), (112, 48201), (118, 48189), (138, 48093), (139, 48078),

Gene: LittleGuy\_83 Start: 48307, Stop: 47954, Start Num: 77

Candidate Starts for LittleGuy\_83:

(Start: 77 @48307 has 327 MA's), (Start: 84 @48271 has 1 MA's), (118, 48079), (122, 48064), (138, 47983), (139, 47968),

Gene: LochMonster\_84 Start: 48653, Stop: 48300, Start Num: 77

Candidate Starts for LochMonster\_84:

(Start: 77 @48653 has 327 MA's), (Start: 84 @48617 has 1 MA's), (91, 48554), (112, 48437), (118, 48425), (138, 48329), (139, 48314),

Gene: Lokk\_84 Start: 47977, Stop: 47624, Start Num: 77

Candidate Starts for Lokk\_84:

(Start: 77 @47977 has 327 MA's), (Start: 84 @47941 has 1 MA's), (92, 47875), (99, 47827), (112, 47761), (139, 47638),

Gene: LoneWolf\_91 Start: 49562, Stop: 49209, Start Num: 76

Candidate Starts for LoneWolf\_91:

(Start: 76 @49562 has 1 MA's), (Start: 84 @49526 has 1 MA's), (91, 49463), (99, 49412), (122, 49319), (139, 49223),

Gene: Lorenzo\_83 Start: 48414, Stop: 48061, Start Num: 77

Candidate Starts for Lorenzo\_83:

(Start: 77 @48414 has 327 MA's), (Start: 84 @48378 has 1 MA's), (91, 48315), (118, 48186), (122, 48171), (138, 48090), (139, 48075),

Gene: Loser\_91 Start: 50233, Stop: 49880, Start Num: 38

Candidate Starts for Loser\_91:

(Start: 38 @50233 has 3 MA's), (Start: 84 @50197 has 1 MA's), (92, 50131), (96, 50119), (99, 50083), (112, 50017), (113, 50014), (122, 49990), (139, 49894),

Gene: Louie6\_85 Start: 47814, Stop: 47431, Start Num: 77

Candidate Starts for Louie6\_85:

(Start: 73 @47820 has 3 MA's), (Start: 75 @47817 has 2 MA's), (Start: 77 @47814 has 327 MA's), (91, 47697), (92, 47694), (108, 47595), (115, 47565),

Gene: Lowa\_83 Start: 47770, Stop: 47387, Start Num: 77

Candidate Starts for Lowa\_83:

(23, 47929), (49, 47839), (51, 47830), (Start: 64 @47800 has 1 MA's), (Start: 73 @47776 has 3 MA's), (Start: 77 @47770 has 327 MA's), (Start: 79 @47764 has 8 MA's), (91, 47653), (92, 47650), (108, 47551), (115, 47521),

Gene: Luchador\_87 Start: 49118, Stop: 48765, Start Num: 77

Candidate Starts for Luchador\_87:

(50, 49175), (69, 49136), (Start: 77 @49118 has 327 MA's), (Start: 79 @49112 has 8 MA's), (80, 49106), (Start: 84 @49082 has 1 MA's), (91, 49019), (98, 48992), (99, 48968), (107, 48920), (108, 48917), (118, 48890), (138, 48794), (139, 48779),

Gene: Lucivia\_92 Start: 48976, Stop: 48623, Start Num: 77

Candidate Starts for Lucivia\_92:

(72, 48979), (Start: 77 @48976 has 327 MA's), (85, 48931), (89, 48898), (91, 48877), (96, 48862), (99, 48826), (113, 48757), (122, 48733), (139, 48637),

Gene: LugYA\_89 Start: 47782, Stop: 47399, Start Num: 77

Candidate Starts for LugYA\_89:

(Start: 73 @47788 has 3 MA's), (Start: 77 @47782 has 327 MA's), (83, 47740), (91, 47665), (92, 47662), (108, 47563), (115, 47533),

Gene: Lunsford\_83 Start: 48409, Stop: 48056, Start Num: 77

Candidate Starts for Lunsford\_83:

(Start: 77 @48409 has 327 MA's), (Start: 84 @48373 has 1 MA's), (91, 48310), (112, 48193), (118, 48181), (138, 48085), (139, 48070),

Gene: MaCh\_91 Start: 48940, Stop: 48587, Start Num: 77

Candidate Starts for MaCh\_91:

(72, 48943), (Start: 77 @48940 has 327 MA's), (85, 48895), (89, 48862), (91, 48841), (96, 48826), (99, 48790), (113, 48721), (122, 48697), (139, 48601),

Gene: Mabel\_91 Start: 48941, Stop: 48588, Start Num: 77

Candidate Starts for Mabel\_91:

(72, 48944), (Start: 77 @48941 has 327 MA's), (85, 48896), (89, 48863), (91, 48842), (96, 48827), (99, 48791), (113, 48722), (122, 48698), (139, 48602),

Gene: MadMarie\_84 Start: 47779, Stop: 47396, Start Num: 77

Candidate Starts for MadMarie\_84:

(23, 47938), (49, 47848), (51, 47839), (Start: 64 @47809 has 1 MA's), (Start: 73 @47785 has 3 MA's), (Start: 77 @47779 has 327 MA's), (Start: 79 @47773 has 8 MA's), (91, 47662), (92, 47659), (108, 47560), (115, 47530),

Gene: Mainiac\_85 Start: 47771, Stop: 47388, Start Num: 77

Candidate Starts for Mainiac\_85:

(23, 47930), (49, 47840), (51, 47831), (Start: 64 @47801 has 1 MA's), (Start: 73 @47777 has 3 MA's), (Start: 77 @47771 has 327 MA's), (Start: 79 @47765 has 8 MA's), (91, 47654), (92, 47651), (108, 47552), (115, 47522),

Gene: MajorMajor\_86 Start: 47362, Stop: 46982, Start Num: 70

Candidate Starts for MajorMajor\_86:

(Start: 70 @47362 has 67 MA's), (Start: 79 @47341 has 8 MA's), (88, 47275), (89, 47251), (91, 47230), (97, 47206), (98, 47203), (104, 47143), (122, 47092), (139, 46996),

Gene: Malec\_87 Start: 49857, Stop: 49504, Start Num: 77

Candidate Starts for Malec\_87:

(Start: 77 @49857 has 327 MA's), (Start: 79 @49851 has 8 MA's), (Start: 84 @49821 has 1 MA's), (92, 49755), (99, 49707), (122, 49614), (139, 49518),

Gene: Malinsilva\_89 Start: 47770, Stop: 47387, Start Num: 77

Candidate Starts for Malinsilva\_89:

(23, 47929), (49, 47839), (51, 47830), (Start: 64 @47800 has 1 MA's), (Start: 73 @47776 has 3 MA's), (Start: 77 @47770 has 327 MA's), (Start: 79 @47764 has 8 MA's), (91, 47653), (92, 47650), (108, 47551), (115, 47521),

Gene: Maminiaina\_90 Start: 49496, Stop: 49143, Start Num: 77

Candidate Starts for Maminiaina\_90:

(Start: 77 @49496 has 327 MA's), (Start: 84 @49460 has 1 MA's), (89, 49418), (91, 49397), (122, 49253), (139, 49157),

Gene: Manu\_86 Start: 47831, Stop: 47442, Start Num: 77

Candidate Starts for Manu\_86:

(Start: 77 @47831 has 327 MA's), (91, 47714), (92, 47711), (108, 47612),

Gene: MarQuardt\_86 Start: 47785, Stop: 47402, Start Num: 77

Candidate Starts for MarQuardt\_86:

(Start: 73 @47791 has 3 MA's), (Start: 75 @47788 has 2 MA's), (Start: 77 @47785 has 327 MA's), (83, 47743), (91, 47668), (92, 47665), (108, 47566), (115, 47536),

Gene: Marchesa\_85 Start: 47803, Stop: 47384, Start Num: 58

Candidate Starts for Marchesa\_85:

(19, 47929), (Start: 58 @47803 has 9 MA's), (Start: 70 @47773 has 67 MA's), (Start: 84 @47722 has 1 MA's), (99, 47608), (104, 47572), (132, 47437),

Gene: Margo\_85 Start: 47653, Stop: 47237, Start Num: 60

Candidate Starts for Margo\_85:

(26, 47752), (Start: 55 @47662 has 8 MA's), (Start: 60 @47653 has 12 MA's), (Start: 70 @47626 has 67 MA's), (89, 47533), (129, 47305), (132, 47290),

Gene: Marie\_84 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for Marie\_84:

(Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: Marius\_87 Start: 47824, Stop: 47435, Start Num: 77

Candidate Starts for Marius\_87:

(Start: 77 @47824 has 327 MA's), (91, 47707), (92, 47704), (108, 47605),

Gene: Maverick\_82 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Maverick\_82:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: Maxo\_85 Start: 48419, Stop: 48066, Start Num: 77

Candidate Starts for Maxo\_85:

(Start: 77 @48419 has 327 MA's), (Start: 84 @48383 has 1 MA's), (91, 48320), (112, 48203), (118, 48191), (122, 48176), (138, 48095), (139, 48080),

Gene: Mazhar510\_83 Start: 48414, Stop: 48061, Start Num: 77

Candidate Starts for Mazhar510\_83:

(Start: 77 @48414 has 327 MA's), (Start: 84 @48378 has 1 MA's), (91, 48315), (118, 48186), (122, 48171), (138, 48090), (139, 48075),

Gene: McFly\_91 Start: 48658, Stop: 48278, Start Num: 70

Candidate Starts for McFly\_91:

(33, 48760), (Start: 70 @48658 has 67 MA's), (Start: 79 @48637 has 8 MA's), (Start: 84 @48592 has 1 MA's), (85, 48580), (91, 48526), (96, 48511), (97, 48502), (104, 48439), (105, 48436), (127, 48346), (137, 48313),

Gene: Medusa\_82 Start: 48429, Stop: 48076, Start Num: 77

Candidate Starts for Medusa\_82:

(Start: 77 @48429 has 327 MA's), (Start: 84 @48393 has 1 MA's), (118, 48201), (122, 48186), (138, 48105), (139, 48090),

Gene: MeeZee\_82 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for MeeZee\_82:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (112, 48194), (118, 48182), (122, 48167), (138, 48086), (139, 48071),

Gene: MegTheThird\_87 Start: 48933, Stop: 48580, Start Num: 77

Candidate Starts for MegTheThird\_87:

(Start: 77 @48933 has 327 MA's), (Start: 79 @48927 has 8 MA's), (80, 48921), (99, 48783), (108, 48732), (112, 48717), (138, 48609), (139, 48594),

Gene: Melvin\_85 Start: 48411, Stop: 48058, Start Num: 77

Candidate Starts for Melvin\_85:

(Start: 77 @48411 has 327 MA's), (Start: 84 @48375 has 1 MA's), (91, 48312), (118, 48183), (122, 48168), (138, 48087), (139, 48072),

Gene: Methuselah\_79 Start: 47807, Stop: 47424, Start Num: 77

Candidate Starts for Methuselah\_79:

(Start: 73 @47813 has 3 MA's), (Start: 75 @47810 has 2 MA's), (Start: 77 @47807 has 327 MA's), (83, 47765), (91, 47690), (92, 47687), (108, 47588), (115, 47558),

Gene: Microwolf\_82 Start: 47794, Stop: 47411, Start Num: 77

Candidate Starts for Microwolf\_82:

(23, 47953), (49, 47863), (51, 47854), (Start: 64 @47824 has 1 MA's), (Start: 73 @47800 has 3 MA's), (Start: 77 @47794 has 327 MA's), (Start: 79 @47788 has 8 MA's), (91, 47677), (92, 47674), (108, 47575), (115, 47545),

Gene: MiculUcigas\_88 Start: 48982, Stop: 48629, Start Num: 77

Candidate Starts for MiculUcigas\_88:

(36, 49084), (Start: 38 @49078 has 3 MA's), (Start: 77 @48982 has 327 MA's), (Start: 84 @48946 has 1 MA's), (92, 48880), (99, 48832), (112, 48766), (122, 48739), (139, 48643),

Gene: Miko\_85 Start: 48834, Stop: 48481, Start Num: 77

Candidate Starts for Miko\_85:

(Start: 77 @48834 has 327 MA's), (Start: 84 @48798 has 1 MA's), (92, 48732), (99, 48684), (112, 48618), (139, 48495),

Gene: Millski\_82 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for Millski\_82:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (112, 48201), (118, 48189), (122, 48174), (138, 48093), (139, 48078),

Gene: Minispark\_88 Start: 48977, Stop: 48624, Start Num: 77

Candidate Starts for Minispark\_88:

(Start: 77 @48977 has 327 MA's), (Start: 84 @48941 has 1 MA's), (89, 48899), (105, 48788), (112, 48761), (139, 48638),

Gene: Miramae\_83 Start: 48332, Stop: 47979, Start Num: 77

Candidate Starts for Miramae\_83:

(Start: 77 @48332 has 327 MA's), (Start: 84 @48296 has 1 MA's), (91, 48233), (99, 48182), (107, 48134), (108, 48131), (112, 48116), (118, 48104), (138, 48008), (139, 47993),

Gene: Misomonster\_82 Start: 45419, Stop: 45036, Start Num: 77

Candidate Starts for Misomonster\_82:

(Start: 73 @45425 has 3 MA's), (Start: 75 @45422 has 2 MA's), (Start: 77 @45419 has 327 MA's), (83, 45377), (91, 45302), (92, 45299), (108, 45200), (115, 45170),

Gene: MissWhite\_83 Start: 46326, Stop: 45973, Start Num: 77

Candidate Starts for MissWhite\_83:

(30, 46449), (59, 46368), (Start: 77 @46326 has 327 MA's), (Start: 84 @46290 has 1 MA's), (90, 46245), (92, 46224), (94, 46221), (96, 46212), (99, 46176), (104, 46140), (139, 45987),

Gene: MoneyMay\_86 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for MoneyMay\_86:

(Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: Montavir\_81 Start: 47783, Stop: 47400, Start Num: 77

Candidate Starts for Montavir\_81:

(Start: 73 @47789 has 3 MA's), (Start: 75 @47786 has 2 MA's), (Start: 77 @47783 has 327 MA's), (83, 47741), (91, 47666), (92, 47663), (108, 47564), (115, 47534),

Gene: Morpher26\_79 Start: 48055, Stop: 47702, Start Num: 77

Candidate Starts for Morpher26\_79:

(Start: 77 @48055 has 327 MA's), (Start: 84 @48019 has 1 MA's), (91, 47956), (96, 47941), (98, 47929), (99, 47905), (107, 47857), (118, 47827), (138, 47731), (139, 47716),

Gene: Morrow\_85 Start: 48456, Stop: 48103, Start Num: 77

Candidate Starts for Morrow\_85:

(Start: 77 @48456 has 327 MA's), (Start: 84 @48420 has 1 MA's), (118, 48228), (122, 48213), (138, 48132), (139, 48117),

Gene: MrMagoo\_167 Start: 79054, Stop: 78647, Start Num: 56

Candidate Starts for MrMagoo\_167:

(28, 79135), (37, 79105), (Start: 56 @79054 has 20 MA's), (Start: 79 @79000 has 8 MA's), (86, 78958), (89, 78928), (91, 78907), (92, 78904), (94, 78901), (107, 78808), (108, 78805), (130, 78700),

Gene: Mulciber\_90 Start: 48796, Stop: 48443, Start Num: 77

Candidate Starts for Mulciber\_90:

(72, 48799), (Start: 77 @48796 has 327 MA's), (85, 48751), (89, 48718), (91, 48697), (96, 48682), (99, 48646), (113, 48577), (122, 48553), (139, 48457),

Gene: Munch\_90 Start: 48945, Stop: 48592, Start Num: 77

Candidate Starts for Munch\_90:

(72, 48948), (Start: 77 @48945 has 327 MA's), (85, 48900), (89, 48867), (91, 48846), (96, 48831), (99, 48795), (113, 48726), (122, 48702), (139, 48606),

Gene: Mundrea\_81 Start: 48294, Stop: 47941, Start Num: 77

Candidate Starts for Mundrea\_81:

(Start: 77 @48294 has 327 MA's), (Start: 84 @48258 has 1 MA's), (88, 48240), (91, 48195), (99, 48144), (107, 48096), (112, 48078), (118, 48066), (138, 47970), (139, 47955),

Gene: Myxus\_91 Start: 49573, Stop: 49220, Start Num: 77

Candidate Starts for Myxus\_91:

(Start: 77 @49573 has 327 MA's), (Start: 79 @49567 has 8 MA's), (Start: 84 @49537 has 1 MA's), (89, 49495), (91, 49474), (122, 49330), (139, 49234),

Gene: NaSiaTalie\_89 Start: 49263, Stop: 48916, Start Num: 77

Candidate Starts for NaSiaTalie\_89:

(36, 49365), (Start: 38 @49359 has 3 MA's), (Start: 77 @49263 has 327 MA's), (Start: 84 @49227 has 1 MA's), (92, 49161), (99, 49113), (112, 49047), (122, 49026), (139, 48930),

Gene: Nanosmite\_164 Start: 78507, Stop: 78100, Start Num: 56

Candidate Starts for Nanosmite\_164:

(Start: 56 @78507 has 20 MA's), (Start: 79 @78453 has 8 MA's), (89, 78381), (92, 78357), (104, 78273), (114, 78237), (119, 78228), (130, 78153), (135, 78138),

Gene: Nebs\_84 Start: 48456, Stop: 48103, Start Num: 77

Candidate Starts for Nebs\_84:

(Start: 77 @48456 has 327 MA's), (Start: 84 @48420 has 1 MA's), (91, 48357), (112, 48240), (118, 48228), (138, 48132), (139, 48117),

Gene: Neeharika16\_90 Start: 48415, Stop: 48035, Start Num: 70

Candidate Starts for Neeharika16\_90:

(33, 48517), (Start: 70 @48415 has 67 MA's), (Start: 79 @48394 has 8 MA's), (Start: 84 @48349 has 1 MA's), (85, 48337), (91, 48283), (96, 48268), (97, 48259), (104, 48196), (105, 48193), (127, 48103), (137, 48070),

Gene: Nemo27\_82 Start: 48412, Stop: 48059, Start Num: 77

Candidate Starts for Nemo27\_82:

(Start: 77 @48412 has 327 MA's), (Start: 84 @48376 has 1 MA's), (91, 48313), (118, 48184), (122, 48169), (138, 48088), (139, 48073),

Gene: Newrala\_90 Start: 48761, Stop: 48381, Start Num: 70

Candidate Starts for Newrala\_90:

(33, 48863), (Start: 70 @48761 has 67 MA's), (Start: 79 @48740 has 8 MA's), (Start: 84 @48695 has 1 MA's), (85, 48683), (91, 48629), (96, 48614), (97, 48605), (104, 48542), (105, 48539), (127, 48449), (137, 48416),

Gene: NicoleTera\_87 Start: 49416, Stop: 49063, Start Num: 77

Candidate Starts for NicoleTera\_87:

(35, 49518), (42, 49500), (45, 49491), (Start: 77 @49416 has 327 MA's), (Start: 84 @49380 has 1 MA's), (92, 49314), (99, 49266), (108, 49215), (112, 49200), (122, 49173), (139, 49077),

Gene: Noella\_86 Start: 47638, Stop: 47213, Start Num: 55

Candidate Starts for Noella\_86:

(26, 47728), (Start: 55 @47638 has 8 MA's), (Start: 60 @47629 has 12 MA's), (Start: 70 @47602 has 67 MA's), (89, 47509), (129, 47281), (132, 47266),

Gene: Noelle\_80 Start: 48261, Stop: 47908, Start Num: 77

Candidate Starts for Noelle\_80:

(Start: 77 @48261 has 327 MA's), (Start: 84 @48225 has 1 MA's), (91, 48162), (99, 48111), (107, 48063), (108, 48060), (118, 48033), (138, 47937), (139, 47922),

Gene: Norbert\_81 Start: 47635, Stop: 47210, Start Num: 55

Candidate Starts for Norbert\_81:

(26, 47725), (Start: 55 @47635 has 8 MA's), (Start: 60 @47626 has 12 MA's), (Start: 70 @47599 has 67 MA's), (89, 47506), (129, 47278), (132, 47263),

Gene: NorthStar\_80 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for NorthStar\_80:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (112, 48200), (118, 48188), (138, 48092), (139, 48077),

Gene: NotAPhaseMom\_82 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for NotAPhaseMom\_82:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (91, 48318), (118, 48189), (122, 48174), (138, 48093), (139, 48078),

Gene: NothingSpecial\_83 Start: 49297, Stop: 48917, Start Num: 70

Candidate Starts for NothingSpecial\_83:

(Start: 70 @49297 has 67 MA's), (Start: 79 @49276 has 8 MA's), (91, 49165), (92, 49162), (98, 49138), (99, 49114), (104, 49078),

Gene: Nyxis\_82 Start: 48301, Stop: 47948, Start Num: 77

Candidate Starts for Nyxis\_82:

(Start: 77 @48301 has 327 MA's), (Start: 84 @48265 has 1 MA's), (91, 48202), (118, 48073), (122, 48058), (138, 47977), (139, 47962),

Gene: OKCentral2016\_81 Start: 47305, Stop: 46898, Start Num: 61

Candidate Starts for OKCentral2016\_81:

(Start: 61 @47305 has 21 MA's), (Start: 70 @47281 has 67 MA's), (89, 47188), (91, 47167), (95, 47158), (98, 47140), (104, 47080), (109, 47065), (132, 46951),

Gene: OKaNui\_82 Start: 48467, Stop: 48114, Start Num: 77

Candidate Starts for OKaNui\_82:

(Start: 77 @48467 has 327 MA's), (Start: 84 @48431 has 1 MA's), (118, 48239), (122, 48224), (138, 48143), (139, 48128),

Gene: Obama12\_84 Start: 48840, Stop: 48487, Start Num: 77

Candidate Starts for Obama12\_84:

(Start: 77 @48840 has 327 MA's), (Start: 84 @48804 has 1 MA's), (118, 48612), (122, 48597), (138, 48516), (139, 48501),

Gene: Odin\_88 Start: 49191, Stop: 48811, Start Num: 70

Candidate Starts for Odin\_88:

(5, 49443), (Start: 70 @49191 has 67 MA's), (Start: 79 @49170 has 8 MA's), (91, 49059), (94, 49053), (97, 49035), (102, 48987), (116, 48933),

Gene: Ohfah\_84 Start: 48456, Stop: 48103, Start Num: 77

Candidate Starts for Ohfah\_84:

(Start: 77 @48456 has 327 MA's), (Start: 84 @48420 has 1 MA's), (91, 48357), (112, 48240), (118, 48228), (138, 48132), (139, 48117),

Gene: OlanP\_85 Start: 48002, Stop: 47613, Start Num: 77

Candidate Starts for OlanP\_85:

(Start: 77 @48002 has 327 MA's), (91, 47885), (92, 47882), (108, 47783), (115, 47753),

Gene: Ollie\_86 Start: 47649, Stop: 47266, Start Num: 77

Candidate Starts for Ollie\_86:

(23, 47808), (49, 47718), (51, 47709), (Start: 64 @47679 has 1 MA's), (Start: 73 @47655 has 3 MA's), (Start: 77 @47649 has 327 MA's), (Start: 79 @47643 has 8 MA's), (91, 47532), (92, 47529), (108, 47430), (115, 47400),

Gene: Onglai\_89 Start: 47722, Stop: 47375, Start Num: 79

Candidate Starts for Onglai\_89:

(Start: 77 @47728 has 327 MA's), (Start: 79 @47722 has 8 MA's), (Start: 84 @47692 has 1 MA's), (89, 47650), (91, 47629), (122, 47485), (139, 47389),

Gene: Orange\_91 Start: 48495, Stop: 48142, Start Num: 77

Candidate Starts for Orange\_91:

(72, 48498), (Start: 77 @48495 has 327 MA's), (85, 48450), (89, 48417), (91, 48396), (96, 48381), (99, 48345), (113, 48276), (122, 48252), (139, 48156),

Gene: P28Green\_86 Start: 47789, Stop: 47406, Start Num: 77

Candidate Starts for P28Green\_86:

(Start: 73 @47795 has 3 MA's), (Start: 75 @47792 has 2 MA's), (Start: 77 @47789 has 327 MA's), (83, 47747), (91, 47672), (92, 47669), (108, 47570), (115, 47540),

Gene: PGHhamlin\_88 Start: 47770, Stop: 47387, Start Num: 77

Candidate Starts for PGHhamlin\_88:

(23, 47929), (49, 47839), (51, 47830), (Start: 64 @47800 has 1 MA's), (Start: 73 @47776 has 3 MA's), (Start: 77 @47770 has 327 MA's), (Start: 79 @47764 has 8 MA's), (91, 47653), (92, 47650), (108, 47551), (115, 47521),

Gene: PP\_01 Start: 413, Stop: 3, Start Num: 60

Candidate Starts for PP\_01:

(31, 497), (Start: 60 @413 has 12 MA's), (Start: 70 @389 has 67 MA's), (80, 362), (88, 320), (92, 272), (98, 248), (100, 221), (104, 188), (107, 176), (129, 71), (140, 20),

Gene: PackMan\_86 Start: 47487, Stop: 47134, Start Num: 77

Candidate Starts for PackMan\_86:

(Start: 77 @47487 has 327 MA's), (Start: 79 @47481 has 8 MA's), (Start: 84 @47451 has 1 MA's), (89, 47409), (91, 47388), (122, 47244), (139, 47148),

Gene: Palestino\_82 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Palestino\_82:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: Panamaxus\_81 Start: 47628, Stop: 47212, Start Num: 60

Candidate Starts for Panamaxus\_81:

(26, 47727), (Start: 55 @47637 has 8 MA's), (Start: 60 @47628 has 12 MA's), (Start: 70 @47601 has 67 MA's), (89, 47508), (129, 47280), (132, 47265),

Gene: Pawn\_85 Start: 47831, Stop: 47442, Start Num: 77

Candidate Starts for Pawn\_85:

(Start: 77 @47831 has 327 MA's), (91, 47714), (92, 47711), (108, 47612),

Gene: PeaceMeal1\_79 Start: 47235, Stop: 46828, Start Num: 61

Candidate Starts for PeaceMeal1\_79:

(Start: 61 @47235 has 21 MA's), (Start: 70 @47211 has 67 MA's), (89, 47118), (91, 47097), (95, 47088), (98, 47070), (104, 47010), (109, 46995), (122, 46947), (129, 46896), (132, 46881),

Gene: Peaches\_81 Start: 48421, Stop: 48068, Start Num: 77

Candidate Starts for Peaches\_81:

(Start: 77 @48421 has 327 MA's), (Start: 84 @48385 has 1 MA's), (91, 48322), (118, 48193), (122, 48178), (138, 48097), (139, 48082),

Gene: PegLeg\_150 Start: 75840, Stop: 75433, Start Num: 56

Candidate Starts for PegLeg\_150:

(Start: 56 @75840 has 20 MA's), (89, 75714), (92, 75690), (97, 75669), (98, 75666), (108, 75591), (114, 75570), (130, 75486), (137, 75468),

Gene: Pembroke\_86 Start: 47779, Stop: 47396, Start Num: 77

Candidate Starts for Pembroke\_86:

(23, 47938), (49, 47848), (51, 47839), (Start: 64 @47809 has 1 MA's), (Start: 73 @47785 has 3 MA's), (Start: 77 @47779 has 327 MA's), (Start: 79 @47773 has 8 MA's), (91, 47662), (92, 47659), (108, 47560), (115, 47530),

Gene: Penny1\_86 Start: 47787, Stop: 47404, Start Num: 77

Candidate Starts for Penny1\_86:

(Start: 73 @47793 has 3 MA's), (Start: 75 @47790 has 2 MA's), (Start: 77 @47787 has 327 MA's), (83, 47745), (91, 47670), (92, 47667), (108, 47568), (115, 47538),

Gene: Perplexer\_79 Start: 48035, Stop: 47682, Start Num: 77

Candidate Starts for Perplexer\_79:

(Start: 77 @48035 has 327 MA's), (Start: 84 @47999 has 1 MA's), (91, 47936), (96, 47921), (98, 47909), (99, 47885), (107, 47837), (118, 47807), (138, 47711), (139, 47696),

Gene: PeterPeter\_83 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for PeterPeter\_83:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (91, 48311), (112, 48194), (118, 48182), (138, 48086), (139, 48071),

Gene: Petersenfast\_85 Start: 47376, Stop: 47023, Start Num: 77

Candidate Starts for Petersenfast\_85:

(72, 47379), (Start: 77 @47376 has 327 MA's), (85, 47331), (89, 47298), (91, 47277), (96, 47262), (99, 47226), (113, 47157), (122, 47133), (139, 47037),

Gene: PetiteSangsue\_79 Start: 48038, Stop: 47685, Start Num: 77

Candidate Starts for PetiteSangsue\_79:

(Start: 77 @48038 has 327 MA's), (Start: 84 @48002 has 1 MA's), (91, 47939), (96, 47924), (98, 47912), (99, 47888), (107, 47840), (118, 47810), (138, 47714), (139, 47699),

Gene: Ph8s\_91 Start: 48979, Stop: 48599, Start Num: 70

Candidate Starts for Ph8s\_91:

(Start: 70 @48979 has 67 MA's), (Start: 79 @48958 has 8 MA's), (85, 48901), (88, 48892), (91, 48847), (97, 48823), (102, 48775),

Gene: Phacado\_83 Start: 48412, Stop: 48059, Start Num: 77

Candidate Starts for Phacado\_83:

(Start: 77 @48412 has 327 MA's), (Start: 84 @48376 has 1 MA's), (91, 48313), (118, 48184), (122, 48169), (138, 48088), (139, 48073),

Gene: Phaded\_82 Start: 50321, Stop: 49899, Start Num: 48

Candidate Starts for Phaded\_82:

(Start: 48 @50321 has 1 MA's), (Start: 65 @50279 has 7 MA's), (Start: 79 @50258 has 8 MA's), (91, 50147), (98, 50120), (99, 50096), (101, 50081), (104, 50060), (125, 49976), (139, 49913),

Gene: Phaeder\_91 Start: 49448, Stop: 49095, Start Num: 77

Candidate Starts for Phaeder\_91:

(Start: 77 @49448 has 327 MA's), (Start: 79 @49442 has 8 MA's), (Start: 84 @49412 has 1 MA's), (89, 49370), (91, 49349), (122, 49205), (139, 49109),

Gene: Phantastic\_86 Start: 47138, Stop: 46725, Start Num: 61

Candidate Starts for Phantastic\_86:

(26, 47234), (Start: 55 @47144 has 8 MA's), (Start: 61 @47138 has 21 MA's), (89, 47021), (94, 46994), (105, 46910), (129, 46793), (132, 46778),

Gene: Phelipe\_83 Start: 48377, Stop: 48024, Start Num: 77

Candidate Starts for Phelipe\_83:

(Start: 77 @48377 has 327 MA's), (Start: 84 @48341 has 1 MA's), (91, 48278), (112, 48161), (118, 48149), (138, 48053), (139, 48038),

Gene: Phighter1804\_83 Start: 48477, Stop: 48124, Start Num: 77

Candidate Starts for Phighter1804\_83:

(Start: 77 @48477 has 327 MA's), (Start: 84 @48441 has 1 MA's), (107, 48279), (118, 48249), (122, 48234), (131, 48174), (138, 48153), (139, 48138),

Gene: PhishRPhriends\_83 Start: 47011, Stop: 46622, Start Num: 77

Candidate Starts for PhishRPhriends\_83:

(Start: 77 @47011 has 327 MA's), (91, 46894), (92, 46891), (108, 46792),

Gene: Phoebe\_87 Start: 47779, Stop: 47396, Start Num: 77

Candidate Starts for Phoebe\_87:

(Start: 73 @47785 has 3 MA's), (Start: 75 @47782 has 2 MA's), (Start: 77 @47779 has 327 MA's), (83, 47737), (91, 47662), (92, 47659), (108, 47560), (115, 47530),

Gene: Phonnegut\_91 Start: 49454, Stop: 49107, Start Num: 79

Candidate Starts for Phonnegut\_91:

(Start: 77 @49460 has 327 MA's), (Start: 79 @49454 has 8 MA's), (Start: 84 @49424 has 1 MA's), (89, 49382), (91, 49361), (122, 49217), (139, 49121),

Gene: Phontbonne\_83 Start: 48317, Stop: 47964, Start Num: 77

Candidate Starts for Phontbonne\_83:

(Start: 77 @48317 has 327 MA's), (Start: 84 @48281 has 1 MA's), (118, 48089), (122, 48074), (138, 47993), (139, 47978),

Gene: Phranny\_79 Start: 45279, Stop: 44890, Start Num: 77

Candidate Starts for Phranny\_79:

(Start: 77 @45279 has 327 MA's), (91, 45162), (92, 45159), (108, 45060),

Gene: Phrappuccino\_6 Start: 6232, Stop: 6651, Start Num: 63

Candidate Starts for Phrappuccino\_6:

(1, 5695), (2, 5776), (4, 5992), (41, 6175), (Start: 63 @6232 has 3 MA's), (81, 6283), (85, 6316), (89, 6349), (90, 6352), (103, 6445), (104, 6457), (106, 6466), (120, 6502), (128, 6562), (141, 6613), (145, 6622),

Gene: Pioneer\_91 Start: 49454, Stop: 49107, Start Num: 79

Candidate Starts for Pioneer\_91:

(Start: 77 @49460 has 327 MA's), (Start: 79 @49454 has 8 MA's), (Start: 84 @49424 has 1 MA's), (89, 49382), (91, 49361), (122, 49217), (139, 49121),

Gene: Pipcraft\_79 Start: 48417, Stop: 48064, Start Num: 77

Candidate Starts for Pipcraft\_79:

(Start: 77 @48417 has 327 MA's), (Start: 84 @48381 has 1 MA's), (91, 48318), (118, 48189), (122, 48174), (138, 48093), (139, 48078),

Gene: Piro94\_87 Start: 49217, Stop: 48864, Start Num: 77

Candidate Starts for Piro94\_87:

(11, 49427), (36, 49319), (Start: 38 @49313 has 3 MA's), (Start: 77 @49217 has 327 MA's), (Start: 84 @49181 has 1 MA's), (92, 49115), (99, 49067), (108, 49016), (112, 49001), (113, 48998), (122, 48974), (139, 48878),

Gene: Pistachio\_86 Start: 47518, Stop: 47099, Start Num: 58

Candidate Starts for Pistachio\_86:

(Start: 58 @47518 has 9 MA's), (Start: 70 @47488 has 67 MA's), (Start: 84 @47437 has 1 MA's), (99, 47323), (104, 47287), (132, 47152),

Gene: Pmask\_90 Start: 48962, Stop: 48582, Start Num: 70

Candidate Starts for Pmask\_90:

(33, 49064), (Start: 70 @48962 has 67 MA's), (Start: 79 @48941 has 8 MA's), (Start: 84 @48896 has 1 MA's), (85, 48884), (91, 48830), (96, 48815), (97, 48806), (104, 48743), (105, 48740), (127, 48650), (137, 48617),

Gene: Pocahontas\_84 Start: 47633, Stop: 47208, Start Num: 55

Candidate Starts for Pocahontas\_84:

(26, 47723), (Start: 55 @47633 has 8 MA's), (Start: 60 @47624 has 12 MA's), (Start: 70 @47597 has 67 MA's), (89, 47504), (129, 47276), (132, 47261),

Gene: Polymorphads\_84 Start: 48437, Stop: 48084, Start Num: 77

Candidate Starts for Polymorphads\_84:

(Start: 77 @48437 has 327 MA's), (Start: 84 @48401 has 1 MA's), (118, 48209), (122, 48194), (138, 48113), (139, 48098),

Gene: Polyphemus\_84 Start: 46733, Stop: 46353, Start Num: 70

Candidate Starts for Polyphemus\_84:

(33, 46835), (Start: 70 @46733 has 67 MA's), (Start: 79 @46712 has 8 MA's), (Start: 84 @46667 has 1 MA's), (85, 46655), (91, 46601), (96, 46586), (97, 46577), (104, 46514), (105, 46511), (127, 46421), (137, 46388),

Gene: Pomar16\_90 Start: 49602, Stop: 49222, Start Num: 70

Candidate Starts for Pomar16\_90:

(Start: 70 @49602 has 67 MA's), (88, 49515), (97, 49446), (98, 49443), (99, 49419),

Gene: Poompha\_79 Start: 47233, Stop: 46826, Start Num: 61

Candidate Starts for Poompha\_79:

(Start: 61 @47233 has 21 MA's), (Start: 70 @47209 has 67 MA's), (89, 47116), (91, 47095), (95, 47086), (98, 47068), (104, 47008), (109, 46993), (122, 46945), (129, 46894), (132, 46879),

Gene: Popcicle\_85 Start: 47633, Stop: 47208, Start Num: 55

Candidate Starts for Popcicle\_85:

(26, 47723), (Start: 55 @47633 has 8 MA's), (Start: 60 @47624 has 12 MA's), (Start: 70 @47597 has 67 MA's), (89, 47504), (129, 47276), (132, 47261),

Gene: PotatoSplit\_87 Start: 47787, Stop: 47404, Start Num: 77

Candidate Starts for PotatoSplit\_87:

(Start: 73 @47793 has 3 MA's), (Start: 75 @47790 has 2 MA's), (Start: 77 @47787 has 327 MA's), (83, 47745), (91, 47670), (92, 47667), (108, 47568), (115, 47538),

Gene: Power\_88 Start: 49880, Stop: 49527, Start Num: 77

Candidate Starts for Power\_88:

(Start: 77 @49880 has 327 MA's), (Start: 84 @49844 has 1 MA's), (92, 49778), (99, 49730), (108, 49679), (112, 49664), (139, 49541),

Gene: Priamo\_92 Start: 48199, Stop: 47819, Start Num: 70

Candidate Starts for Priamo\_92:

(18, 48337), (Start: 55 @48232 has 8 MA's), (Start: 70 @48199 has 67 MA's), (Start: 79 @48178 has 8 MA's), (Start: 84 @48133 has 1 MA's), (85, 48121), (91, 48067), (96, 48052), (97, 48043), (98, 48040), (104, 47980), (105, 47977), (127, 47887), (137, 47854),

Gene: Priya\_89 Start: 49232, Stop: 48879, Start Num: 77

Candidate Starts for Priya\_89:

(Start: 77 @49232 has 327 MA's), (Start: 79 @49226 has 8 MA's), (Start: 84 @49196 has 1 MA's), (89, 49154), (91, 49133), (122, 48989), (139, 48893),

Gene: Prudy\_83 Start: 49666, Stop: 49313, Start Num: 77

Candidate Starts for Prudy\_83:

(42, 49750), (45, 49741), (Start: 77 @49666 has 327 MA's), (Start: 84 @49630 has 1 MA's), (92, 49564), (99, 49516), (112, 49450), (139, 49327),

Gene: Pukovnik\_83 Start: 49753, Stop: 49373, Start Num: 65

Candidate Starts for Pukovnik\_83:

(Start: 48 @49783 has 1 MA's), (Start: 65 @49753 has 7 MA's), (Start: 79 @49732 has 8 MA's), (85, 49675), (91, 49621), (97, 49597), (99, 49570), (101, 49555), (104, 49534), (116, 49495), (125, 49450), (139, 49387),

Gene: Pumbaa\_83 Start: 48361, Stop: 48008, Start Num: 77

Candidate Starts for Pumbaa\_83:

(Start: 77 @48361 has 327 MA's), (Start: 84 @48325 has 1 MA's), (91, 48262), (118, 48133), (122, 48118), (138, 48037), (139, 48022),

Gene: Puppy\_87 Start: 47588, Stop: 47169, Start Num: 58

Candidate Starts for Puppy\_87:

(Start: 58 @47588 has 9 MA's), (Start: 70 @47558 has 67 MA's), (Start: 84 @47507 has 1 MA's), (99, 47393), (104, 47357), (132, 47222),

Gene: Qobbit\_89 Start: 49194, Stop: 48841, Start Num: 77

Candidate Starts for Qobbit\_89:

(Start: 77 @49194 has 327 MA's), (Start: 79 @49188 has 8 MA's), (Start: 84 @49158 has 1 MA's), (89, 49116), (91, 49095), (122, 48951), (139, 48855),

Gene: QueenB2\_85 Start: 48968, Stop: 48615, Start Num: 77

Candidate Starts for QueenB2\_85:

(Start: 77 @48968 has 327 MA's), (Start: 84 @48932 has 1 MA's), (94, 48863), (98, 48842), (99, 48818), (112, 48752), (139, 48629),

Gene: QueenBeesly\_88 Start: 49833, Stop: 49480, Start Num: 77

Candidate Starts for QueenBeesly\_88:

(Start: 77 @49833 has 327 MA's), (Start: 84 @49797 has 1 MA's), (92, 49731), (99, 49683), (108, 49632), (139, 49494),

Gene: QuinnKiro\_84 Start: 47627, Stop: 47211, Start Num: 60

Candidate Starts for QuinnKiro\_84:

(26, 47726), (Start: 55 @47636 has 8 MA's), (Start: 60 @47627 has 12 MA's), (Start: 70 @47600 has 67 MA's), (89, 47507), (129, 47279), (132, 47264),

Gene: Quokka\_91 Start: 49071, Stop: 48691, Start Num: 70

Candidate Starts for Quokka\_91:

(Start: 70 @49071 has 67 MA's), (Start: 79 @49050 has 8 MA's), (88, 48984), (89, 48960), (91, 48939), (97, 48915), (98, 48912), (104, 48852), (122, 48801), (139, 48705),

Gene: RGL3\_54 Start: 39978, Stop: 39625, Start Num: 77

Candidate Starts for RGL3\_54:

(Start: 77 @39978 has 327 MA's), (96, 39864), (98, 39852), (103, 39804), (107, 39780),

Gene: Rachaly\_86 Start: 48977, Stop: 48624, Start Num: 77

Candidate Starts for Rachaly\_86:

(Start: 77 @48977 has 327 MA's), (Start: 84 @48941 has 1 MA's), (92, 48875), (99, 48827), (112, 48761), (139, 48638),

Gene: Rahalelujah\_90 Start: 48992, Stop: 48639, Start Num: 77

Candidate Starts for Rahalelujah\_90:

(Start: 77 @48992 has 327 MA's), (Start: 84 @48956 has 1 MA's), (89, 48914), (105, 48803), (112, 48776), (139, 48653),

Gene: Reba\_82 Start: 46667, Stop: 46278, Start Num: 77

Candidate Starts for Reba\_82:

(Start: 77 @46667 has 327 MA's), (91, 46550), (92, 46547), (108, 46448),

Gene: Rebeuca\_83 Start: 48503, Stop: 48096, Start Num: 61

Candidate Starts for Rebeuca\_83:

(16, 48641), (Start: 61 @48503 has 21 MA's), (Start: 70 @48479 has 67 MA's), (89, 48386), (91, 48365), (95, 48356), (98, 48338), (104, 48278), (105, 48275), (107, 48266), (109, 48263), (122, 48215), (132, 48149),

Gene: RedRock\_89 Start: 49991, Stop: 49638, Start Num: 38

Candidate Starts for RedRock\_89:

(Start: 38 @49991 has 3 MA's), (Start: 84 @49955 has 1 MA's), (92, 49889), (99, 49841), (112, 49775), (113, 49772), (139, 49652),

Gene: Refuge\_83 Start: 49309, Stop: 48926, Start Num: 70

Candidate Starts for Refuge\_83:

(40, 49387), (Start: 70 @49309 has 67 MA's), (Start: 79 @49288 has 8 MA's), (89, 49198), (97, 49153), (98, 49150), (99, 49126), (104, 49090), (105, 49087), (110, 49069),

Gene: Reindeer\_148 Start: 77080, Stop: 76673, Start Num: 56

Candidate Starts for Reindeer\_148:

(Start: 56 @77080 has 20 MA's), (86, 76984), (89, 76954), (92, 76930), (97, 76909), (99, 76882), (103, 76858), (104, 76846), (105, 76843), (130, 76726), (137, 76708),

Gene: Relief\_82 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Relief\_82:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (112, 48197), (118, 48185), (138, 48089), (139, 48074),

Gene: ResDef\_83 Start: 47639, Stop: 47214, Start Num: 55

Candidate Starts for ResDef\_83:

(26, 47729), (Start: 55 @47639 has 8 MA's), (Start: 60 @47630 has 12 MA's), (Start: 70 @47603 has 67 MA's), (89, 47510), (129, 47282), (132, 47267),

Gene: Retro23\_88 Start: 49379, Stop: 49026, Start Num: 77

Candidate Starts for Retro23\_88:

(Start: 77 @49379 has 327 MA's), (Start: 84 @49343 has 1 MA's), (92, 49277), (112, 49163), (139, 49040),

Gene: Rey\_165 Start: 78264, Stop: 77857, Start Num: 56

Candidate Starts for Rey\_165:

(28, 78345), (37, 78315), (Start: 56 @78264 has 20 MA's), (Start: 79 @78210 has 8 MA's), (86, 78168), (91, 78117), (92, 78114), (94, 78111), (104, 78030), (107, 78018), (108, 78015), (130, 77910),

Gene: RhynO\_70 Start: 43938, Stop: 43531, Start Num: 61

Candidate Starts for RhynO\_70:

(16, 44085), (Start: 61 @43938 has 21 MA's), (Start: 70 @43914 has 67 MA's), (89, 43821), (98, 43773), (104, 43713), (111, 43683), (117, 43665),

Gene: Rifter\_93 Start: 47952, Stop: 47572, Start Num: 70

Candidate Starts for Rifter\_93:

(33, 48054), (Start: 70 @47952 has 67 MA's), (Start: 79 @47931 has 8 MA's), (Start: 84 @47886 has 1 MA's), (85, 47874), (91, 47820), (96, 47805), (97, 47796), (98, 47793), (104, 47733), (105, 47730), (127, 47640), (137, 47607),

Gene: RockieBear\_80 Start: 48421, Stop: 48068, Start Num: 77

Candidate Starts for RockieBear\_80:

(Start: 77 @48421 has 327 MA's), (Start: 84 @48385 has 1 MA's), (118, 48193), (122, 48178), (138, 48097), (139, 48082),

Gene: Rockstar\_73 Start: 44617, Stop: 44204, Start Num: 61

Candidate Starts for Rockstar\_73:

(Start: 61 @44617 has 21 MA's), (89, 44500), (105, 44389), (129, 44272), (132, 44257),

Gene: Roimos\_84 Start: 47827, Stop: 47408, Start Num: 58

Candidate Starts for Roimos\_84:

(19, 47953), (Start: 58 @47827 has 9 MA's), (Start: 70 @47797 has 67 MA's), (Start: 84 @47746 has 1 MA's), (99, 47632), (104, 47596), (132, 47461),

Gene: Roksolana\_93 Start: 48647, Stop: 48288, Start Num: 79

Candidate Starts for Roksolana\_93:

(33, 48770), (Start: 70 @48668 has 67 MA's), (Start: 79 @48647 has 8 MA's), (Start: 84 @48602 has 1 MA's), (85, 48590), (91, 48536), (96, 48521), (97, 48512), (98, 48509), (104, 48449), (105, 48446), (127, 48356), (137, 48323),

Gene: Romney\_82 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Romney\_82:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (112, 48197), (118, 48185), (138, 48089), (139, 48074),

Gene: Roosevelt\_81 Start: 48418, Stop: 48065, Start Num: 77

Candidate Starts for Roosevelt\_81:

(Start: 77 @48418 has 327 MA's), (Start: 84 @48382 has 1 MA's), (118, 48190), (122, 48175), (138, 48094), (139, 48079),

Gene: Rosa24\_79 Start: 48444, Stop: 48091, Start Num: 77

Candidate Starts for Rosa24\_79:

(Start: 77 @48444 has 327 MA's), (Start: 84 @48408 has 1 MA's), (91, 48345), (99, 48294), (107, 48246), (108, 48243), (118, 48216), (138, 48120), (139, 48105),

Gene: RoseMarie\_154 Start: 78565, Stop: 78158, Start Num: 56

Candidate Starts for RoseMarie\_154:

(Start: 56 @78565 has 20 MA's), (89, 78439), (92, 78415), (97, 78394), (98, 78391), (108, 78316), (114, 78295), (130, 78211), (137, 78193),

Gene: Rowdy\_85 Start: 48324, Stop: 47917, Start Num: 61

Candidate Starts for Rowdy\_85:

(16, 48471), (Start: 61 @48324 has 21 MA's), (Start: 70 @48300 has 67 MA's), (89, 48207), (98, 48159), (104, 48099), (111, 48069), (117, 48051),

Gene: Ruin\_83 Start: 48409, Stop: 48056, Start Num: 77

Candidate Starts for Ruin\_83:

(Start: 77 @48409 has 327 MA's), (Start: 84 @48373 has 1 MA's), (91, 48310), (112, 48193), (118, 48181), (138, 48085), (139, 48070),

Gene: Rummer\_85 Start: 47811, Stop: 47428, Start Num: 77

Candidate Starts for Rummer\_85:

(Start: 73 @47817 has 3 MA's), (Start: 75 @47814 has 2 MA's), (Start: 77 @47811 has 327 MA's), (83, 47769), (91, 47694), (92, 47691), (108, 47592), (115, 47562),

Gene: RyeScarlet\_92 Start: 49446, Stop: 49093, Start Num: 77

Candidate Starts for RyeScarlet\_92:

(Start: 77 @49446 has 327 MA's), (Start: 79 @49440 has 8 MA's), (Start: 84 @49410 has 1 MA's), (89, 49368), (91, 49347), (122, 49203), (139, 49107),

Gene: Sabertooth\_83 Start: 48421, Stop: 48068, Start Num: 77

Candidate Starts for Sabertooth\_83:

(Start: 77 @48421 has 327 MA's), (Start: 84 @48385 has 1 MA's), (91, 48322), (112, 48205), (118, 48193), (138, 48097), (139, 48082),

Gene: Sabia\_84 Start: 47786, Stop: 47403, Start Num: 77

Candidate Starts for Sabia\_84:

(23, 47945), (49, 47855), (51, 47846), (Start: 64 @47816 has 1 MA's), (Start: 73 @47792 has 3 MA's), (Start: 77 @47786 has 327 MA's), (Start: 79 @47780 has 8 MA's), (91, 47669), (92, 47666), (108, 47567), (115, 47537),

Gene: Sabinator\_84 Start: 47785, Stop: 47402, Start Num: 77

Candidate Starts for Sabinator\_84:

(Start: 73 @47791 has 3 MA's), (Start: 75 @47788 has 2 MA's), (Start: 77 @47785 has 327 MA's), (83, 47743), (91, 47668), (92, 47665), (108, 47566), (115, 47536),

Gene: Sachima\_87 Start: 49469, Stop: 49122, Start Num: 79

Candidate Starts for Sachima\_87:

(Start: 77 @49475 has 327 MA's), (Start: 79 @49469 has 8 MA's), (Start: 84 @49439 has 1 MA's), (89, 49397), (91, 49376), (122, 49232), (139, 49136),

Gene: Salz\_87 Start: 47605, Stop: 47252, Start Num: 77

Candidate Starts for Salz\_87:

(72, 47608), (Start: 77 @47605 has 327 MA's), (85, 47560), (89, 47527), (91, 47506), (96, 47491), (99, 47455), (113, 47386), (122, 47362), (139, 47266),

Gene: Saskia\_88 Start: 48007, Stop: 47654, Start Num: 77

Candidate Starts for Saskia\_88:

(72, 48010), (Start: 77 @48007 has 327 MA's), (Start: 84 @47971 has 1 MA's), (90, 47926), (92, 47905), (96, 47893), (99, 47857), (104, 47821), (139, 47668),

Gene: SaturnRing\_87 Start: 47971, Stop: 47552, Start Num: 58

Candidate Starts for SaturnRing\_87:

(Start: 58 @47971 has 9 MA's), (Start: 70 @47941 has 67 MA's), (Start: 84 @47890 has 1 MA's), (99, 47776), (104, 47740), (132, 47605),

Gene: Scamp\_83 Start: 48418, Stop: 48065, Start Num: 77

Candidate Starts for Scamp\_83:

(Start: 77 @48418 has 327 MA's), (Start: 84 @48382 has 1 MA's), (91, 48319), (112, 48202), (118, 48190), (138, 48094), (139, 48079),

Gene: Scherzo\_89 Start: 49492, Stop: 49139, Start Num: 77

Candidate Starts for Scherzo\_89:

(Start: 77 @49492 has 327 MA's), (Start: 79 @49486 has 8 MA's), (Start: 84 @49456 has 1 MA's), (89, 49414), (91, 49393), (122, 49249), (139, 49153),

Gene: Scout\_85 Start: 47152, Stop: 46733, Start Num: 58

Candidate Starts for Scout\_85:

(Start: 58 @47152 has 9 MA's), (Start: 70 @47122 has 67 MA's), (Start: 84 @47071 has 1 MA's), (99, 46957), (104, 46921), (132, 46786),

Gene: SemperFi\_88 Start: 49721, Stop: 49368, Start Num: 77

Candidate Starts for SemperFi\_88:

(Start: 77 @49721 has 327 MA's), (Start: 84 @49685 has 1 MA's), (92, 49619), (99, 49571), (108, 49520), (112, 49505), (139, 49382),

Gene: SenorClean\_84 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for SenorClean\_84:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Serenity\_92 Start: 49110, Stop: 48730, Start Num: 70

Candidate Starts for Serenity\_92:

(Start: 70 @49110 has 67 MA's), (88, 49023), (91, 48978), (97, 48954), (102, 48906), (116, 48852), (139, 48744),

Gene: Settecandela\_6 Start: 6232, Stop: 6651, Start Num: 63

Candidate Starts for Settecandela\_6:

(1, 5695), (2, 5776), (4, 5992), (41, 6175), (Start: 63 @6232 has 3 MA's), (81, 6283), (85, 6316), (89, 6349), (90, 6352), (103, 6445), (104, 6457), (106, 6466), (120, 6502), (128, 6562), (141, 6613), (145, 6622),

Gene: Severus\_80 Start: 47233, Stop: 46826, Start Num: 61

Candidate Starts for Severus\_80:

(Start: 61 @47233 has 21 MA's), (Start: 70 @47209 has 67 MA's), (89, 47116), (91, 47095), (95, 47086), (98, 47068), (104, 47008), (109, 46993), (122, 46945), (129, 46894), (132, 46879),

Gene: Shaka\_81 Start: 48414, Stop: 48061, Start Num: 77

Candidate Starts for Shaka\_81:

(Start: 77 @48414 has 327 MA's), (Start: 84 @48378 has 1 MA's), (91, 48315), (118, 48186), (138, 48090), (139, 48075),

Gene: Sham4\_88 Start: 47691, Stop: 47338, Start Num: 77

Candidate Starts for Sham4\_88:

(72, 47694), (Start: 77 @47691 has 327 MA's), (85, 47646), (89, 47613), (91, 47592), (96, 47577), (99, 47541), (113, 47472), (122, 47448), (139, 47352),

Gene: Shapes\_85 Start: 48324, Stop: 47917, Start Num: 61

Candidate Starts for Shapes\_85:

(16, 48471), (Start: 61 @48324 has 21 MA's), (Start: 70 @48300 has 67 MA's), (89, 48207), (98, 48159), (104, 48099), (111, 48069), (117, 48051),

Gene: SheaKeira\_86 Start: 48740, Stop: 48387, Start Num: 77

Candidate Starts for SheaKeira\_86:

(17, 48923), (22, 48899), (27, 48872), (Start: 77 @48740 has 327 MA's), (Start: 79 @48734 has 8 MA's), (Start: 84 @48704 has 1 MA's), (91, 48641), (108, 48539), (112, 48524), (122, 48497), (139, 48401),

Gene: Sheen\_81 Start: 50508, Stop: 50107, Start Num: 60

Candidate Starts for Sheen\_81:

(Start: 60 @50508 has 12 MA's), (Start: 70 @50484 has 67 MA's), (80, 50457), (85, 50424), (92, 50367), (98, 50343), (104, 50283), (107, 50271), (126, 50190), (130, 50169), (144, 50115),

Gene: SheldonCooper\_83 Start: 48854, Stop: 48501, Start Num: 77

Candidate Starts for SheldonCooper\_83:

(Start: 77 @48854 has 327 MA's), (Start: 84 @48818 has 1 MA's), (91, 48755), (112, 48638), (118, 48626), (138, 48530), (139, 48515),

Gene: Shygu2\_81 Start: 48360, Stop: 48007, Start Num: 77

Candidate Starts for Shygu2\_81:

(Start: 77 @48360 has 327 MA's), (Start: 84 @48324 has 1 MA's), (118, 48132), (138, 48036), (139, 48021),

Gene: Skinny\_153 Start: 76957, Stop: 76550, Start Num: 56

Candidate Starts for Skinny\_153:

(Start: 56 @76957 has 20 MA's), (89, 76831), (92, 76807), (97, 76786), (98, 76783), (108, 76708), (114, 76687), (130, 76603), (137, 76585),

Gene: Skipitt\_82 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for Skipitt\_82:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (91, 48311), (112, 48194), (118, 48182), (138, 48086), (139, 48071),

Gene: Sknot\_88 Start: 49076, Stop: 48723, Start Num: 77

Candidate Starts for Sknot\_88:

(36, 49178), (Start: 38 @49172 has 3 MA's), (Start: 77 @49076 has 327 MA's), (Start: 84 @49040 has 1 MA's), (92, 48974), (99, 48926), (112, 48860), (122, 48833), (139, 48737),

Gene: SlimJimmy\_147 Start: 76427, Stop: 76020, Start Num: 56

Candidate Starts for SlimJimmy\_147:

(37, 76478), (Start: 56 @76427 has 20 MA's), (89, 76301), (92, 76277), (97, 76256), (98, 76253), (108, 76178), (114, 76157), (130, 76073), (137, 76055),

Gene: Smeagan\_91 Start: 50128, Stop: 49775, Start Num: 77

Candidate Starts for Smeagan\_91:

(Start: 77 @50128 has 327 MA's), (Start: 84 @50092 has 1 MA's), (92, 50026), (99, 49978), (112, 49912), (139, 49789),

Gene: SmellyB\_91 Start: 48313, Stop: 47933, Start Num: 70

Candidate Starts for SmellyB\_91:

(33, 48415), (Start: 70 @48313 has 67 MA's), (Start: 79 @48292 has 8 MA's), (Start: 84 @48247 has 1 MA's), (85, 48235), (91, 48181), (96, 48166), (97, 48157), (104, 48094), (105, 48091), (127, 48001), (137, 47968),

Gene: SnapTap\_88 Start: 49536, Stop: 49183, Start Num: 77

Candidate Starts for SnapTap\_88:

(Start: 77 @49536 has 327 MA's), (Start: 84 @49500 has 1 MA's), (92, 49434), (99, 49386), (108, 49335), (112, 49320), (139, 49197),

Gene: Snape\_91 Start: 48484, Stop: 48131, Start Num: 77

Candidate Starts for Snape\_91:

(72, 48487), (Start: 77 @48484 has 327 MA's), (85, 48439), (89, 48406), (91, 48385), (96, 48370), (99, 48334), (113, 48265), (122, 48241), (139, 48145),

Gene: Snickers\_86 Start: 47751, Stop: 47368, Start Num: 77

Candidate Starts for Snickers\_86:

(23, 47910), (49, 47820), (51, 47811), (Start: 64 @47781 has 1 MA's), (Start: 73 @47757 has 3 MA's), (Start: 77 @47751 has 327 MA's), (Start: 79 @47745 has 8 MA's), (91, 47634), (92, 47631), (108, 47532), (115, 47502),

Gene: SoYo\_83 Start: 47699, Stop: 47316, Start Num: 77

Candidate Starts for SoYo\_83:

(Start: 73 @47705 has 3 MA's), (Start: 75 @47702 has 2 MA's), (Start: 77 @47699 has 327 MA's), (83, 47657), (91, 47582), (92, 47579), (108, 47480), (115, 47450),

Gene: SoilDragon\_86 Start: 47221, Stop: 46838, Start Num: 77

Candidate Starts for SoilDragon\_86:

(23, 47380), (49, 47290), (51, 47281), (Start: 64 @47251 has 1 MA's), (Start: 73 @47227 has 3 MA's), (Start: 77 @47221 has 327 MA's), (Start: 79 @47215 has 8 MA's), (91, 47104), (92, 47101), (108, 47002), (115, 46972),

Gene: SororFago\_87 Start: 49002, Stop: 48646, Start Num: 77

Candidate Starts for SororFago\_87:

(50, 49059), (54, 49050), (69, 49020), (Start: 77 @49002 has 327 MA's), (Start: 79 @48996 has 8 MA's), (80, 48990), (Start: 84 @48966 has 1 MA's), (93, 48897), (98, 48873), (99, 48849), (118, 48771), (135, 48684), (138, 48675), (139, 48660),

Gene: Soshari\_88 Start: 47807, Stop: 47424, Start Num: 77

Candidate Starts for Soshari\_88:

(Start: 73 @47813 has 3 MA's), (Start: 75 @47810 has 2 MA's), (Start: 77 @47807 has 327 MA's), (83, 47765), (91, 47690), (92, 47687), (108, 47588), (115, 47558),

Gene: Sparxx\_84 Start: 48412, Stop: 48059, Start Num: 77

Candidate Starts for Sparxx\_84:

(Start: 77 @48412 has 327 MA's), (Start: 84 @48376 has 1 MA's), (91, 48313), (112, 48196), (118, 48184), (138, 48088), (139, 48073),

Gene: Spike509\_86 Start: 47803, Stop: 47420, Start Num: 77

Candidate Starts for Spike509\_86:

(23, 47962), (49, 47872), (51, 47863), (Start: 64 @47833 has 1 MA's), (Start: 73 @47809 has 3 MA's), (Start: 77 @47803 has 327 MA's), (Start: 79 @47797 has 8 MA's), (91, 47686), (92, 47683), (108, 47584), (115, 47554),

Gene: Spino\_82 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for Spino\_82:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (112, 48200), (118, 48188), (138, 48092), (139, 48077),

Gene: Spouty\_89 Start: 49231, Stop: 48878, Start Num: 77

Candidate Starts for Spouty\_89:

(Start: 77 @49231 has 327 MA's), (Start: 79 @49225 has 8 MA's), (Start: 84 @49195 has 1 MA's), (89, 49153), (91, 49132), (122, 48988), (139, 48892),

Gene: Stagni\_83 Start: 47811, Stop: 47398, Start Num: 64

Candidate Starts for Stagni\_83:

(23, 47940), (49, 47850), (51, 47841), (Start: 64 @47811 has 1 MA's), (Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: StarStuff\_90 Start: 49564, Stop: 49184, Start Num: 70

Candidate Starts for StarStuff\_90:

(Start: 70 @49564 has 67 MA's), (88, 49477), (97, 49408), (98, 49405), (99, 49381),

Gene: Stasia\_80 Start: 48401, Stop: 48003, Start Num: 61

Candidate Starts for Stasia\_80:

(Start: 61 @48401 has 21 MA's), (Start: 73 @48368 has 3 MA's), (91, 48263), (107, 48164), (122, 48122), (126, 48086), (130, 48065),

Gene: SteMason\_79 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for SteMason\_79:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: Steamy\_79 Start: 48134, Stop: 47763, Start Num: 67

Candidate Starts for Steamy\_79:

(20, 48284), (27, 48248), (Start: 38 @48212 has 3 MA's), (Start: 67 @48134 has 1 MA's), (Start: 79 @48113 has 8 MA's), (80, 48107), (Start: 84 @48083 has 1 MA's), (89, 48041), (90, 48038), (92,

48017), (93, 48014), (98, 47990), (108, 47915), (138, 47792), (139, 47777),

Gene: StepMih\_86 Start: 47778, Stop: 47389, Start Num: 73

Candidate Starts for StepMih\_86:

(23, 47931), (49, 47841), (51, 47832), (Start: 64 @47802 has 1 MA's), (Start: 73 @47778 has 3 MA's), (Start: 77 @47772 has 327 MA's), (Start: 79 @47766 has 8 MA's), (91, 47655), (92, 47652), (108, 47553), (115, 47523),

Gene: Stink\_83 Start: 48640, Stop: 48287, Start Num: 77

Candidate Starts for Stink\_83:

(Start: 77 @48640 has 327 MA's), (Start: 84 @48604 has 1 MA's), (91, 48541), (99, 48490), (107, 48442), (108, 48439), (112, 48424), (118, 48412), (138, 48316), (139, 48301),

Gene: Sultana\_83 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Sultana\_83:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (118, 48185), (122, 48170), (138, 48089), (139, 48074),

Gene: Sunhee\_89 Start: 47491, Stop: 47138, Start Num: 75

Candidate Starts for Sunhee\_89:

(Start: 73 @47494 has 3 MA's), (Start: 75 @47491 has 2 MA's), (Start: 79 @47485 has 8 MA's), (80, 47479), (Start: 84 @47455 has 1 MA's), (89, 47413), (90, 47410), (96, 47377), (118, 47263), (122, 47248), (138, 47167), (139, 47152),

Gene: SuperAwesome\_91 Start: 49001, Stop: 48621, Start Num: 70

Candidate Starts for SuperAwesome\_91:

(33, 49103), (Start: 70 @49001 has 67 MA's), (Start: 79 @48980 has 8 MA's), (Start: 84 @48935 has 1 MA's), (85, 48923), (91, 48869), (96, 48854), (97, 48845), (104, 48782), (105, 48779), (127, 48689), (137, 48656),

Gene: SuperCallie99\_87 Start: 48376, Stop: 47996, Start Num: 70

Candidate Starts for SuperCallie99\_87:

(33, 48478), (Start: 70 @48376 has 67 MA's), (Start: 79 @48355 has 8 MA's), (Start: 84 @48310 has 1 MA's), (85, 48298), (91, 48244), (96, 48229), (97, 48220), (104, 48157), (105, 48154), (127, 48064), (137, 48031),

Gene: Superchunk\_89 Start: 48723, Stop: 48343, Start Num: 70

Candidate Starts for Superchunk\_89:

(Start: 70 @48723 has 67 MA's), (Start: 79 @48702 has 8 MA's), (88, 48636), (91, 48591), (94, 48585), (97, 48567), (102, 48519), (116, 48465),

Gene: SweetiePie\_88 Start: 49669, Stop: 49316, Start Num: 77

Candidate Starts for SweetiePie\_88:

(Start: 77 @49669 has 327 MA's), (Start: 84 @49633 has 1 MA's), (92, 49567), (99, 49519), (108, 49468), (112, 49453), (139, 49330),

Gene: SwirlSquare\_91 Start: 48453, Stop: 48073, Start Num: 68

Candidate Starts for SwirlSquare\_91:

(Start: 68 @48453 has 2 MA's), (Start: 79 @48432 has 8 MA's), (85, 48375), (88, 48366), (91, 48321), (97, 48297), (102, 48249),

Gene: TNguyen7\_87 Start: 47929, Stop: 47510, Start Num: 58

Candidate Starts for TNguyen7\_87:

(Start: 58 @47929 has 9 MA's), (Start: 70 @47899 has 67 MA's), (Start: 84 @47848 has 1 MA's), (99, 47734), (104, 47698), (132, 47563),

Gene: Taquarus\_82 Start: 48425, Stop: 48072, Start Num: 77

Candidate Starts for Taquarus\_82:

(Start: 77 @48425 has 327 MA's), (Start: 84 @48389 has 1 MA's), (118, 48197), (122, 48182), (138, 48101), (139, 48086),

Gene: TarsusIV\_87 Start: 49681, Stop: 49328, Start Num: 77

Candidate Starts for TarsusIV\_87:

(Start: 77 @49681 has 327 MA's), (Start: 84 @49645 has 1 MA's), (92, 49579), (96, 49567), (99, 49531), (112, 49465), (122, 49438), (139, 49342),

Gene: Taurus\_87 Start: 47781, Stop: 47398, Start Num: 77

Candidate Starts for Taurus\_87:

(Start: 73 @47787 has 3 MA's), (Start: 77 @47781 has 327 MA's), (83, 47739), (91, 47664), (92, 47661), (108, 47562), (115, 47532),

Gene: Temprado\_94 Start: 48784, Stop: 48404, Start Num: 70

Candidate Starts for Temprado\_94:

(33, 48886), (Start: 70 @48784 has 67 MA's), (Start: 79 @48763 has 8 MA's), (Start: 84 @48718 has 1 MA's), (85, 48706), (91, 48652), (96, 48637), (97, 48628), (98, 48625), (104, 48565), (105, 48562), (127, 48472), (137, 48439),

Gene: Terrific\_89 Start: 49044, Stop: 48697, Start Num: 77

Candidate Starts for Terrific\_89:

(36, 49146), (Start: 38 @49140 has 3 MA's), (Start: 77 @49044 has 327 MA's), (Start: 84 @49008 has 1 MA's), (92, 48942), (99, 48894), (112, 48828), (122, 48807), (139, 48711),

Gene: Texage\_83 Start: 47628, Stop: 47212, Start Num: 60

Candidate Starts for Texage\_83:

(26, 47727), (Start: 55 @47637 has 8 MA's), (Start: 60 @47628 has 12 MA's), (Start: 70 @47601 has 67 MA's), (89, 47508), (129, 47280), (132, 47265),

Gene: Thanksgivukkah\_82 Start: 48414, Stop: 48061, Start Num: 77

Candidate Starts for Thanksgivukkah\_82:

(Start: 77 @48414 has 327 MA's), (Start: 84 @48378 has 1 MA's), (112, 48198), (118, 48186), (122, 48171), (138, 48090), (139, 48075),

Gene: Tiffany\_85 Start: 47671, Stop: 47288, Start Num: 77

Candidate Starts for Tiffany\_85:

(Start: 73 @47677 has 3 MA's), (Start: 75 @47674 has 2 MA's), (Start: 77 @47671 has 327 MA's), (83, 47629), (91, 47554), (92, 47551), (108, 47452), (115, 47422),

Gene: Timothy\_91 Start: 48461, Stop: 48108, Start Num: 77

Candidate Starts for Timothy\_91:

(72, 48464), (Start: 77 @48461 has 327 MA's), (85, 48416), (89, 48383), (91, 48362), (96, 48347), (99, 48311), (113, 48242), (122, 48218), (139, 48122),

Gene: Timshel\_80 Start: 50322, Stop: 49888, Start Num: 60

Candidate Starts for Timshel\_80:

(Start: 60 @50322 has 12 MA's), (Start: 70 @50295 has 67 MA's), (Start: 79 @50274 has 8 MA's), (88, 50226), (89, 50202), (91, 50181), (98, 50154), (99, 50130), (107, 50082), (109, 50079), (121, 50028),

(123, 50007),

Gene: TinaFeyge\_81 Start: 48411, Stop: 48058, Start Num: 77

Candidate Starts for TinaFeyge\_81:

(Start: 77 @48411 has 327 MA's), (Start: 84 @48375 has 1 MA's), (118, 48183), (122, 48168), (138, 48087), (139, 48072),

Gene: TinyPebbles\_85 Start: 47815, Stop: 47432, Start Num: 77

Candidate Starts for TinyPebbles\_85:

(Start: 73 @47821 has 3 MA's), (Start: 75 @47818 has 2 MA's), (Start: 77 @47815 has 327 MA's), (83, 47773), (91, 47698), (92, 47695), (108, 47596), (115, 47566),

Gene: TinyTimmy\_89 Start: 48190, Stop: 47837, Start Num: 77

Candidate Starts for TinyTimmy\_89:

(72, 48193), (Start: 77 @48190 has 327 MA's), (85, 48145), (89, 48112), (91, 48091), (96, 48076), (99, 48040), (113, 47971), (122, 47947), (139, 47851),

Gene: Tinybot\_82 Start: 48443, Stop: 48090, Start Num: 77

Candidate Starts for Tinybot\_82:

(Start: 77 @48443 has 327 MA's), (Start: 84 @48407 has 1 MA's), (107, 48245), (122, 48200), (131, 48140), (138, 48119), (139, 48104),

Gene: TopsytheTRex\_88 Start: 49112, Stop: 48732, Start Num: 70

Candidate Starts for TopsytheTRex\_88:

(3, 49388), (7, 49352), (Start: 70 @49112 has 67 MA's), (Start: 79 @49091 has 8 MA's), (88, 49025), (89, 49001), (91, 48980), (97, 48956), (98, 48953), (104, 48893), (122, 48842), (139, 48746),

Gene: TiroTheta9\_82 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for TiroTheta9\_82:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (118, 48182), (122, 48167), (138, 48086), (139, 48071),

Gene: Toaka\_89 Start: 49331, Stop: 48978, Start Num: 77

Candidate Starts for Toaka\_89:

(Start: 77 @49331 has 327 MA's), (Start: 84 @49295 has 1 MA's), (89, 49253), (96, 49217), (98, 49205), (99, 49181), (112, 49115), (139, 48992),

Gene: Todacoro\_85 Start: 47627, Stop: 47211, Start Num: 60

Candidate Starts for Todacoro\_85:

(26, 47726), (Start: 55 @47636 has 8 MA's), (Start: 60 @47627 has 12 MA's), (Start: 70 @47600 has 67 MA's), (89, 47507), (129, 47279), (132, 47264),

Gene: Tomathan\_90 Start: 49643, Stop: 49263, Start Num: 70

Candidate Starts for Tomathan\_90:

(Start: 70 @49643 has 67 MA's), (88, 49556), (97, 49487), (98, 49484), (99, 49460),

Gene: ToneTone\_90 Start: 48335, Stop: 47955, Start Num: 70

Candidate Starts for ToneTone\_90:

(33, 48437), (Start: 70 @48335 has 67 MA's), (Start: 79 @48314 has 8 MA's), (Start: 84 @48269 has 1 MA's), (85, 48257), (91, 48203), (96, 48188), (97, 48179), (98, 48176), (104, 48116), (105, 48113), (127, 48023), (137, 47990),

Gene: Topanga\_72 Start: 44959, Stop: 44552, Start Num: 61

Candidate Starts for Topanga\_72:

(6, 45175), (16, 45100), (Start: 61 @44959 has 21 MA's), (Start: 70 @44935 has 67 MA's), (89, 44842), (91, 44821), (95, 44812), (98, 44794), (109, 44719), (122, 44671), (129, 44620), (132, 44605),

Gene: Toro\_82 Start: 51171, Stop: 50770, Start Num: 60

Candidate Starts for Toro\_82:

(Start: 60 @51171 has 12 MA's), (Start: 70 @51147 has 67 MA's), (80, 51120), (85, 51087), (92, 51030), (98, 51006), (104, 50946), (107, 50934), (126, 50853), (130, 50832), (144, 50778),

Gene: TpudiCK\_150 Start: 75687, Stop: 75280, Start Num: 56

Candidate Starts for TpudiCK\_150:

(37, 75738), (Start: 56 @75687 has 20 MA's), (89, 75561), (92, 75537), (97, 75516), (98, 75513), (108, 75438), (114, 75417), (130, 75333), (137, 75315),

Gene: Travvers\_90 Start: 49560, Stop: 49180, Start Num: 70

Candidate Starts for Travvers\_90:

(Start: 70 @49560 has 67 MA's), (88, 49473), (97, 49404), (98, 49401), (99, 49377),

Gene: Tristan\_84 Start: 50111, Stop: 49731, Start Num: 65

Candidate Starts for Tristan\_84:

(Start: 48 @50153 has 1 MA's), (Start: 65 @50111 has 7 MA's), (Start: 79 @50090 has 8 MA's), (91, 49979), (98, 49952), (99, 49928), (104, 49892), (125, 49808), (139, 49745),

Gene: Trixie\_88 Start: 50150, Stop: 49794, Start Num: 77

Candidate Starts for Trixie\_88:

(Start: 77 @50150 has 327 MA's), (89, 50072), (93, 50045), (96, 50033), (99, 49997), (105, 49958), (112, 49931), (135, 49832), (139, 49808),

Gene: Trooper\_88 Start: 49279, Stop: 48899, Start Num: 70

Candidate Starts for Trooper\_88:

(Start: 70 @49279 has 67 MA's), (Start: 79 @49258 has 8 MA's), (85, 49201), (88, 49192), (91, 49147), (97, 49123), (98, 49120), (99, 49096), (104, 49060),

Gene: TroyPia\_84 Start: 48451, Stop: 48098, Start Num: 77

Candidate Starts for TroyPia\_84:

(Start: 77 @48451 has 327 MA's), (Start: 84 @48415 has 1 MA's), (91, 48352), (112, 48235), (118, 48223), (138, 48127), (139, 48112),

Gene: Tubs\_91 Start: 49448, Stop: 49095, Start Num: 77

Candidate Starts for Tubs\_91:

(Start: 77 @49448 has 327 MA's), (Start: 79 @49442 has 8 MA's), (Start: 84 @49412 has 1 MA's), (89, 49370), (91, 49349), (122, 49205), (139, 49109),

Gene: Tucker\_93 Start: 48538, Stop: 48158, Start Num: 70

Candidate Starts for Tucker\_93:

(33, 48640), (Start: 70 @48538 has 67 MA's), (Start: 79 @48517 has 8 MA's), (Start: 84 @48472 has 1 MA's), (85, 48460), (91, 48406), (96, 48391), (97, 48382), (98, 48379), (104, 48319), (105, 48316), (127, 48226), (137, 48193),

Gene: Turbido\_89 Start: 49849, Stop: 49496, Start Num: 77

Candidate Starts for Turbido\_89:

(36, 49951), (Start: 38 @49945 has 3 MA's), (Start: 77 @49849 has 327 MA's), (Start: 84 @49813 has 1 MA's), (92, 49747), (99, 49699), (112, 49633), (139, 49510),

Gene: Twister\_83 Start: 48167, Stop: 47760, Start Num: 61

Candidate Starts for Twister\_83:

(6, 48389), (16, 48314), (Start: 61 @48167 has 21 MA's), (Start: 70 @48143 has 67 MA's), (89, 48050), (91, 48029), (95, 48020), (98, 48002), (104, 47942), (105, 47939), (107, 47930), (109, 47927), (122, 47879), (132, 47813),

Gene: TyDawg\_143 Start: 75872, Stop: 75465, Start Num: 56

Candidate Starts for TyDawg\_143:

(37, 75923), (Start: 56 @75872 has 20 MA's), (89, 75746), (92, 75722), (97, 75701), (98, 75698), (108, 75623), (114, 75602), (130, 75518), (137, 75500),

Gene: TygerBlood\_83 Start: 48416, Stop: 48063, Start Num: 77

Candidate Starts for TygerBlood\_83:

(Start: 77 @48416 has 327 MA's), (Start: 84 @48380 has 1 MA's), (91, 48317), (118, 48188), (122, 48173), (138, 48092), (139, 48077),

Gene: Ugenie5\_78 Start: 46930, Stop: 46583, Start Num: 79

Candidate Starts for Ugenie5\_78:

(Start: 77 @46936 has 327 MA's), (Start: 79 @46930 has 8 MA's), (Start: 84 @46900 has 1 MA's), (89, 46858), (91, 46837), (122, 46693), (139, 46597),

Gene: Ulysses\_82 Start: 48099, Stop: 47746, Start Num: 77

Candidate Starts for Ulysses\_82:

(Start: 77 @48099 has 327 MA's), (Start: 84 @48063 has 1 MA's), (91, 48000), (118, 47871), (122, 47856), (138, 47775), (139, 47760),

Gene: Updawg\_89 Start: 49264, Stop: 48911, Start Num: 77

Candidate Starts for Updawg\_89:

(36, 49366), (Start: 38 @49360 has 3 MA's), (Start: 77 @49264 has 327 MA's), (Start: 84 @49228 has 1 MA's), (92, 49162), (98, 49138), (99, 49114), (112, 49048), (122, 49021), (139, 48925),

Gene: VA6\_88 Start: 49607, Stop: 49260, Start Num: 77

Candidate Starts for VA6\_88:

(32, 49721), (Start: 77 @49607 has 327 MA's), (Start: 84 @49571 has 1 MA's), (92, 49505), (96, 49493), (99, 49457), (112, 49391), (139, 49274),

Gene: Vanisoa\_86 Start: 49634, Stop: 49317, Start Num: 84

Candidate Starts for Vanisoa\_86:

(Start: 77 @49670 has 327 MA's), (Start: 84 @49634 has 1 MA's), (89, 49592), (98, 49544), (139, 49331),

Gene: Veracruz\_82 Start: 47628, Stop: 47212, Start Num: 60

Candidate Starts for Veracruz\_82:

(26, 47727), (Start: 55 @47637 has 8 MA's), (Start: 60 @47628 has 12 MA's), (Start: 70 @47601 has 67 MA's), (89, 47508), (129, 47280), (132, 47265),

Gene: Vix\_82 Start: 47872, Stop: 47483, Start Num: 73

Candidate Starts for Vix\_82:

(Start: 73 @47872 has 3 MA's), (Start: 75 @47869 has 2 MA's), (Start: 77 @47866 has 327 MA's), (83, 47824), (91, 47749), (92, 47746), (108, 47647), (115, 47617),

Gene: VohminGhazi\_91 Start: 48314, Stop: 47934, Start Num: 70

Candidate Starts for VohminGhazi\_91:

(33, 48416), (Start: 70 @48314 has 67 MA's), (Start: 79 @48293 has 8 MA's), (Start: 84 @48248 has 1 MA's), (85, 48236), (91, 48182), (96, 48167), (97, 48158), (104, 48095), (105, 48092), (127, 48002), (137, 47969),

Gene: WalterMcMickey\_82 Start: 48167, Stop: 47760, Start Num: 61

Candidate Starts for WalterMcMickey\_82:

(6, 48389), (16, 48314), (Start: 61 @48167 has 21 MA's), (Start: 70 @48143 has 67 MA's), (89, 48050), (91, 48029), (95, 48020), (98, 48002), (104, 47942), (105, 47939), (107, 47930), (109, 47927), (122, 47879), (132, 47813),

Gene: Wander\_83 Start: 48410, Stop: 48057, Start Num: 77

Candidate Starts for Wander\_83:

(Start: 77 @48410 has 327 MA's), (Start: 84 @48374 has 1 MA's), (91, 48311), (118, 48182), (122, 48167), (138, 48086), (139, 48071),

Gene: Watson\_85 Start: 47770, Stop: 47387, Start Num: 77

Candidate Starts for Watson\_85:

(23, 47929), (49, 47839), (51, 47830), (Start: 64 @47800 has 1 MA's), (Start: 73 @47776 has 3 MA's), (Start: 77 @47770 has 327 MA's), (Start: 79 @47764 has 8 MA's), (91, 47653), (92, 47650), (108, 47551), (115, 47521),

Gene: WeiHuaDA\_90 Start: 50289, Stop: 49933, Start Num: 77

Candidate Starts for WeiHuaDA\_90:

(Start: 77 @50289 has 327 MA's), (Start: 84 @50253 has 1 MA's), (89, 50211), (93, 50184), (99, 50136), (105, 50097), (112, 50070), (138, 49962), (139, 49947),

Gene: Whabigail7\_87 Start: 49847, Stop: 49494, Start Num: 77

Candidate Starts for Whabigail7\_87:

(36, 49949), (Start: 38 @49943 has 3 MA's), (Start: 77 @49847 has 327 MA's), (Start: 84 @49811 has 1 MA's), (92, 49745), (99, 49697), (112, 49631), (139, 49508),

Gene: WideWale\_89 Start: 49264, Stop: 48911, Start Num: 77

Candidate Starts for WideWale\_89:

(36, 49366), (Start: 38 @49360 has 3 MA's), (Start: 77 @49264 has 327 MA's), (Start: 84 @49228 has 1 MA's), (92, 49162), (98, 49138), (99, 49114), (112, 49048), (122, 49021), (139, 48925),

Gene: Wiks\_92 Start: 48415, Stop: 48035, Start Num: 70

Candidate Starts for Wiks\_92:

(33, 48517), (Start: 70 @48415 has 67 MA's), (Start: 79 @48394 has 8 MA's), (Start: 84 @48349 has 1 MA's), (85, 48337), (91, 48283), (96, 48268), (97, 48259), (98, 48256), (104, 48196), (105, 48193), (127, 48103), (137, 48070),

Gene: Wilbur\_83 Start: 48413, Stop: 48060, Start Num: 77

Candidate Starts for Wilbur\_83:

(Start: 77 @48413 has 327 MA's), (Start: 84 @48377 has 1 MA's), (91, 48314), (112, 48197), (118, 48185), (138, 48089), (139, 48074),

Gene: Wile\_78 Start: 48064, Stop: 47711, Start Num: 77

Candidate Starts for Wile\_78:

(Start: 77 @48064 has 327 MA's), (Start: 84 @48028 has 1 MA's), (91, 47965), (96, 47950), (98, 47938), (99, 47914), (107, 47866), (118, 47836), (138, 47740), (139, 47725),

Gene: Wizard007\_79 Start: 47790, Stop: 47437, Start Num: 77

Candidate Starts for Wizard007\_79:

(Start: 77 @47790 has 327 MA's), (Start: 84 @47754 has 1 MA's), (91, 47691), (96, 47676), (98, 47664), (99, 47640), (107, 47592), (118, 47562), (138, 47466), (139, 47451),

Gene: Wolpertinger\_91 Start: 48810, Stop: 48457, Start Num: 77

Candidate Starts for Wolpertinger\_91:

(72, 48813), (Start: 77 @48810 has 327 MA's), (85, 48765), (89, 48732), (91, 48711), (96, 48696), (99, 48660), (113, 48591), (122, 48567), (139, 48471),

Gene: Wooldri\_88 Start: 47692, Stop: 47309, Start Num: 77

Candidate Starts for Wooldri\_88:

(Start: 73 @47698 has 3 MA's), (Start: 75 @47695 has 2 MA's), (Start: 77 @47692 has 327 MA's), (83, 47650), (91, 47575), (92, 47572), (108, 47473), (115, 47443),

Gene: WorldCup\_89 Start: 49128, Stop: 48775, Start Num: 77

Candidate Starts for WorldCup\_89:

(14, 49329), (Start: 58 @49173 has 9 MA's), (Start: 70 @49143 has 67 MA's), (Start: 77 @49128 has 327 MA's), (80, 49116), (Start: 84 @49092 has 1 MA's), (89, 49050), (105, 48939), (112, 48912), (139, 48789),

Gene: Xena\_79 Start: 48235, Stop: 47882, Start Num: 77

Candidate Starts for Xena\_79:

(Start: 77 @48235 has 327 MA's), (Start: 79 @48229 has 8 MA's), (Start: 84 @48199 has 1 MA's), (107, 48037), (112, 48019), (118, 48007), (138, 47911), (139, 47896),

Gene: XianYue\_88 Start: 50053, Stop: 49673, Start Num: 70

Candidate Starts for XianYue\_88:

(62, 50071), (Start: 70 @50053 has 67 MA's), (Start: 79 @50032 has 8 MA's), (85, 49975), (88, 49966), (91, 49921), (97, 49897), (99, 49870), (104, 49834), (125, 49750),

Gene: Yecey3\_92 Start: 49214, Stop: 48861, Start Num: 77

Candidate Starts for Yecey3\_92:

(44, 49295), (Start: 61 @49250 has 21 MA's), (Start: 77 @49214 has 327 MA's), (Start: 79 @49208 has 8 MA's), (80, 49202), (Start: 84 @49178 has 1 MA's), (99, 49064), (107, 49016), (108, 49013), (122, 48971), (139, 48875),

Gene: YoSam321\_83 Start: 48411, Stop: 48058, Start Num: 77

Candidate Starts for YoSam321\_83:

(Start: 77 @48411 has 327 MA's), (Start: 84 @48375 has 1 MA's), (118, 48183), (122, 48168), (138, 48087), (139, 48072),

Gene: Yokurt\_92 Start: 48415, Stop: 48035, Start Num: 70

Candidate Starts for Yokurt\_92:

(33, 48517), (Start: 70 @48415 has 67 MA's), (Start: 79 @48394 has 8 MA's), (Start: 84 @48349 has 1 MA's), (85, 48337), (91, 48283), (96, 48268), (97, 48259), (98, 48256), (104, 48196), (105, 48193), (127, 48103), (137, 48070),

Gene: Zaka\_93 Start: 48415, Stop: 48035, Start Num: 70

Candidate Starts for Zaka\_93:

(33, 48517), (Start: 70 @48415 has 67 MA's), (Start: 79 @48394 has 8 MA's), (Start: 84 @48349 has 1 MA's), (85, 48337), (91, 48283), (96, 48268), (97, 48259), (98, 48256), (104, 48196), (105, 48193), (127, 48103), (137, 48070),

Gene: Zarafa\_83 Start: 47817, Stop: 47398, Start Num: 58

Candidate Starts for Zarafa\_83:

(19, 47943), (Start: 58 @47817 has 9 MA's), (Start: 70 @47787 has 67 MA's), (Start: 84 @47736 has 1 MA's), (99, 47622), (104, 47586), (132, 47451),

Gene: Zetzy\_78 Start: 45245, Stop: 44823, Start Num: 61

Candidate Starts for Zetzy\_78:

(Start: 61 @45245 has 21 MA's), (82, 45182), (89, 45128), (132, 44885), (144, 44840),

Gene: Zimmer\_82 Start: 48548, Stop: 48165, Start Num: 70

Candidate Starts for Zimmer\_82:

(21, 48698), (29, 48662), (40, 48626), (Start: 70 @48548 has 67 MA's), (Start: 79 @48527 has 8 MA's), (89, 48437), (97, 48392), (98, 48389), (99, 48365), (104, 48329), (105, 48326), (110, 48308),

Gene: Zulu\_94 Start: 48792, Stop: 48412, Start Num: 70

Candidate Starts for Zulu\_94:

(33, 48894), (Start: 70 @48792 has 67 MA's), (Start: 79 @48771 has 8 MA's), (Start: 84 @48726 has 1 MA's), (85, 48714), (91, 48660), (96, 48645), (97, 48636), (98, 48633), (104, 48573), (105, 48570), (127, 48480), (137, 48447),