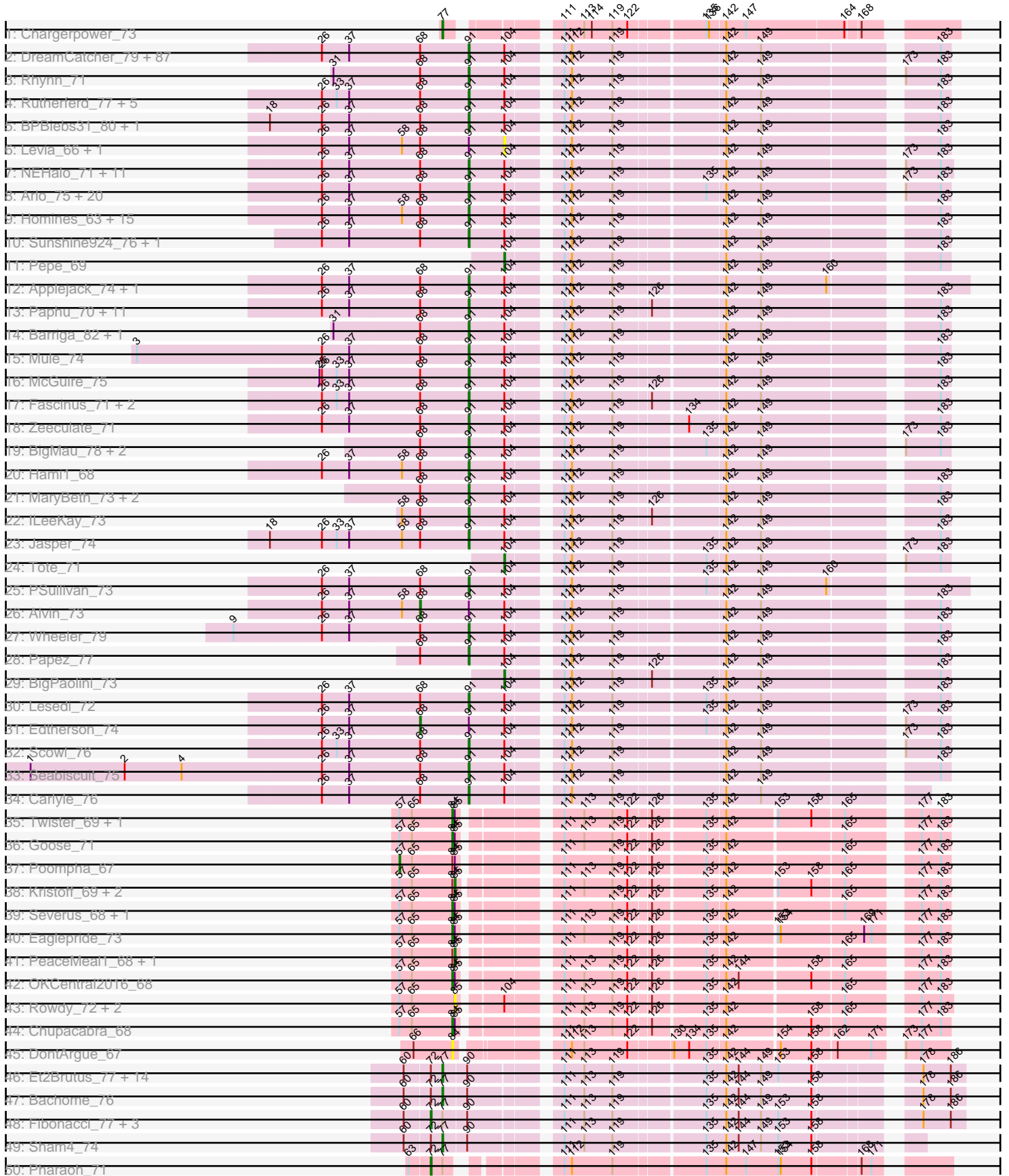
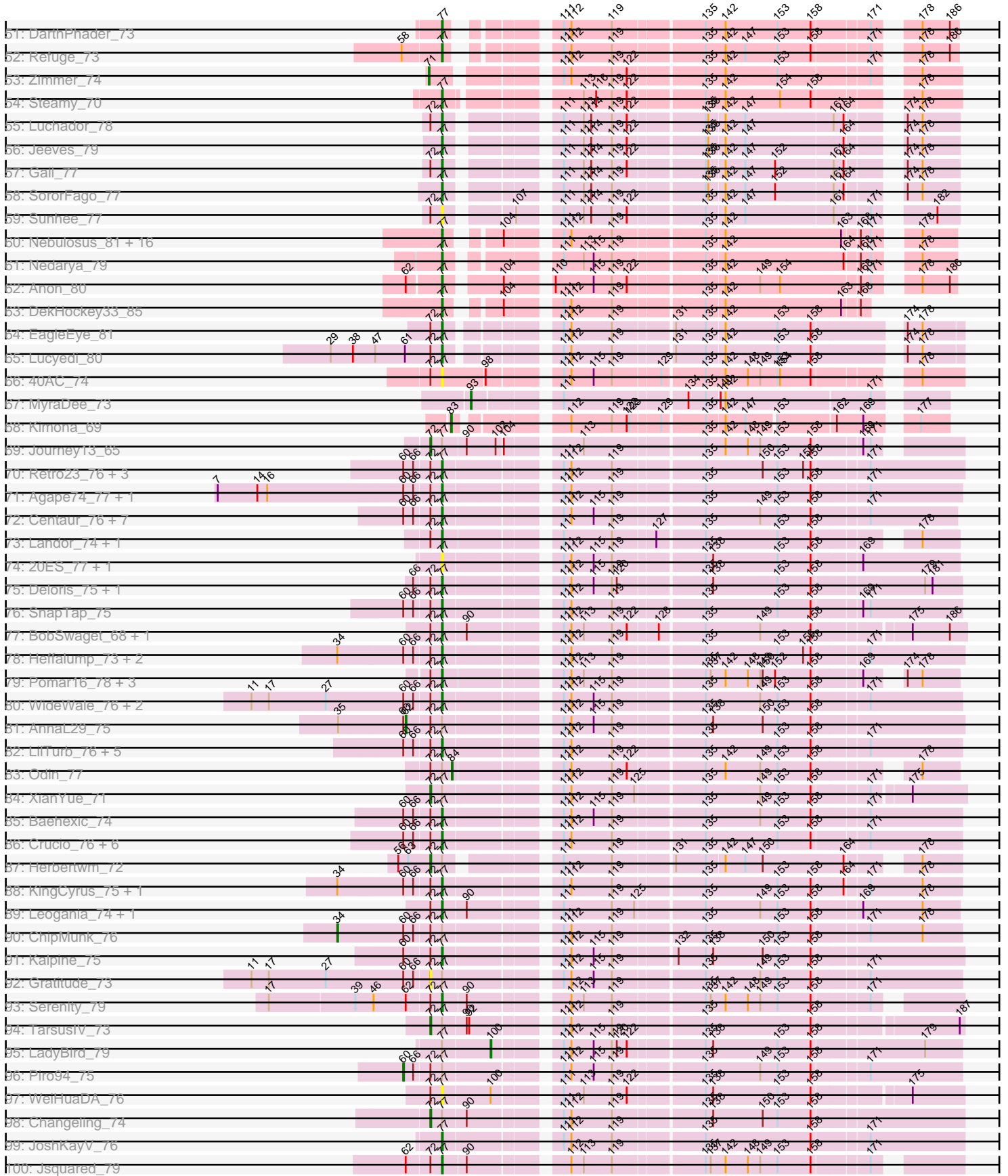


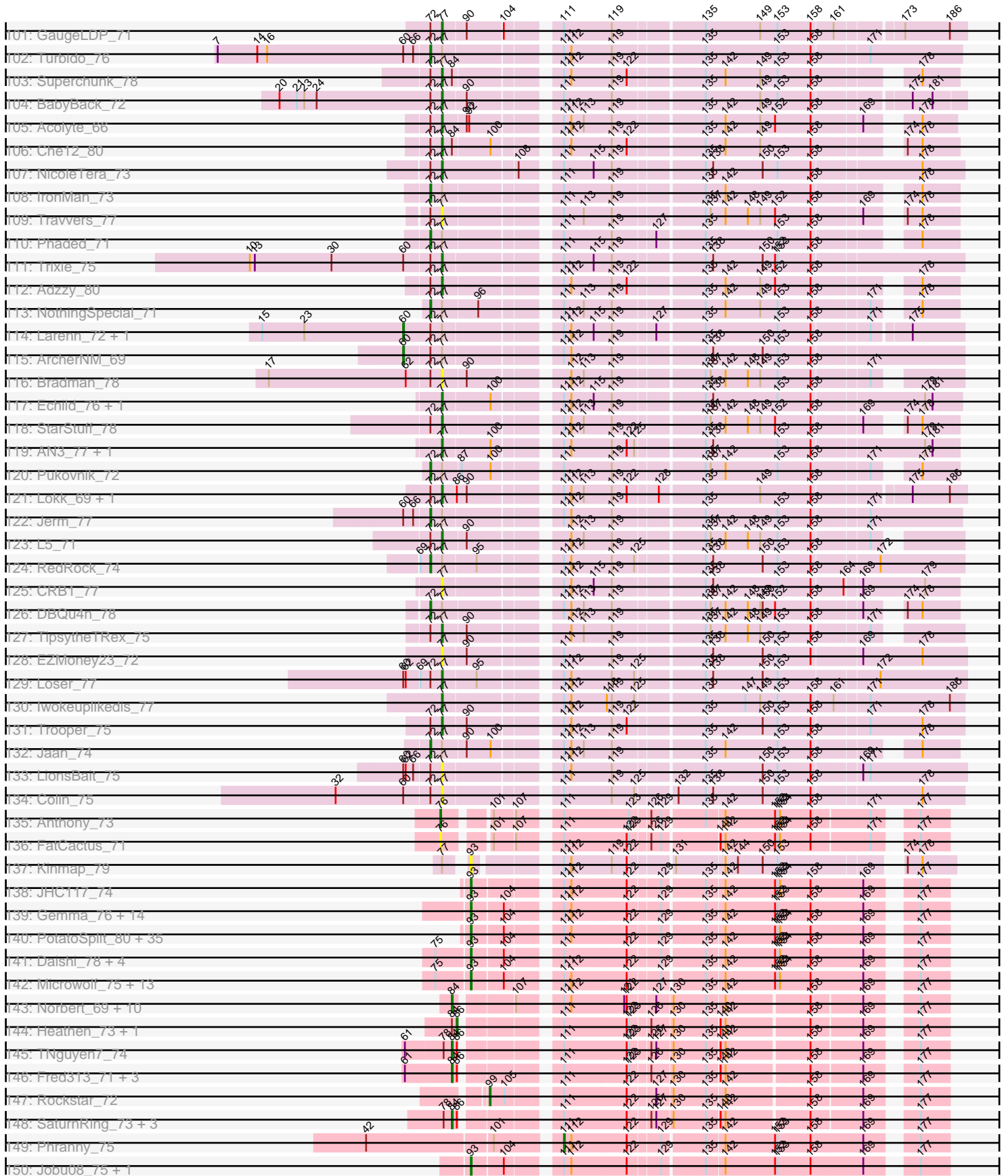
Pham 224123



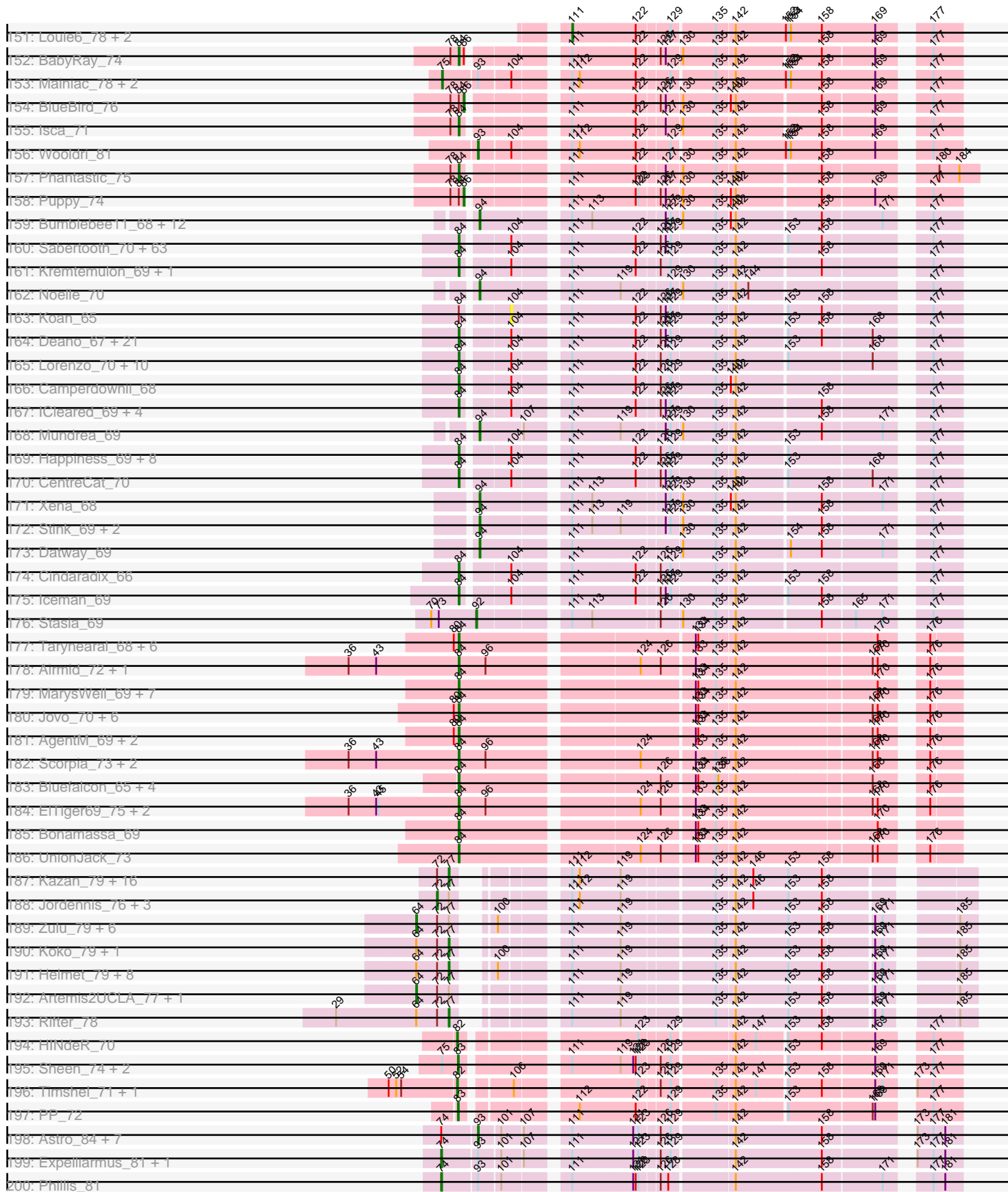
Pham 224123



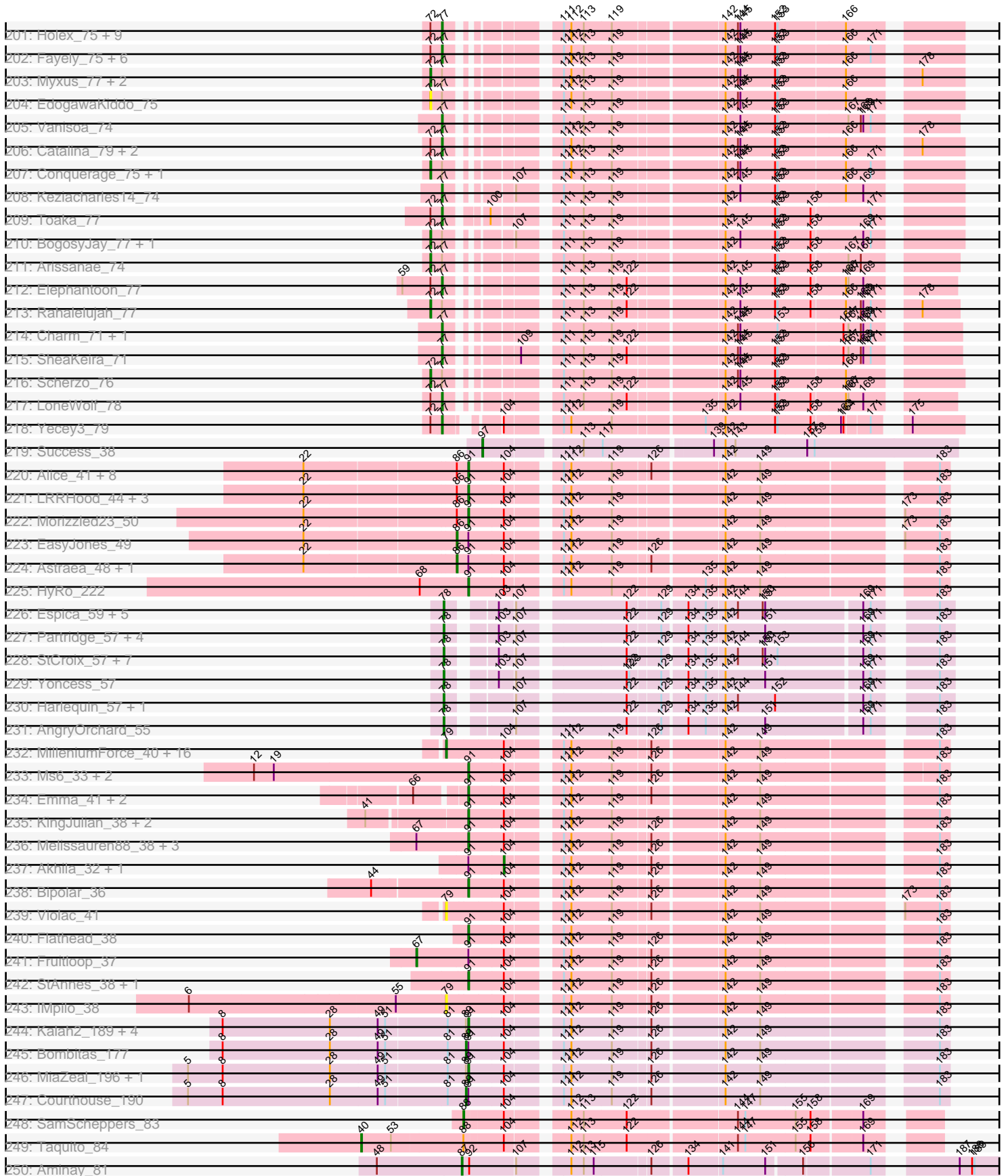
Pham 224123



Pham 224123



Pham 224123



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 224123 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224123 has 857 members, 82 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_73
- Track 2 : DreamCatcher\_79, Adahisdi\_71, Iqorha\_67, Dreamboat\_75, JackSparrow\_76, Pari\_80, JC27\_76, Ashballer\_77, Ichabod\_78, Hermia\_70, Magnar\_71, Killigrew\_72, GrecoEtereo\_79, Perseus\_75, Ringer\_75, Sanya\_70, Rajelicia\_77, Bxb1\_69, Bexan\_70, Raid\_73, IgnatiusPatJac\_75, Rufus\_78, Fushigi\_69, Bones\_71, Rubeus\_76, Slagathor\_76, Squee\_76, BluSpix\_73, HarryOW\_76, Anglerfish\_77, Espresso\_69, STLscum\_81, Marcell\_68, Tripl3t\_78, Fajezeel\_78, BarrowTuph\_77, Acme\_79, Eyeball\_74, SpikeBT\_72, Briton15\_78, QTRlifeCrisis\_74, Parliament\_76, Ruotula\_79, Lopton\_74, Greg\_78, Inyanga\_67, Buttons\_72, Gompeii16\_76, BeesKnees\_76, Bigchungu\_75, Dulcie\_76, Doom\_68, Fenn\_78, Licorice\_76, MrGordo\_76, Francis47\_77, Big3\_76, Marchy\_67, Euphoria\_76, Michley\_76, Jorgensen\_82, Agaliana\_73, PherrisBueller\_74, Nerujay\_79, ShortQueendom\_68, Smeagol\_78, Dynamix\_75, Beatrix\_72, Atkinbua\_81, U2\_69, Sorpresa\_74, Target\_75, StrongArm\_71, McSinger\_73, Gwendoluna\_79, GageAP\_78, Zeuska\_77, PascalRango\_73, Violet\_70, TheloniousMonk\_77, Tasp14\_74, Naira\_77, Watermelon\_78, Gandalf20\_74, Sandaddy\_73, MPlant7149\_75, Sagefire\_72, BaconJack\_77
- Track 3 : Rhynn\_71
- Track 4 : Rutherferd\_77, SwissCheese\_79, KSSJEB\_72, Mkhuseli\_72, Bruns\_78, Corvo\_77
- Track 5 : BPBiebs31\_80, Bethlehem\_78
- Track 6 : Levia\_66, PhineBark\_70
- Track 7 : NEHalo\_71, Ohno789\_78, ConceptII\_80, Aeneas\_80, Dexes\_76, Abbyshoes\_75, Dussy\_74, Marsha\_75, Niza\_75, Molly\_75, Pinto\_75, Sumter\_72
- Track 8 : Arlo\_75, Treddle\_77, Moose\_77, Pelly\_78, Kanely\_77, Bob3\_76, Forsytheast\_77, JuliaChild\_76, KyMonks1A\_81, Lamina13\_79, Sibs6\_75, Petp2012\_76, TwoPeat\_75, Altman\_78, Swole\_76, Pita2\_76, Snazzy\_76, Mryolo\_70, Burton\_76, Hope4ever\_76, Rohr\_78
- Track 9 : Homines\_63, Nhonho\_71, Teodoridan\_72, Ciao\_72, Ajay\_72, AFIS\_72, Paraselene\_73, Marge\_72, Monet\_79, PattyP\_75, Seanderson\_75, Zephyr\_77, Blue\_72, Pippin\_76, ProMouse\_75, PinkPlastic\_71
- Track 10 : Sunshine924\_76, DrFeelGood\_71
- Track 11 : Pepe\_69
- Track 12 : Applejack\_74, KBG\_73
- Track 13 : Paphu\_70, EnzoK\_75, Traft412\_75, Lockley\_72, DD5\_73, Oogway\_74, BillKnuckles\_69, Solon\_71, Wilkins\_72, Topgun\_71, Kugel\_77, Graduation\_78
- Track 14 : Barriga\_82, Kykar\_75

- Track 15 : Mule\_74
- Track 16 : McGuire\_75
- Track 17 : Fascinus\_71, Phlippers\_73, CactusRose\_78
- Track 18 : Zeeculate\_71
- Track 19 : BigMau\_78, Jerm2\_77, HermioneGrange\_79
- Track 20 : Hami1\_68
- Track 21 : MaryBeth\_73, MetalQZJ\_72, LilBib\_72
- Track 22 : lLeeKay\_73
- Track 23 : Jasper\_74
- Track 24 : Tote\_71
- Track 25 : PSullivan\_73
- Track 26 : Alvin\_73
- Track 27 : Wheeler\_79
- Track 28 : Papez\_77
- Track 29 : BigPaolini\_73
- Track 30 : Lesedi\_72
- Track 31 : Edtherson\_74
- Track 32 : Scowl\_76
- Track 33 : Seabiscuit\_75
- Track 34 : Carlyle\_76
- Track 35 : Twister\_69, Edison31\_67
- Track 36 : Goose\_71
- Track 37 : Poompha\_67
- Track 38 : Kristoff\_69, Rebeuca\_71, WalterMcMickey\_69
- Track 39 : Severus\_68, KittenMittens\_67
- Track 40 : Eaglepride\_73
- Track 41 : PeaceMeal1\_68, Drake94\_68
- Track 42 : OKCentral2016\_68
- Track 43 : Rowdy\_72, Shapes\_72, DustyMartin\_72
- Track 44 : Chupacabra\_68
- Track 45 : DontArgue\_67
- Track 46 : Et2Brutus\_77, Flaverint\_79, Joselito\_77, Petersenfast\_72, Snape\_78, Mabel\_78, Gilberta\_75, Timothy\_78, Lucivia\_79, Aneem\_79, Insomnia\_77, Salz\_73, Jabith\_77, MaCh\_78, Ebony\_78
- Track 47 : Bachome\_76
- Track 48 : Fibonacci\_77, Munch\_78, Bud\_73, Mulciber\_76
- Track 49 : Sham4\_74
- Track 50 : Pharaoh\_71
- Track 51 : DARTHPhader\_73
- Track 52 : Refuge\_73
- Track 53 : Zimmer\_74
- Track 54 : Steamy\_70
- Track 55 : Luchador\_78
- Track 56 : Jeeves\_79
- Track 57 : Gail\_77
- Track 58 : SororFago\_77
- Track 59 : Sunhee\_77
- Track 60 : Nebulosus\_81, Looper\_83, MinecraftSteve\_84, Epsocamisio\_81, Rosalind\_82, Soups\_83, Battleship\_86, Remus\_84, JSwag\_84, Warrior24\_85, LastResort\_82, Anaysia\_84, KatherineG\_84, Waits\_83, ReMo\_82, Strosahl\_84, Oofda\_83
- Track 61 : Nedarya\_79
- Track 62 : Anon\_80

- Track 63 : DekHockey33\_85
- Track 64 : EagleEye\_81
- Track 65 : Lucyedi\_80
- Track 66 : 40AC\_74
- Track 67 : MyraDee\_73
- Track 68 : Kimona\_69
- Track 69 : Journey13\_65
- Track 70 : Retro23\_76, Dalmatian\_76, Anselm\_77, DudeLittle\_74
- Track 71 : Agape74\_77, AbbyPaige\_77
- Track 72 : Centaur\_76, Terrific\_76, Drake55\_77, HarryHoudini\_76, NaSiaTalie\_76, Flare16\_76, Sknot\_76, MiculUcigas\_76
- Track 73 : Landor\_74, Bactobuster\_68
- Track 74 : 20ES\_77, First\_0076
- Track 75 : Deloris\_75, BengiVuitton\_75
- Track 76 : SnapTap\_75
- Track 77 : BobSwaget\_68, Miko\_69
- Track 78 : Heffalump\_73, Fameo\_74, QueenB2\_73
- Track 79 : Pomar16\_78, Tomathan\_78, Duplo\_78, Kerberos\_78
- Track 80 : WideWale\_76, Equemioh13\_75, Updawg\_76
- Track 81 : AnnaL29\_75
- Track 82 : LilTurb\_76, Buggy\_77, Dignity\_77, Leviathan\_77, Smeagan\_78, Whabigail7\_76
- Track 83 : Odin\_77
- Track 84 : XianYue\_71
- Track 85 : Baehexic\_74
- Track 86 : Crucio\_76, QueenBeesly\_76, Georgie2\_77, FiringLine\_76, Power\_75, SemperFi\_76, SweetiePie\_75
- Track 87 : Herbertwm\_72
- Track 88 : KingCyrus\_75, EvilGenius\_75
- Track 89 : Leogania\_74, BiancaTri92\_74
- Track 90 : ChipMunk\_76
- Track 91 : Kalpine\_75
- Track 92 : Gratitude\_73
- Track 93 : Serenity\_79
- Track 94 : TarsusIV\_73
- Track 95 : LadyBird\_79
- Track 96 : Piro94\_75
- Track 97 : WeiHuaDA\_76
- Track 98 : Changeling\_74
- Track 99 : JoshKayV\_76
- Track 100 : Jsquared\_79
- Track 101 : GaugeLDP\_71
- Track 102 : Turbido\_76
- Track 103 : Superchunk\_78
- Track 104 : BabyBack\_72
- Track 105 : Acolyte\_66
- Track 106 : Che12\_80
- Track 107 : NicoleTera\_73
- Track 108 : IronMan\_73
- Track 109 : Travvers\_77
- Track 110 : Phaded\_71
- Track 111 : Trixie\_75
- Track 112 : Adzzy\_80



- Track 113 : NothingSpecial\_71
- Track 114 : Larenn\_72, Malec\_73
- Track 115 : ArcherNM\_69
- Track 116 : Bradman\_78
- Track 117 : Echild\_76, Benvolio\_73
- Track 118 : StarStuff\_78
- Track 119 : AN3\_77, VA6\_75
- Track 120 : Pukovnik\_72
- Track 121 : Lokk\_69, Rachaly\_71
- Track 122 : Jerm\_77
- Track 123 : L5\_71
- Track 124 : RedRock\_74
- Track 125 : CRB1\_77
- Track 126 : DBQu4n\_78
- Track 127 : TipsytheTRex\_75
- Track 128 : EZMoney23\_72
- Track 129 : Loser\_77
- Track 130 : Iwokeuplikedis\_77
- Track 131 : Trooper\_75
- Track 132 : Jaan\_74
- Track 133 : LionsBait\_75
- Track 134 : Colin\_75
- Track 135 : Anthony\_73
- Track 136 : FatCactus\_71
- Track 137 : Kinmap\_79
- Track 138 : JHC117\_74
- Track 139 : Gemma\_76, Kalnoky\_79, PurpleHaze\_78, JeppNRM\_79, Marius\_79, Heliosoles\_76, Pawn\_77, Groupthink\_79, HaveUMetTed\_79, PhishRPhriends\_75, OlanP\_77, Reba\_74, Manu\_78, Calvinny\_76, ACFishhook\_76
- Track 140 : PotatoSplit\_80, Penny1\_79, Grif\_77, Dieselweasel\_79, Taurus\_80, Phoxy\_79, MarQuardt\_79, Aglet\_80, GinkgoMaracino\_79, Grum1\_78, Colbster\_75, Anubis\_82, Farber\_79, Soshari\_81, GtownJaz\_79, EpicPhail\_80, Tiffany\_78, LBerry\_80, Rummer\_78, Spike509\_79, JenCasNa\_80, Methuselah\_72, Snickers\_75, Cullens\_79, Hercules11\_79, Sabinator\_77, Fernando\_79, LugYA\_82, P28Green\_79, Beauxregard13\_78, SoYo\_76, Ollie\_79, MoneyMay\_78, Marie\_77, Vix\_75, Phoebe\_80
- Track 141 : Daishi\_78, LarryKay\_79, TinyPebbles\_75, HashRod\_80, KADY\_76
- Track 142 : Microwolf\_75, AugsMagnumOpus\_82, Pembroke\_79, Stagni\_76, Lowa\_76, Malinsilva\_81, Bigflo\_76, MadMarie\_77, BreSam8\_79, Lilith\_77, PGHhamlin\_81, Watson\_78, StepMih\_78, MuchMore\_82
- Track 143 : Norbert\_69, Margo\_73, Todacoro\_73, QuinnKiro\_72, Panamaxus\_71, Pocahontas\_72, Lambert1\_73, Popcicle\_73, Texage\_71, ResDef\_71, Hookmount\_73
- Track 144 : Heathen\_73, Kachowdy\_71
- Track 145 : TNguyen7\_74
- Track 146 : Fred313\_71, DropBear\_71, HelDan\_73, Scout\_72
- Track 147 : Rockstar\_72
- Track 148 : SaturnRing\_73, Bugatti\_73, Idleandcovert\_74, Giroux\_72
- Track 149 : Phranny\_75
- Track 150 : Jobu08\_75, SoilDragon\_78
- Track 151 : Louie6\_78, Bxz2\_74, BuzzBuzz\_73
- Track 152 : BabyRay\_74
- Track 153 : Mainiac\_78, Sabia\_77, DaHudson\_78
- Track 154 : BlueBird\_76

- Track 155 : Isca\_71
- Track 156 : Wooldri\_81
- Track 157 : Phantastic\_75
- Track 158 : Puppy\_74
- Track 159 : Bumblebee11\_68, AbbysRanger\_69, Backyardigan\_67, PetiteSangsue\_69, Wizard007\_69, Morpher26\_69, Katalie136\_69, Cici\_69, Perplexer\_69, Shygu2\_69, Achebe\_68, Wile\_68, Badger\_68
- Track 160 : Sabertooth\_70, Romney\_69, MeeZee\_69, Mazhar510\_70, LochMonster\_71, Millski\_69, NorthStar\_68, Peaches\_68, Avle17\_70, Ruin\_70, Pumbaa\_70, KFPoly\_69, Burger\_68, Bruiser\_69, Wander\_70, Flux\_70, Ulysses\_69, Kratak\_69, Bombshell\_70, Caelakin\_69, Skipitt\_69, Funston\_69, OKaNui\_69, Melvin\_72, Sparxx\_71, SenorClean\_65, JoongJeon\_69, PeterPeter\_70, Mayonnaise\_67, Broseidon\_70, Taquarus\_69, Cocoaberry\_70, Eris\_69, Kyee\_70, Relief\_69, Scamp\_70, Lemur\_70, LittleB\_70, Phighter1804\_70, Maverick\_69, Clarenza\_69, Phacado\_70, HamSlice\_66, Jaykayelowell\_67, Koreni\_69, NotAPhaseMom\_69, Anyyong\_69, Iracema64\_70, Thanksgivukkah\_69, DirtyDunning\_69, Gadost\_70, Houdini22\_69, Eapen\_70, Palestino\_69, Connomayer\_70, Spino\_69, Tinybot\_69, Wilbur\_70, YoSam321\_70, Nemo27\_69, Arturo\_67, Pipcraft\_67, Dhanush\_70, Rosa24\_67
- Track 161 : Kremtemulon\_69, Cintron\_70
- Track 162 : Noelle\_70
- Track 163 : Koan\_65
- Track 164 : Deano\_67, Bartimeaus\_70, Albee\_70, Druantia\_69, Kingmustik0402\_70, Holli\_69, Alberto7\_71, Baby16\_70, Chaph\_70, Blackmoor\_69, TiroTheta9\_69, Florean\_70, Eros\_70, LappelDuVide\_70, Phontbonne\_70, BubbleTrouble\_69, Roosevelt\_68, TinaFeyge\_68, Nyxis\_69, TygerBlood\_70, LittleGuy\_70, Citius\_70
- Track 165 : Lorenzo\_70, Kampy\_69, Phelipe\_71, Eagle\_69, TroyPia\_71, Polymorphads\_70, Eurydice\_71, BellusTerra\_71, Ohfah\_71, Nebs\_71, LeoAvram\_69
- Track 166 : Camperdownii\_68
- Track 167 : ICleared\_69, Abdiel\_70, Commander\_68, Lunsford\_70, Medusa\_70
- Track 168 : Mundrea\_69
- Track 169 : Happiness\_69, SheldonCooper\_70, ChampagnePapi\_72, Shaka\_68, BangNhom\_68, JetBlade\_70, Obama12\_71, LHTSCC\_72, Cerulean\_71
- Track 170 : CentreCat\_70
- Track 171 : Xena\_68
- Track 172 : Stink\_69, Miramae\_69, AvatarAhPeg\_69
- Track 173 : Datway\_69
- Track 174 : Cindaradix\_66
- Track 175 : Iceman\_69
- Track 176 : Stasia\_69
- Track 177 : Tarynearal\_68, George\_65, Swirley\_69, Cuco\_68, Twigg\_66, Prinash11\_67, Milcery\_69
- Track 178 : Airmid\_72, Jabiru\_71
- Track 179 : MarysWell\_69, LittleCherry\_68, Theia\_68, Dublin\_69, Coog\_66, Midas2\_66, HuhtaEnerson15\_67, Micasa\_69
- Track 180 : Jovo\_70, PickleBack\_70, Lev2\_70, Aragog\_69, ForGetIt\_70, Conspiracy\_70, Discoknowium\_67
- Track 181 : AgentM\_69, Phlorence\_68, Tiger\_69
- Track 182 : Scorpia\_73, PetterN\_77, Chadwick\_73
- Track 183 : Bluefalcon\_65, Ghoulboy\_69, Archetta\_67, Zolita\_68, SydNat\_69
- Track 184 : EITiger69\_75, Benedict\_73, Naca\_72
- Track 185 : Bonamassa\_69

- Track 186 : UnionJack\_73
- Track 187 : Kazan\_79, Neeharika16\_77, Candra\_76, SmellyB\_78, Hoot\_73, DaVinci\_76, Kipper29\_78, GreedyLawyer\_73, McFly\_79, VohminGhazi\_78, SuperCallie99\_75, BABullseye\_71, Cookiedough\_78, Chartreuse\_75, Isiphiwo\_75, EricB\_77, Newrala\_77
- Track 188 : Jordennis\_76, SuperAwesome\_78, Pmask\_77, Dorothea\_78
- Track 189 : Zulu\_79, Zaka\_78, Hammer\_78, Blue7\_79, CloudWang3\_78, Gruunaga\_77, Gladiator\_75
- Track 190 : Koko\_79, Roksolana\_78
- Track 191 : Helmet\_79, Indra\_81, BlessJoy\_77, Garak\_79, Temprado\_79, ToneTone\_75, Wiks\_77, Tucker\_78, Yokurt\_77
- Track 192 : Artemis2UCLA\_77, Hexamo\_77
- Track 193 : Rifter\_78
- Track 194 : HINdeR\_70
- Track 195 : Sheen\_74, Toro\_73, FlyCatcher\_75
- Track 196 : Timshel\_71, DroogsArmy\_69
- Track 197 : PP\_72
- Track 198 : Astro\_84, Saintus\_80, Danforth\_85, Dixon\_83, NearlyHeadless\_85, Groundhog\_82, Stephig9\_83, Smeadley\_84
- Track 199 : Expelliarmus\_81, Roary\_86
- Track 200 : Phillis\_81
- Track 201 : Horex\_75, Sachima\_73, Phonnegut\_77, Jiawan\_74, RyeScarlet\_78, Onglai\_75, Hanray\_75, Pioneer\_77, Beemo\_77, Lilleskat\_74
- Track 202 : Fayely\_75, Priya\_75, EmyBug\_74, Alma\_75, Spouty\_75, Qobbit\_75, ExplosioNervosa\_75
- Track 203 : Myxus\_77, HortumSL17\_78, PackMan\_76
- Track 204 : EdogawaKiddo\_75
- Track 205 : Vanisoa\_74
- Track 206 : Catalina\_79, Tubs\_77, Phaeder\_77
- Track 207 : Conquerage\_75, Eidsmoe\_75
- Track 208 : Keziacharles14\_74
- Track 209 : Toaka\_77
- Track 210 : BogosyJay\_77, Maminiaina\_77
- Track 211 : Arissanae\_74
- Track 212 : Elephantoon\_77
- Track 213 : Rahalelujah\_77
- Track 214 : Charm\_71, DreamTeam1\_71
- Track 215 : SheaKeira\_71
- Track 216 : Scherzo\_76
- Track 217 : LoneWolf\_78
- Track 218 : Yecey3\_79
- Track 219 : Success\_38
- Track 220 : Alice\_41, Shaqnato\_43, Phox\_45, Koguma\_43, Ronan\_41, Lukilu\_41, JulietS\_42, Yassified\_45, DLane\_38
- Track 221 : LRRHood\_44, Rabinovish\_45, Stubby\_43, Pinkcreek\_38
- Track 222 : Morizzled23\_50
- Track 223 : EasyJones\_49
- Track 224 : Astraea\_48, BadAgartude\_49
- Track 225 : HyRo\_222
- Track 226 : Espica\_59, Shuman\_59, Belenaria\_59, AppleCloud\_55, Natosaleda\_57, RexFury\_57
- Track 227 : Partridge\_57, Dinger\_57, Hiro\_58, Bonanza\_59, PhailMary\_57

- Track 228 : StCroix\_57, Naiad\_57, CosmicSans\_58, TWAMP\_58, Rhodalysa\_58, Krishelle\_58, Alatin\_57, Lillie\_58
- Track 229 : Yoncess\_57
- Track 230 : Harlequin\_57, Jester\_57
- Track 231 : AngryOrchard\_55
- Track 232 : MilleniumForce\_40, NewHope4\_43, Ovechkin\_39, Coco12\_38, Brookers\_38, Donkeykong\_39, KristaRAM\_40, Soul22\_44, Phanphagia\_35, Galactic\_41, Shauna1\_36, Moonbeam\_39, MinionDave\_41, CaptainTrips\_39, Byougenkin\_38, XFactor\_38, Jant\_40
- Track 233 : Ms6\_33, Mova\_39, Bobi\_40
- Track 234 : Emma\_41, Kenuha5\_35, Rialto\_43
- Track 235 : KingJulian\_38, Corium\_38, Juice456\_41
- Track 236 : Melissauren88\_38, Batiatus\_38, Polo2Bam\_43, LunaBlu\_42
- Track 237 : Akhila\_32, MilanaBonita\_32
- Track 238 : Bipolar\_36
- Track 239 : Violac\_41
- Track 240 : Flathead\_38
- Track 241 : Fruitloop\_37
- Track 242 : StAnnes\_38, Phalconet\_39
- Track 243 : IMpilo\_38
- Track 244 : Kalah2\_189, Pound\_183, Ariel\_194, Squint\_188, Superphikiman\_191
- Track 245 : Bombitas\_177
- Track 246 : MiaZeal\_196, LittleE\_195
- Track 247 : Courthouse\_190
- Track 248 : SamScheppers\_83
- Track 249 : Taquito\_84
- Track 250 : Aminay\_81

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

The start number called the most often in the published annotations is 91, it was called in 205 of the 775 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AFIS\_72, Abbyshoes\_75, Acme\_79, Adahisdi\_71, Aeneas\_80, Agaliana\_73, Ajay\_72, Alice\_41, Altman\_78, Anglerfish\_77, Applejack\_74, Ariel\_194, Arlo\_75, Ashballer\_77, Atkinbua\_81, BPBiebs31\_80, BaconJack\_77, Barriga\_82, BarrowTuph\_77, Batiatus\_38, Beatrix\_72, BeesKnees\_76, Bethlehem\_78, Bexan\_70, Big3\_76, BigMau\_78, Bigchungu\_75, BillKnuckles\_69, Bipolar\_36, BluSpix\_73, Blue\_72, Bob3\_76, Bobi\_40, Bones\_71, Briton15\_78, Bruns\_78, Burton\_76, Buttons\_72, Bxb1\_69, CactusRose\_78, Carlyle\_76, Ciao\_72, ConceptII\_80, Corium\_38, Corvo\_77, DD5\_73, DLane\_38, Dexes\_76, Doom\_68, DrFeelGood\_71, DreamCatcher\_79, Dreamboat\_75, Dulcie\_76, Dussy\_74, Dynamix\_75, Emma\_41, EnzoK\_75, Espresso\_69, Euphoria\_76, Eyeball\_74, Fajezeel\_78, Fascinus\_71, Fenn\_78, Flathead\_38, Forsytheast\_77, Francis47\_77, Fushigi\_69, GageAP\_78, Gandalf20\_74, Gompeii16\_76, Graduation\_78, GrecoEtereo\_79, Greg\_78, Gwendoluna\_79, Hami1\_68, HarryOW\_76, Hermia\_70, HermioneGrange\_79, Homines\_63, Hope4ever\_76, HyRo\_222, ILeeKay\_73, Ichabod\_78, IgnatiusPatJac\_75, Inyanga\_67, Iqorha\_67, JC27\_76, JackSparrow\_76, Jasper\_74, Jerm2\_77, Jorgensen\_82, Juice456\_41, JuliaChild\_76, JulietS\_42, KBG\_73,

KSSJEB\_72, Kalah2\_189, Kanely\_77, Kenuha5\_35, Killigrew\_72, KingJulian\_38, Koguma\_43, Kugel\_77, KyMonks1A\_81, Kykar\_75, LRRHood\_44, Lamina13\_79, Lesedi\_72, Licorice\_76, LilBib\_72, LittleE\_195, Lockley\_72, Lopton\_74, Lukilu\_41, LunaBlu\_42, MPlant7149\_75, Magnar\_71, Marcell\_68, Marchy\_67, Marge\_72, Marsha\_75, MaryBeth\_73, McGuire\_75, McSinger\_73, Melissauren88\_38, MetalQZJ\_72, MiaZeal\_196, Michley\_76, Mkhuseleli\_72, Molly\_75, Monet\_79, Moose\_77, Morizzled23\_50, Mova\_39, MrGordo\_76, Mryolo\_70, Ms6\_33, Mule\_74, NEHalo\_71, Naira\_77, Nerujay\_79, Nhonho\_71, Niza\_75, Ohno789\_78, Oogway\_74, PSullivan\_73, Papez\_77, Paphu\_70, Paraselene\_73, Pari\_80, Parliament\_76, PascalRango\_73, PattyP\_75, Pelly\_78, Perseus\_75, Petp2012\_76, Phalconet\_39, PherrisBueller\_74, Phlippers\_73, Phox\_45, PinkPlastic\_71, Pinkcreek\_38, Pinto\_75, Pippin\_76, Pita2\_76, Polo2Bam\_43, Pound\_183, ProMouse\_75, QTRlifeCrisis\_74, Rabinovich\_45, Raid\_73, Rajelicia\_77, Rhynn\_71, Rialto\_43, Ringer\_75, Rohr\_78, Ronan\_41, Rubeus\_76, Rufus\_78, Ruotula\_79, Rutherford\_77, STLscum\_81, Sagefire\_72, Sandaddy\_73, Sanya\_70, Scowl\_76, Seabiscuit\_75, Seanderson\_75, Shaqato\_43, ShortQueendom\_68, Sibs6\_75, Slagathor\_76, Smeagol\_78, Snazzy\_76, Solon\_71, Sorpresa\_74, SpikeBT\_72, Squee\_76, Squint\_188, StAnnes\_38, StrongArm\_71, Stubby\_43, Sumter\_72, Sunshine924\_76, Superphikiman\_191, SwissCheese\_79, Swole\_76, Target\_75, Tasp14\_74, Teodoridan\_72, TheloniousMonk\_77, Topgun\_71, Traft412\_75, Treddle\_77, Tripl3t\_78, TwoPeat\_75, U2\_69, Violet\_70, Watermelon\_78, Wheeler\_79, Wilkins\_72, Yassified\_45, Zeeculate\_71, Zephyr\_77, Zeuska\_77,

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

- Akhila\_32, Alvin\_73, Astraea\_48, BadAgartude\_49, Bombitas\_177, Courthouse\_190, EasyJones\_49, Edtherson\_74, Fruitloop\_37, Levia\_66, MilanaBonita\_32, PhineBark\_70,

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

- 20ES\_77, 40AC\_74, ACFishhook\_76, AN3\_77, AbbyPaige\_77, AbbysRanger\_69, Abdiel\_70, Achebe\_68, Acolyte\_66, Adzzy\_80, Agape74\_77, AgentM\_69, Aglet\_80, Airmid\_72, Alatin\_57, Albee\_70, Alberto7\_71, Alma\_75, Aminay\_81, Anaysia\_84, Aneem\_79, AngryOrchard\_55, AnnaL29\_75, Annyong\_69, Anon\_80, Anselm\_77, Anthony\_73, Anubis\_82, AppleCloud\_55, Aragog\_69, ArcherNM\_69, Archetta\_67, Arissanae\_74, Artemis2UCLA\_77, Arturo\_67, Astro\_84, AugsMagnumOpus\_82, AvatarAhPeg\_69, Avle17\_70, BABullseye\_71, Baby16\_70, BabyBack\_72, BabyRay\_74, Bachome\_76, Backyardigan\_67, Bactobuster\_68, Badger\_68, Baehexic\_74, BangNhom\_68, Bartimeaus\_70, Battleship\_86, Beauxregard13\_78, Beemo\_77, Belenaria\_59, BellusTerra\_71, Benedict\_73, BengiVuitton\_75, Benvolio\_73, BiancaTri92\_74, BigPaolini\_73, Bigflo\_76, Blackmoor\_69, BlessJoy\_77, Blue7\_79, BlueBird\_76, Bluefalcon\_65, BobSwaget\_68, BogosyJay\_77, Bombshell\_70, Bonamassa\_69, Bonanza\_59, Bradman\_78, BreSam8\_79, Brookers\_38, Broseidon\_70, Bruiser\_69, BubbleTrouble\_69, Bud\_73, Bugatti\_73, Buggy\_77, Bumblebee11\_68, Burger\_68, BuzzBuzz\_73, Bxz2\_74, Byougenkin\_38, CRB1\_77, Caelakin\_69, Calvinny\_76, Camperdownii\_68, Candra\_76, CaptainTrips\_39, Catalina\_79, Centaur\_76, CentreCat\_70, Cerulean\_71, Chadwick\_73, ChampagnePapi\_72, Changeling\_74, Chaph\_70, Chargerpower\_73, Charm\_71, Chartreuse\_75, Che12\_80, ChipMunk\_76, Chupacabra\_68, Cici\_69, Cindaradix\_66, Cintron\_70, Citius\_70, Clarenza\_69, CloudWang3\_78, Coco12\_38, Cocoaberry\_70, Colbster\_75, Colin\_75, Commander\_68, Connomayer\_70, Conquerage\_75, Conspiracy\_70, Coog\_66, Cookiedough\_78, CosmicSans\_58, Crucio\_76, Cuco\_68, Cullens\_79, DBQu4n\_78, DaHudson\_78, DaVinci\_76, Daishi\_78, Dalmatian\_76, Danforth\_85, DarthPhader\_73, Datway\_69, Deano\_67,

DekHockey33\_85, Deloris\_75, Dhanush\_70, Dieselweasel\_79, Dignity\_77, Dinger\_57, DirtyDunning\_69, Discoknowium\_67, Dixon\_83, Donkeykong\_39, DontArgue\_67, Dorothea\_78, Drake55\_77, Drake94\_68, DreamTeam1\_71, DroogsArmy\_69, DropBear\_71, Druantia\_69, Dublin\_69, DudeLittle\_74, Duplo\_78, DustyMartin\_72, EZMoney23\_72, EagleEye\_81, Eagle\_69, Eaglepride\_73, Eapen\_70, Ebony\_78, Echild\_76, Edison31\_67, EdogawaKiddo\_75, Eidsmoe\_75, EITiger69\_75, Elephantoon\_77, EmyBug\_74, EpicPhail\_80, Epsocamisio\_81, Equemioh13\_75, EricB\_77, Eris\_69, Eros\_70, Espica\_59, Et2Brutus\_77, Eurydice\_71, EvilGenius\_75, Expelliarmus\_81, ExplosioNervosa\_75, Fameo\_74, Farber\_79, FatCactus\_71, Fayely\_75, Fernando\_79, Fibonacci\_77, FiringLine\_76, First\_0076, Flare16\_76, Flaverint\_79, Florean\_70, Flux\_70, FlyCatcher\_75, ForGetIt\_70, Fred313\_71, Funston\_69, Gadost\_70, Gail\_77, Galactic\_41, Garak\_79, GaugeLDP\_71, Gemma\_76, George\_65, Georgie2\_77, Ghoulyboy\_69, Gilberta\_75, GingkoMaracino\_79, Giroux\_72, Gladiator\_75, Goose\_71, Gratitude\_73, GreedyLawyer\_73, Grif\_77, Groundhog\_82, Groupthink\_79, Grum1\_78, Gruunaga\_77, GtownJaz\_79, HINdeR\_70, HamSlice\_66, Hammer\_78, Hanray\_75, Happiness\_69, Harlequin\_57, HarryHoudini\_76, HashRod\_80, HaveUMetTed\_79, Heathen\_73, Heffalump\_73, HelDan\_73, Heliosoles\_76, Helmet\_79, Herbertwm\_72, Hercules11\_79, Hexamo\_77, Hiro\_58, Holes\_75, Holli\_69, Hookmount\_73, Hoot\_73, HortumSL17\_78, Houdini22\_69, HuhtaEnerson15\_67, ICleared\_69, IMpilo\_38, Iceman\_69, Idleandcovert\_74, Indra\_81, Insomnia\_77, Iracema64\_70, IronMan\_73, Isca\_71, Isiphiwo\_75, Iwokeuplikedis\_77, JHC117\_74, JSwag\_84, Jaan\_74, Jabiru\_71, Jabith\_77, Jant\_40, Jaykayelowell\_67, Jeeves\_79, JenCasNa\_80, JeppNRM\_79, Jerm\_77, Jester\_57, JetBlade\_70, Jiawan\_74, Jobu08\_75, JoongJeon\_69, Jordennis\_76, Joselito\_77, JoshKayV\_76, Journey13\_65, Jovo\_70, Jsquared\_79, KADY\_76, KFPoly\_69, Kachowdy\_71, Kalnoky\_79, Kalpine\_75, Kamy\_69, Katalie136\_69, KatherineG\_84, Kazan\_79, Kerberos\_78, Keziacharles14\_74, Kimona\_69, KingCyrus\_75, Kingmustik0402\_70, Kinmap\_79, Kipper29\_78, KittenMittens\_67, Koan\_65, Koko\_79, Koreni\_69, Kratak\_69, Kremtemulon\_69, Krishelle\_58, KristaRAM\_40, Kristoff\_69, Kyee\_70, L5\_71, LBerry\_80, LHTSCC\_72, LadyBird\_79, Lambert1\_73, Landor\_74, LappelDuVide\_70, Larenn\_72, LarryKay\_79, LastResort\_82, Lemur\_70, LeoAvram\_69, Leogania\_74, Lev2\_70, Leviathan\_77, LiITurb\_76, Lilit\_77, Lilleskat\_74, Lillie\_58, LionsBait\_75, LittleB\_70, LittleCherry\_68, LittleGuy\_70, LochMonster\_71, Lokk\_69, LoneWolf\_78, Looper\_83, Lorenzo\_70, Loser\_77, Louie6\_78, Iowa\_76, Luchador\_78, Lucivia\_79, Lucyedi\_80, LugYA\_82, Lunsford\_70, MaCh\_78, Mabel\_78, MadMarie\_77, Mainiac\_78, Malec\_73, Malinsilva\_81, Maminiaina\_77, Manu\_78, MarQuardt\_79, Margo\_73, Marie\_77, Marius\_79, MarysWell\_69, Maverick\_69, Mayonnaise\_67, Mazhar510\_70, McFly\_79, Medusa\_70, MeeZee\_69, Melvin\_72, Methuselah\_72, Micasa\_69, Microwolf\_75, MiculUcigas\_76, Midas2\_66, Miko\_69, Milcery\_69, MilleniumForce\_40, Millski\_69, MinecraftSteve\_84, MinionDave\_41, Miramae\_69, MoneyMay\_78, Moonbeam\_39, Morpher26\_69, MuchMore\_82, Mulciber\_76, Munch\_78, Mundrea\_69, MyraDee\_73, Myxus\_77, NaSiaTalie\_76, Naca\_72, Naiad\_57, Natosaleda\_57, NearlyHeadless\_85, Nebs\_71, Nebulosus\_81, Nedarya\_79, Neeharika16\_77, Nemo27\_69, NewHope4\_43, Newrala\_77, NicoleTera\_73, Noelle\_70, Norbert\_69, NorthStar\_68, NotAPhaseMom\_69, NothingSpecial\_71, Nyxis\_69, OKCentral2016\_68, OKaNui\_69, Obama12\_71, Odin\_77, Ohfah\_71, OlanP\_77, Ollie\_79, Onglai\_75, Oofda\_83, Ovechkin\_39, P28Green\_79, PGHhamlin\_81, PP\_72, PackMan\_76, Palestino\_69, Panamaxus\_71, Partridge\_57, Pawn\_77, PeaceMeal1\_68, Peaches\_68, Pembroke\_79, Penny1\_79, Pepe\_69, Perplexer\_69, PeterPeter\_70, Petersenfast\_72, PetiteSangsue\_69, PetterN\_77, Phacado\_70, Phaded\_71, Phaeder\_77, PhailMary\_57, Phanphagia\_35, Phantastic\_75, Pharaoh\_71, Phelipe\_71, Phighter1804\_70, Phillis\_81,

PhishRPhriends\_75, Phlorence\_68, Phoebe\_80, Phonnegut\_77, Phontbonne\_70, Phoxy\_79, Phranny\_75, PickleBack\_70, Pioneer\_77, Pipcraft\_67, Piro94\_75, Pmask\_77, Pocahontas\_72, Polymorphads\_70, Pomar16\_78, Poompha\_67, Popcicle\_73, PotatoSplit\_80, Power\_75, Prinash11\_67, Priya\_75, Pukovnik\_72, Pumbaa\_70, Puppy\_74, PurpleHaze\_78, Qobbit\_75, QueenB2\_73, QueenBeesly\_76, QuinnKiro\_72, Rachaly\_71, Rahalelujah\_77, ReMo\_82, Reba\_74, Rebeuca\_71, RedRock\_74, Refuge\_73, Relief\_69, Remus\_84, ResDef\_71, Retro23\_76, RexFury\_57, Rhodalysa\_58, Rifter\_78, Roary\_86, Rockstar\_72, Roksolana\_78, Romney\_69, Roosevelt\_68, Rosa24\_67, Rosalind\_82, Rowdy\_72, Ruin\_70, Rummer\_78, RyeScarlet\_78, Sabertooth\_70, Sabia\_77, Sabinator\_77, Sachima\_73, Saintus\_80, Salz\_73, SamScheppers\_83, SaturnRing\_73, Scamp\_70, Scherzo\_76, Scorpia\_73, Scout\_72, SemperFi\_76, SenorClean\_65, Serenity\_79, Severus\_68, Shaka\_68, Sham4\_74, Shapes\_72, Shauna1\_36, SheaKeira\_71, Sheen\_74, SheldonCooper\_70, Shuman\_59, Shygu2\_69, Skipitt\_69, Sknot\_76, Smeadley\_84, Smeagan\_78, SmellyB\_78, SnapTap\_75, Snape\_78, Snickers\_75, SoYo\_76, SoilDragon\_78, SororFago\_77, Soshari\_81, Soul22\_44, Soups\_83, Sparxx\_71, Spike509\_79, Spino\_69, Spouty\_75, StCroix\_57, Stagni\_76, StarStuff\_78, Stasia\_69, Steamy\_70, StepMih\_78, Stephig9\_83, Stink\_69, Strosahl\_84, Success\_38, Sunhee\_77, SuperAwesome\_78, SuperCallie99\_75, Superchunk\_78, SweetiePie\_75, Swirley\_69, SydNat\_69, TNguyen7\_74, TWAMP\_58, Taquarus\_69, Taquito\_84, TarsusIV\_73, Tarynearal\_68, Taurus\_80, Temprado\_79, Terrific\_76, Texage\_71, Thanksgivukkah\_69, Theia\_68, Tiffany\_78, Tiger\_69, Timothy\_78, Timshel\_71, TinaFeyge\_68, TinyPebbles\_75, Tinybot\_69, TipsytheTRex\_75, TiroTheta9\_69, Toaka\_77, Todacoro\_73, Tomathan\_78, ToneTone\_75, Toro\_73, Tote\_71, Travvers\_77, Trixie\_75, Trooper\_75, TroyPia\_71, Tubs\_77, Tucker\_78, Turbido\_76, Twigg\_66, Twister\_69, TygerBlood\_70, Ulysses\_69, UnionJack\_73, Updawg\_76, VA6\_75, Vanisoa\_74, Violac\_41, Vix\_75, VohminGhazi\_78, Waits\_83, WalterMcMickey\_69, Wander\_70, Warrior24\_85, Watson\_78, WeiHuaDA\_76, Whabigail7\_76, WideWale\_76, Wiks\_77, Wilbur\_70, Wile\_68, Wizard007\_69, Wooldri\_81, XFactor\_38, Xena\_68, XianYue\_71, Yecey3\_79, YoSam321\_70, Yokurt\_77, Yoncess\_57, Zaka\_78, Zimmer\_74, Zolita\_68, Zulu\_79,

### Summary by start number:

#### Start 34:

- Found in 6 of 857 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 16.7% of time when present
- Phage (with cluster) where this start called: ChipMunk\_76 (A2),

#### Start 40:

- Found in 1 of 857 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Taquito\_84 (K4),

#### Start 57:

- Found in 17 of 857 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 5.9% of time when present
- Phage (with cluster) where this start called: Poompha\_67 (A10),

#### Start 60:

- Found in 72 of 857 ( 8.4% ) of genes in pham
- Manual Annotations of this start: 4 of 775
- Called 5.6% of time when present
- Phage (with cluster) where this start called: ArcherNM\_69 (A2), Larenn\_72 (A2), Malec\_73 (A2), Piro94\_75 (A2),

#### Start 62:

- Found in 7 of 857 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 14.3% of time when present
- Phage (with cluster) where this start called: AnnaL29\_75 (A2),

#### Start 64:

- Found in 21 of 857 ( 2.5% ) of genes in pham
- Manual Annotations of this start: 9 of 775
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA\_77 (A6), Blue7\_79 (A6), CloudWang3\_78 (A6), Gladiator\_75 (A6), Gruunaga\_77 (A6), Hammer\_78 (A6), Hexamo\_77 (A6), Zaka\_78 (A6), Zulu\_79 (A6),

#### Start 67:

- Found in 5 of 857 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Fruitloop\_37 (F1),

#### Start 68:

- Found in 191 of 857 ( 22.3% ) of genes in pham
- Manual Annotations of this start: 2 of 775
- Called 1.0% of time when present
- Phage (with cluster) where this start called: Alvin\_73 (A1), Edtherson\_74 (A1),

#### Start 71:

- Found in 1 of 857 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Zimmer\_74 (A12),

#### Start 72:

- Found in 199 of 857 ( 23.2% ) of genes in pham
- Manual Annotations of this start: 33 of 775
- Called 17.6% of time when present
- Phage (with cluster) where this start called: Arissanae\_74 (A9), BogosyJay\_77 (A9), Bud\_73 (A11), Changeling\_74 (A2), Conquerage\_75 (A9), DBQu4n\_78 (A2), Dorothea\_78 (A6), EdogawaKiddo\_75 (A9), Eidsmoe\_75 (A9), Fibonacci\_77 (A11), Gratitude\_73 (A2), Herbertwm\_72 (A2), HortumSL17\_78 (A9), IronMan\_73 (A2), Jaan\_74 (A2), Jerm\_77 (A2), Jordennis\_76 (A6), Journey13\_65 (A2), Maminiaina\_77 (A9), Mulciber\_76 (A11), Munch\_78 (A11), Myxus\_77 (A9), NothingSpecial\_71 (A2), PackMan\_76 (A9), Phaded\_71 (A2), Pharaoh\_71 (A12), Pmask\_77 (A6), Pukovnik\_72 (A2), Rahalelujah\_77 (A9), RedRock\_74 (A2), Scherzo\_76 (A9), SuperAwesome\_78 (A6), TarsusIV\_73 (A2), Turbido\_76 (A2), XianYue\_71 (A2),

#### Start 74:



- Found in 11 of 857 ( 1.3% ) of genes in pham
- Manual Annotations of this start: 3 of 775
- Called 27.3% of time when present
- Phage (with cluster) where this start called: Expelliarmus\_81 (A8), Phillis\_81 (A8), Roary\_86 (A8),

#### Start 75:

- Found in 25 of 857 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 3 of 775
- Called 12.0% of time when present
- Phage (with cluster) where this start called: DaHudson\_78 (A3), Mainiac\_78 (A3), Sabia\_77 (A3),

#### Start 76:

- Found in 2 of 857 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony\_73 (A20), FatCactus\_71 (A20),

#### Start 77:

- Found in 242 of 857 ( 28.2% ) of genes in pham
- Manual Annotations of this start: 160 of 775
- Called 78.1% of time when present
- Phage (with cluster) where this start called: 20ES\_77 (A2), 40AC\_74 (A17), AN3\_77 (A2), AbbyPaige\_77 (A2), Acolyte\_66 (A2), Adzzy\_80 (A2), Agape74\_77 (A2), Alma\_75 (A9), Anaysia\_84 (A15), Aneem\_79 (A11), Anon\_80 (A15), Anselm\_77 (A2), BABullseye\_71 (A6), BabyBack\_72 (A2), Bachome\_76 (A11), Bactobuster\_68 (A2), Baehexic\_74 (A2), Battleship\_86 (A15), Beemo\_77 (A9), BengiVuitton\_75 (A2), Benvolio\_73 (A2), BiancaTri92\_74 (A2), BlessJoy\_77 (A6), BobSwaget\_68 (A2), Bradman\_78 (A2), Buggy\_77 (A2), CRB1\_77 (A2), Candra\_76 (A6), Catalina\_79 (A9), Centaur\_76 (A2), Chargerpower\_73 (A), Charm\_71 (A9), Chartreuse\_75 (A6), Che12\_80 (A2), Colin\_75 (A2), Cookiedough\_78 (A6), Crucio\_76 (A2), DaVinci\_76 (A6), Dalmatian\_76 (A2), DARTHPhader\_73 (A12), DekHockey33\_85 (A15), Deloris\_75 (A2), Dignity\_77 (A2), Drake55\_77 (A2), DreamTeam1\_71 (A9), DudeLittle\_74 (A2), Duplo\_78 (A2), EZMoney23\_72 (A2), EagleEye\_81 (A16), Ebony\_78 (A11), Echild\_76 (A2), Elephantoon\_77 (A9), EmyBug\_74 (A9), Epsocamisio\_81 (A15), Equemioh13\_75 (A2), EricB\_77 (A6), Et2Brutus\_77 (A11), EvilGenius\_75 (A2), ExplosioNervosa\_75 (A9), Fameo\_74 (A2), Fayely\_75 (A9), FiringLine\_76 (A2), First\_0076 (A2), Flare16\_76 (A2), Flaverint\_79 (A11), Gail\_77 (A14), Garak\_79 (A6), GaugeLDP\_71 (A2), Georgie2\_77 (A2), Gilberta\_75 (A11), GreedyLawyer\_73 (A6), Hanray\_75 (A9), HarryHoudini\_76 (A2), Heffalump\_73 (A2), Helmet\_79 (A6), Horex\_75 (A9), Hoot\_73 (A6), Indra\_81 (A6), Insomnia\_77 (A11), Isiphiwo\_75 (A6), Iwokeuplikedis\_77 (A2), JSwag\_84 (A15), Jabith\_77 (A11), Jeeves\_79 (A14), Jiawan\_74 (A9), Joselito\_77 (A11), JoshKayV\_76 (A2), Jsquared\_79 (A2), Kalpine\_75 (A2), KatherineG\_84 (A15), Kazan\_79 (A6), Kerberos\_78 (A2), Keziacharles14\_74 (A9), KingCyrus\_75 (A2), Kipper29\_78 (A6), Koko\_79 (A6), L5\_71 (A2), Landor\_74 (A2), LastResort\_82 (A15), Leogania\_74 (A2), Leviathan\_77 (A2), LilTurb\_76 (A2), Lilleskat\_74 (A9), LionsBait\_75 (A2), Lokk\_69 (A2), LoneWolf\_78 (A9), Looper\_83 (A15), Loser\_77 (A2), Luchador\_78 (A14), Lucivia\_79 (A11), Lucyedi\_80 (A16), MaCh\_78 (A11), Mabel\_78 (A11), McFly\_79 (A6), MiculUcigas\_76 (A2), Miko\_69 (A2), MinecraftSteve\_84 (A15), NaSiaTalie\_76 (A2), Nebulosus\_81 (A15), Nedarya\_79 (A15), Neeharika16\_77 (A6), Newrala\_77 (A6), NicoleTera\_73 (A2), Onglai\_75 (A9), Oofda\_83 (A15), Petersenfast\_72 (A11), Phaeder\_77 (A9),

Phonnegut\_77 (A9), Pioneer\_77 (A9), Pomar16\_78 (A2), Power\_75 (A2), Priya\_75 (A9), Qobbit\_75 (A9), QueenB2\_73 (A2), QueenBeesly\_76 (A2), Rachaly\_71 (A2), ReMo\_82 (A15), Refuge\_73 (A12), Remus\_84 (A15), Retro23\_76 (A2), Rifter\_78 (A6), Roksolana\_78 (A6), Rosalind\_82 (A15), RyeScarlet\_78 (A9), Sachima\_73 (A9), Salz\_73 (A11), SemperFi\_76 (A2), Serenity\_79 (A2), Sham4\_74 (A11), SheaKeira\_71 (A9), Sknot\_76 (A2), Smeagan\_78 (A2), SmellyB\_78 (A6), SnapTap\_75 (A2), Snape\_78 (A11), SororFago\_77 (A14), Soups\_83 (A15), Spouty\_75 (A9), StarStuff\_78 (A2), Steamy\_70 (A12), Strosahl\_84 (A15), Sunhee\_77 (A14), SuperCallie99\_75 (A6), Superchunk\_78 (A2), SweetiePie\_75 (A2), Temprado\_79 (A6), Terrific\_76 (A2), Timothy\_78 (A11), TipsytheTRex\_75 (A2), Toaka\_77 (A9), Tomathan\_78 (A2), ToneTone\_75 (A6), Travvers\_77 (A2), Trixie\_75 (A2), Trooper\_75 (A2), Tubs\_77 (A9), Tucker\_78 (A6), Updawg\_76 (A2), VA6\_75 (A2), Vanisoa\_74 (A9), VohminGhazi\_78 (A6), Waits\_83 (A15), Warrior24\_85 (A15), WeiHuaDA\_76 (A2), Whabigail7\_76 (A2), WideWale\_76 (A2), Wiks\_77 (A6), Yecey3\_79 (A9), Yokurt\_77 (A6),

#### Start 78:

- Found in 33 of 857 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 23 of 775
- Called 69.7% of time when present
- Phage (with cluster) where this start called: Alatin\_57 (CA), AngryOrchard\_55 (CA), AppleCloud\_55 (CA), Belenaria\_59 (CA), Bonanza\_59 (CA), CosmicSans\_58 (CA), Dinger\_57 (CA), Espica\_59 (CA), Harlequin\_57 (CA), Hiro\_58 (CA), Jester\_57 (CA), Krishelle\_58 (CA), Lillie\_58 (CA), Naiad\_57 (CA), Natosaleda\_57 (CA), Partridge\_57 (CA), PhailMary\_57 (CA), RexFury\_57 (CA), Rhodalysa\_58 (CA), Shuman\_59 (CA), StCroix\_57 (CA), TWAMP\_58 (CA), Yoncess\_57 (CA),

#### Start 79:

- Found in 19 of 857 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 14 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brookers\_38 (F1), Byougenkin\_38 (F1), CaptainTrips\_39 (F1), Coco12\_38 (F1), Donkeykong\_39 (F1), Galactic\_41 (F1), IMpilo\_38 (F1), Jant\_40 (F1), KristaRAM\_40 (F1), MilleniumForce\_40 (F1), MinionDave\_41 (F1), Moonbeam\_39 (F1), NewHope4\_43 (F1), Ovechkin\_39 (F1), Phanphagia\_35 (F1), Shauna1\_36 (F1), Soul22\_44 (F2), Violac\_41 (F1), XFactor\_38 (F1),

#### Start 82:

- Found in 3 of 857 ( 0.4% ) of genes in pham
- Manual Annotations of this start: 3 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DroogsArmy\_69 (A7), HINdeR\_70 (A7), Timshel\_71 (A7),

#### Start 83:

- Found in 5 of 857 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FlyCatcher\_75 (A7), Kimona\_69 (A19), PP\_72 (A7), Sheen\_74 (A7), Toro\_73 (A7),

#### Start 84:

- Found in 203 of 857 ( 23.7% ) of genes in pham
- Manual Annotations of this start: 180 of 775
- Called 93.6% of time when present
- Phage (with cluster) where this start called: Abdiel\_70 (A4), AgentM\_69 (A5), Airmid\_72 (A5), Albee\_70 (A4), Alberto7\_71 (A4), Annyong\_69 (A4), Aragog\_69 (A5), Archetta\_67 (A5), Arturo\_67 (A4), Avle17\_70 (A4), Baby16\_70 (A4), BabyRay\_74 (A3), BangNhom\_68 (A4), Bartimeaus\_70 (A4), BellusTerra\_71 (A4), Benedict\_73 (A5), Blackmoor\_69 (A4), Bluefalcon\_65 (A5), Bombshell\_70 (A4), Bonamassa\_69 (A5), Broseidon\_70 (A4), Bruiser\_69 (A4), BubbleTrouble\_69 (A4), Bugatti\_73 (A3), Burger\_68 (A4), Caelakin\_69 (A4), Camperdownii\_68 (A4), CentreCat\_70 (A4), Cerulean\_71 (A4), Chadwick\_73 (A5), ChampagnePapi\_72 (A4), Chaph\_70 (A4), Chupacabra\_68 (A10), Cindaradix\_66 (A4), Cintron\_70 (A4), Citius\_70 (A4), Clarenza\_69 (A4), Cocoaberry\_70 (A4), Commander\_68 (A4), Connomayer\_70 (A4), Conspiracy\_70 (A5), Coog\_66 (A5), Cuco\_68 (A5), Deano\_67 (A4), Dhanush\_70 (A4), DirtyDunning\_69 (A4), Discoknowium\_67 (A5), DontArgue\_67 (A10), DropBear\_71 (A3), Druantia\_69 (A4), Dublin\_69 (A5), Eagle\_69 (A4), Eaglepride\_73 (A10), Eapen\_70 (A4), Edison31\_67 (A10), EITiger69\_75 (A5), Eris\_69 (A4), Eros\_70 (A4), Eurydice\_71 (A4), Florean\_70 (A4), Flux\_70 (A4), ForGetIt\_70 (A5), Fred313\_71 (A3), Funston\_69 (A4), Gadost\_70 (A4), George\_65 (A5), Ghouboy\_69 (A5), Giroux\_72 (A3), Goose\_71 (A10), HamSlice\_66 (A4), Happiness\_69 (A4), HelDan\_73 (A3), Holli\_69 (A4), Hookmount\_73 (A3), Houdini22\_69 (A4), HuhtaEnerson15\_67 (A5), ICleared\_69 (A4), Iceman\_69 (A4), Idleandcovert\_74 (A3), Iracema64\_70 (A4), Isca\_71 (A3), Jabiru\_71 (A5), Jaykayelowell\_67 (A4), JetBlade\_70 (A4), JoongJeon\_69 (A4), Jovo\_70 (A5), KFPoly\_69 (A4), Kampy\_69 (A4), Kingmustik0402\_70 (A4), KittenMittens\_67 (A10), Koreni\_69 (A4), Kratark\_69 (A4), Kremtemulon\_69 (A4), Kye\_70 (A4), LHTSCC\_72 (A4), Lambert1\_73 (A3), LappelDuVide\_70 (A4), Lemur\_70 (A4), LeoAvram\_69 (A4), Lev2\_70 (A5), LittleB\_70 (A4), LittleCherry\_68 (A5), LittleGuy\_70 (A4), LochMonster\_71 (A4), Lorenzo\_70 (A4), Lunsford\_70 (A4), Margo\_73 (A3), MarysWell\_69 (A5), Maverick\_69 (A4), Mayonnaise\_67 (A4), Mazhar510\_70 (A4), Medusa\_70 (A4), MeeZee\_69 (A4), Melvin\_72 (A4), Micasa\_69 (A5), Midas2\_66 (A5), Milcery\_69 (A5), Millski\_69 (A4), Naca\_72 (A5), Nebs\_71 (A4), Nemo27\_69 (A4), Norbert\_69 (A3), NorthStar\_68 (A4), NotAPhaseMom\_69 (A4), Nyxis\_69 (A4), OKCentral2016\_68 (A10), OKaNui\_69 (A4), Obama12\_71 (A4), Odin\_77 (A2), Ohfah\_71 (A4), Palestino\_69 (A4), Panamaxus\_71 (A3), Peaches\_68 (A4), PeterPeter\_70 (A4), PetterN\_77 (A5), Phacado\_70 (A4), Phantastic\_75 (A3), Felipe\_71 (A4), Phighter1804\_70 (A4), Phlorence\_68 (A5), Phontbonne\_70 (A4), PickleBack\_70 (A5), Pipcraft\_67 (A4), Pocahontas\_72 (A3), Polymorphads\_70 (A4), Popcicle\_73 (A3), Prinashe11\_67 (A5), Pumbaa\_70 (A4), QuinnKiro\_72 (A3), Relief\_69 (A4), ResDef\_71 (A3), Romney\_69 (A4), Roosevelt\_68 (A4), Rosa24\_67 (A4), Ruin\_70 (A4), Sabertooth\_70 (A4), SaturnRing\_73 (A3), Scamp\_70 (A4), Scorpia\_73 (A5), Scout\_72 (A3), SeniorClean\_65 (A4), Severus\_68 (A10), Shaka\_68 (A4), SheldonCooper\_70 (A4), Skipitt\_69 (A4), Sparxx\_71 (A4), Spino\_69 (A4), Swirley\_69 (A5), SydNat\_69 (A5), TNguyen7\_74 (A3), Taquarus\_69 (A4), Tarynearal\_68 (A5), Texage\_71 (A3), Thanksgivukkah\_69 (A4), Theia\_68 (A5), Tiger\_69 (A5), TinaFeyge\_68 (A4), Tinybot\_69 (A4), TiroTheta9\_69 (A4), Todacoro\_73 (A3), TroyPia\_71 (A4), Twigg\_66 (A5), Twister\_69 (A10), TygerBlood\_70 (A4), Ulysses\_69 (A4), UnionJack\_73 (A5), Wander\_70 (A4), Wilbur\_70 (A4), YoSam321\_70 (A4), Zolita\_68 (A5),

#### Start 85:

- Found in 17 of 857 ( 2.0% ) of genes in pham
- Manual Annotations of this start: 5 of 775
- Called 47.1% of time when present

- Phage (with cluster) where this start called: Drake94\_68 (A10), DustyMartin\_72 (A10), Kristoff\_69 (A10), PeaceMeal1\_68 (A10), Rebeuca\_71 (A10), Rowdy\_72 (A10), Shapes\_72 (A10), WalterMcMickey\_69 (A10),

#### Start 86:

- Found in 33 of 857 ( 3.9% ) of genes in pham
- Manual Annotations of this start: 6 of 775
- Called 21.2% of time when present
- Phage (with cluster) where this start called: Astraea\_48 (C1), BadAgartude\_49 (C1), BlueBird\_76 (A3), EasyJones\_49 (C1), Heathen\_73 (A3), Kachowdy\_71 (A3), Puppy\_74 (A3),

#### Start 87:

- Found in 2 of 857 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Aminay\_81 (K7),

#### Start 88:

- Found in 2 of 857 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 50.0% of time when present
- Phage (with cluster) where this start called: SamScheppers\_83 (K4),

#### Start 89:

- Found in 9 of 857 ( 1.1% ) of genes in pham
- Manual Annotations of this start: 2 of 775
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Bombitas\_177 (J), Courthouse\_190 (J),

#### Start 91:

- Found in 237 of 857 ( 27.7% ) of genes in pham
- Manual Annotations of this start: 205 of 775
- Called 94.9% of time when present
- Phage (with cluster) where this start called: AFIS\_72 (A1), Abbyshoes\_75 (A1), Acme\_79 (A1), Adahisdi\_71 (A1), Aeneas\_80 (A1), Agaliana\_73 (A1), Ajay\_72 (A1), Alice\_41 (C1), Altman\_78 (A1), Anglerfish\_77 (A1), Applejack\_74 (A1), Ariel\_194 (J), Arlo\_75 (A1), Ashballer\_77 (A1), Atkinbua\_81 (A1), BPBiebs31\_80 (A1), BaconJack\_77 (A1), Barriga\_82 (A1), BarrowTuph\_77 (A1), Batiatus\_38 (F1), Beatrix\_72 (A1), BeesKnees\_76 (A1), Bethlehem\_78 (A1), Bexan\_70 (A1), Big3\_76 (A1), BigMau\_78 (A1), Bigchungji\_75 (A1), BillKnuckles\_69 (A1), Bipolar\_36 (F1), BluSpix\_73 (A1), Blue\_72 (A1), Bob3\_76 (A1), Bobi\_40 (F1), Bones\_71 (A1), Briton15\_78 (A1), Bruns\_78 (A1), Burton\_76 (A1), Buttons\_72 (A1), Bxb1\_69 (A1), CactusRose\_78 (A1), Carlyle\_76 (A1), Ciao\_72 (A1), Conceptll\_80 (A1), Corium\_38 (F1), Corvo\_77 (A1), DD5\_73 (A1), DLane\_38 (F1), Dexes\_76 (A1), Doom\_68 (A1), DrFeelGood\_71 (A1), DreamCatcher\_79 (A1), Dreamboat\_75 (A1), Dulcie\_76 (A1), Dussy\_74 (A1), Dynamix\_75 (A1), Emma\_41 (F1), EnzoK\_75 (A1), Espresso\_69 (A1), Euphoria\_76 (A1), Eyeball\_74 (A1), Fajezeel\_78 (A1), Fascinus\_71 (A1), Fenn\_78 (A1), Flathead\_38 (F1), Forsytheast\_77 (A1), Francis47\_77 (A1), Fushigi\_69 (A1), GageAP\_78 (A1), Gandalf20\_74 (A1), Gompeii16\_76 (A1), Graduation\_78 (A1), GrecoEtereo\_79 (A1), Greg\_78 (A1), Gwendoluna\_79 (A1), Hami1\_68 (A1), HarryOW\_76 (A1), Hermia\_70 (A1), HermioneGrange\_79 (A1), Homines\_63 (A1), Hope4ever\_76 (A1), HyRo\_222 (C1), ILeeKay\_73 (A1),

Ichabod\_78 (A1), IgnatiusPatJac\_75 (A1), Inyanga\_67 (A1), Iqorha\_67 (A1), JC27\_76 (A1), JackSparrow\_76 (A1), Jasper\_74 (A1), Jerm2\_77 (A1), Jorgensen\_82 (A1), Juice456\_41 (F1), JuliaChild\_76 (A1), JulietS\_42 (C1), KBG\_73 (A1), KSSJEB\_72 (A1), Kalah2\_189 (J), Kanely\_77 (A1), Kenuha5\_35 (F1), Killigrew\_72 (A1), KingJulian\_38 (F1), Koguma\_43 (C1), Kugel\_77 (A1), KyMonks1A\_81 (A1), Kykar\_75 (A1), LRRHood\_44 (C1), Lamina13\_79 (A1), Lesedi\_72 (A1), Licorice\_76 (A1), LilBib\_72 (A1), LittleE\_195 (J), Lockley\_72 (A1), Lopton\_74 (A1), Lukilu\_41 (C1), LunaBlu\_42 (F1), MPlant7149\_75 (A1), Magnar\_71 (A1), Marcell\_68 (A1), Marchy\_67 (A1), Marge\_72 (A1), Marsha\_75 (A1), MaryBeth\_73 (A1), McGuire\_75 (A1), McSinger\_73 (A1), Melissauren88\_38 (F1), MetalQZJ\_72 (A1), MiaZeal\_196 (J), Michley\_76 (A1), Mkhuseleli\_72 (A1), Molly\_75 (A1), Monet\_79 (A1), Moose\_77 (A1), Morizzled23\_50 (C1), Mova\_39 (F1), MrGordo\_76 (A1), Mryolo\_70 (A1), Ms6\_33 (F1), Mule\_74 (A1), NEHalo\_71 (A1), Naira\_77 (A1), Nerujay\_79 (A1), Nhonho\_71 (A1), Niza\_75 (A1), Ohno789\_78 (A1), Oogway\_74 (A1), PSullivan\_73 (A1), Papez\_77 (A1), Paphu\_70 (A1), Paraselene\_73 (A1), Pari\_80 (A1), Parliament\_76 (A1), PascalRango\_73 (A1), PattyP\_75 (A1), Pelly\_78 (A1), Perseus\_75 (A1), Petp2012\_76 (A1), Phalconet\_39 (F1), PherrisBueller\_74 (A1), Philippers\_73 (A1), Phox\_45 (C1), PinkPlastic\_71 (A1), Pinkcreek\_38 (C1), Pinto\_75 (A1), Pippin\_76 (A1), Pita2\_76 (A1), Polo2Bam\_43 (F1), Pound\_183 (J), ProMouse\_75 (A1), QTRLifeCrisis\_74 (A1), Rabinovich\_45 (C1), Raid\_73 (A1), Rajelicia\_77 (A1), Rhynn\_71 (A1), Rialto\_43 (F1), Ringer\_75 (A1), Rohr\_78 (A1), Ronan\_41 (C1), Rubeus\_76 (A1), Rufus\_78 (A1), Ruotula\_79 (A1), Rutherford\_77 (A1), STLscum\_81 (A1), Sagefire\_72 (A1), Sandaddy\_73 (A1), Sanya\_70 (A1), Scowl\_76 (A1), Seabiscuit\_75 (A1), Seanderson\_75 (A1), Shaqnato\_43 (C1), ShortQueendom\_68 (A1), Sibs6\_75 (A1), Slagathor\_76 (A1), Smeagol\_78 (A1), Snazzy\_76 (A1), Solon\_71 (A1), Sorpresa\_74 (A1), SpikeBT\_72 (A1), Squee\_76 (A1), Squint\_188 (J), StAnnes\_38 (F1), StrongArm\_71 (A1), Stubby\_43 (C1), Sumter\_72 (A1), Sunshine924\_76 (A1), Superphikiman\_191 (J), SwissCheese\_79 (A1), Swole\_76 (A1), Target\_75 (A1), Tasp14\_74 (A1), Teodoridan\_72 (A1), TheloniousMonk\_77 (A1), Topgun\_71 (A1), Traft412\_75 (A1), Treddle\_77 (A1), Tripl3t\_78 (A1), TwoPeat\_75 (A1), U2\_69 (A1), Violet\_70 (A1), Watermelon\_78 (A1), Wheeler\_79 (A1), Wilkins\_72 (A1), Yassified\_45 (C1), Zeeculate\_71 (A1), Zephyr\_77 (A1), Zeuska\_77 (A1),

Start 92:

- Found in 4 of 857 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Stasia\_69 (A4),

Start 93:

- Found in 90 of 857 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 78 of 775
- Called 93.3% of time when present
- Phage (with cluster) where this start called: ACFishhook\_76 (A3), Aglet\_80 (A3), Anubis\_82 (A3), Astro\_84 (A8), AugsMagnumOpus\_82 (A3), Beauxregard13\_78 (A3), Bigflo\_76 (A3), BreSam8\_79 (A3), Calvinny\_76 (A3), Colbster\_75 (A3), Cullens\_79 (A3), Daishi\_78 (A3), Danforth\_85 (A8), Dieselweasel\_79 (A3), Dixon\_83 (A8), EpicPhail\_80 (A3), Farber\_79 (A3), Fernando\_79 (A3), Gemma\_76 (A3), GingkoMaracino\_79 (A3), Grif\_77 (A3), Groundhog\_82 (A8), Groupthink\_79 (A3), Grum1\_78 (A3), GtownJaz\_79 (A3), HashRod\_80 (A3), HaveUMetTed\_79 (A3), Heliosoles\_76 (A3), Hercules11\_79 (A3), JHC117\_74 (A3), JenCasNa\_80 (A3), JeppNRM\_79 (A3), Jobu08\_75 (A3), KADY\_76 (A3), Kalnoky\_79 (A3), Kinmap\_79

(A21), LBerry\_80 (A3), LarryKay\_79 (A3), Liliith\_77 (A3), Lowa\_76 (A3), LugYA\_82 (A3), MadMarie\_77 (A3), Malinsilva\_81 (A3), Manu\_78 (A3), MarQuardt\_79 (A3), Marie\_77 (A3), Marius\_79 (A3), Methuselah\_72 (A3), Microwolf\_75 (A3), MoneyMay\_78 (A3), MuchMore\_82 (A3), MyraDee\_73 (A18), NearlyHeadless\_85 (A8), OlanP\_77 (A3), Ollie\_79 (A3), P28Green\_79 (A3), PGHhamlin\_81 (A3), Pawn\_77 (A3), Pembroke\_79 (A3), Penny1\_79 (A3), PhishRPhriends\_75 (A3), Phoebe\_80 (A3), Phoxy\_79 (A3), PotatoSplit\_80 (A3), PurpleHaze\_78 (A3), Reba\_74 (A3), Rummer\_78 (A3), Sabinator\_77 (A3), Saintus\_80 (A8), Smeadley\_84 (A8), Snickers\_75 (A3), SoYo\_76 (A3), SoilDragon\_78 (A3), Soshari\_81 (A3), Spike509\_79 (A3), Stagni\_76 (A3), StepMih\_78 (A3), Stephig9\_83 (A8), Taurus\_80 (A3), Tiffany\_78 (A3), TinyPebbles\_75 (A3), Vix\_75 (A3), Watson\_78 (A3), Wooldri\_81 (A3),

#### Start 94:

- Found in 20 of 857 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 20 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbysRanger\_69 (A4), Achebe\_68 (A4), AvatarAhPeg\_69 (A4), Backyardigan\_67 (A4), Badger\_68 (A4), Bumblebee11\_68 (A4), Cici\_69 (A4), Datway\_69 (A4), Katalie136\_69 (A4), Miramae\_69 (A4), Morpher26\_69 (A4), Mundrea\_69 (A4), Noelle\_70 (A4), Perplexer\_69 (A4), PetiteSangsue\_69 (A4), Shygu2\_69 (A4), Stink\_69 (A4), Wile\_68 (A4), Wizard007\_69 (A4), Xena\_68 (A4),

#### Start 97:

- Found in 1 of 857 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Success\_38 (BT),

#### Start 99:

- Found in 1 of 857 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rockstar\_72 (A3),

#### Start 100:

- Found in 26 of 857 ( 3.0% ) of genes in pham
- Manual Annotations of this start: 1 of 775
- Called 3.8% of time when present
- Phage (with cluster) where this start called: LadyBird\_79 (A2),

#### Start 104:

- Found in 480 of 857 ( 56.0% ) of genes in pham
- Manual Annotations of this start: 5 of 775
- Called 1.7% of time when present
- Phage (with cluster) where this start called: Akhila\_32 (F1), BigPaolini\_73 (A1), Koan\_65 (A4), Levia\_66 (A1), MilanaBonita\_32 (F1), Pepe\_69 (A1), PhineBark\_70 (A1), Tote\_71 (A1),

#### Start 111:

- Found in 777 of 857 ( 90.7% ) of genes in pham
- Manual Annotations of this start: 4 of 775

- Called 0.5% of time when present
- Phage (with cluster) where this start called: BuzzBuzz\_73 (A3), Bxz2\_74 (A3), Louie6\_78 (A3), Phranny\_75 (A3),

### **Summary by clusters:**

There are 29 clusters represented in this pham: BT, K7, K4, A15, A14, A17, A16, A11, A10, A12, A19, A18, A1, A3, A2, A5, A4, A7, A6, A9, A8, C1, A, A21, CA, J, A20, F1, F2,

Info for manual annotations of cluster A:

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

Info for manual annotations of cluster A1:

- Start number 68 was manually annotated 2 times for cluster A1.
- Start number 91 was manually annotated 171 times for cluster A1.
- Start number 104 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 57 was manually annotated 1 time for cluster A10.
- Start number 84 was manually annotated 8 times for cluster A10.
- Start number 85 was manually annotated 5 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 72 was manually annotated 4 times for cluster A11.
- Start number 77 was manually annotated 16 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 71 was manually annotated 1 time for cluster A12.
- Start number 72 was manually annotated 1 time for cluster A12.
- Start number 77 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 A15:

- Start number 77 was manually annotated 18 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 77 was manually annotated 2 times for cluster A16.

Info for manual annotations of cluster A18:

- Start number 93 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A19:

- Start number 83 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 34 was manually annotated 1 time for cluster A2.
- Start number 60 was manually annotated 4 times for cluster A2.
- Start number 62 was manually annotated 1 time for cluster A2.
- Start number 72 was manually annotated 14 times for cluster A2.

- Start number 77 was manually annotated 71 times for cluster A2.
- Start number 84 was manually annotated 1 time for cluster A2.
- Start number 100 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 76 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:

- Start number 75 was manually annotated 3 times for cluster A3.
- Start number 84 was manually annotated 19 times for cluster A3.
- Start number 86 was manually annotated 3 times for cluster A3.
- Start number 93 was manually annotated 69 times for cluster A3.
- Start number 99 was manually annotated 1 time for cluster A3.
- Start number 111 was manually annotated 4 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 84 was manually annotated 114 times for cluster A4.
- Start number 92 was manually annotated 1 time for cluster A4.
- Start number 94 was manually annotated 20 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 84 was manually annotated 38 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 64 was manually annotated 9 times for cluster A6.
- Start number 72 was manually annotated 4 times for cluster A6.
- Start number 77 was manually annotated 23 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 82 was manually annotated 3 times for cluster A7.
- Start number 83 was manually annotated 2 times for cluster A7.

Info for manual annotations of cluster A8:

- Start number 74 was manually annotated 3 times for cluster A8.
- Start number 93 was manually annotated 8 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 72 was manually annotated 10 times for cluster A9.
- Start number 77 was manually annotated 22 times for cluster A9.

Info for manual annotations of cluster BT:

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

Info for manual annotations of cluster C1:

- Start number 86 was manually annotated 3 times for cluster C1.
- Start number 91 was manually annotated 13 times for cluster C1.

Info for manual annotations of cluster CA:

- Start number 78 was manually annotated 23 times for cluster CA.

Info for manual annotations of cluster F1:

- Start number 67 was manually annotated 1 time for cluster F1.



- Start number 79 was manually annotated 13 times for cluster F1.
- Start number 91 was manually annotated 14 times for cluster F1.
- Start number 104 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 79 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster J:

- Start number 89 was manually annotated 2 times for cluster J.
- Start number 91 was manually annotated 7 times for cluster J.

Info for manual annotations of cluster K4:

- Start number 40 was manually annotated 1 time for cluster K4.
- Start number 88 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K7:

- Start number 87 was manually annotated 1 time for cluster K7.

### **Gene Information:**

Gene: 20ES\_77 Start: 45500, Stop: 44928, Start Num: 77

Candidate Starts for 20ES\_77:

(Start: 77 @45500 has 160 MA's), (Start: 111 @45383 has 4 MA's), (112, 45374), (115, 45347), (119, 45326), (135, 45224), (138, 45215), (153, 45137), (158, 45098), (169, 45044),

Gene: 40AC\_74 Start: 45910, Stop: 45359, Start Num: 77

Candidate Starts for 40AC\_74:

(Start: 72 @45922 has 33 MA's), (Start: 77 @45910 has 160 MA's), (98, 45862), (Start: 111 @45793 has 4 MA's), (112, 45784), (115, 45757), (119, 45736), (129, 45682), (135, 45634), (142, 45610), (148, 45583), (149, 45568), (153, 45547), (154, 45544), (158, 45508), (178, 45409),

Gene: ACFishhook\_76 Start: 44888, Stop: 44379, Start Num: 93

Candidate Starts for ACFishhook\_76:

(Start: 93 @44888 has 78 MA's), (Start: 104 @44852 has 5 MA's), (Start: 111 @44801 has 4 MA's), (112, 44792), (122, 44726), (129, 44690), (135, 44642), (142, 44621), (152, 44561), (153, 44558), (158, 44519), (169, 44456), (177, 44411),

Gene: AFIS\_72 Start: 46954, Stop: 46442, Start Num: 91

Candidate Starts for AFIS\_72:

(26, 47128), (37, 47095), (58, 47032), (Start: 68 @47011 has 2 MA's), (Start: 91 @46954 has 205 MA's), (Start: 104 @46912 has 5 MA's), (Start: 111 @46861 has 4 MA's), (112, 46852), (119, 46804), (142, 46681), (149, 46639), (183, 46453),

Gene: AN3\_77 Start: 44285, Stop: 43713, Start Num: 77

Candidate Starts for AN3\_77:

(Start: 77 @44285 has 160 MA's), (Start: 100 @44231 has 1 MA's), (Start: 111 @44168 has 4 MA's), (112, 44159), (119, 44111), (122, 44093), (125, 44084), (135, 44009), (138, 44000), (153, 43922), (158, 43883), (179, 43754), (181, 43745),

Gene: AbbyPaige\_77 Start: 45770, Stop: 45195, Start Num: 77

Candidate Starts for AbbyPaige\_77:

(7, 46034), (14, 45986), (16, 45974), (Start: 60 @45812 has 4 MA's), (66, 45800), (Start: 72 @45782 has 33 MA's), (Start: 77 @45770 has 160 MA's), (Start: 111 @45653 has 4 MA's), (112, 45644), (119, 45596), (135, 45494), (153, 45407), (158, 45368), (171, 45305),

Gene: AbbysRanger\_69 Start: 44366, Stop: 43866, Start Num: 94

Candidate Starts for AbbysRanger\_69:

(Start: 94 @44366 has 20 MA's), (Start: 111 @44279 has 4 MA's), (113, 44255), (127, 44174), (129, 44168), (130, 44156), (135, 44117), (140, 44102), (142, 44096), (158, 44000), (171, 43934), (177, 43898),

Gene: Abbysshoes\_75 Start: 46207, Stop: 45695, Start Num: 91

Candidate Starts for Abbysshoes\_75:

(26, 46381), (37, 46348), (Start: 68 @46264 has 2 MA's), (Start: 91 @46207 has 205 MA's), (Start: 104 @46165 has 5 MA's), (Start: 111 @46114 has 4 MA's), (112, 46105), (119, 46057), (142, 45934), (149, 45892), (173, 45748), (183, 45706),

Gene: Abdiel\_70 Start: 44184, Stop: 43672, Start Num: 84

Candidate Starts for Abdiel\_70:

(Start: 84 @44184 has 180 MA's), (Start: 104 @44136 has 5 MA's), (Start: 111 @44085 has 4 MA's), (122, 44010), (126, 43986), (127, 43980), (129, 43974), (135, 43923), (142, 43902), (158, 43806), (177, 43704),

Gene: Achebe\_68 Start: 44349, Stop: 43849, Start Num: 94

Candidate Starts for Achebe\_68:

(Start: 94 @44349 has 20 MA's), (Start: 111 @44262 has 4 MA's), (113, 44238), (127, 44157), (129, 44151), (130, 44139), (135, 44100), (140, 44085), (142, 44079), (158, 43983), (171, 43917), (177, 43881),

Gene: Acme\_79 Start: 48278, Stop: 47766, Start Num: 91

Candidate Starts for Acme\_79:

(26, 48452), (37, 48419), (Start: 68 @48335 has 2 MA's), (Start: 91 @48278 has 205 MA's), (Start: 104 @48236 has 5 MA's), (Start: 111 @48185 has 4 MA's), (112, 48176), (119, 48128), (142, 48005), (149, 47963), (183, 47777),

Gene: Acolyte\_66 Start: 43348, Stop: 42803, Start Num: 77

Candidate Starts for Acolyte\_66:

(Start: 72 @43360 has 33 MA's), (Start: 77 @43348 has 160 MA's), (90, 43321), (Start: 92 @43318 has 1 MA's), (Start: 111 @43231 has 4 MA's), (112, 43222), (113, 43207), (119, 43174), (135, 43072), (142, 43048), (149, 43006), (152, 42988), (158, 42946), (169, 42889), (178, 42844),

Gene: Adahisdi\_71 Start: 46277, Stop: 45765, Start Num: 91

Candidate Starts for Adahisdi\_71:

(26, 46451), (37, 46418), (Start: 68 @46334 has 2 MA's), (Start: 91 @46277 has 205 MA's), (Start: 104 @46235 has 5 MA's), (Start: 111 @46184 has 4 MA's), (112, 46175), (119, 46127), (142, 46004), (149, 45962), (183, 45776),

Gene: Adzzy\_80 Start: 45187, Stop: 44639, Start Num: 77

Candidate Starts for Adzzy\_80:

(Start: 72 @45199 has 33 MA's), (Start: 77 @45187 has 160 MA's), (Start: 111 @45070 has 4 MA's), (112, 45061), (119, 45013), (122, 44995), (135, 44911), (142, 44887), (149, 44845), (152, 44827), (158, 44785), (178, 44683),

Gene: Aeneas\_80 Start: 48566, Stop: 48054, Start Num: 91

Candidate Starts for Aeneas\_80:

(26, 48740), (37, 48707), (Start: 68 @48623 has 2 MA's), (Start: 91 @48566 has 205 MA's), (Start: 104 @48524 has 5 MA's), (Start: 111 @48473 has 4 MA's), (112, 48464), (119, 48416), (142, 48293), (149, 48251), (173, 48107), (183, 48065),

Gene: Agaliana\_73 Start: 45095, Stop: 44583, Start Num: 91

Candidate Starts for Agaliana\_73:

(26, 45269), (37, 45236), (Start: 68 @45152 has 2 MA's), (Start: 91 @45095 has 205 MA's), (Start: 104 @45053 has 5 MA's), (Start: 111 @45002 has 4 MA's), (112, 44993), (119, 44945), (142, 44822), (149, 44780), (183, 44594),

Gene: Agape74\_77 Start: 45765, Stop: 45190, Start Num: 77

Candidate Starts for Agape74\_77:

(7, 46029), (14, 45981), (16, 45969), (Start: 60 @45807 has 4 MA's), (66, 45795), (Start: 72 @45777 has 33 MA's), (Start: 77 @45765 has 160 MA's), (Start: 111 @45648 has 4 MA's), (112, 45639), (119, 45591), (135, 45489), (153, 45402), (158, 45363), (171, 45300),

Gene: AgentM\_69 Start: 43551, Stop: 43021, Start Num: 84

Candidate Starts for AgentM\_69:

(80, 43557), (Start: 84 @43551 has 180 MA's), (133, 43299), (134, 43296), (135, 43275), (142, 43254), (168, 43101), (170, 43095), (176, 43056),

Gene: Aglet\_80 Start: 45006, Stop: 44497, Start Num: 93

Candidate Starts for Aglet\_80:

(Start: 93 @45006 has 78 MA's), (Start: 104 @44970 has 5 MA's), (Start: 111 @44919 has 4 MA's), (112, 44910), (122, 44844), (129, 44808), (135, 44760), (142, 44739), (152, 44679), (153, 44676), (154, 44673), (158, 44637), (169, 44574), (177, 44529),

Gene: Airmid\_72 Start: 44380, Stop: 43850, Start Num: 84

Candidate Starts for Airmid\_72:

(36, 44512), (43, 44479), (Start: 84 @44380 has 180 MA's), (96, 44350), (124, 44188), (126, 44164), (133, 44128), (135, 44104), (142, 44083), (168, 43930), (170, 43924), (176, 43885),

Gene: Ajay\_72 Start: 45478, Stop: 44966, Start Num: 91

Candidate Starts for Ajay\_72:

(26, 45652), (37, 45619), (58, 45556), (Start: 68 @45535 has 2 MA's), (Start: 91 @45478 has 205 MA's), (Start: 104 @45436 has 5 MA's), (Start: 111 @45385 has 4 MA's), (112, 45376), (119, 45328), (142, 45205), (149, 45163), (183, 44977),

Gene: Akhila\_32 Start: 27185, Stop: 26715, Start Num: 104

Candidate Starts for Akhila\_32:

(Start: 91 @27227 has 205 MA's), (Start: 104 @27185 has 5 MA's), (Start: 111 @27134 has 4 MA's), (112, 27125), (119, 27077), (126, 27035), (142, 26954), (149, 26912), (183, 26726),

Gene: Alatin\_57 Start: 40202, Stop: 39678, Start Num: 78

Candidate Starts for Alatin\_57:

(Start: 78 @40202 has 23 MA's), (103, 40157), (107, 40139), (122, 40025), (129, 39989), (134, 39962), (135, 39941), (142, 39920), (144, 39905), (150, 39875), (151, 39872), (153, 39857), (169, 39761), (171, 39752), (183, 39695),

Gene: Albee\_70 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Albee\_70:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (168, 43739), (177, 43691),

Gene: Alberto7\_71 Start: 44508, Stop: 43996, Start Num: 84

Candidate Starts for Alberto7\_71:

(Start: 84 @44508 has 180 MA's), (Start: 104 @44460 has 5 MA's), (Start: 111 @44409 has 4 MA's), (122, 44334), (126, 44310), (127, 44304), (129, 44298), (135, 44247), (142, 44226), (153, 44169), (158, 44130), (168, 44076), (177, 44028),

Gene: Alice\_41 Start: 14045, Stop: 14557, Start Num: 91

Candidate Starts for Alice\_41:

(22, 13856), (Start: 86 @14033 has 6 MA's), (Start: 91 @14045 has 205 MA's), (Start: 104 @14087 has 5 MA's), (Start: 111 @14138 has 4 MA's), (112, 14147), (119, 14195), (126, 14237), (142, 14318), (149, 14360), (183, 14546),

Gene: Alma\_75 Start: 44677, Stop: 44141, Start Num: 77

Candidate Starts for Alma\_75:

(Start: 72 @44689 has 33 MA's), (Start: 77 @44677 has 160 MA's), (Start: 111 @44581 has 4 MA's), (112, 44572), (113, 44557), (119, 44524), (142, 44401), (144, 44386), (145, 44383), (152, 44341), (153, 44338), (166, 44260), (171, 44230),

Gene: Altman\_78 Start: 47286, Stop: 46774, Start Num: 91

Candidate Starts for Altman\_78:

(26, 47460), (37, 47427), (Start: 68 @47343 has 2 MA's), (Start: 91 @47286 has 205 MA's), (Start: 104 @47244 has 5 MA's), (Start: 111 @47193 has 4 MA's), (112, 47184), (119, 47136), (135, 47034), (142, 47013), (149, 46971), (173, 46827), (183, 46785),

Gene: Alvin\_73 Start: 45755, Stop: 45186, Start Num: 68

Candidate Starts for Alvin\_73:

(26, 45872), (37, 45839), (58, 45776), (Start: 68 @45755 has 2 MA's), (Start: 91 @45698 has 205 MA's), (Start: 104 @45656 has 5 MA's), (Start: 111 @45605 has 4 MA's), (112, 45596), (119, 45548), (142, 45425), (149, 45383), (183, 45197),

Gene: Aminay\_81 Start: 51706, Stop: 52278, Start Num: 87

Candidate Starts for Aminay\_81:

(48, 51604), (Start: 87 @51706 has 1 MA's), (Start: 92 @51715 has 1 MA's), (107, 51769), (112, 51817), (113, 51832), (115, 51844), (126, 51907), (134, 51946), (141, 51985), (151, 52036), (156, 52075), (171, 52147), (187, 52228), (188, 52243), (189, 52246),

Gene: Anaysia\_84 Start: 45925, Stop: 45386, Start Num: 77

Candidate Starts for Anaysia\_84:

(Start: 77 @45925 has 160 MA's), (Start: 104 @45880 has 5 MA's), (Start: 111 @45811 has 4 MA's), (112, 45802), (119, 45754), (135, 45652), (142, 45631), (163, 45493), (168, 45475), (171, 45463), (178, 45427),

Gene: Aneem\_79 Start: 45350, Stop: 44799, Start Num: 77

Candidate Starts for Aneem\_79:

(Start: 60 @45392 has 4 MA's), (Start: 72 @45362 has 33 MA's), (Start: 77 @45350 has 160 MA's), (90, 45323), (Start: 111 @45233 has 4 MA's), (113, 45209), (119, 45176), (135, 45074), (142, 45050), (144, 45035), (149, 45008), (153, 44987), (158, 44948), (178, 44849), (186, 44816),

Gene: Anglerfish\_77 Start: 47609, Stop: 47097, Start Num: 91

Candidate Starts for Anglerfish\_77:

(26, 47783), (37, 47750), (Start: 68 @47666 has 2 MA's), (Start: 91 @47609 has 205 MA's), (Start: 104 @47567 has 5 MA's), (Start: 111 @47516 has 4 MA's), (112, 47507), (119, 47459), (142, 47336), (149, 47294), (183, 47108),

Gene: AngryOrchard\_55 Start: 40257, Stop: 39733, Start Num: 78

Candidate Starts for AngryOrchard\_55:

(Start: 78 @40257 has 23 MA's), (107, 40194), (122, 40080), (129, 40044), (134, 40017), (135, 39996), (142, 39975), (151, 39927), (169, 39816), (171, 39807), (183, 39750),

Gene: AnnaL29\_75 Start: 45761, Stop: 45144, Start Num: 62

Candidate Starts for AnnaL29\_75:

(35, 45839), (Start: 60 @45764 has 4 MA's), (Start: 62 @45761 has 1 MA's), (Start: 72 @45734 has 33 MA's), (Start: 77 @45722 has 160 MA's), (Start: 111 @45605 has 4 MA's), (112, 45596), (115, 45569), (119, 45548), (135, 45446), (138, 45437), (150, 45377), (153, 45359), (158, 45320),

Gene: Annyong\_69 Start: 44216, Stop: 43704, Start Num: 84

Candidate Starts for Annyong\_69:

(Start: 84 @44216 has 180 MA's), (Start: 104 @44168 has 5 MA's), (Start: 111 @44117 has 4 MA's), (122, 44042), (126, 44018), (127, 44012), (129, 44006), (135, 43955), (142, 43934), (153, 43877), (158, 43838), (177, 43736),

Gene: Anon\_80 Start: 45240, Stop: 44707, Start Num: 77

Candidate Starts for Anon\_80:

(Start: 62 @45279 has 1 MA's), (Start: 77 @45240 has 160 MA's), (Start: 104 @45183 has 5 MA's), (110, 45141), (115, 45096), (119, 45075), (122, 45057), (135, 44973), (142, 44952), (149, 44910), (154, 44886), (168, 44796), (171, 44784), (178, 44748), (186, 44715),

Gene: Anselm\_77 Start: 45836, Stop: 45258, Start Num: 77

Candidate Starts for Anselm\_77:

(Start: 60 @45878 has 4 MA's), (66, 45866), (Start: 72 @45848 has 33 MA's), (Start: 77 @45836 has 160 MA's), (Start: 111 @45719 has 4 MA's), (112, 45710), (119, 45662), (135, 45560), (150, 45491), (153, 45473), (156, 45443), (158, 45434), (171, 45371),

Gene: Anthony\_73 Start: 44766, Stop: 44242, Start Num: 76

Candidate Starts for Anthony\_73:

(Start: 76 @44766 has 1 MA's), (101, 44721), (107, 44697), (Start: 111 @44658 has 4 MA's), (123, 44580), (126, 44559), (129, 44547), (135, 44499), (142, 44478), (152, 44418), (153, 44415), (154, 44412), (158, 44376), (171, 44310), (177, 44274),

Gene: Anubis\_82 Start: 44892, Stop: 44383, Start Num: 93

Candidate Starts for Anubis\_82:

(Start: 93 @44892 has 78 MA's), (Start: 104 @44856 has 5 MA's), (Start: 111 @44805 has 4 MA's), (112, 44796), (122, 44730), (129, 44694), (135, 44646), (142, 44625), (152, 44565), (153, 44562), (154, 44559), (158, 44523), (169, 44460), (177, 44415),

Gene: AppleCloud\_55 Start: 39917, Stop: 39393, Start Num: 78

Candidate Starts for AppleCloud\_55:

(Start: 78 @39917 has 23 MA's), (103, 39872), (107, 39854), (122, 39740), (129, 39704), (134, 39677), (135, 39656), (142, 39635), (144, 39620), (150, 39590), (151, 39587), (169, 39476), (171, 39467), (183, 39410),

Gene: Applejack\_74 Start: 44460, Stop: 43924, Start Num: 91

Candidate Starts for Applejack\_74:

(26, 44634), (37, 44601), (Start: 68 @44517 has 2 MA's), (Start: 91 @44460 has 205 MA's), (Start: 104 @44418 has 5 MA's), (Start: 111 @44367 has 4 MA's), (112, 44358), (119, 44310), (142, 44187), (149, 44145), (160, 44067),

Gene: Aragog\_69 Start: 43571, Stop: 43041, Start Num: 84

Candidate Starts for Aragog\_69:

(80, 43577), (Start: 84 @43571 has 180 MA's), (133, 43319), (134, 43316), (135, 43295), (142, 43274), (168, 43121), (170, 43115), (176, 43076),

Gene: ArcherNM\_69 Start: 45032, Stop: 44412, Start Num: 60

Candidate Starts for ArcherNM\_69:

(Start: 60 @45032 has 4 MA's), (Start: 72 @45002 has 33 MA's), (Start: 77 @44990 has 160 MA's), (Start: 111 @44873 has 4 MA's), (112, 44864), (119, 44816), (135, 44714), (138, 44705), (150, 44645), (153, 44627), (158, 44588),

Gene: Archetta\_67 Start: 43517, Stop: 42987, Start Num: 84

Candidate Starts for Archetta\_67:

(Start: 84 @43517 has 180 MA's), (126, 43301), (133, 43265), (134, 43262), (135, 43241), (136, 43238), (142, 43220), (168, 43067), (176, 43022),

Gene: Ariel\_194 Start: 94262, Stop: 93750, Start Num: 91

Candidate Starts for Ariel\_194:

(8, 94553), (28, 94424), (49, 94367), (51, 94358), (81, 94286), (Start: 89 @94265 has 2 MA's), (Start: 91 @94262 has 205 MA's), (Start: 104 @94220 has 5 MA's), (Start: 111 @94169 has 4 MA's), (112, 94160), (119, 94112), (126, 94070), (142, 93989), (149, 93947), (183, 93761),

Gene: Arissanae\_74 Start: 45012, Stop: 44470, Start Num: 72

Candidate Starts for Arissanae\_74:

(Start: 72 @45012 has 33 MA's), (Start: 77 @45000 has 160 MA's), (Start: 111 @44904 has 4 MA's), (113, 44880), (119, 44847), (142, 44724), (152, 44664), (153, 44661), (158, 44622), (167, 44580), (168, 44565),

Gene: Arlo\_75 Start: 47001, Stop: 46489, Start Num: 91

Candidate Starts for Arlo\_75:

(26, 47175), (37, 47142), (Start: 68 @47058 has 2 MA's), (Start: 91 @47001 has 205 MA's), (Start: 104 @46959 has 5 MA's), (Start: 111 @46908 has 4 MA's), (112, 46899), (119, 46851), (135, 46749), (142, 46728), (149, 46686), (173, 46542), (183, 46500),

Gene: Artemis2UCLA\_77 Start: 43914, Stop: 43363, Start Num: 64

Candidate Starts for Artemis2UCLA\_77:

(Start: 64 @43914 has 9 MA's), (Start: 72 @43890 has 33 MA's), (Start: 77 @43878 has 160 MA's), (Start: 111 @43791 has 4 MA's), (119, 43734), (135, 43632), (142, 43611), (153, 43548), (158, 43509), (169, 43455), (171, 43446), (185, 43383),

Gene: Arturo\_67 Start: 44298, Stop: 43786, Start Num: 84

Candidate Starts for Arturo\_67:

(Start: 84 @44298 has 180 MA's), (Start: 104 @44250 has 5 MA's), (Start: 111 @44199 has 4 MA's), (122, 44124), (126, 44100), (127, 44094), (129, 44088), (135, 44037), (142, 44016), (153, 43959), (158, 43920), (177, 43818),

Gene: Ashballer\_77 Start: 47054, Stop: 46542, Start Num: 91

Candidate Starts for Ashballer\_77:

(26, 47228), (37, 47195), (Start: 68 @47111 has 2 MA's), (Start: 91 @47054 has 205 MA's), (Start: 104 @47012 has 5 MA's), (Start: 111 @46961 has 4 MA's), (112, 46952), (119, 46904), (142, 46781), (149, 46739), (183, 46553),

Gene: Astraea\_48 Start: 15429, Stop: 15953, Start Num: 86

Candidate Starts for Astraea\_48:

(22, 15252), (Start: 86 @15429 has 6 MA's), (Start: 91 @15441 has 205 MA's), (Start: 104 @15483 has 5 MA's), (Start: 111 @15534 has 4 MA's), (112, 15543), (119, 15591), (126, 15633), (142, 15714), (149, 15756), (183, 15942),

Gene: Astro\_84 Start: 46044, Stop: 45541, Start Num: 93

Candidate Starts for Astro\_84:

(Start: 74 @46083 has 3 MA's), (Start: 93 @46044 has 78 MA's), (101, 46020), (107, 45996), (Start: 111 @45957 has 4 MA's), (121, 45885), (123, 45879), (126, 45858), (129, 45846), (142, 45777), (158, 45675), (173, 45591), (177, 45573), (181, 45561),

Gene: Atkinbua\_81 Start: 47613, Stop: 47101, Start Num: 91

Candidate Starts for Atkinbua\_81:

(26, 47787), (37, 47754), (Start: 68 @47670 has 2 MA's), (Start: 91 @47613 has 205 MA's), (Start: 104 @47571 has 5 MA's), (Start: 111 @47520 has 4 MA's), (112, 47511), (119, 47463), (142, 47340), (149, 47298), (183, 47112),

Gene: AugsMagnumOpus\_82 Start: 44994, Stop: 44485, Start Num: 93

Candidate Starts for AugsMagnumOpus\_82:

(Start: 75 @45030 has 3 MA's), (Start: 93 @44994 has 78 MA's), (Start: 104 @44958 has 5 MA's), (Start: 111 @44907 has 4 MA's), (112, 44898), (122, 44832), (129, 44796), (135, 44748), (142, 44727), (152, 44667), (153, 44664), (154, 44661), (158, 44625), (169, 44562), (177, 44517),

Gene: AvatarAhPeg\_69 Start: 44245, Stop: 43745, Start Num: 94

Candidate Starts for AvatarAhPeg\_69:

(Start: 94 @44245 has 20 MA's), (Start: 111 @44158 has 4 MA's), (113, 44134), (119, 44101), (127, 44053), (129, 44047), (130, 44035), (135, 43996), (142, 43975), (158, 43879), (177, 43777),

Gene: Avle17\_70 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for Avle17\_70:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: BABullseye\_71 Start: 42519, Stop: 42004, Start Num: 77

Candidate Starts for BABullseye\_71:

(Start: 72 @42531 has 33 MA's), (Start: 77 @42519 has 160 MA's), (Start: 111 @42432 has 4 MA's), (112, 42423), (119, 42375), (135, 42273), (142, 42252), (146, 42231), (153, 42189), (158, 42150),

Gene: BPBiebs31\_80 Start: 48113, Stop: 47601, Start Num: 91

Candidate Starts for BPBiebs31\_80:

(18, 48350), (26, 48287), (37, 48254), (Start: 68 @48170 has 2 MA's), (Start: 91 @48113 has 205 MA's), (Start: 104 @48071 has 5 MA's), (Start: 111 @48020 has 4 MA's), (112, 48011), (119, 47963), (142, 47840), (149, 47798), (183, 47612),

Gene: Baby16\_70 Start: 44182, Stop: 43670, Start Num: 84

Candidate Starts for Baby16\_70:

(Start: 84 @44182 has 180 MA's), (Start: 104 @44134 has 5 MA's), (Start: 111 @44083 has 4 MA's), (122, 44008), (126, 43984), (127, 43978), (129, 43972), (135, 43921), (142, 43900), (153, 43843), (158, 43804), (168, 43750), (177, 43702),

Gene: BabyBack\_72 Start: 45412, Stop: 44843, Start Num: 77

Candidate Starts for BabyBack\_72:

(20, 45607), (21, 45586), (23, 45577), (24, 45562), (Start: 72 @45424 has 33 MA's), (Start: 77 @45412 has 160 MA's), (90, 45385), (Start: 111 @45295 has 4 MA's), (119, 45238), (135, 45136), (149, 45070), (153, 45049), (158, 45010), (175, 44905), (181, 44881),

Gene: BabyRay\_74 Start: 44621, Stop: 44109, Start Num: 84

Candidate Starts for BabyRay\_74:

(Start: 78 @44630 has 23 MA's), (Start: 84 @44621 has 180 MA's), (Start: 86 @44615 has 6 MA's), (Start: 111 @44522 has 4 MA's), (122, 44447), (126, 44423), (127, 44417), (130, 44399), (135, 44360), (142, 44339), (158, 44243), (169, 44186), (177, 44141),

Gene: Bachome\_76 Start: 44229, Stop: 43678, Start Num: 77

Candidate Starts for Bachome\_76:

(Start: 60 @44271 has 4 MA's), (Start: 72 @44241 has 33 MA's), (Start: 77 @44229 has 160 MA's), (90, 44202), (Start: 111 @44112 has 4 MA's), (113, 44088), (119, 44055), (135, 43953), (142, 43929), (144, 43914), (149, 43887), (158, 43827), (178, 43728), (186, 43695),

Gene: Backyardigan\_67 Start: 44382, Stop: 43882, Start Num: 94

Candidate Starts for Backyardigan\_67:

(Start: 94 @44382 has 20 MA's), (Start: 111 @44295 has 4 MA's), (113, 44271), (127, 44190), (129, 44184), (130, 44172), (135, 44133), (140, 44118), (142, 44112), (158, 44016), (171, 43950), (177, 43914),

Gene: BaconJack\_77 Start: 48268, Stop: 47756, Start Num: 91

Candidate Starts for BaconJack\_77:

(26, 48442), (37, 48409), (Start: 68 @48325 has 2 MA's), (Start: 91 @48268 has 205 MA's), (Start: 104 @48226 has 5 MA's), (Start: 111 @48175 has 4 MA's), (112, 48166), (119, 48118), (142, 47995), (149, 47953), (183, 47767),

Gene: Bactobuster\_68 Start: 45050, Stop: 44505, Start Num: 77

Candidate Starts for Bactobuster\_68:

(Start: 72 @45062 has 33 MA's), (Start: 77 @45050 has 160 MA's), (Start: 111 @44933 has 4 MA's), (119, 44876), (127, 44828), (135, 44774), (153, 44687), (158, 44648), (178, 44549),

Gene: BadAgartude\_49 Start: 16114, Stop: 16638, Start Num: 86

Candidate Starts for BadAgartude\_49:

(22, 15937), (Start: 86 @16114 has 6 MA's), (Start: 91 @16126 has 205 MA's), (Start: 104 @16168 has 5 MA's), (Start: 111 @16219 has 4 MA's), (112, 16228), (119, 16276), (126, 16318), (142, 16399), (149, 16441), (183, 16627),

Gene: Badger\_68 Start: 44350, Stop: 43850, Start Num: 94

Candidate Starts for Badger\_68:

(Start: 94 @44350 has 20 MA's), (Start: 111 @44263 has 4 MA's), (113, 44239), (127, 44158), (129, 44152), (130, 44140), (135, 44101), (140, 44086), (142, 44080), (158, 43984), (171, 43918), (177, 43882),

Gene: Baehexic\_74 Start: 45162, Stop: 44587, Start Num: 77

Candidate Starts for Baehexic\_74:



(Start: 60 @45204 has 4 MA's), (66, 45192), (Start: 72 @45174 has 33 MA's), (Start: 77 @45162 has 160 MA's), (Start: 111 @45045 has 4 MA's), (112, 45036), (115, 45009), (119, 44988), (135, 44886), (149, 44820), (153, 44799), (158, 44760), (171, 44697),

Gene: BangNhom\_68 Start: 44607, Stop: 44095, Start Num: 84

Candidate Starts for BangNhom\_68:

(Start: 84 @44607 has 180 MA's), (Start: 104 @44559 has 5 MA's), (Start: 111 @44508 has 4 MA's), (122, 44433), (126, 44409), (129, 44397), (135, 44346), (142, 44325), (153, 44268), (177, 44127),

Gene: Barriga\_82 Start: 47008, Stop: 46496, Start Num: 91

Candidate Starts for Barriga\_82:

(31, 47167), (Start: 68 @47065 has 2 MA's), (Start: 91 @47008 has 205 MA's), (Start: 104 @46966 has 5 MA's), (Start: 111 @46915 has 4 MA's), (112, 46906), (119, 46858), (142, 46735), (149, 46693), (183, 46507),

Gene: BarrowTuph\_77 Start: 47314, Stop: 46802, Start Num: 91

Candidate Starts for BarrowTuph\_77:

(26, 47488), (37, 47455), (Start: 68 @47371 has 2 MA's), (Start: 91 @47314 has 205 MA's), (Start: 104 @47272 has 5 MA's), (Start: 111 @47221 has 4 MA's), (112, 47212), (119, 47164), (142, 47041), (149, 46999), (183, 46813),

Gene: Bartimeaus\_70 Start: 44173, Stop: 43661, Start Num: 84

Candidate Starts for Bartimeaus\_70:

(Start: 84 @44173 has 180 MA's), (Start: 104 @44125 has 5 MA's), (Start: 111 @44074 has 4 MA's), (122, 43999), (126, 43975), (127, 43969), (129, 43963), (135, 43912), (142, 43891), (153, 43834), (158, 43795), (168, 43741), (177, 43693),

Gene: Batiatus\_38 Start: 31135, Stop: 30623, Start Num: 91

Candidate Starts for Batiatus\_38:

(Start: 67 @31195 has 1 MA's), (Start: 91 @31135 has 205 MA's), (Start: 104 @31093 has 5 MA's), (Start: 111 @31042 has 4 MA's), (112, 31033), (119, 30985), (126, 30943), (142, 30862), (149, 30820), (183, 30634),

Gene: Battleship\_86 Start: 45780, Stop: 45259, Start Num: 77

Candidate Starts for Battleship\_86:

(Start: 77 @45780 has 160 MA's), (Start: 104 @45735 has 5 MA's), (Start: 111 @45684 has 4 MA's), (112, 45675), (119, 45627), (135, 45525), (142, 45504), (163, 45366), (168, 45348), (171, 45336), (178, 45300),

Gene: Beatrix\_72 Start: 46273, Stop: 45761, Start Num: 91

Candidate Starts for Beatrix\_72:

(26, 46447), (37, 46414), (Start: 68 @46330 has 2 MA's), (Start: 91 @46273 has 205 MA's), (Start: 104 @46231 has 5 MA's), (Start: 111 @46180 has 4 MA's), (112, 46171), (119, 46123), (142, 46000), (149, 45958), (183, 45772),

Gene: Beauxregard13\_78 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for Beauxregard13\_78:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: Beemo\_77 Start: 44717, Stop: 44181, Start Num: 77

Candidate Starts for Beemo\_77:

(Start: 72 @44729 has 33 MA's), (Start: 77 @44717 has 160 MA's), (Start: 111 @44621 has 4 MA's), (112, 44612), (113, 44597), (119, 44564), (142, 44441), (144, 44426), (145, 44423), (152, 44381), (153, 44378), (166, 44300),

Gene: BeesKnees\_76 Start: 45376, Stop: 44864, Start Num: 91

Candidate Starts for BeesKnees\_76:

(26, 45550), (37, 45517), (Start: 68 @45433 has 2 MA's), (Start: 91 @45376 has 205 MA's), (Start: 104 @45334 has 5 MA's), (Start: 111 @45283 has 4 MA's), (112, 45274), (119, 45226), (142, 45103), (149, 45061), (183, 44875),

Gene: Belenaria\_59 Start: 40065, Stop: 39541, Start Num: 78

Candidate Starts for Belenaria\_59:

(Start: 78 @40065 has 23 MA's), (103, 40020), (107, 40002), (122, 39888), (129, 39852), (134, 39825), (135, 39804), (142, 39783), (144, 39768), (150, 39738), (151, 39735), (169, 39624), (171, 39615), (183, 39558),

Gene: BellusTerra\_71 Start: 44211, Stop: 43699, Start Num: 84

Candidate Starts for BellusTerra\_71:

(Start: 84 @44211 has 180 MA's), (Start: 104 @44163 has 5 MA's), (Start: 111 @44112 has 4 MA's), (122, 44037), (126, 44013), (129, 44001), (135, 43950), (142, 43929), (153, 43872), (168, 43779), (177, 43731),

Gene: Benedict\_73 Start: 44112, Stop: 43582, Start Num: 84

Candidate Starts for Benedict\_73:

(36, 44244), (43, 44211), (45, 44208), (Start: 84 @44112 has 180 MA's), (96, 44082), (124, 43920), (126, 43896), (133, 43860), (135, 43836), (142, 43815), (168, 43662), (170, 43656), (176, 43617),

Gene: BengiVuitton\_75 Start: 45458, Stop: 44883, Start Num: 77

Candidate Starts for BengiVuitton\_75:

(66, 45488), (Start: 72 @45470 has 33 MA's), (Start: 77 @45458 has 160 MA's), (Start: 111 @45341 has 4 MA's), (112, 45332), (115, 45305), (119, 45284), (120, 45278), (135, 45182), (138, 45173), (153, 45095), (158, 45056), (179, 44927), (181, 44918),

Gene: Benvolio\_73 Start: 45053, Stop: 44478, Start Num: 77

Candidate Starts for Benvolio\_73:

(Start: 77 @45053 has 160 MA's), (Start: 100 @44999 has 1 MA's), (Start: 111 @44936 has 4 MA's), (112, 44927), (115, 44900), (119, 44879), (135, 44777), (138, 44768), (153, 44690), (158, 44651), (179, 44522), (181, 44513),

Gene: Bethlehem\_78 Start: 49153, Stop: 48641, Start Num: 91

Candidate Starts for Bethlehem\_78:

(18, 49390), (26, 49327), (37, 49294), (Start: 68 @49210 has 2 MA's), (Start: 91 @49153 has 205 MA's), (Start: 104 @49111 has 5 MA's), (Start: 111 @49060 has 4 MA's), (112, 49051), (119, 49003), (142, 48880), (149, 48838), (183, 48652),

Gene: Bexan\_70 Start: 46047, Stop: 45535, Start Num: 91

Candidate Starts for Bexan\_70:

(26, 46221), (37, 46188), (Start: 68 @46104 has 2 MA's), (Start: 91 @46047 has 205 MA's), (Start: 104 @46005 has 5 MA's), (Start: 111 @45954 has 4 MA's), (112, 45945), (119, 45897), (142, 45774), (149, 45732), (183, 45546),

Gene: BiancaTri92\_74 Start: 45410, Stop: 44838, Start Num: 77

Candidate Starts for BiancaTri92\_74:

(Start: 72 @45422 has 33 MA's), (Start: 77 @45410 has 160 MA's), (90, 45383), (Start: 111 @45293 has 4 MA's), (119, 45236), (125, 45209), (135, 45134), (149, 45068), (153, 45047), (158, 45008), (169, 44954), (178, 44882),

Gene: Big3\_76 Start: 48080, Stop: 47568, Start Num: 91

Candidate Starts for Big3\_76:

(26, 48254), (37, 48221), (Start: 68 @48137 has 2 MA's), (Start: 91 @48080 has 205 MA's), (Start: 104 @48038 has 5 MA's), (Start: 111 @47987 has 4 MA's), (112, 47978), (119, 47930), (142, 47807), (149, 47765), (183, 47579),

Gene: BigMau\_78 Start: 47862, Stop: 47350, Start Num: 91

Candidate Starts for BigMau\_78:

(Start: 68 @47919 has 2 MA's), (Start: 91 @47862 has 205 MA's), (Start: 104 @47820 has 5 MA's), (Start: 111 @47769 has 4 MA's), (112, 47760), (119, 47712), (135, 47610), (142, 47589), (149, 47547), (173, 47403), (183, 47361),

Gene: BigPaolini\_73 Start: 45203, Stop: 44733, Start Num: 104

Candidate Starts for BigPaolini\_73:

(Start: 104 @45203 has 5 MA's), (Start: 111 @45152 has 4 MA's), (112, 45143), (119, 45095), (126, 45053), (142, 44972), (149, 44930), (183, 44744),

Gene: Bigchungi\_75 Start: 47688, Stop: 47176, Start Num: 91

Candidate Starts for Bigchungi\_75:

(26, 47862), (37, 47829), (Start: 68 @47745 has 2 MA's), (Start: 91 @47688 has 205 MA's), (Start: 104 @47646 has 5 MA's), (Start: 111 @47595 has 4 MA's), (112, 47586), (119, 47538), (142, 47415), (149, 47373), (183, 47187),

Gene: Bigflo\_76 Start: 45005, Stop: 44496, Start Num: 93

Candidate Starts for Bigflo\_76:

(Start: 75 @45041 has 3 MA's), (Start: 93 @45005 has 78 MA's), (Start: 104 @44969 has 5 MA's), (Start: 111 @44918 has 4 MA's), (112, 44909), (122, 44843), (129, 44807), (135, 44759), (142, 44738), (152, 44678), (153, 44675), (154, 44672), (158, 44636), (169, 44573), (177, 44528),

Gene: BillKnuckles\_69 Start: 46250, Stop: 45738, Start Num: 91

Candidate Starts for BillKnuckles\_69:

(26, 46424), (37, 46391), (Start: 68 @46307 has 2 MA's), (Start: 91 @46250 has 205 MA's), (Start: 104 @46208 has 5 MA's), (Start: 111 @46157 has 4 MA's), (112, 46148), (119, 46100), (126, 46058), (142, 45977), (149, 45935), (183, 45749),

Gene: Bipolar\_36 Start: 30223, Stop: 29711, Start Num: 91

Candidate Starts for Bipolar\_36:

(44, 30334), (Start: 91 @30223 has 205 MA's), (Start: 104 @30181 has 5 MA's), (Start: 111 @30130 has 4 MA's), (112, 30121), (119, 30073), (126, 30031), (142, 29950), (149, 29908), (183, 29722),

Gene: Blackmoor\_69 Start: 44173, Stop: 43661, Start Num: 84

Candidate Starts for Blackmoor\_69:

(Start: 84 @44173 has 180 MA's), (Start: 104 @44125 has 5 MA's), (Start: 111 @44074 has 4 MA's), (122, 43999), (126, 43975), (127, 43969), (129, 43963), (135, 43912), (142, 43891), (153, 43834), (158, 43795), (168, 43741), (177, 43693),

Gene: BlessJoy\_77 Start: 44400, Stop: 43885, Start Num: 77

Candidate Starts for BlessJoy\_77:

(Start: 64 @44436 has 9 MA's), (Start: 72 @44412 has 33 MA's), (Start: 77 @44400 has 160 MA's), (Start: 100 @44376 has 1 MA's), (Start: 111 @44313 has 4 MA's), (119, 44256), (135, 44154), (142, 44133), (153, 44070), (158, 44031), (169, 43977), (171, 43968), (185, 43905),

Gene: BluSpix\_73 Start: 41802, Stop: 41290, Start Num: 91

Candidate Starts for BluSpix\_73:

(26, 41976), (37, 41943), (Start: 68 @41859 has 2 MA's), (Start: 91 @41802 has 205 MA's), (Start: 104 @41760 has 5 MA's), (Start: 111 @41709 has 4 MA's), (112, 41700), (119, 41652), (142, 41529), (149, 41487), (183, 41301),

Gene: Blue\_72 Start: 46154, Stop: 45642, Start Num: 91

Candidate Starts for Blue\_72:

(26, 46328), (37, 46295), (58, 46232), (Start: 68 @46211 has 2 MA's), (Start: 91 @46154 has 205 MA's), (Start: 104 @46112 has 5 MA's), (Start: 111 @46061 has 4 MA's), (112, 46052), (119, 46004), (142, 45881), (149, 45839), (183, 45653),

Gene: Blue7\_79 Start: 44134, Stop: 43583, Start Num: 64

Candidate Starts for Blue7\_79:

(Start: 64 @44134 has 9 MA's), (Start: 72 @44110 has 33 MA's), (Start: 77 @44098 has 160 MA's), (Start: 100 @44074 has 1 MA's), (Start: 111 @44011 has 4 MA's), (119, 43954), (135, 43852), (142, 43831), (153, 43768), (158, 43729), (169, 43675), (171, 43666), (185, 43603),

Gene: BlueBird\_76 Start: 44686, Stop: 44180, Start Num: 86

Candidate Starts for BlueBird\_76:

(Start: 78 @44701 has 23 MA's), (Start: 84 @44692 has 180 MA's), (Start: 86 @44686 has 6 MA's), (Start: 111 @44593 has 4 MA's), (122, 44518), (126, 44494), (127, 44488), (130, 44470), (135, 44431), (140, 44416), (142, 44410), (158, 44314), (169, 44257), (177, 44212),

Gene: Bluefalcon\_65 Start: 43537, Stop: 43007, Start Num: 84

Candidate Starts for Bluefalcon\_65:

(Start: 84 @43537 has 180 MA's), (126, 43321), (133, 43285), (134, 43282), (135, 43261), (136, 43258), (142, 43240), (168, 43087), (176, 43042),

Gene: Bob3\_76 Start: 47130, Stop: 46618, Start Num: 91

Candidate Starts for Bob3\_76:

(26, 47304), (37, 47271), (Start: 68 @47187 has 2 MA's), (Start: 91 @47130 has 205 MA's), (Start: 104 @47088 has 5 MA's), (Start: 111 @47037 has 4 MA's), (112, 47028), (119, 46980), (135, 46878), (142, 46857), (149, 46815), (173, 46671), (183, 46629),

Gene: BobSwaget\_68 Start: 43285, Stop: 42713, Start Num: 77

Candidate Starts for BobSwaget\_68:

(Start: 72 @43297 has 33 MA's), (Start: 77 @43285 has 160 MA's), (90, 43258), (Start: 111 @43168 has 4 MA's), (112, 43159), (113, 43144), (119, 43111), (122, 43093), (128, 43060), (135, 43009), (149, 42943), (158, 42883), (175, 42778), (186, 42733),

Gene: Bobi\_40 Start: 31847, Stop: 31335, Start Num: 91

Candidate Starts for Bobi\_40:

(12, 32105), (19, 32081), (Start: 91 @31847 has 205 MA's), (Start: 104 @31805 has 5 MA's), (Start: 111 @31754 has 4 MA's), (112, 31745), (119, 31697), (126, 31655), (142, 31574), (149, 31532), (183, 31346),

Gene: BogosyJay\_77 Start: 44961, Stop: 44413, Start Num: 72

Candidate Starts for BogosyJay\_77:

(Start: 72 @44961 has 33 MA's), (Start: 77 @44949 has 160 MA's), (107, 44892), (Start: 111 @44853 has 4 MA's), (113, 44829), (119, 44796), (142, 44673), (145, 44655), (152, 44613), (153, 44610), (158, 44571), (169, 44511), (171, 44502),

Gene: Bombitas\_177 Start: 94010, Stop: 93495, Start Num: 89

Candidate Starts for Bombitas\_177:

(8, 94298), (28, 94169), (49, 94112), (51, 94103), (81, 94031), (Start: 89 @94010 has 2 MA's), (Start: 91 @94007 has 205 MA's), (Start: 104 @93965 has 5 MA's), (Start: 111 @93914 has 4 MA's), (112, 93905), (119, 93857), (126, 93815), (142, 93734), (149, 93692), (183, 93506),

Gene: Bombshell\_70 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Bombshell\_70:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Bonamassa\_69 Start: 43739, Stop: 43209, Start Num: 84

Candidate Starts for Bonamassa\_69:

(Start: 84 @43739 has 180 MA's), (133, 43487), (134, 43484), (135, 43463), (142, 43442), (170, 43283),

Gene: Bonanza\_59 Start: 40477, Stop: 39953, Start Num: 78

Candidate Starts for Bonanza\_59:

(Start: 78 @40477 has 23 MA's), (103, 40432), (107, 40414), (122, 40300), (129, 40264), (134, 40237), (135, 40216), (142, 40195), (151, 40147), (169, 40036), (171, 40027), (183, 39970),

Gene: Bones\_71 Start: 46436, Stop: 45924, Start Num: 91

Candidate Starts for Bones\_71:

(26, 46610), (37, 46577), (Start: 68 @46493 has 2 MA's), (Start: 91 @46436 has 205 MA's), (Start: 104 @46394 has 5 MA's), (Start: 111 @46343 has 4 MA's), (112, 46334), (119, 46286), (142, 46163), (149, 46121), (183, 45935),

Gene: Bradman\_78 Start: 44821, Stop: 44270, Start Num: 77

Candidate Starts for Bradman\_78:

(17, 45025), (Start: 62 @44860 has 1 MA's), (Start: 72 @44833 has 33 MA's), (Start: 77 @44821 has 160 MA's), (90, 44794), (112, 44695), (113, 44680), (119, 44647), (135, 44545), (137, 44539), (142, 44521), (148, 44494), (149, 44479), (153, 44458), (158, 44419), (171, 44356),

Gene: BreSam8\_79 Start: 44999, Stop: 44490, Start Num: 93

Candidate Starts for BreSam8\_79:

(Start: 75 @45035 has 3 MA's), (Start: 93 @44999 has 78 MA's), (Start: 104 @44963 has 5 MA's), (Start: 111 @44912 has 4 MA's), (112, 44903), (122, 44837), (129, 44801), (135, 44753), (142, 44732), (152, 44672), (153, 44669), (154, 44666), (158, 44630), (169, 44567), (177, 44522),

Gene: Briton15\_78 Start: 47516, Stop: 47004, Start Num: 91

Candidate Starts for Briton15\_78:

(26, 47690), (37, 47657), (Start: 68 @47573 has 2 MA's), (Start: 91 @47516 has 205 MA's), (Start: 104 @47474 has 5 MA's), (Start: 111 @47423 has 4 MA's), (112, 47414), (119, 47366), (142, 47243), (149, 47201), (183, 47015),

Gene: Brookers\_38 Start: 30105, Stop: 29569, Start Num: 79

Candidate Starts for Brookers\_38:

(Start: 79 @30105 has 14 MA's), (Start: 104 @30039 has 5 MA's), (Start: 111 @29988 has 4 MA's), (112, 29979), (119, 29931), (126, 29889), (142, 29808), (149, 29766), (183, 29580),

Gene: Broseidon\_70 Start: 44174, Stop: 43662, Start Num: 84

Candidate Starts for Broseidon\_70:

(Start: 84 @44174 has 180 MA's), (Start: 104 @44126 has 5 MA's), (Start: 111 @44075 has 4 MA's), (122, 44000), (126, 43976), (127, 43970), (129, 43964), (135, 43913), (142, 43892), (153, 43835), (158, 43796), (177, 43694),

Gene: Bruiser\_69 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Bruiser\_69:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: Bruns\_78 Start: 46379, Stop: 45867, Start Num: 91

Candidate Starts for Bruns\_78:

(26, 46553), (33, 46535), (37, 46520), (Start: 68 @46436 has 2 MA's), (Start: 91 @46379 has 205 MA's), (Start: 104 @46337 has 5 MA's), (Start: 111 @46286 has 4 MA's), (112, 46277), (119, 46229), (142, 46106), (149, 46064), (183, 45878),

Gene: BubbleTrouble\_69 Start: 44198, Stop: 43686, Start Num: 84

Candidate Starts for BubbleTrouble\_69:

(Start: 84 @44198 has 180 MA's), (Start: 104 @44150 has 5 MA's), (Start: 111 @44099 has 4 MA's), (122, 44024), (126, 44000), (127, 43994), (129, 43988), (135, 43937), (142, 43916), (153, 43859), (158, 43820), (168, 43766), (177, 43718),

Gene: Bud\_73 Start: 43799, Stop: 43236, Start Num: 72

Candidate Starts for Bud\_73:

(Start: 60 @43829 has 4 MA's), (Start: 72 @43799 has 33 MA's), (Start: 77 @43787 has 160 MA's), (90, 43760), (Start: 111 @43670 has 4 MA's), (113, 43646), (119, 43613), (135, 43511), (142, 43487), (144, 43472), (149, 43445), (153, 43424), (158, 43385), (178, 43286), (186, 43253),

Gene: Bugatti\_73 Start: 44692, Stop: 44180, Start Num: 84

Candidate Starts for Bugatti\_73:

(Start: 78 @44701 has 23 MA's), (Start: 84 @44692 has 180 MA's), (Start: 86 @44686 has 6 MA's), (Start: 111 @44593 has 4 MA's), (122, 44518), (126, 44494), (127, 44488), (130, 44470), (135, 44431), (140, 44416), (142, 44410), (158, 44314), (169, 44257), (177, 44212),

Gene: Buggy\_77 Start: 45815, Stop: 45240, Start Num: 77

Candidate Starts for Buggy\_77:

(Start: 60 @45857 has 4 MA's), (66, 45845), (Start: 72 @45827 has 33 MA's), (Start: 77 @45815 has 160 MA's), (Start: 111 @45698 has 4 MA's), (112, 45689), (119, 45641), (135, 45539), (153, 45452), (158, 45413), (171, 45350),

Gene: Bumblebee11\_68 Start: 44352, Stop: 43852, Start Num: 94

Candidate Starts for Bumblebee11\_68:

(Start: 94 @44352 has 20 MA's), (Start: 111 @44265 has 4 MA's), (113, 44241), (127, 44160), (129, 44154), (130, 44142), (135, 44103), (140, 44088), (142, 44082), (158, 43986), (171, 43920), (177, 43884),

Gene: Burger\_68 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Burger\_68:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: Burton\_76 Start: 48545, Stop: 48030, Start Num: 91

Candidate Starts for Burton\_76:

(26, 48719), (37, 48686), (Start: 68 @48602 has 2 MA's), (Start: 91 @48545 has 205 MA's), (Start: 104 @48503 has 5 MA's), (Start: 111 @48452 has 4 MA's), (112, 48443), (119, 48395), (135, 48293), (142, 48272), (149, 48230), (173, 48086), (183, 48044),

Gene: Buttons\_72 Start: 44646, Stop: 44134, Start Num: 91

Candidate Starts for Buttons\_72:

(26, 44820), (37, 44787), (Start: 68 @44703 has 2 MA's), (Start: 91 @44646 has 205 MA's), (Start: 104 @44604 has 5 MA's), (Start: 111 @44553 has 4 MA's), (112, 44544), (119, 44496), (142, 44373), (149, 44331), (183, 44145),

Gene: BuzzBuzz\_73 Start: 44946, Stop: 44524, Start Num: 111

Candidate Starts for BuzzBuzz\_73:

(Start: 111 @44946 has 4 MA's), (122, 44871), (129, 44835), (135, 44787), (142, 44766), (152, 44706), (153, 44703), (154, 44700), (158, 44664), (169, 44601), (177, 44556),

Gene: Bxb1\_69 Start: 44762, Stop: 44250, Start Num: 91

Candidate Starts for Bxb1\_69:

(26, 44936), (37, 44903), (Start: 68 @44819 has 2 MA's), (Start: 91 @44762 has 205 MA's), (Start: 104 @44720 has 5 MA's), (Start: 111 @44669 has 4 MA's), (112, 44660), (119, 44612), (142, 44489), (149, 44447), (183, 44261),

Gene: Bxz2\_74 Start: 44953, Stop: 44531, Start Num: 111

Candidate Starts for Bxz2\_74:

(Start: 111 @44953 has 4 MA's), (122, 44878), (129, 44842), (135, 44794), (142, 44773), (152, 44713), (153, 44710), (154, 44707), (158, 44671), (169, 44608), (177, 44563),

Gene: Byougenkin\_38 Start: 31250, Stop: 30714, Start Num: 79

Candidate Starts for Byougenkin\_38:

(Start: 79 @31250 has 14 MA's), (Start: 104 @31184 has 5 MA's), (Start: 111 @31133 has 4 MA's), (112, 31124), (119, 31076), (126, 31034), (142, 30953), (149, 30911), (183, 30725),

Gene: CRB1\_77 Start: 46002, Stop: 45430, Start Num: 77

Candidate Starts for CRB1\_77:

(Start: 77 @46002 has 160 MA's), (Start: 111 @45885 has 4 MA's), (112, 45876), (115, 45849), (119, 45828), (135, 45726), (138, 45717), (153, 45639), (158, 45600), (164, 45564), (169, 45546), (179, 45471),

Gene: CactusRose\_78 Start: 47360, Stop: 46848, Start Num: 91

Candidate Starts for CactusRose\_78:

(26, 47534), (33, 47516), (37, 47501), (Start: 68 @47417 has 2 MA's), (Start: 91 @47360 has 205 MA's), (Start: 104 @47318 has 5 MA's), (Start: 111 @47267 has 4 MA's), (112, 47258), (119, 47210), (126, 47168), (142, 47087), (149, 47045), (183, 46859),

Gene: Caelakin\_69 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Caelakin\_69:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832),

(158, 43793), (177, 43691),

Gene: Calvinny\_76 Start: 44816, Stop: 44307, Start Num: 93

Candidate Starts for Calvinny\_76:

(Start: 93 @44816 has 78 MA's), (Start: 104 @44780 has 5 MA's), (Start: 111 @44729 has 4 MA's), (112, 44720), (122, 44654), (129, 44618), (135, 44570), (142, 44549), (152, 44489), (153, 44486), (158, 44447), (169, 44384), (177, 44339),

Gene: Camperdownii\_68 Start: 43842, Stop: 43330, Start Num: 84

Candidate Starts for Camperdownii\_68:

(Start: 84 @43842 has 180 MA's), (Start: 104 @43794 has 5 MA's), (Start: 111 @43743 has 4 MA's), (122, 43668), (126, 43644), (129, 43632), (135, 43581), (140, 43566), (142, 43560), (177, 43362),

Gene: Candra\_76 Start: 44214, Stop: 43699, Start Num: 77

Candidate Starts for Candra\_76:

(Start: 72 @44226 has 33 MA's), (Start: 77 @44214 has 160 MA's), (Start: 111 @44127 has 4 MA's), (112, 44118), (119, 44070), (135, 43968), (142, 43947), (146, 43926), (153, 43884), (158, 43845),

Gene: CaptainTrips\_39 Start: 31571, Stop: 31035, Start Num: 79

Candidate Starts for CaptainTrips\_39:

(Start: 79 @31571 has 14 MA's), (Start: 104 @31505 has 5 MA's), (Start: 111 @31454 has 4 MA's), (112, 31445), (119, 31397), (126, 31355), (142, 31274), (149, 31232), (183, 31046),

Gene: Carlyle\_76 Start: 45834, Stop: 45346, Start Num: 91

Candidate Starts for Carlyle\_76:

(26, 46008), (37, 45975), (Start: 68 @45891 has 2 MA's), (Start: 91 @45834 has 205 MA's), (Start: 104 @45792 has 5 MA's), (Start: 111 @45741 has 4 MA's), (112, 45732), (119, 45684), (142, 45561), (149, 45519),

Gene: Catalina\_79 Start: 44771, Stop: 44235, Start Num: 77

Candidate Starts for Catalina\_79:

(Start: 72 @44783 has 33 MA's), (Start: 77 @44771 has 160 MA's), (Start: 111 @44675 has 4 MA's), (112, 44666), (113, 44651), (119, 44618), (142, 44495), (144, 44480), (145, 44477), (152, 44435), (153, 44432), (166, 44354), (178, 44285),

Gene: Centaur\_76 Start: 45368, Stop: 44799, Start Num: 77

Candidate Starts for Centaur\_76:

(Start: 60 @45410 has 4 MA's), (66, 45398), (Start: 72 @45380 has 33 MA's), (Start: 77 @45368 has 160 MA's), (Start: 111 @45251 has 4 MA's), (112, 45242), (115, 45215), (119, 45194), (135, 45092), (149, 45026), (153, 45005), (158, 44966), (171, 44903),

Gene: CentreCat\_70 Start: 44210, Stop: 43698, Start Num: 84

Candidate Starts for CentreCat\_70:

(Start: 84 @44210 has 180 MA's), (Start: 104 @44162 has 5 MA's), (Start: 111 @44111 has 4 MA's), (122, 44036), (126, 44012), (127, 44006), (129, 44000), (135, 43949), (142, 43928), (153, 43871), (168, 43778), (177, 43730),

Gene: Cerulean\_71 Start: 44608, Stop: 44096, Start Num: 84

Candidate Starts for Cerulean\_71:

(Start: 84 @44608 has 180 MA's), (Start: 104 @44560 has 5 MA's), (Start: 111 @44509 has 4 MA's), (122, 44434), (126, 44410), (129, 44398), (135, 44347), (142, 44326), (153, 44269), (177, 44128),

Gene: Chadwick\_73 Start: 43856, Stop: 43326, Start Num: 84



Candidate Starts for Chadwick\_73:

(36, 43988), (43, 43955), (Start: 84 @43856 has 180 MA's), (96, 43826), (124, 43664), (133, 43604), (135, 43580), (142, 43559), (168, 43406), (170, 43400), (176, 43361),

Gene: ChampagnePapi\_72 Start: 44607, Stop: 44095, Start Num: 84

Candidate Starts for ChampagnePapi\_72:

(Start: 84 @44607 has 180 MA's), (Start: 104 @44559 has 5 MA's), (Start: 111 @44508 has 4 MA's), (122, 44433), (126, 44409), (129, 44397), (135, 44346), (142, 44325), (153, 44268), (177, 44127),

Gene: Changeling\_74 Start: 45726, Stop: 45136, Start Num: 72

Candidate Starts for Changeling\_74:

(Start: 72 @45726 has 33 MA's), (Start: 77 @45714 has 160 MA's), (90, 45687), (Start: 111 @45597 has 4 MA's), (112, 45588), (119, 45540), (135, 45438), (138, 45429), (150, 45369), (153, 45351), (158, 45312),

Gene: Chaph\_70 Start: 44182, Stop: 43670, Start Num: 84

Candidate Starts for Chaph\_70:

(Start: 84 @44182 has 180 MA's), (Start: 104 @44134 has 5 MA's), (Start: 111 @44083 has 4 MA's), (122, 44008), (126, 43984), (127, 43978), (129, 43972), (135, 43921), (142, 43900), (153, 43843), (158, 43804), (168, 43750), (177, 43702),

Gene: Chargerpower\_73 Start: 43754, Stop: 43230, Start Num: 77

Candidate Starts for Chargerpower\_73:

(Start: 77 @43754 has 160 MA's), (Start: 111 @43655 has 4 MA's), (113, 43631), (114, 43622), (119, 43598), (122, 43580), (135, 43496), (136, 43493), (142, 43475), (147, 43451), (164, 43337), (168, 43322),

Gene: Charm\_71 Start: 43884, Stop: 43351, Start Num: 77

Candidate Starts for Charm\_71:

(Start: 77 @43884 has 160 MA's), (Start: 111 @43788 has 4 MA's), (113, 43764), (119, 43731), (142, 43608), (144, 43593), (145, 43590), (153, 43545), (164, 43470), (167, 43464), (168, 43449), (169, 43446), (171, 43437),

Gene: Chartreuse\_75 Start: 43525, Stop: 43010, Start Num: 77

Candidate Starts for Chartreuse\_75:

(Start: 72 @43537 has 33 MA's), (Start: 77 @43525 has 160 MA's), (Start: 111 @43438 has 4 MA's), (112, 43429), (119, 43381), (135, 43279), (142, 43258), (146, 43237), (153, 43195), (158, 43156),

Gene: Che12\_80 Start: 45086, Stop: 44538, Start Num: 77

Candidate Starts for Che12\_80:

(Start: 72 @45098 has 33 MA's), (Start: 77 @45086 has 160 MA's), (Start: 84 @45074 has 180 MA's), (Start: 100 @45032 has 1 MA's), (Start: 111 @44969 has 4 MA's), (112, 44960), (119, 44912), (122, 44894), (135, 44810), (142, 44786), (149, 44744), (158, 44684), (174, 44600), (178, 44582),

Gene: ChipMunk\_76 Start: 46976, Stop: 46281, Start Num: 34

Candidate Starts for ChipMunk\_76:

(Start: 34 @46976 has 1 MA's), (Start: 60 @46898 has 4 MA's), (66, 46886), (Start: 72 @46868 has 33 MA's), (Start: 77 @46856 has 160 MA's), (Start: 111 @46739 has 4 MA's), (112, 46730), (119, 46682), (135, 46580), (153, 46493), (158, 46454), (171, 46391), (178, 46328),

Gene: Chupacabra\_68 Start: 44005, Stop: 43499, Start Num: 84

Candidate Starts for Chupacabra\_68:

(Start: 57 @44068 has 1 MA's), (65, 44053), (Start: 84 @44005 has 180 MA's), (Start: 85 @44002 has 5 MA's), (Start: 111 @43909 has 4 MA's), (113, 43885), (119, 43852), (122, 43834), (126, 43810), (135, 43750), (142, 43729), (158, 43633), (165, 43597), (177, 43531), (183, 43510),

Gene: Ciao\_72 Start: 44955, Stop: 44443, Start Num: 91

Candidate Starts for Ciao\_72:

(26, 45129), (37, 45096), (58, 45033), (Start: 68 @45012 has 2 MA's), (Start: 91 @44955 has 205 MA's), (Start: 104 @44913 has 5 MA's), (Start: 111 @44862 has 4 MA's), (112, 44853), (119, 44805), (142, 44682), (149, 44640), (183, 44454),

Gene: Cici\_69 Start: 44367, Stop: 43867, Start Num: 94

Candidate Starts for Cici\_69:

(Start: 94 @44367 has 20 MA's), (Start: 111 @44280 has 4 MA's), (113, 44256), (127, 44175), (129, 44169), (130, 44157), (135, 44118), (140, 44103), (142, 44097), (158, 44001), (171, 43935), (177, 43899),

Gene: Cindaradix\_66 Start: 44070, Stop: 43558, Start Num: 84

Candidate Starts for Cindaradix\_66:

(Start: 84 @44070 has 180 MA's), (Start: 104 @44022 has 5 MA's), (Start: 111 @43971 has 4 MA's), (122, 43896), (126, 43872), (129, 43860), (135, 43809), (142, 43788), (177, 43590),

Gene: Cintron\_70 Start: 44321, Stop: 43809, Start Num: 84

Candidate Starts for Cintron\_70:

(Start: 84 @44321 has 180 MA's), (Start: 104 @44273 has 5 MA's), (Start: 111 @44222 has 4 MA's), (122, 44147), (126, 44123), (129, 44111), (135, 44060), (142, 44039), (158, 43943), (177, 43841),

Gene: Citius\_70 Start: 44192, Stop: 43680, Start Num: 84

Candidate Starts for Citius\_70:

(Start: 84 @44192 has 180 MA's), (Start: 104 @44144 has 5 MA's), (Start: 111 @44093 has 4 MA's), (122, 44018), (126, 43994), (127, 43988), (129, 43982), (135, 43931), (142, 43910), (153, 43853), (158, 43814), (168, 43760), (177, 43712),

Gene: Clarenza\_69 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Clarenza\_69:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: CloudWang3\_78 Start: 44426, Stop: 43875, Start Num: 64

Candidate Starts for CloudWang3\_78:

(Start: 64 @44426 has 9 MA's), (Start: 72 @44402 has 33 MA's), (Start: 77 @44390 has 160 MA's), (Start: 100 @44366 has 1 MA's), (Start: 111 @44303 has 4 MA's), (119, 44246), (135, 44144), (142, 44123), (153, 44060), (158, 44021), (169, 43967), (171, 43958), (185, 43895),

Gene: Coco12\_38 Start: 31229, Stop: 30693, Start Num: 79

Candidate Starts for Coco12\_38:

(Start: 79 @31229 has 14 MA's), (Start: 104 @31163 has 5 MA's), (Start: 111 @31112 has 4 MA's), (112, 31103), (119, 31055), (126, 31013), (142, 30932), (149, 30890), (183, 30704),

Gene: Cocoaberry\_70 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for Cocoaberry\_70:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833),

(158, 43794), (177, 43692),

Gene: Colbster\_75 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for Colbster\_75:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: Colin\_75 Start: 46429, Stop: 45851, Start Num: 77

Candidate Starts for Colin\_75:

(32, 46552), (Start: 60 @46471 has 4 MA's), (Start: 72 @46441 has 33 MA's), (Start: 77 @46429 has 160 MA's), (Start: 111 @46312 has 4 MA's), (119, 46255), (125, 46228), (132, 46186), (135, 46153), (138, 46144), (150, 46084), (153, 46066), (158, 46027), (178, 45901),

Gene: Commander\_68 Start: 44170, Stop: 43658, Start Num: 84

Candidate Starts for Commander\_68:

(Start: 84 @44170 has 180 MA's), (Start: 104 @44122 has 5 MA's), (Start: 111 @44071 has 4 MA's), (122, 43996), (126, 43972), (127, 43966), (129, 43960), (135, 43909), (142, 43888), (158, 43792), (177, 43690),

Gene: Conceptll\_80 Start: 48387, Stop: 47875, Start Num: 91

Candidate Starts for Conceptll\_80:

(26, 48561), (37, 48528), (Start: 68 @48444 has 2 MA's), (Start: 91 @48387 has 205 MA's), (Start: 104 @48345 has 5 MA's), (Start: 111 @48294 has 4 MA's), (112, 48285), (119, 48237), (142, 48114), (149, 48072), (173, 47928), (183, 47886),

Gene: Connomayer\_70 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Connomayer\_70:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: Conquerage\_75 Start: 44458, Stop: 43910, Start Num: 72

Candidate Starts for Conquerage\_75:

(Start: 72 @44458 has 33 MA's), (Start: 77 @44446 has 160 MA's), (Start: 111 @44350 has 4 MA's), (112, 44341), (113, 44326), (119, 44293), (142, 44170), (144, 44155), (145, 44152), (152, 44110), (153, 44107), (166, 44029), (171, 43999),

Gene: Conspiracy\_70 Start: 43793, Stop: 43263, Start Num: 84

Candidate Starts for Conspiracy\_70:

(80, 43799), (Start: 84 @43793 has 180 MA's), (133, 43541), (134, 43538), (135, 43517), (142, 43496), (168, 43343), (170, 43337), (176, 43298),

Gene: Coog\_66 Start: 43560, Stop: 43030, Start Num: 84

Candidate Starts for Coog\_66:

(Start: 84 @43560 has 180 MA's), (133, 43308), (134, 43305), (135, 43284), (142, 43263), (170, 43104), (176, 43065),

Gene: Cookiedough\_78 Start: 44829, Stop: 44314, Start Num: 77

Candidate Starts for Cookiedough\_78:

(Start: 72 @44841 has 33 MA's), (Start: 77 @44829 has 160 MA's), (Start: 111 @44742 has 4 MA's), (112, 44733), (119, 44685), (135, 44583), (142, 44562), (146, 44541), (153, 44499), (158, 44460),

Gene: Corium\_38 Start: 31351, Stop: 30839, Start Num: 91

Candidate Starts for Corium\_38:

(41, 31462), (Start: 91 @31351 has 205 MA's), (Start: 104 @31309 has 5 MA's), (Start: 111 @31258 has 4 MA's), (112, 31249), (119, 31201), (142, 31078), (149, 31036), (183, 30850),

Gene: Corvo\_77 Start: 48036, Stop: 47524, Start Num: 91

Candidate Starts for Corvo\_77:

(26, 48210), (33, 48192), (37, 48177), (Start: 68 @48093 has 2 MA's), (Start: 91 @48036 has 205 MA's), (Start: 104 @47994 has 5 MA's), (Start: 111 @47943 has 4 MA's), (112, 47934), (119, 47886), (142, 47763), (149, 47721), (183, 47535),

Gene: CosmicSans\_58 Start: 40126, Stop: 39602, Start Num: 78

Candidate Starts for CosmicSans\_58:

(Start: 78 @40126 has 23 MA's), (103, 40081), (107, 40063), (122, 39949), (129, 39913), (134, 39886), (135, 39865), (142, 39844), (144, 39829), (150, 39799), (151, 39796), (153, 39781), (169, 39685), (171, 39676), (183, 39619),

Gene: Courthouse\_190 Start: 94714, Stop: 94199, Start Num: 89

Candidate Starts for Courthouse\_190:

(5, 95044), (8, 95002), (28, 94873), (49, 94816), (51, 94807), (81, 94735), (Start: 89 @94714 has 2 MA's), (Start: 91 @94711 has 205 MA's), (Start: 104 @94669 has 5 MA's), (Start: 111 @94618 has 4 MA's), (112, 94609), (119, 94561), (126, 94519), (142, 94438), (149, 94396), (183, 94210),

Gene: Crucio\_76 Start: 45736, Stop: 45161, Start Num: 77

Candidate Starts for Crucio\_76:

(Start: 60 @45778 has 4 MA's), (66, 45766), (Start: 72 @45748 has 33 MA's), (Start: 77 @45736 has 160 MA's), (Start: 111 @45619 has 4 MA's), (112, 45610), (119, 45562), (135, 45460), (153, 45373), (158, 45334), (171, 45271),

Gene: Cuco\_68 Start: 43420, Stop: 42890, Start Num: 84

Candidate Starts for Cuco\_68:

(80, 43426), (Start: 84 @43420 has 180 MA's), (133, 43168), (134, 43165), (135, 43144), (142, 43123), (170, 42964), (176, 42925),

Gene: Cullens\_79 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for Cullens\_79:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: DBQu4n\_78 Start: 45869, Stop: 45312, Start Num: 72

Candidate Starts for DBQu4n\_78:

(Start: 72 @45869 has 33 MA's), (Start: 77 @45857 has 160 MA's), (Start: 111 @45740 has 4 MA's), (112, 45731), (113, 45716), (119, 45683), (135, 45581), (137, 45575), (142, 45557), (148, 45530), (149, 45515), (150, 45512), (152, 45497), (158, 45455), (169, 45401), (174, 45374), (178, 45356),

Gene: DD5\_73 Start: 46562, Stop: 46050, Start Num: 91

Candidate Starts for DD5\_73:

(26, 46736), (37, 46703), (Start: 68 @46619 has 2 MA's), (Start: 91 @46562 has 205 MA's), (Start: 104 @46520 has 5 MA's), (Start: 111 @46469 has 4 MA's), (112, 46460), (119, 46412), (126, 46370), (142, 46289), (149, 46247), (183, 46061),

Gene: DLane\_38 Start: 31116, Stop: 30604, Start Num: 91

Candidate Starts for DLane\_38:

(22, 31305), (Start: 86 @31128 has 6 MA's), (Start: 91 @31116 has 205 MA's), (Start: 104 @31074 has 5 MA's), (Start: 111 @31023 has 4 MA's), (112, 31014), (119, 30966), (126, 30924), (142, 30843), (149, 30801), (183, 30615),

Gene: DaHudson\_78 Start: 45034, Stop: 44489, Start Num: 75

Candidate Starts for DaHudson\_78:

(Start: 75 @45034 has 3 MA's), (Start: 93 @44998 has 78 MA's), (Start: 104 @44962 has 5 MA's), (Start: 111 @44911 has 4 MA's), (112, 44902), (122, 44836), (129, 44800), (135, 44752), (142, 44731), (152, 44671), (153, 44668), (154, 44665), (158, 44629), (169, 44566), (177, 44521),

Gene: DaVinci\_76 Start: 43579, Stop: 43064, Start Num: 77

Candidate Starts for DaVinci\_76:

(Start: 72 @43591 has 33 MA's), (Start: 77 @43579 has 160 MA's), (Start: 111 @43492 has 4 MA's), (112, 43483), (119, 43435), (135, 43333), (142, 43312), (146, 43291), (153, 43249), (158, 43210),

Gene: Daishi\_78 Start: 43873, Stop: 43364, Start Num: 93

Candidate Starts for Daishi\_78:

(Start: 75 @43909 has 3 MA's), (Start: 93 @43873 has 78 MA's), (Start: 104 @43837 has 5 MA's), (Start: 111 @43786 has 4 MA's), (122, 43711), (129, 43675), (135, 43627), (142, 43606), (152, 43546), (153, 43543), (154, 43540), (158, 43504), (169, 43441), (177, 43396),

Gene: Dalmatian\_76 Start: 45555, Stop: 44977, Start Num: 77

Candidate Starts for Dalmatian\_76:

(Start: 60 @45597 has 4 MA's), (66, 45585), (Start: 72 @45567 has 33 MA's), (Start: 77 @45555 has 160 MA's), (Start: 111 @45438 has 4 MA's), (112, 45429), (119, 45381), (135, 45279), (150, 45210), (153, 45192), (156, 45162), (158, 45153), (171, 45090),

Gene: Danforth\_85 Start: 46121, Stop: 45618, Start Num: 93

Candidate Starts for Danforth\_85:

(Start: 74 @46160 has 3 MA's), (Start: 93 @46121 has 78 MA's), (101, 46097), (107, 46073), (Start: 111 @46034 has 4 MA's), (121, 45962), (123, 45956), (126, 45935), (129, 45923), (142, 45854), (158, 45752), (173, 45668), (177, 45650), (181, 45638),

Gene: DARTHPhader\_73 Start: 45812, Stop: 45297, Start Num: 77

Candidate Starts for DARTHPhader\_73:

(Start: 77 @45812 has 160 MA's), (Start: 111 @45722 has 4 MA's), (112, 45713), (119, 45665), (135, 45563), (142, 45539), (153, 45476), (158, 45437), (171, 45374), (178, 45338), (186, 45305),

Gene: Datway\_69 Start: 44341, Stop: 43841, Start Num: 94

Candidate Starts for Datway\_69:

(Start: 94 @44341 has 20 MA's), (Start: 111 @44254 has 4 MA's), (130, 44131), (135, 44092), (142, 44071), (154, 44011), (158, 43975), (171, 43909), (177, 43873),

Gene: Deano\_67 Start: 44179, Stop: 43667, Start Num: 84

Candidate Starts for Deano\_67:

(Start: 84 @44179 has 180 MA's), (Start: 104 @44131 has 5 MA's), (Start: 111 @44080 has 4 MA's), (122, 44005), (126, 43981), (127, 43975), (129, 43969), (135, 43918), (142, 43897), (153, 43840), (158, 43801), (168, 43747), (177, 43699),

Gene: DekHockey33\_85 Start: 45865, Stop: 45422, Start Num: 77

Candidate Starts for DekHockey33\_85:

(Start: 77 @45865 has 160 MA's), (Start: 104 @45820 has 5 MA's), (Start: 111 @45769 has 4 MA's), (112, 45760), (119, 45712), (135, 45610), (142, 45589), (163, 45451), (168, 45433),

Gene: Deloris\_75 Start: 45154, Stop: 44579, Start Num: 77

Candidate Starts for Deloris\_75:

(66, 45184), (Start: 72 @45166 has 33 MA's), (Start: 77 @45154 has 160 MA's), (Start: 111 @45037 has 4 MA's), (112, 45028), (115, 45001), (119, 44980), (120, 44974), (135, 44878), (138, 44869), (153, 44791), (158, 44752), (179, 44623), (181, 44614),

Gene: Dexes\_76 Start: 48978, Stop: 48466, Start Num: 91

Candidate Starts for Dexes\_76:

(26, 49152), (37, 49119), (Start: 68 @49035 has 2 MA's), (Start: 91 @48978 has 205 MA's), (Start: 104 @48936 has 5 MA's), (Start: 111 @48885 has 4 MA's), (112, 48876), (119, 48828), (142, 48705), (149, 48663), (173, 48519), (183, 48477),

Gene: Dhanush\_70 Start: 44174, Stop: 43662, Start Num: 84

Candidate Starts for Dhanush\_70:

(Start: 84 @44174 has 180 MA's), (Start: 104 @44126 has 5 MA's), (Start: 111 @44075 has 4 MA's), (122, 44000), (126, 43976), (127, 43970), (129, 43964), (135, 43913), (142, 43892), (153, 43835), (158, 43796), (177, 43694),

Gene: Dieselweasel\_79 Start: 45007, Stop: 44498, Start Num: 93

Candidate Starts for Dieselweasel\_79:

(Start: 93 @45007 has 78 MA's), (Start: 104 @44971 has 5 MA's), (Start: 111 @44920 has 4 MA's), (112, 44911), (122, 44845), (129, 44809), (135, 44761), (142, 44740), (152, 44680), (153, 44677), (154, 44674), (158, 44638), (169, 44575), (177, 44530),

Gene: Dignity\_77 Start: 45853, Stop: 45278, Start Num: 77

Candidate Starts for Dignity\_77:

(Start: 60 @45895 has 4 MA's), (66, 45883), (Start: 72 @45865 has 33 MA's), (Start: 77 @45853 has 160 MA's), (Start: 111 @45736 has 4 MA's), (112, 45727), (119, 45679), (135, 45577), (153, 45490), (158, 45451), (171, 45388),

Gene: Dinger\_57 Start: 40270, Stop: 39746, Start Num: 78

Candidate Starts for Dinger\_57:

(Start: 78 @40270 has 23 MA's), (103, 40225), (107, 40207), (122, 40093), (129, 40057), (134, 40030), (135, 40009), (142, 39988), (151, 39940), (169, 39829), (171, 39820), (183, 39763),

Gene: DirtyDunning\_69 Start: 44183, Stop: 43671, Start Num: 84

Candidate Starts for DirtyDunning\_69:

(Start: 84 @44183 has 180 MA's), (Start: 104 @44135 has 5 MA's), (Start: 111 @44084 has 4 MA's), (122, 44009), (126, 43985), (127, 43979), (129, 43973), (135, 43922), (142, 43901), (153, 43844), (158, 43805), (177, 43703),

Gene: Discoknowium\_67 Start: 43310, Stop: 42780, Start Num: 84

Candidate Starts for Discoknowium\_67:

(80, 43316), (Start: 84 @43310 has 180 MA's), (133, 43058), (134, 43055), (135, 43034), (142, 43013), (168, 42860), (170, 42854), (176, 42815),

Gene: Dixon\_83 Start: 45603, Stop: 45100, Start Num: 93

Candidate Starts for Dixon\_83:

(Start: 74 @45642 has 3 MA's), (Start: 93 @45603 has 78 MA's), (101, 45579), (107, 45555), (Start: 111 @45516 has 4 MA's), (121, 45444), (123, 45438), (126, 45417), (129, 45405), (142, 45336), (158,

45234), (173, 45150), (177, 45132), (181, 45120),

Gene: Donkeykong\_39 Start: 31357, Stop: 30821, Start Num: 79

Candidate Starts for Donkeykong\_39:

(Start: 79 @31357 has 14 MA's), (Start: 104 @31291 has 5 MA's), (Start: 111 @31240 has 4 MA's), (112, 31231), (119, 31183), (126, 31141), (142, 31060), (149, 31018), (183, 30832),

Gene: DontArgue\_67 Start: 42958, Stop: 42449, Start Num: 84

Candidate Starts for DontArgue\_67:

(66, 43003), (Start: 84 @42958 has 180 MA's), (Start: 111 @42862 has 4 MA's), (112, 42853), (113, 42838), (122, 42787), (130, 42739), (134, 42721), (135, 42700), (142, 42679), (154, 42619), (158, 42583), (162, 42556), (171, 42517), (173, 42499), (177, 42481),

Gene: Doom\_68 Start: 45189, Stop: 44677, Start Num: 91

Candidate Starts for Doom\_68:

(26, 45363), (37, 45330), (Start: 68 @45246 has 2 MA's), (Start: 91 @45189 has 205 MA's), (Start: 104 @45147 has 5 MA's), (Start: 111 @45096 has 4 MA's), (112, 45087), (119, 45039), (142, 44916), (149, 44874), (183, 44688),

Gene: Dorothea\_78 Start: 44837, Stop: 44310, Start Num: 72

Candidate Starts for Dorothea\_78:

(Start: 72 @44837 has 33 MA's), (Start: 77 @44825 has 160 MA's), (Start: 111 @44738 has 4 MA's), (112, 44729), (119, 44681), (135, 44579), (142, 44558), (146, 44537), (153, 44495), (158, 44456),

Gene: DrFeelGood\_71 Start: 44565, Stop: 44053, Start Num: 91

Candidate Starts for DrFeelGood\_71:

(26, 44739), (37, 44706), (Start: 68 @44622 has 2 MA's), (Start: 91 @44565 has 205 MA's), (Start: 104 @44523 has 5 MA's), (Start: 111 @44472 has 4 MA's), (112, 44463), (119, 44415), (142, 44292), (149, 44250), (183, 44064),

Gene: Drake55\_77 Start: 45449, Stop: 44874, Start Num: 77

Candidate Starts for Drake55\_77:

(Start: 60 @45491 has 4 MA's), (66, 45479), (Start: 72 @45461 has 33 MA's), (Start: 77 @45449 has 160 MA's), (Start: 111 @45332 has 4 MA's), (112, 45323), (115, 45296), (119, 45275), (135, 45173), (149, 45107), (153, 45086), (158, 45047), (171, 44984),

Gene: Drake94\_68 Start: 43133, Stop: 42630, Start Num: 85

Candidate Starts for Drake94\_68:

(Start: 57 @43199 has 1 MA's), (65, 43184), (Start: 84 @43136 has 180 MA's), (Start: 85 @43133 has 5 MA's), (Start: 111 @43040 has 4 MA's), (119, 42983), (122, 42965), (126, 42941), (135, 42881), (142, 42860), (165, 42728), (177, 42662), (183, 42641),

Gene: DreamCatcher\_79 Start: 47366, Stop: 46854, Start Num: 91

Candidate Starts for DreamCatcher\_79:

(26, 47540), (37, 47507), (Start: 68 @47423 has 2 MA's), (Start: 91 @47366 has 205 MA's), (Start: 104 @47324 has 5 MA's), (Start: 111 @47273 has 4 MA's), (112, 47264), (119, 47216), (142, 47093), (149, 47051), (183, 46865),

Gene: DreamTeam1\_71 Start: 43731, Stop: 43198, Start Num: 77

Candidate Starts for DreamTeam1\_71:

(Start: 77 @43731 has 160 MA's), (Start: 111 @43635 has 4 MA's), (113, 43611), (119, 43578), (142, 43455), (144, 43440), (145, 43437), (153, 43392), (164, 43317), (167, 43311), (168, 43296), (169, 43293), (171, 43284),

Gene: Dreamboat\_75 Start: 44848, Stop: 44336, Start Num: 91

Candidate Starts for Dreamboat\_75:

(26, 45022), (37, 44989), (Start: 68 @44905 has 2 MA's), (Start: 91 @44848 has 205 MA's), (Start: 104 @44806 has 5 MA's), (Start: 111 @44755 has 4 MA's), (112, 44746), (119, 44698), (142, 44575), (149, 44533), (183, 44347),

Gene: DroogsArmy\_69 Start: 47376, Stop: 46870, Start Num: 82

Candidate Starts for DroogsArmy\_69:

(50, 47454), (52, 47445), (54, 47439), (Start: 82 @47376 has 3 MA's), (106, 47328), (123, 47202), (126, 47181), (129, 47169), (135, 47121), (142, 47100), (147, 47076), (153, 47043), (158, 47004), (169, 46947), (171, 46938), (173, 46920), (177, 46902),

Gene: DropBear\_71 Start: 44617, Stop: 44105, Start Num: 84

Candidate Starts for DropBear\_71:

(61, 44671), (Start: 84 @44617 has 180 MA's), (Start: 86 @44611 has 6 MA's), (Start: 111 @44518 has 4 MA's), (122, 44443), (123, 44440), (126, 44419), (130, 44395), (135, 44356), (140, 44341), (142, 44335), (158, 44239), (169, 44182), (177, 44137),

Gene: Druantia\_69 Start: 44174, Stop: 43662, Start Num: 84

Candidate Starts for Druantia\_69:

(Start: 84 @44174 has 180 MA's), (Start: 104 @44126 has 5 MA's), (Start: 111 @44075 has 4 MA's), (122, 44000), (126, 43976), (127, 43970), (129, 43964), (135, 43913), (142, 43892), (153, 43835), (158, 43796), (168, 43742), (177, 43694),

Gene: Dublin\_69 Start: 43699, Stop: 43169, Start Num: 84

Candidate Starts for Dublin\_69:

(Start: 84 @43699 has 180 MA's), (133, 43447), (134, 43444), (135, 43423), (142, 43402), (170, 43243), (176, 43204),

Gene: DudeLittle\_74 Start: 45321, Stop: 44743, Start Num: 77

Candidate Starts for DudeLittle\_74:

(Start: 60 @45363 has 4 MA's), (66, 45351), (Start: 72 @45333 has 33 MA's), (Start: 77 @45321 has 160 MA's), (Start: 111 @45204 has 4 MA's), (112, 45195), (119, 45147), (135, 45045), (150, 44976), (153, 44958), (156, 44928), (158, 44919), (171, 44856),

Gene: Dulcie\_76 Start: 48642, Stop: 48130, Start Num: 91

Candidate Starts for Dulcie\_76:

(26, 48816), (37, 48783), (Start: 68 @48699 has 2 MA's), (Start: 91 @48642 has 205 MA's), (Start: 104 @48600 has 5 MA's), (Start: 111 @48549 has 4 MA's), (112, 48540), (119, 48492), (142, 48369), (149, 48327), (183, 48141),

Gene: Duplo\_78 Start: 45914, Stop: 45369, Start Num: 77

Candidate Starts for Duplo\_78:

(Start: 72 @45926 has 33 MA's), (Start: 77 @45914 has 160 MA's), (Start: 111 @45797 has 4 MA's), (112, 45788), (113, 45773), (119, 45740), (135, 45638), (137, 45632), (142, 45614), (148, 45587), (149, 45572), (150, 45569), (152, 45554), (158, 45512), (169, 45458), (174, 45431), (178, 45413),

Gene: Dussy\_74 Start: 46227, Stop: 45715, Start Num: 91

Candidate Starts for Dussy\_74:

(26, 46401), (37, 46368), (Start: 68 @46284 has 2 MA's), (Start: 91 @46227 has 205 MA's), (Start: 104 @46185 has 5 MA's), (Start: 111 @46134 has 4 MA's), (112, 46125), (119, 46077), (142, 45954), (149, 45912), (173, 45768), (183, 45726),



Gene: DustyMartin\_72 Start: 44148, Stop: 43642, Start Num: 85

Candidate Starts for DustyMartin\_72:

(Start: 57 @44214 has 1 MA's), (65, 44199), (Start: 85 @44148 has 5 MA's), (Start: 104 @44106 has 5 MA's), (Start: 111 @44055 has 4 MA's), (113, 44031), (119, 43998), (122, 43980), (126, 43956), (135, 43896), (142, 43875), (165, 43743), (177, 43677), (183, 43656),

Gene: Dynamix\_75 Start: 45282, Stop: 44770, Start Num: 91

Candidate Starts for Dynamix\_75:

(26, 45456), (37, 45423), (Start: 68 @45339 has 2 MA's), (Start: 91 @45282 has 205 MA's), (Start: 104 @45240 has 5 MA's), (Start: 111 @45189 has 4 MA's), (112, 45180), (119, 45132), (142, 45009), (149, 44967), (183, 44781),

Gene: EZMoney23\_72 Start: 45225, Stop: 44641, Start Num: 77

Candidate Starts for EZMoney23\_72:

(Start: 77 @45225 has 160 MA's), (90, 45198), (Start: 111 @45108 has 4 MA's), (119, 45051), (135, 44949), (138, 44940), (150, 44880), (153, 44862), (158, 44823), (169, 44766), (178, 44694),

Gene: Eagle\_69 Start: 44232, Stop: 43720, Start Num: 84

Candidate Starts for Eagle\_69:

(Start: 84 @44232 has 180 MA's), (Start: 104 @44184 has 5 MA's), (Start: 111 @44133 has 4 MA's), (122, 44058), (126, 44034), (129, 44022), (135, 43971), (142, 43950), (153, 43893), (168, 43800), (177, 43752),

Gene: EagleEye\_81 Start: 45914, Stop: 45372, Start Num: 77

Candidate Starts for EagleEye\_81:

(Start: 72 @45926 has 33 MA's), (Start: 77 @45914 has 160 MA's), (Start: 111 @45809 has 4 MA's), (112, 45800), (119, 45752), (131, 45686), (135, 45650), (142, 45629), (153, 45566), (158, 45527), (174, 45437), (178, 45419),

Gene: Eaglepride\_73 Start: 44100, Stop: 43594, Start Num: 84

Candidate Starts for Eaglepride\_73:

(Start: 57 @44163 has 1 MA's), (65, 44148), (Start: 84 @44100 has 180 MA's), (Start: 85 @44097 has 5 MA's), (Start: 111 @44004 has 4 MA's), (113, 43980), (119, 43947), (122, 43929), (126, 43905), (135, 43845), (142, 43824), (153, 43767), (154, 43764), (169, 43671), (171, 43662), (177, 43626), (183, 43605),

Gene: Eapen\_70 Start: 44166, Stop: 43654, Start Num: 84

Candidate Starts for Eapen\_70:

(Start: 84 @44166 has 180 MA's), (Start: 104 @44118 has 5 MA's), (Start: 111 @44067 has 4 MA's), (122, 43992), (126, 43968), (127, 43962), (129, 43956), (135, 43905), (142, 43884), (153, 43827), (158, 43788), (177, 43686),

Gene: EasyJones\_49 Start: 15112, Stop: 15636, Start Num: 86

Candidate Starts for EasyJones\_49:

(22, 14935), (Start: 86 @15112 has 6 MA's), (Start: 91 @15124 has 205 MA's), (Start: 104 @15166 has 5 MA's), (Start: 111 @15217 has 4 MA's), (112, 15226), (119, 15274), (142, 15397), (149, 15439), (173, 15583), (183, 15625),

Gene: Ebony\_78 Start: 44921, Stop: 44370, Start Num: 77

Candidate Starts for Ebony\_78:

(Start: 60 @44963 has 4 MA's), (Start: 72 @44933 has 33 MA's), (Start: 77 @44921 has 160 MA's), (90, 44894), (Start: 111 @44804 has 4 MA's), (113, 44780), (119, 44747), (135, 44645), (142, 44621),

(144, 44606), (149, 44579), (153, 44558), (158, 44519), (178, 44420), (186, 44387),

Gene: Echild\_76 Start: 45077, Stop: 44502, Start Num: 77

Candidate Starts for Echild\_76:

(Start: 77 @45077 has 160 MA's), (Start: 100 @45023 has 1 MA's), (Start: 111 @44960 has 4 MA's), (112, 44951), (115, 44924), (119, 44903), (135, 44801), (138, 44792), (153, 44714), (158, 44675), (179, 44546), (181, 44537),

Gene: Edison31\_67 Start: 43873, Stop: 43367, Start Num: 84

Candidate Starts for Edison31\_67:

(Start: 57 @43936 has 1 MA's), (65, 43921), (Start: 84 @43873 has 180 MA's), (Start: 85 @43870 has 5 MA's), (Start: 111 @43777 has 4 MA's), (113, 43753), (119, 43720), (122, 43702), (126, 43678), (135, 43618), (142, 43597), (153, 43540), (158, 43501), (165, 43465), (177, 43399), (183, 43378),

Gene: EdogawaKiddo\_75 Start: 44751, Stop: 44203, Start Num: 72

Candidate Starts for EdogawaKiddo\_75:

(Start: 72 @44751 has 33 MA's), (Start: 77 @44739 has 160 MA's), (Start: 111 @44643 has 4 MA's), (112, 44634), (113, 44619), (119, 44586), (142, 44463), (144, 44448), (145, 44445), (152, 44403), (153, 44400), (166, 44322),

Gene: Edtherson\_74 Start: 46515, Stop: 45946, Start Num: 68

Candidate Starts for Edtherson\_74:

(26, 46632), (37, 46599), (Start: 68 @46515 has 2 MA's), (Start: 91 @46458 has 205 MA's), (Start: 104 @46416 has 5 MA's), (Start: 111 @46365 has 4 MA's), (112, 46356), (119, 46308), (135, 46206), (142, 46185), (149, 46143), (173, 45999), (183, 45957),

Gene: Eidsmoe\_75 Start: 44450, Stop: 43902, Start Num: 72

Candidate Starts for Eidsmoe\_75:

(Start: 72 @44450 has 33 MA's), (Start: 77 @44438 has 160 MA's), (Start: 111 @44342 has 4 MA's), (112, 44333), (113, 44318), (119, 44285), (142, 44162), (144, 44147), (145, 44144), (152, 44102), (153, 44099), (166, 44021), (171, 43991),

Gene: EITiger69\_75 Start: 44783, Stop: 44253, Start Num: 84

Candidate Starts for EITiger69\_75:

(36, 44915), (43, 44882), (45, 44879), (Start: 84 @44783 has 180 MA's), (96, 44753), (124, 44591), (126, 44567), (133, 44531), (135, 44507), (142, 44486), (168, 44333), (170, 44327), (176, 44288),

Gene: Elephantoon\_77 Start: 44590, Stop: 44063, Start Num: 77

Candidate Starts for Elephantoon\_77:

(59, 44635), (Start: 72 @44602 has 33 MA's), (Start: 77 @44590 has 160 MA's), (Start: 111 @44494 has 4 MA's), (113, 44470), (119, 44437), (122, 44419), (142, 44314), (145, 44296), (152, 44254), (153, 44251), (158, 44212), (166, 44173), (167, 44170), (169, 44152),

Gene: Emma\_41 Start: 31756, Stop: 31244, Start Num: 91

Candidate Starts for Emma\_41:

(66, 31810), (Start: 91 @31756 has 205 MA's), (Start: 104 @31714 has 5 MA's), (Start: 111 @31663 has 4 MA's), (112, 31654), (119, 31606), (126, 31564), (142, 31483), (149, 31441), (183, 31255),

Gene: EmyBug\_74 Start: 44440, Stop: 43904, Start Num: 77

Candidate Starts for EmyBug\_74:

(Start: 72 @44452 has 33 MA's), (Start: 77 @44440 has 160 MA's), (Start: 111 @44344 has 4 MA's), (112, 44335), (113, 44320), (119, 44287), (142, 44164), (144, 44149), (145, 44146), (152, 44104), (153, 44101), (166, 44023), (171, 43993),

Gene: EnzoK\_75 Start: 44568, Stop: 44056, Start Num: 91

Candidate Starts for EnzoK\_75:

(26, 44742), (37, 44709), (Start: 68 @44625 has 2 MA's), (Start: 91 @44568 has 205 MA's), (Start: 104 @44526 has 5 MA's), (Start: 111 @44475 has 4 MA's), (112, 44466), (119, 44418), (126, 44376), (142, 44295), (149, 44253), (183, 44067),

Gene: EpicPhail\_80 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for EpicPhail\_80:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: Epsocamisio\_81 Start: 45155, Stop: 44634, Start Num: 77

Candidate Starts for Epsocamisio\_81:

(Start: 77 @45155 has 160 MA's), (Start: 104 @45110 has 5 MA's), (Start: 111 @45059 has 4 MA's), (112, 45050), (119, 45002), (135, 44900), (142, 44879), (163, 44741), (168, 44723), (171, 44711), (178, 44675),

Gene: Equemioh13\_75 Start: 45271, Stop: 44696, Start Num: 77

Candidate Starts for Equemioh13\_75:

(11, 45496), (17, 45475), (27, 45406), (Start: 60 @45313 has 4 MA's), (66, 45301), (Start: 72 @45283 has 33 MA's), (Start: 77 @45271 has 160 MA's), (Start: 111 @45154 has 4 MA's), (112, 45145), (115, 45118), (119, 45097), (135, 44995), (149, 44929), (153, 44908), (158, 44869), (171, 44806),

Gene: EricB\_77 Start: 44171, Stop: 43656, Start Num: 77

Candidate Starts for EricB\_77:

(Start: 72 @44183 has 33 MA's), (Start: 77 @44171 has 160 MA's), (Start: 111 @44084 has 4 MA's), (112, 44075), (119, 44027), (135, 43925), (142, 43904), (146, 43883), (153, 43841), (158, 43802),

Gene: Eris\_69 Start: 44183, Stop: 43671, Start Num: 84

Candidate Starts for Eris\_69:

(Start: 84 @44183 has 180 MA's), (Start: 104 @44135 has 5 MA's), (Start: 111 @44084 has 4 MA's), (122, 44009), (126, 43985), (127, 43979), (129, 43973), (135, 43922), (142, 43901), (153, 43844), (158, 43805), (177, 43703),

Gene: Eros\_70 Start: 44173, Stop: 43661, Start Num: 84

Candidate Starts for Eros\_70:

(Start: 84 @44173 has 180 MA's), (Start: 104 @44125 has 5 MA's), (Start: 111 @44074 has 4 MA's), (122, 43999), (126, 43975), (127, 43969), (129, 43963), (135, 43912), (142, 43891), (153, 43834), (158, 43795), (168, 43741), (177, 43693),

Gene: Espica\_59 Start: 40065, Stop: 39541, Start Num: 78

Candidate Starts for Espica\_59:

(Start: 78 @40065 has 23 MA's), (103, 40020), (107, 40002), (122, 39888), (129, 39852), (134, 39825), (135, 39804), (142, 39783), (144, 39768), (150, 39738), (151, 39735), (169, 39624), (171, 39615), (183, 39558),

Gene: Espresso\_69 Start: 45130, Stop: 44618, Start Num: 91

Candidate Starts for Espresso\_69:

(26, 45304), (37, 45271), (Start: 68 @45187 has 2 MA's), (Start: 91 @45130 has 205 MA's), (Start: 104 @45088 has 5 MA's), (Start: 111 @45037 has 4 MA's), (112, 45028), (119, 44980), (142, 44857), (149, 44815), (183, 44629),

Gene: Et2Brutus\_77 Start: 44884, Stop: 44333, Start Num: 77

Candidate Starts for Et2Brutus\_77:

(Start: 60 @44926 has 4 MA's), (Start: 72 @44896 has 33 MA's), (Start: 77 @44884 has 160 MA's), (90, 44857), (Start: 111 @44767 has 4 MA's), (113, 44743), (119, 44710), (135, 44608), (142, 44584), (144, 44569), (149, 44542), (153, 44521), (158, 44482), (178, 44383), (186, 44350),

Gene: Euphoria\_76 Start: 47047, Stop: 46535, Start Num: 91

Candidate Starts for Euphoria\_76:

(26, 47221), (37, 47188), (Start: 68 @47104 has 2 MA's), (Start: 91 @47047 has 205 MA's), (Start: 104 @47005 has 5 MA's), (Start: 111 @46954 has 4 MA's), (112, 46945), (119, 46897), (142, 46774), (149, 46732), (183, 46546),

Gene: Eurydice\_71 Start: 44207, Stop: 43695, Start Num: 84

Candidate Starts for Eurydice\_71:

(Start: 84 @44207 has 180 MA's), (Start: 104 @44159 has 5 MA's), (Start: 111 @44108 has 4 MA's), (122, 44033), (126, 44009), (129, 43997), (135, 43946), (142, 43925), (153, 43868), (168, 43775), (177, 43727),

Gene: EvilGenius\_75 Start: 46857, Stop: 46282, Start Num: 77

Candidate Starts for EvilGenius\_75:

(Start: 34 @46977 has 1 MA's), (Start: 60 @46899 has 4 MA's), (66, 46887), (Start: 72 @46869 has 33 MA's), (Start: 77 @46857 has 160 MA's), (Start: 111 @46740 has 4 MA's), (112, 46731), (119, 46683), (135, 46581), (153, 46494), (158, 46455), (164, 46419), (171, 46392), (178, 46329),

Gene: Expelliarmus\_81 Start: 45856, Stop: 45314, Start Num: 74

Candidate Starts for Expelliarmus\_81:

(Start: 74 @45856 has 3 MA's), (Start: 93 @45817 has 78 MA's), (101, 45793), (107, 45769), (Start: 111 @45730 has 4 MA's), (121, 45658), (123, 45652), (126, 45631), (129, 45619), (142, 45550), (158, 45448), (173, 45364), (177, 45346), (181, 45334),

Gene: ExplosioNervosa\_75 Start: 44506, Stop: 43970, Start Num: 77

Candidate Starts for ExplosioNervosa\_75:

(Start: 72 @44518 has 33 MA's), (Start: 77 @44506 has 160 MA's), (Start: 111 @44410 has 4 MA's), (112, 44401), (113, 44386), (119, 44353), (142, 44230), (144, 44215), (145, 44212), (152, 44170), (153, 44167), (166, 44089), (171, 44059),

Gene: Eyeball\_74 Start: 46332, Stop: 45820, Start Num: 91

Candidate Starts for Eyeball\_74:

(26, 46506), (37, 46473), (Start: 68 @46389 has 2 MA's), (Start: 91 @46332 has 205 MA's), (Start: 104 @46290 has 5 MA's), (Start: 111 @46239 has 4 MA's), (112, 46230), (119, 46182), (142, 46059), (149, 46017), (183, 45831),

Gene: Fajezeel\_78 Start: 47568, Stop: 47056, Start Num: 91

Candidate Starts for Fajezeel\_78:

(26, 47742), (37, 47709), (Start: 68 @47625 has 2 MA's), (Start: 91 @47568 has 205 MA's), (Start: 104 @47526 has 5 MA's), (Start: 111 @47475 has 4 MA's), (112, 47466), (119, 47418), (142, 47295), (149, 47253), (183, 47067),

Gene: Fameo\_74 Start: 45363, Stop: 44785, Start Num: 77

Candidate Starts for Fameo\_74:

(Start: 34 @45483 has 1 MA's), (Start: 60 @45405 has 4 MA's), (66, 45393), (Start: 72 @45375 has 33 MA's), (Start: 77 @45363 has 160 MA's), (Start: 111 @45246 has 4 MA's), (112, 45237), (119, 45189),

(135, 45087), (153, 45000), (156, 44970), (158, 44961), (171, 44898),

Gene: Farber\_79 Start: 44995, Stop: 44486, Start Num: 93

Candidate Starts for Farber\_79:

(Start: 93 @44995 has 78 MA's), (Start: 104 @44959 has 5 MA's), (Start: 111 @44908 has 4 MA's), (112, 44899), (122, 44833), (129, 44797), (135, 44749), (142, 44728), (152, 44668), (153, 44665), (154, 44662), (158, 44626), (169, 44563), (177, 44518),

Gene: Fascinus\_71 Start: 46856, Stop: 46344, Start Num: 91

Candidate Starts for Fascinus\_71:

(26, 47030), (33, 47012), (37, 46997), (Start: 68 @46913 has 2 MA's), (Start: 91 @46856 has 205 MA's), (Start: 104 @46814 has 5 MA's), (Start: 111 @46763 has 4 MA's), (112, 46754), (119, 46706), (126, 46664), (142, 46583), (149, 46541), (183, 46355),

Gene: FatCactus\_71 Start: 44220, Stop: 43696, Start Num: 76

Candidate Starts for FatCactus\_71:

(Start: 76 @44220 has 1 MA's), (101, 44175), (107, 44151), (Start: 111 @44112 has 4 MA's), (122, 44037), (123, 44034), (126, 44013), (129, 44001), (140, 43938), (142, 43932), (152, 43872), (153, 43869), (154, 43866), (158, 43830), (171, 43764), (177, 43728),

Gene: Fayely\_75 Start: 44407, Stop: 43871, Start Num: 77

Candidate Starts for Fayely\_75:

(Start: 72 @44419 has 33 MA's), (Start: 77 @44407 has 160 MA's), (Start: 111 @44311 has 4 MA's), (112, 44302), (113, 44287), (119, 44254), (142, 44131), (144, 44116), (145, 44113), (152, 44071), (153, 44068), (166, 43990), (171, 43960),

Gene: Fenn\_78 Start: 47387, Stop: 46875, Start Num: 91

Candidate Starts for Fenn\_78:

(26, 47561), (37, 47528), (Start: 68 @47444 has 2 MA's), (Start: 91 @47387 has 205 MA's), (Start: 104 @47345 has 5 MA's), (Start: 111 @47294 has 4 MA's), (112, 47285), (119, 47237), (142, 47114), (149, 47072), (183, 46886),

Gene: Fernando\_79 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for Fernando\_79:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: Fibonacci\_77 Start: 44902, Stop: 44339, Start Num: 72

Candidate Starts for Fibonacci\_77:

(Start: 60 @44932 has 4 MA's), (Start: 72 @44902 has 33 MA's), (Start: 77 @44890 has 160 MA's), (90, 44863), (Start: 111 @44773 has 4 MA's), (113, 44749), (119, 44716), (135, 44614), (142, 44590), (144, 44575), (149, 44548), (153, 44527), (158, 44488), (178, 44389), (186, 44356),

Gene: FiringLine\_76 Start: 45718, Stop: 45143, Start Num: 77

Candidate Starts for FiringLine\_76:

(Start: 60 @45760 has 4 MA's), (66, 45748), (Start: 72 @45730 has 33 MA's), (Start: 77 @45718 has 160 MA's), (Start: 111 @45601 has 4 MA's), (112, 45592), (119, 45544), (135, 45442), (153, 45355), (158, 45316), (171, 45253),

Gene: First\_0076 Start: 45400, Stop: 44828, Start Num: 77

Candidate Starts for First\_0076:

(Start: 77 @45400 has 160 MA's), (Start: 111 @45283 has 4 MA's), (112, 45274), (115, 45247), (119, 45226), (135, 45124), (138, 45115), (153, 45037), (158, 44998), (169, 44944),

Gene: Flare16\_76 Start: 45412, Stop: 44843, Start Num: 77

Candidate Starts for Flare16\_76:

(Start: 60 @45454 has 4 MA's), (66, 45442), (Start: 72 @45424 has 33 MA's), (Start: 77 @45412 has 160 MA's), (Start: 111 @45295 has 4 MA's), (112, 45286), (115, 45259), (119, 45238), (135, 45136), (149, 45070), (153, 45049), (158, 45010), (171, 44947),

Gene: Flathead\_38 Start: 31750, Stop: 31238, Start Num: 91

Candidate Starts for Flathead\_38:

(Start: 91 @31750 has 205 MA's), (Start: 104 @31708 has 5 MA's), (Start: 111 @31657 has 4 MA's), (112, 31648), (119, 31600), (142, 31477), (149, 31435), (183, 31249),

Gene: Flaverint\_79 Start: 45348, Stop: 44797, Start Num: 77

Candidate Starts for Flaverint\_79:

(Start: 60 @45390 has 4 MA's), (Start: 72 @45360 has 33 MA's), (Start: 77 @45348 has 160 MA's), (90, 45321), (Start: 111 @45231 has 4 MA's), (113, 45207), (119, 45174), (135, 45072), (142, 45048), (144, 45033), (149, 45006), (153, 44985), (158, 44946), (178, 44847), (186, 44814),

Gene: Florean\_70 Start: 44170, Stop: 43658, Start Num: 84

Candidate Starts for Florean\_70:

(Start: 84 @44170 has 180 MA's), (Start: 104 @44122 has 5 MA's), (Start: 111 @44071 has 4 MA's), (122, 43996), (126, 43972), (127, 43966), (129, 43960), (135, 43909), (142, 43888), (153, 43831), (158, 43792), (168, 43738), (177, 43690),

Gene: Flux\_70 Start: 44170, Stop: 43658, Start Num: 84

Candidate Starts for Flux\_70:

(Start: 84 @44170 has 180 MA's), (Start: 104 @44122 has 5 MA's), (Start: 111 @44071 has 4 MA's), (122, 43996), (126, 43972), (127, 43966), (129, 43960), (135, 43909), (142, 43888), (153, 43831), (158, 43792), (177, 43690),

Gene: FlyCatcher\_75 Start: 48186, Stop: 47677, Start Num: 83

Candidate Starts for FlyCatcher\_75:

(Start: 75 @48204 has 3 MA's), (Start: 83 @48186 has 3 MA's), (Start: 111 @48087 has 4 MA's), (119, 48030), (121, 48015), (122, 48012), (123, 48009), (126, 47988), (129, 47976), (142, 47907), (153, 47850), (169, 47754), (177, 47709),

Gene: ForGetIt\_70 Start: 43818, Stop: 43288, Start Num: 84

Candidate Starts for ForGetIt\_70:

(80, 43824), (Start: 84 @43818 has 180 MA's), (133, 43566), (134, 43563), (135, 43542), (142, 43521), (168, 43368), (170, 43362), (176, 43323),

Gene: Forsytheast\_77 Start: 47070, Stop: 46555, Start Num: 91

Candidate Starts for Forsytheast\_77:

(26, 47244), (37, 47211), (Start: 68 @47127 has 2 MA's), (Start: 91 @47070 has 205 MA's), (Start: 104 @47028 has 5 MA's), (Start: 111 @46977 has 4 MA's), (112, 46968), (119, 46920), (135, 46818), (142, 46797), (149, 46755), (173, 46611), (183, 46569),

Gene: Francis47\_77 Start: 48939, Stop: 48427, Start Num: 91

Candidate Starts for Francis47\_77:

(26, 49113), (37, 49080), (Start: 68 @48996 has 2 MA's), (Start: 91 @48939 has 205 MA's), (Start: 104 @48897 has 5 MA's), (Start: 111 @48846 has 4 MA's), (112, 48837), (119, 48789), (142, 48666), (149,

48624), (183, 48438),

Gene: Fred313\_71 Start: 44311, Stop: 43799, Start Num: 84

Candidate Starts for Fred313\_71:

(61, 44365), (Start: 84 @44311 has 180 MA's), (Start: 86 @44305 has 6 MA's), (Start: 111 @44212 has 4 MA's), (122, 44137), (123, 44134), (126, 44113), (130, 44089), (135, 44050), (140, 44035), (142, 44029), (158, 43933), (169, 43876), (177, 43831),

Gene: Fruitloop\_37 Start: 31358, Stop: 30786, Start Num: 67

Candidate Starts for Fruitloop\_37:

(Start: 67 @31358 has 1 MA's), (Start: 91 @31298 has 205 MA's), (Start: 104 @31256 has 5 MA's), (Start: 111 @31205 has 4 MA's), (112, 31196), (119, 31148), (126, 31106), (142, 31025), (149, 30983), (183, 30797),

Gene: Funston\_69 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Funston\_69:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Fushigi\_69 Start: 43388, Stop: 42876, Start Num: 91

Candidate Starts for Fushigi\_69:

(26, 43562), (37, 43529), (Start: 68 @43445 has 2 MA's), (Start: 91 @43388 has 205 MA's), (Start: 104 @43346 has 5 MA's), (Start: 111 @43295 has 4 MA's), (112, 43286), (119, 43238), (142, 43115), (149, 43073), (183, 42887),

Gene: Gadost\_70 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for Gadost\_70:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833), (158, 43794), (177, 43692),

Gene: GageAP\_78 Start: 48292, Stop: 47780, Start Num: 91

Candidate Starts for GageAP\_78:

(26, 48466), (37, 48433), (Start: 68 @48349 has 2 MA's), (Start: 91 @48292 has 205 MA's), (Start: 104 @48250 has 5 MA's), (Start: 111 @48199 has 4 MA's), (112, 48190), (119, 48142), (142, 48019), (149, 47977), (183, 47791),

Gene: Gail\_77 Start: 45694, Stop: 45167, Start Num: 77

Candidate Starts for Gail\_77:

(Start: 72 @45706 has 33 MA's), (Start: 77 @45694 has 160 MA's), (Start: 111 @45592 has 4 MA's), (113, 45568), (114, 45559), (119, 45535), (122, 45517), (135, 45433), (136, 45430), (142, 45412), (147, 45388), (152, 45352), (161, 45286), (164, 45274), (174, 45229), (178, 45211),

Gene: Galactic\_41 Start: 32019, Stop: 31483, Start Num: 79

Candidate Starts for Galactic\_41:

(Start: 79 @32019 has 14 MA's), (Start: 104 @31953 has 5 MA's), (Start: 111 @31902 has 4 MA's), (112, 31893), (119, 31845), (126, 31803), (142, 31722), (149, 31680), (183, 31494),

Gene: Gandalf20\_74 Start: 46415, Stop: 45903, Start Num: 91

Candidate Starts for Gandalf20\_74:

(26, 46589), (37, 46556), (Start: 68 @46472 has 2 MA's), (Start: 91 @46415 has 205 MA's), (Start: 104 @46373 has 5 MA's), (Start: 111 @46322 has 4 MA's), (112, 46313), (119, 46265), (142, 46142), (149,

46100), (183, 45914),

Gene: Garak\_79 Start: 44341, Stop: 43826, Start Num: 77

Candidate Starts for Garak\_79:

(Start: 64 @44377 has 9 MA's), (Start: 72 @44353 has 33 MA's), (Start: 77 @44341 has 160 MA's), (Start: 100 @44317 has 1 MA's), (Start: 111 @44254 has 4 MA's), (119, 44197), (135, 44095), (142, 44074), (153, 44011), (158, 43972), (169, 43918), (171, 43909), (185, 43846),

Gene: GaugeLDP\_71 Start: 44968, Stop: 44396, Start Num: 77

Candidate Starts for GaugeLDP\_71:

(Start: 72 @44980 has 33 MA's), (Start: 77 @44968 has 160 MA's), (90, 44941), (Start: 104 @44902 has 5 MA's), (Start: 111 @44851 has 4 MA's), (119, 44794), (135, 44692), (149, 44626), (153, 44605), (158, 44566), (161, 44542), (173, 44470), (186, 44416),

Gene: Gemma\_76 Start: 44815, Stop: 44306, Start Num: 93

Candidate Starts for Gemma\_76:

(Start: 93 @44815 has 78 MA's), (Start: 104 @44779 has 5 MA's), (Start: 111 @44728 has 4 MA's), (112, 44719), (122, 44653), (129, 44617), (135, 44569), (142, 44548), (152, 44488), (153, 44485), (158, 44446), (169, 44383), (177, 44338),

Gene: George\_65 Start: 43483, Stop: 42953, Start Num: 84

Candidate Starts for George\_65:

(80, 43489), (Start: 84 @43483 has 180 MA's), (133, 43231), (134, 43228), (135, 43207), (142, 43186), (170, 43027), (176, 42988),

Gene: Georgie2\_77 Start: 45763, Stop: 45188, Start Num: 77

Candidate Starts for Georgie2\_77:

(Start: 60 @45805 has 4 MA's), (66, 45793), (Start: 72 @45775 has 33 MA's), (Start: 77 @45763 has 160 MA's), (Start: 111 @45646 has 4 MA's), (112, 45637), (119, 45589), (135, 45487), (153, 45400), (158, 45361), (171, 45298),

Gene: Ghoulboy\_69 Start: 43791, Stop: 43261, Start Num: 84

Candidate Starts for Ghoulboy\_69:

(Start: 84 @43791 has 180 MA's), (126, 43575), (133, 43539), (134, 43536), (135, 43515), (136, 43512), (142, 43494), (168, 43341), (176, 43296),

Gene: Gilberta\_75 Start: 44224, Stop: 43673, Start Num: 77

Candidate Starts for Gilberta\_75:

(Start: 60 @44266 has 4 MA's), (Start: 72 @44236 has 33 MA's), (Start: 77 @44224 has 160 MA's), (90, 44197), (Start: 111 @44107 has 4 MA's), (113, 44083), (119, 44050), (135, 43948), (142, 43924), (144, 43909), (149, 43882), (153, 43861), (158, 43822), (178, 43723), (186, 43690),

Gene: GingkoMaracino\_79 Start: 44891, Stop: 44382, Start Num: 93

Candidate Starts for GingkoMaracino\_79:

(Start: 93 @44891 has 78 MA's), (Start: 104 @44855 has 5 MA's), (Start: 111 @44804 has 4 MA's), (112, 44795), (122, 44729), (129, 44693), (135, 44645), (142, 44624), (152, 44564), (153, 44561), (154, 44558), (158, 44522), (169, 44459), (177, 44414),

Gene: Giroux\_72 Start: 44691, Stop: 44179, Start Num: 84

Candidate Starts for Giroux\_72:

(Start: 78 @44700 has 23 MA's), (Start: 84 @44691 has 180 MA's), (Start: 86 @44685 has 6 MA's), (Start: 111 @44592 has 4 MA's), (122, 44517), (126, 44493), (127, 44487), (130, 44469), (135, 44430), (140, 44415), (142, 44409), (158, 44313), (169, 44256), (177, 44211),



Gene: Gladiator\_75 Start: 44280, Stop: 43729, Start Num: 64

Candidate Starts for Gladiator\_75:

(Start: 64 @44280 has 9 MA's), (Start: 72 @44256 has 33 MA's), (Start: 77 @44244 has 160 MA's), (Start: 100 @44220 has 1 MA's), (Start: 111 @44157 has 4 MA's), (119, 44100), (135, 43998), (142, 43977), (153, 43914), (158, 43875), (169, 43821), (171, 43812), (185, 43749),

Gene: Gompeii16\_76 Start: 48939, Stop: 48427, Start Num: 91

Candidate Starts for Gompeii16\_76:

(26, 49113), (37, 49080), (Start: 68 @48996 has 2 MA's), (Start: 91 @48939 has 205 MA's), (Start: 104 @48897 has 5 MA's), (Start: 111 @48846 has 4 MA's), (112, 48837), (119, 48789), (142, 48666), (149, 48624), (183, 48438),

Gene: Goose\_71 Start: 43816, Stop: 43310, Start Num: 84

Candidate Starts for Goose\_71:

(Start: 57 @43879 has 1 MA's), (65, 43864), (Start: 84 @43816 has 180 MA's), (Start: 85 @43813 has 5 MA's), (Start: 111 @43720 has 4 MA's), (113, 43696), (119, 43663), (122, 43645), (126, 43621), (135, 43561), (142, 43540), (165, 43408), (177, 43342), (183, 43321),

Gene: Graduation\_78 Start: 46915, Stop: 46403, Start Num: 91

Candidate Starts for Graduation\_78:

(26, 47089), (37, 47056), (Start: 68 @46972 has 2 MA's), (Start: 91 @46915 has 205 MA's), (Start: 104 @46873 has 5 MA's), (Start: 111 @46822 has 4 MA's), (112, 46813), (119, 46765), (126, 46723), (142, 46642), (149, 46600), (183, 46414),

Gene: Gratitude\_73 Start: 45283, Stop: 44696, Start Num: 72

Candidate Starts for Gratitude\_73:

(11, 45496), (17, 45475), (27, 45406), (Start: 60 @45313 has 4 MA's), (66, 45301), (Start: 72 @45283 has 33 MA's), (Start: 77 @45271 has 160 MA's), (Start: 111 @45154 has 4 MA's), (112, 45145), (115, 45118), (119, 45097), (135, 44995), (149, 44929), (153, 44908), (158, 44869), (171, 44806),

Gene: GrecoEtereo\_79 Start: 48044, Stop: 47532, Start Num: 91

Candidate Starts for GrecoEtereo\_79:

(26, 48218), (37, 48185), (Start: 68 @48101 has 2 MA's), (Start: 91 @48044 has 205 MA's), (Start: 104 @48002 has 5 MA's), (Start: 111 @47951 has 4 MA's), (112, 47942), (119, 47894), (142, 47771), (149, 47729), (183, 47543),

Gene: GreedyLawyer\_73 Start: 44144, Stop: 43629, Start Num: 77

Candidate Starts for GreedyLawyer\_73:

(Start: 72 @44156 has 33 MA's), (Start: 77 @44144 has 160 MA's), (Start: 111 @44057 has 4 MA's), (112, 44048), (119, 44000), (135, 43898), (142, 43877), (146, 43856), (153, 43814), (158, 43775),

Gene: Greg\_78 Start: 47568, Stop: 47056, Start Num: 91

Candidate Starts for Greg\_78:

(26, 47742), (37, 47709), (Start: 68 @47625 has 2 MA's), (Start: 91 @47568 has 205 MA's), (Start: 104 @47526 has 5 MA's), (Start: 111 @47475 has 4 MA's), (112, 47466), (119, 47418), (142, 47295), (149, 47253), (183, 47067),

Gene: Grif\_77 Start: 45082, Stop: 44573, Start Num: 93

Candidate Starts for Grif\_77:

(Start: 93 @45082 has 78 MA's), (Start: 104 @45046 has 5 MA's), (Start: 111 @44995 has 4 MA's), (112, 44986), (122, 44920), (129, 44884), (135, 44836), (142, 44815), (152, 44755), (153, 44752), (154, 44749), (158, 44713), (169, 44650), (177, 44605),

Gene: Groundhog\_82 Start: 45873, Stop: 45370, Start Num: 93

Candidate Starts for Groundhog\_82:

(Start: 74 @45912 has 3 MA's), (Start: 93 @45873 has 78 MA's), (101, 45849), (107, 45825), (Start: 111 @45786 has 4 MA's), (121, 45714), (123, 45708), (126, 45687), (129, 45675), (142, 45606), (158, 45504), (173, 45420), (177, 45402), (181, 45390),

Gene: Groupthink\_79 Start: 44816, Stop: 44307, Start Num: 93

Candidate Starts for Groupthink\_79:

(Start: 93 @44816 has 78 MA's), (Start: 104 @44780 has 5 MA's), (Start: 111 @44729 has 4 MA's), (112, 44720), (122, 44654), (129, 44618), (135, 44570), (142, 44549), (152, 44489), (153, 44486), (158, 44447), (169, 44384), (177, 44339),

Gene: Grum1\_78 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for Grum1\_78:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: Gruunaga\_77 Start: 44235, Stop: 43684, Start Num: 64

Candidate Starts for Gruunaga\_77:

(Start: 64 @44235 has 9 MA's), (Start: 72 @44211 has 33 MA's), (Start: 77 @44199 has 160 MA's), (Start: 100 @44175 has 1 MA's), (Start: 111 @44112 has 4 MA's), (119, 44055), (135, 43953), (142, 43932), (153, 43869), (158, 43830), (169, 43776), (171, 43767), (185, 43704),

Gene: GtownJaz\_79 Start: 45006, Stop: 44497, Start Num: 93

Candidate Starts for GtownJaz\_79:

(Start: 93 @45006 has 78 MA's), (Start: 104 @44970 has 5 MA's), (Start: 111 @44919 has 4 MA's), (112, 44910), (122, 44844), (129, 44808), (135, 44760), (142, 44739), (152, 44679), (153, 44676), (154, 44673), (158, 44637), (169, 44574), (177, 44529),

Gene: Gwendoluna\_79 Start: 47881, Stop: 47369, Start Num: 91

Candidate Starts for Gwendoluna\_79:

(26, 48055), (37, 48022), (Start: 68 @47938 has 2 MA's), (Start: 91 @47881 has 205 MA's), (Start: 104 @47839 has 5 MA's), (Start: 111 @47788 has 4 MA's), (112, 47779), (119, 47731), (142, 47608), (149, 47566), (183, 47380),

Gene: HINdeR\_70 Start: 46802, Stop: 46296, Start Num: 82

Candidate Starts for HINdeR\_70:

(Start: 82 @46802 has 3 MA's), (123, 46628), (129, 46595), (142, 46526), (147, 46502), (153, 46469), (158, 46430), (169, 46373), (177, 46328),

Gene: HamSlice\_66 Start: 44170, Stop: 43658, Start Num: 84

Candidate Starts for HamSlice\_66:

(Start: 84 @44170 has 180 MA's), (Start: 104 @44122 has 5 MA's), (Start: 111 @44071 has 4 MA's), (122, 43996), (126, 43972), (127, 43966), (129, 43960), (135, 43909), (142, 43888), (153, 43831), (158, 43792), (177, 43690),

Gene: Hami1\_68 Start: 41281, Stop: 40769, Start Num: 91

Candidate Starts for Hami1\_68:

(26, 41455), (37, 41422), (58, 41359), (Start: 68 @41338 has 2 MA's), (Start: 91 @41281 has 205 MA's), (Start: 104 @41239 has 5 MA's), (Start: 111 @41188 has 4 MA's), (112, 41179), (119, 41131), (142, 41008), (149, 40966),

Gene: Hammer\_78 Start: 43942, Stop: 43391, Start Num: 64

Candidate Starts for Hammer\_78:

(Start: 64 @43942 has 9 MA's), (Start: 72 @43918 has 33 MA's), (Start: 77 @43906 has 160 MA's), (Start: 100 @43882 has 1 MA's), (Start: 111 @43819 has 4 MA's), (119, 43762), (135, 43660), (142, 43639), (153, 43576), (158, 43537), (169, 43483), (171, 43474), (185, 43411),

Gene: Hanray\_75 Start: 44771, Stop: 44235, Start Num: 77

Candidate Starts for Hanray\_75:

(Start: 72 @44783 has 33 MA's), (Start: 77 @44771 has 160 MA's), (Start: 111 @44675 has 4 MA's), (112, 44666), (113, 44651), (119, 44618), (142, 44495), (144, 44480), (145, 44477), (152, 44435), (153, 44432), (166, 44354),

Gene: Happiness\_69 Start: 44190, Stop: 43678, Start Num: 84

Candidate Starts for Happiness\_69:

(Start: 84 @44190 has 180 MA's), (Start: 104 @44142 has 5 MA's), (Start: 111 @44091 has 4 MA's), (122, 44016), (126, 43992), (129, 43980), (135, 43929), (142, 43908), (153, 43851), (177, 43710),

Gene: Harlequin\_57 Start: 39912, Stop: 39388, Start Num: 78

Candidate Starts for Harlequin\_57:

(Start: 78 @39912 has 23 MA's), (107, 39849), (122, 39735), (129, 39699), (134, 39672), (135, 39651), (142, 39630), (144, 39615), (152, 39570), (169, 39471), (171, 39462), (183, 39405),

Gene: HarryHoudini\_76 Start: 45446, Stop: 44871, Start Num: 77

Candidate Starts for HarryHoudini\_76:

(Start: 60 @45488 has 4 MA's), (66, 45476), (Start: 72 @45458 has 33 MA's), (Start: 77 @45446 has 160 MA's), (Start: 111 @45329 has 4 MA's), (112, 45320), (115, 45293), (119, 45272), (135, 45170), (149, 45104), (153, 45083), (158, 45044), (171, 44981),

Gene: HarryOW\_76 Start: 48092, Stop: 47580, Start Num: 91

Candidate Starts for HarryOW\_76:

(26, 48266), (37, 48233), (Start: 68 @48149 has 2 MA's), (Start: 91 @48092 has 205 MA's), (Start: 104 @48050 has 5 MA's), (Start: 111 @47999 has 4 MA's), (112, 47990), (119, 47942), (142, 47819), (149, 47777), (183, 47591),

Gene: HashRod\_80 Start: 45033, Stop: 44524, Start Num: 93

Candidate Starts for HashRod\_80:

(Start: 75 @45069 has 3 MA's), (Start: 93 @45033 has 78 MA's), (Start: 104 @44997 has 5 MA's), (Start: 111 @44946 has 4 MA's), (122, 44871), (129, 44835), (135, 44787), (142, 44766), (152, 44706), (153, 44703), (154, 44700), (158, 44664), (169, 44601), (177, 44556),

Gene: HaveUMetTed\_79 Start: 44804, Stop: 44295, Start Num: 93

Candidate Starts for HaveUMetTed\_79:

(Start: 93 @44804 has 78 MA's), (Start: 104 @44768 has 5 MA's), (Start: 111 @44717 has 4 MA's), (112, 44708), (122, 44642), (129, 44606), (135, 44558), (142, 44537), (152, 44477), (153, 44474), (158, 44435), (169, 44372), (177, 44327),

Gene: Heathen\_73 Start: 44400, Stop: 43894, Start Num: 86

Candidate Starts for Heathen\_73:

(Start: 84 @44406 has 180 MA's), (Start: 86 @44400 has 6 MA's), (Start: 111 @44307 has 4 MA's), (122, 44232), (123, 44229), (126, 44208), (130, 44184), (135, 44145), (140, 44130), (142, 44124), (158, 44028), (169, 43971), (177, 43926),

Gene: Heffalump\_73 Start: 45831, Stop: 45253, Start Num: 77

Candidate Starts for Heffalump\_73:

(Start: 34 @45951 has 1 MA's), (Start: 60 @45873 has 4 MA's), (66, 45861), (Start: 72 @45843 has 33 MA's), (Start: 77 @45831 has 160 MA's), (Start: 111 @45714 has 4 MA's), (112, 45705), (119, 45657), (135, 45555), (153, 45468), (156, 45438), (158, 45429), (171, 45366),

Gene: HelDan\_73 Start: 44622, Stop: 44110, Start Num: 84

Candidate Starts for HelDan\_73:

(61, 44676), (Start: 84 @44622 has 180 MA's), (Start: 86 @44616 has 6 MA's), (Start: 111 @44523 has 4 MA's), (122, 44448), (123, 44445), (126, 44424), (130, 44400), (135, 44361), (140, 44346), (142, 44340), (158, 44244), (169, 44187), (177, 44142),

Gene: Heliosoles\_76 Start: 44819, Stop: 44310, Start Num: 93

Candidate Starts for Heliosoles\_76:

(Start: 93 @44819 has 78 MA's), (Start: 104 @44783 has 5 MA's), (Start: 111 @44732 has 4 MA's), (112, 44723), (122, 44657), (129, 44621), (135, 44573), (142, 44552), (152, 44492), (153, 44489), (158, 44450), (169, 44387), (177, 44342),

Gene: Helmet\_79 Start: 44341, Stop: 43826, Start Num: 77

Candidate Starts for Helmet\_79:

(Start: 64 @44377 has 9 MA's), (Start: 72 @44353 has 33 MA's), (Start: 77 @44341 has 160 MA's), (Start: 100 @44317 has 1 MA's), (Start: 111 @44254 has 4 MA's), (119, 44197), (135, 44095), (142, 44074), (153, 44011), (158, 43972), (169, 43918), (171, 43909), (185, 43846),

Gene: Herbertwm\_72 Start: 45070, Stop: 44522, Start Num: 72

Candidate Starts for Herbertwm\_72:

(56, 45109), (63, 45097), (Start: 72 @45070 has 33 MA's), (Start: 77 @45058 has 160 MA's), (Start: 111 @44953 has 4 MA's), (119, 44896), (131, 44830), (135, 44794), (142, 44773), (147, 44749), (150, 44728), (164, 44632), (178, 44569),

Gene: Hercules11\_79 Start: 45017, Stop: 44508, Start Num: 93

Candidate Starts for Hercules11\_79:

(Start: 93 @45017 has 78 MA's), (Start: 104 @44981 has 5 MA's), (Start: 111 @44930 has 4 MA's), (112, 44921), (122, 44855), (129, 44819), (135, 44771), (142, 44750), (152, 44690), (153, 44687), (154, 44684), (158, 44648), (169, 44585), (177, 44540),

Gene: Hermia\_70 Start: 44971, Stop: 44459, Start Num: 91

Candidate Starts for Hermia\_70:

(26, 45145), (37, 45112), (Start: 68 @45028 has 2 MA's), (Start: 91 @44971 has 205 MA's), (Start: 104 @44929 has 5 MA's), (Start: 111 @44878 has 4 MA's), (112, 44869), (119, 44821), (142, 44698), (149, 44656), (183, 44470),

Gene: HermioneGrange\_79 Start: 48356, Stop: 47844, Start Num: 91

Candidate Starts for HermioneGrange\_79:

(Start: 68 @48413 has 2 MA's), (Start: 91 @48356 has 205 MA's), (Start: 104 @48314 has 5 MA's), (Start: 111 @48263 has 4 MA's), (112, 48254), (119, 48206), (135, 48104), (142, 48083), (149, 48041), (173, 47897), (183, 47855),

Gene: Hexamo\_77 Start: 43911, Stop: 43360, Start Num: 64

Candidate Starts for Hexamo\_77:

(Start: 64 @43911 has 9 MA's), (Start: 72 @43887 has 33 MA's), (Start: 77 @43875 has 160 MA's), (Start: 111 @43788 has 4 MA's), (119, 43731), (135, 43629), (142, 43608), (153, 43545), (158, 43506), (169, 43452), (171, 43443), (185, 43380),

Gene: Hiro\_58 Start: 40386, Stop: 39862, Start Num: 78

Candidate Starts for Hiro\_58:

(Start: 78 @40386 has 23 MA's), (103, 40341), (107, 40323), (122, 40209), (129, 40173), (134, 40146), (135, 40125), (142, 40104), (151, 40056), (169, 39945), (171, 39936), (183, 39879),

Gene: Horex\_75 Start: 44787, Stop: 44251, Start Num: 77

Candidate Starts for Horex\_75:

(Start: 72 @44799 has 33 MA's), (Start: 77 @44787 has 160 MA's), (Start: 111 @44691 has 4 MA's), (112, 44682), (113, 44667), (119, 44634), (142, 44511), (144, 44496), (145, 44493), (152, 44451), (153, 44448), (166, 44370),

Gene: Holli\_69 Start: 43961, Stop: 43449, Start Num: 84

Candidate Starts for Holli\_69:

(Start: 84 @43961 has 180 MA's), (Start: 104 @43913 has 5 MA's), (Start: 111 @43862 has 4 MA's), (122, 43787), (126, 43763), (127, 43757), (129, 43751), (135, 43700), (142, 43679), (153, 43622), (158, 43583), (168, 43529), (177, 43481),

Gene: Homines\_63 Start: 41301, Stop: 40789, Start Num: 91

Candidate Starts for Homines\_63:

(26, 41475), (37, 41442), (58, 41379), (Start: 68 @41358 has 2 MA's), (Start: 91 @41301 has 205 MA's), (Start: 104 @41259 has 5 MA's), (Start: 111 @41208 has 4 MA's), (112, 41199), (119, 41151), (142, 41028), (149, 40986), (183, 40800),

Gene: Hookmount\_73 Start: 44647, Stop: 44138, Start Num: 84

Candidate Starts for Hookmount\_73:

(Start: 84 @44647 has 180 MA's), (107, 44590), (Start: 111 @44551 has 4 MA's), (112, 44542), (121, 44479), (122, 44476), (127, 44446), (130, 44428), (135, 44389), (142, 44368), (158, 44272), (169, 44215), (177, 44170),

Gene: Hoot\_73 Start: 42029, Stop: 41514, Start Num: 77

Candidate Starts for Hoot\_73:

(Start: 72 @42041 has 33 MA's), (Start: 77 @42029 has 160 MA's), (Start: 111 @41942 has 4 MA's), (112, 41933), (119, 41885), (135, 41783), (142, 41762), (146, 41741), (153, 41699), (158, 41660),

Gene: Hope4ever\_76 Start: 46572, Stop: 46060, Start Num: 91

Candidate Starts for Hope4ever\_76:

(26, 46746), (37, 46713), (Start: 68 @46629 has 2 MA's), (Start: 91 @46572 has 205 MA's), (Start: 104 @46530 has 5 MA's), (Start: 111 @46479 has 4 MA's), (112, 46470), (119, 46422), (135, 46320), (142, 46299), (149, 46257), (173, 46113), (183, 46071),

Gene: HortumSL17\_78 Start: 44781, Stop: 44233, Start Num: 72

Candidate Starts for HortumSL17\_78:

(Start: 72 @44781 has 33 MA's), (Start: 77 @44769 has 160 MA's), (Start: 111 @44673 has 4 MA's), (112, 44664), (113, 44649), (119, 44616), (142, 44493), (144, 44478), (145, 44475), (152, 44433), (153, 44430), (166, 44352), (178, 44283),

Gene: Houdini22\_69 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for Houdini22\_69:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833), (158, 43794), (177, 43692),

Gene: HuhtaEnerson15\_67 Start: 43392, Stop: 42862, Start Num: 84

Candidate Starts for HuhtaEnerson15\_67:

(Start: 84 @43392 has 180 MA's), (133, 43140), (134, 43137), (135, 43116), (142, 43095), (170, 42936), (176, 42897),

Gene: HyRo\_222 Start: 131397, Stop: 131909, Start Num: 91

Candidate Starts for HyRo\_222:

(Start: 68 @131340 has 2 MA's), (Start: 91 @131397 has 205 MA's), (Start: 104 @131439 has 5 MA's), (Start: 111 @131490 has 4 MA's), (112, 131499), (119, 131547), (135, 131649), (142, 131670), (149, 131712), (183, 131898),

Gene: ICleared\_69 Start: 44239, Stop: 43727, Start Num: 84

Candidate Starts for ICleared\_69:

(Start: 84 @44239 has 180 MA's), (Start: 104 @44191 has 5 MA's), (Start: 111 @44140 has 4 MA's), (122, 44065), (126, 44041), (127, 44035), (129, 44029), (135, 43978), (142, 43957), (158, 43861), (177, 43759),

Gene: ILeeKay\_73 Start: 44882, Stop: 44370, Start Num: 91

Candidate Starts for ILeeKay\_73:

(58, 44960), (Start: 68 @44939 has 2 MA's), (Start: 91 @44882 has 205 MA's), (Start: 104 @44840 has 5 MA's), (Start: 111 @44789 has 4 MA's), (112, 44780), (119, 44732), (126, 44690), (142, 44609), (149, 44567), (183, 44381),

Gene: IMpilo\_38 Start: 30984, Stop: 30448, Start Num: 79

Candidate Starts for IMpilo\_38:

(6, 31287), (55, 31044), (Start: 79 @30984 has 14 MA's), (Start: 104 @30918 has 5 MA's), (Start: 111 @30867 has 4 MA's), (112, 30858), (119, 30810), (126, 30768), (142, 30687), (149, 30645), (183, 30459),

Gene: Iceman\_69 Start: 44460, Stop: 43948, Start Num: 84

Candidate Starts for Iceman\_69:

(Start: 84 @44460 has 180 MA's), (Start: 104 @44412 has 5 MA's), (Start: 111 @44361 has 4 MA's), (122, 44286), (126, 44262), (127, 44256), (129, 44250), (135, 44199), (142, 44178), (153, 44121), (158, 44082), (177, 43980),

Gene: Ichabod\_78 Start: 47129, Stop: 46617, Start Num: 91

Candidate Starts for Ichabod\_78:

(26, 47303), (37, 47270), (Start: 68 @47186 has 2 MA's), (Start: 91 @47129 has 205 MA's), (Start: 104 @47087 has 5 MA's), (Start: 111 @47036 has 4 MA's), (112, 47027), (119, 46979), (142, 46856), (149, 46814), (183, 46628),

Gene: Idleandcovert\_74 Start: 44692, Stop: 44180, Start Num: 84

Candidate Starts for Idleandcovert\_74:

(Start: 78 @44701 has 23 MA's), (Start: 84 @44692 has 180 MA's), (Start: 86 @44686 has 6 MA's), (Start: 111 @44593 has 4 MA's), (122, 44518), (126, 44494), (127, 44488), (130, 44470), (135, 44431), (140, 44416), (142, 44410), (158, 44314), (169, 44257), (177, 44212),

Gene: IgnatiusPatJac\_75 Start: 45747, Stop: 45235, Start Num: 91

Candidate Starts for IgnatiusPatJac\_75:

(26, 45921), (37, 45888), (Start: 68 @45804 has 2 MA's), (Start: 91 @45747 has 205 MA's), (Start: 104 @45705 has 5 MA's), (Start: 111 @45654 has 4 MA's), (112, 45645), (119, 45597), (142, 45474), (149, 45432), (183, 45246),

Gene: Indra\_81 Start: 44342, Stop: 43827, Start Num: 77

Candidate Starts for Indra\_81:

(Start: 64 @44378 has 9 MA's), (Start: 72 @44354 has 33 MA's), (Start: 77 @44342 has 160 MA's), (Start: 100 @44318 has 1 MA's), (Start: 111 @44255 has 4 MA's), (119, 44198), (135, 44096), (142, 44075), (153, 44012), (158, 43973), (169, 43919), (171, 43910), (185, 43847),

Gene: Insomnia\_77 Start: 45065, Stop: 44514, Start Num: 77

Candidate Starts for Insomnia\_77:

(Start: 60 @45107 has 4 MA's), (Start: 72 @45077 has 33 MA's), (Start: 77 @45065 has 160 MA's), (90, 45038), (Start: 111 @44948 has 4 MA's), (113, 44924), (119, 44891), (135, 44789), (142, 44765), (144, 44750), (149, 44723), (153, 44702), (158, 44663), (178, 44564), (186, 44531),

Gene: Inyanga\_67 Start: 45075, Stop: 44563, Start Num: 91

Candidate Starts for Inyanga\_67:

(26, 45249), (37, 45216), (Start: 68 @45132 has 2 MA's), (Start: 91 @45075 has 205 MA's), (Start: 104 @45033 has 5 MA's), (Start: 111 @44982 has 4 MA's), (112, 44973), (119, 44925), (142, 44802), (149, 44760), (183, 44574),

Gene: Iqorha\_67 Start: 45074, Stop: 44562, Start Num: 91

Candidate Starts for Iqorha\_67:

(26, 45248), (37, 45215), (Start: 68 @45131 has 2 MA's), (Start: 91 @45074 has 205 MA's), (Start: 104 @45032 has 5 MA's), (Start: 111 @44981 has 4 MA's), (112, 44972), (119, 44924), (142, 44801), (149, 44759), (183, 44573),

Gene: Iracema64\_70 Start: 44435, Stop: 43923, Start Num: 84

Candidate Starts for Iracema64\_70:

(Start: 84 @44435 has 180 MA's), (Start: 104 @44387 has 5 MA's), (Start: 111 @44336 has 4 MA's), (122, 44261), (126, 44237), (127, 44231), (129, 44225), (135, 44174), (142, 44153), (153, 44096), (158, 44057), (177, 43955),

Gene: IronMan\_73 Start: 46531, Stop: 45974, Start Num: 72

Candidate Starts for IronMan\_73:

(Start: 72 @46531 has 33 MA's), (Start: 77 @46519 has 160 MA's), (Start: 111 @46402 has 4 MA's), (119, 46345), (135, 46243), (142, 46219), (158, 46117), (178, 46018),

Gene: Isca\_71 Start: 44174, Stop: 43662, Start Num: 84

Candidate Starts for Isca\_71:

(Start: 78 @44183 has 23 MA's), (Start: 84 @44174 has 180 MA's), (Start: 111 @44075 has 4 MA's), (122, 44000), (127, 43970), (130, 43952), (135, 43913), (142, 43892), (158, 43796), (169, 43739), (177, 43694),

Gene: Isiphiwo\_75 Start: 44195, Stop: 43680, Start Num: 77

Candidate Starts for Isiphiwo\_75:

(Start: 72 @44207 has 33 MA's), (Start: 77 @44195 has 160 MA's), (Start: 111 @44108 has 4 MA's), (112, 44099), (119, 44051), (135, 43949), (142, 43928), (146, 43907), (153, 43865), (158, 43826),

Gene: Iwokeuplikedis\_77 Start: 45892, Stop: 45314, Start Num: 77

Candidate Starts for Iwokeuplikedis\_77:

(Start: 77 @45892 has 160 MA's), (Start: 111 @45775 has 4 MA's), (112, 45766), (118, 45724), (119, 45718), (125, 45691), (135, 45616), (147, 45568), (149, 45550), (153, 45529), (158, 45490), (161, 45466), (171, 45427), (186, 45331),

Gene: JC27\_76 Start: 46157, Stop: 45645, Start Num: 91

Candidate Starts for JC27\_76:

(26, 46331), (37, 46298), (Start: 68 @46214 has 2 MA's), (Start: 91 @46157 has 205 MA's), (Start: 104 @46115 has 5 MA's), (Start: 111 @46064 has 4 MA's), (112, 46055), (119, 46007), (142, 45884), (149, 45842), (183, 45656),

Gene: JHC117\_74 Start: 45003, Stop: 44494, Start Num: 93

Candidate Starts for JHC117\_74:

(Start: 93 @45003 has 78 MA's), (Start: 111 @44916 has 4 MA's), (112, 44907), (122, 44841), (129, 44805), (135, 44757), (142, 44736), (152, 44676), (153, 44673), (154, 44670), (158, 44634), (169, 44571), (177, 44526),

Gene: JSwag\_84 Start: 45440, Stop: 44919, Start Num: 77

Candidate Starts for JSwag\_84:

(Start: 77 @45440 has 160 MA's), (Start: 104 @45395 has 5 MA's), (Start: 111 @45344 has 4 MA's), (112, 45335), (119, 45287), (135, 45185), (142, 45164), (163, 45026), (168, 45008), (171, 44996), (178, 44960),

Gene: Jaan\_74 Start: 46696, Stop: 46139, Start Num: 72

Candidate Starts for Jaan\_74:

(Start: 72 @46696 has 33 MA's), (Start: 77 @46684 has 160 MA's), (90, 46657), (Start: 100 @46630 has 1 MA's), (Start: 111 @46567 has 4 MA's), (112, 46558), (113, 46543), (119, 46510), (135, 46408), (142, 46384), (153, 46321), (158, 46282), (178, 46183),

Gene: Jabiru\_71 Start: 43967, Stop: 43437, Start Num: 84

Candidate Starts for Jabiru\_71:

(36, 44099), (43, 44066), (Start: 84 @43967 has 180 MA's), (96, 43937), (124, 43775), (126, 43751), (133, 43715), (135, 43691), (142, 43670), (168, 43517), (170, 43511), (176, 43472),

Gene: Jabith\_77 Start: 45082, Stop: 44531, Start Num: 77

Candidate Starts for Jabith\_77:

(Start: 60 @45124 has 4 MA's), (Start: 72 @45094 has 33 MA's), (Start: 77 @45082 has 160 MA's), (90, 45055), (Start: 111 @44965 has 4 MA's), (113, 44941), (119, 44908), (135, 44806), (142, 44782), (144, 44767), (149, 44740), (153, 44719), (158, 44680), (178, 44581), (186, 44548),

Gene: JackSparrow\_76 Start: 45982, Stop: 45470, Start Num: 91

Candidate Starts for JackSparrow\_76:

(26, 46156), (37, 46123), (Start: 68 @46039 has 2 MA's), (Start: 91 @45982 has 205 MA's), (Start: 104 @45940 has 5 MA's), (Start: 111 @45889 has 4 MA's), (112, 45880), (119, 45832), (142, 45709), (149, 45667), (183, 45481),

Gene: Jant\_40 Start: 31355, Stop: 30819, Start Num: 79

Candidate Starts for Jant\_40:

(Start: 79 @31355 has 14 MA's), (Start: 104 @31289 has 5 MA's), (Start: 111 @31238 has 4 MA's), (112, 31229), (119, 31181), (126, 31139), (142, 31058), (149, 31016), (183, 30830),

Gene: Jasper\_74 Start: 44734, Stop: 44222, Start Num: 91

Candidate Starts for Jasper\_74:

(18, 44971), (26, 44908), (33, 44890), (37, 44875), (58, 44812), (Start: 68 @44791 has 2 MA's), (Start: 91 @44734 has 205 MA's), (Start: 104 @44692 has 5 MA's), (Start: 111 @44641 has 4 MA's), (112, 44632), (119, 44584), (142, 44461), (149, 44419), (183, 44233),

Gene: Jaykayelowell\_67 Start: 44164, Stop: 43652, Start Num: 84

Candidate Starts for Jaykayelowell\_67:



(Start: 84 @44164 has 180 MA's), (Start: 104 @44116 has 5 MA's), (Start: 111 @44065 has 4 MA's), (122, 43990), (126, 43966), (127, 43960), (129, 43954), (135, 43903), (142, 43882), (153, 43825), (158, 43786), (177, 43684),

Gene: Jeeves\_79 Start: 44610, Stop: 44083, Start Num: 77

Candidate Starts for Jeeves\_79:

(Start: 77 @44610 has 160 MA's), (Start: 111 @44508 has 4 MA's), (113, 44484), (114, 44475), (119, 44451), (122, 44433), (135, 44349), (136, 44346), (142, 44328), (147, 44304), (164, 44190), (174, 44145), (178, 44127),

Gene: JenCasNa\_80 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for JenCasNa\_80:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: JeppNRM\_79 Start: 44817, Stop: 44308, Start Num: 93

Candidate Starts for JeppNRM\_79:

(Start: 93 @44817 has 78 MA's), (Start: 104 @44781 has 5 MA's), (Start: 111 @44730 has 4 MA's), (112, 44721), (122, 44655), (129, 44619), (135, 44571), (142, 44550), (152, 44490), (153, 44487), (158, 44448), (169, 44385), (177, 44340),

Gene: Jerm\_77 Start: 45848, Stop: 45261, Start Num: 72

Candidate Starts for Jerm\_77:

(Start: 60 @45878 has 4 MA's), (66, 45866), (Start: 72 @45848 has 33 MA's), (Start: 77 @45836 has 160 MA's), (Start: 111 @45719 has 4 MA's), (112, 45710), (119, 45662), (135, 45560), (153, 45473), (158, 45434), (171, 45371),

Gene: Jerm2\_77 Start: 48426, Stop: 47914, Start Num: 91

Candidate Starts for Jerm2\_77:

(Start: 68 @48483 has 2 MA's), (Start: 91 @48426 has 205 MA's), (Start: 104 @48384 has 5 MA's), (Start: 111 @48333 has 4 MA's), (112, 48324), (119, 48276), (135, 48174), (142, 48153), (149, 48111), (173, 47967), (183, 47925),

Gene: Jester\_57 Start: 39843, Stop: 39319, Start Num: 78

Candidate Starts for Jester\_57:

(Start: 78 @39843 has 23 MA's), (107, 39780), (122, 39666), (129, 39630), (134, 39603), (135, 39582), (142, 39561), (144, 39546), (152, 39501), (169, 39402), (171, 39393), (183, 39336),

Gene: JetBlade\_70 Start: 44198, Stop: 43686, Start Num: 84

Candidate Starts for JetBlade\_70:

(Start: 84 @44198 has 180 MA's), (Start: 104 @44150 has 5 MA's), (Start: 111 @44099 has 4 MA's), (122, 44024), (126, 44000), (129, 43988), (135, 43937), (142, 43916), (153, 43859), (177, 43718),

Gene: Jiawan\_74 Start: 44803, Stop: 44267, Start Num: 77

Candidate Starts for Jiawan\_74:

(Start: 72 @44815 has 33 MA's), (Start: 77 @44803 has 160 MA's), (Start: 111 @44707 has 4 MA's), (112, 44698), (113, 44683), (119, 44650), (142, 44527), (144, 44512), (145, 44509), (152, 44467), (153, 44464), (166, 44386),

Gene: Jobu08\_75 Start: 44833, Stop: 44324, Start Num: 93

Candidate Starts for Jobu08\_75:

(Start: 93 @44833 has 78 MA's), (Start: 104 @44797 has 5 MA's), (Start: 111 @44746 has 4 MA's), (112, 44737), (122, 44671), (129, 44635), (135, 44587), (142, 44566), (152, 44506), (153, 44503), (158, 44464), (169, 44401), (177, 44356),

Gene: JoongJeon\_69 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for JoongJeon\_69:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: Jordennis\_76 Start: 44422, Stop: 43895, Start Num: 72

Candidate Starts for Jordennis\_76:

(Start: 72 @44422 has 33 MA's), (Start: 77 @44410 has 160 MA's), (Start: 111 @44323 has 4 MA's), (112, 44314), (119, 44266), (135, 44164), (142, 44143), (146, 44122), (153, 44080), (158, 44041),

Gene: Jorgensen\_82 Start: 48016, Stop: 47504, Start Num: 91

Candidate Starts for Jorgensen\_82:

(26, 48190), (37, 48157), (Start: 68 @48073 has 2 MA's), (Start: 91 @48016 has 205 MA's), (Start: 104 @47974 has 5 MA's), (Start: 111 @47923 has 4 MA's), (112, 47914), (119, 47866), (142, 47743), (149, 47701), (183, 47515),

Gene: Joselito\_77 Start: 45102, Stop: 44551, Start Num: 77

Candidate Starts for Joselito\_77:

(Start: 60 @45144 has 4 MA's), (Start: 72 @45114 has 33 MA's), (Start: 77 @45102 has 160 MA's), (90, 45075), (Start: 111 @44985 has 4 MA's), (113, 44961), (119, 44928), (135, 44826), (142, 44802), (144, 44787), (149, 44760), (153, 44739), (158, 44700), (178, 44601), (186, 44568),

Gene: JoshKayV\_76 Start: 45870, Stop: 45292, Start Num: 77

Candidate Starts for JoshKayV\_76:

(Start: 77 @45870 has 160 MA's), (Start: 111 @45753 has 4 MA's), (112, 45744), (119, 45696), (135, 45594), (158, 45468), (171, 45405),

Gene: Journey13\_65 Start: 42021, Stop: 41458, Start Num: 72

Candidate Starts for Journey13\_65:

(Start: 72 @42021 has 33 MA's), (Start: 77 @42009 has 160 MA's), (90, 41982), (102, 41949), (Start: 104 @41943 has 5 MA's), (113, 41868), (135, 41733), (142, 41709), (148, 41682), (149, 41667), (153, 41646), (158, 41607), (169, 41553), (171, 41544),

Gene: Jovo\_70 Start: 44074, Stop: 43544, Start Num: 84

Candidate Starts for Jovo\_70:

(80, 44080), (Start: 84 @44074 has 180 MA's), (133, 43822), (134, 43819), (135, 43798), (142, 43777), (168, 43624), (170, 43618), (176, 43579),

Gene: Jsquared\_79 Start: 44953, Stop: 44402, Start Num: 77

Candidate Starts for Jsquared\_79:

(Start: 62 @44992 has 1 MA's), (Start: 72 @44965 has 33 MA's), (Start: 77 @44953 has 160 MA's), (90, 44926), (112, 44827), (113, 44812), (119, 44779), (135, 44677), (137, 44671), (142, 44653), (148, 44626), (149, 44611), (153, 44590), (158, 44551), (171, 44488),

Gene: Juice456\_41 Start: 32453, Stop: 31941, Start Num: 91

Candidate Starts for Juice456\_41:

(41, 32564), (Start: 91 @32453 has 205 MA's), (Start: 104 @32411 has 5 MA's), (Start: 111 @32360 has 4 MA's), (112, 32351), (119, 32303), (142, 32180), (149, 32138), (183, 31952),

Gene: JuliaChild\_76 Start: 46975, Stop: 46463, Start Num: 91

Candidate Starts for JuliaChild\_76:

(26, 47149), (37, 47116), (Start: 68 @47032 has 2 MA's), (Start: 91 @46975 has 205 MA's), (Start: 104 @46933 has 5 MA's), (Start: 111 @46882 has 4 MA's), (112, 46873), (119, 46825), (135, 46723), (142, 46702), (149, 46660), (173, 46516), (183, 46474),

Gene: JulietS\_42 Start: 13163, Stop: 13675, Start Num: 91

Candidate Starts for JulietS\_42:

(22, 12974), (Start: 86 @13151 has 6 MA's), (Start: 91 @13163 has 205 MA's), (Start: 104 @13205 has 5 MA's), (Start: 111 @13256 has 4 MA's), (112, 13265), (119, 13313), (126, 13355), (142, 13436), (149, 13478), (183, 13664),

Gene: KADY\_76 Start: 45033, Stop: 44524, Start Num: 93

Candidate Starts for KADY\_76:

(Start: 75 @45069 has 3 MA's), (Start: 93 @45033 has 78 MA's), (Start: 104 @44997 has 5 MA's), (Start: 111 @44946 has 4 MA's), (122, 44871), (129, 44835), (135, 44787), (142, 44766), (152, 44706), (153, 44703), (154, 44700), (158, 44664), (169, 44601), (177, 44556),

Gene: KBG\_73 Start: 47323, Stop: 46787, Start Num: 91

Candidate Starts for KBG\_73:

(26, 47497), (37, 47464), (Start: 68 @47380 has 2 MA's), (Start: 91 @47323 has 205 MA's), (Start: 104 @47281 has 5 MA's), (Start: 111 @47230 has 4 MA's), (112, 47221), (119, 47173), (142, 47050), (149, 47008), (160, 46930),

Gene: KFPoly\_69 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for KFPoly\_69:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: KSSJEB\_72 Start: 45207, Stop: 44695, Start Num: 91

Candidate Starts for KSSJEB\_72:

(26, 45381), (33, 45363), (37, 45348), (Start: 68 @45264 has 2 MA's), (Start: 91 @45207 has 205 MA's), (Start: 104 @45165 has 5 MA's), (Start: 111 @45114 has 4 MA's), (112, 45105), (119, 45057), (142, 44934), (149, 44892), (183, 44706),

Gene: Kachowdy\_71 Start: 44652, Stop: 44146, Start Num: 86

Candidate Starts for Kachowdy\_71:

(Start: 84 @44658 has 180 MA's), (Start: 86 @44652 has 6 MA's), (Start: 111 @44559 has 4 MA's), (122, 44484), (123, 44481), (126, 44460), (130, 44436), (135, 44397), (140, 44382), (142, 44376), (158, 44280), (169, 44223), (177, 44178),

Gene: Kalah2\_189 Start: 98070, Stop: 97558, Start Num: 91

Candidate Starts for Kalah2\_189:

(8, 98361), (28, 98232), (49, 98175), (51, 98166), (81, 98094), (Start: 89 @98073 has 2 MA's), (Start: 91 @98070 has 205 MA's), (Start: 104 @98028 has 5 MA's), (Start: 111 @97977 has 4 MA's), (112, 97968), (119, 97920), (126, 97878), (142, 97797), (149, 97755), (183, 97569),

Gene: Kalnoky\_79 Start: 44813, Stop: 44304, Start Num: 93

Candidate Starts for Kalnoky\_79:

(Start: 93 @44813 has 78 MA's), (Start: 104 @44777 has 5 MA's), (Start: 111 @44726 has 4 MA's), (112, 44717), (122, 44651), (129, 44615), (135, 44567), (142, 44546), (152, 44486), (153, 44483),

(158, 44444), (169, 44381), (177, 44336),

Gene: Kalpine\_75 Start: 45776, Stop: 45198, Start Num: 77

Candidate Starts for Kalpine\_75:

(Start: 60 @45818 has 4 MA's), (Start: 72 @45788 has 33 MA's), (Start: 77 @45776 has 160 MA's), (Start: 111 @45659 has 4 MA's), (112, 45650), (115, 45623), (119, 45602), (132, 45533), (135, 45500), (138, 45491), (150, 45431), (153, 45413), (158, 45374),

Gene: Kampy\_69 Start: 44173, Stop: 43661, Start Num: 84

Candidate Starts for Kampy\_69:

(Start: 84 @44173 has 180 MA's), (Start: 104 @44125 has 5 MA's), (Start: 111 @44074 has 4 MA's), (122, 43999), (126, 43975), (129, 43963), (135, 43912), (142, 43891), (153, 43834), (168, 43741), (177, 43693),

Gene: Kanely\_77 Start: 47063, Stop: 46551, Start Num: 91

Candidate Starts for Kanely\_77:

(26, 47237), (37, 47204), (Start: 68 @47120 has 2 MA's), (Start: 91 @47063 has 205 MA's), (Start: 104 @47021 has 5 MA's), (Start: 111 @46970 has 4 MA's), (112, 46961), (119, 46913), (135, 46811), (142, 46790), (149, 46748), (173, 46604), (183, 46562),

Gene: Katalie136\_69 Start: 44352, Stop: 43852, Start Num: 94

Candidate Starts for Katalie136\_69:

(Start: 94 @44352 has 20 MA's), (Start: 111 @44265 has 4 MA's), (113, 44241), (127, 44160), (129, 44154), (130, 44142), (135, 44103), (140, 44088), (142, 44082), (158, 43986), (171, 43920), (177, 43884),

Gene: KatherineG\_84 Start: 45752, Stop: 45231, Start Num: 77

Candidate Starts for KatherineG\_84:

(Start: 77 @45752 has 160 MA's), (Start: 104 @45707 has 5 MA's), (Start: 111 @45656 has 4 MA's), (112, 45647), (119, 45599), (135, 45497), (142, 45476), (163, 45338), (168, 45320), (171, 45308), (178, 45272),

Gene: Kazan\_79 Start: 44184, Stop: 43669, Start Num: 77

Candidate Starts for Kazan\_79:

(Start: 72 @44196 has 33 MA's), (Start: 77 @44184 has 160 MA's), (Start: 111 @44097 has 4 MA's), (112, 44088), (119, 44040), (135, 43938), (142, 43917), (146, 43896), (153, 43854), (158, 43815),

Gene: Kenuha5\_35 Start: 30267, Stop: 29755, Start Num: 91

Candidate Starts for Kenuha5\_35:

(66, 30321), (Start: 91 @30267 has 205 MA's), (Start: 104 @30225 has 5 MA's), (Start: 111 @30174 has 4 MA's), (112, 30165), (119, 30117), (126, 30075), (142, 29994), (149, 29952), (183, 29766),

Gene: Kerberos\_78 Start: 45877, Stop: 45332, Start Num: 77

Candidate Starts for Kerberos\_78:

(Start: 72 @45889 has 33 MA's), (Start: 77 @45877 has 160 MA's), (Start: 111 @45760 has 4 MA's), (112, 45751), (113, 45736), (119, 45703), (135, 45601), (137, 45595), (142, 45577), (148, 45550), (149, 45535), (150, 45532), (152, 45517), (158, 45475), (169, 45421), (174, 45394), (178, 45376),

Gene: Keziacharles14\_74 Start: 45393, Stop: 44857, Start Num: 77

Candidate Starts for Keziacharles14\_74:

(Start: 77 @45393 has 160 MA's), (107, 45336), (Start: 111 @45297 has 4 MA's), (113, 45273), (119, 45240), (142, 45117), (145, 45099), (152, 45057), (153, 45054), (166, 44976), (169, 44955),

Gene: Killigrew\_72 Start: 45573, Stop: 45061, Start Num: 91

Candidate Starts for Killigrew\_72:

(26, 45747), (37, 45714), (Start: 68 @45630 has 2 MA's), (Start: 91 @45573 has 205 MA's), (Start: 104 @45531 has 5 MA's), (Start: 111 @45480 has 4 MA's), (112, 45471), (119, 45423), (142, 45300), (149, 45258), (183, 45072),

Gene: Kimona\_69 Start: 43171, Stop: 42665, Start Num: 83

Candidate Starts for Kimona\_69:

(Start: 83 @43171 has 3 MA's), (112, 43066), (119, 43018), (122, 43000), (123, 42997), (129, 42964), (135, 42916), (142, 42895), (147, 42871), (153, 42838), (162, 42772), (169, 42742), (177, 42697),

Gene: KingCyrus\_75 Start: 46852, Stop: 46277, Start Num: 77

Candidate Starts for KingCyrus\_75:

(Start: 34 @46972 has 1 MA's), (Start: 60 @46894 has 4 MA's), (66, 46882), (Start: 72 @46864 has 33 MA's), (Start: 77 @46852 has 160 MA's), (Start: 111 @46735 has 4 MA's), (112, 46726), (119, 46678), (135, 46576), (153, 46489), (158, 46450), (164, 46414), (171, 46387), (178, 46324),

Gene: KingJulian\_38 Start: 31351, Stop: 30839, Start Num: 91

Candidate Starts for KingJulian\_38:

(41, 31462), (Start: 91 @31351 has 205 MA's), (Start: 104 @31309 has 5 MA's), (Start: 111 @31258 has 4 MA's), (112, 31249), (119, 31201), (142, 31078), (149, 31036), (183, 30850),

Gene: Kingmustik0402\_70 Start: 44160, Stop: 43648, Start Num: 84

Candidate Starts for Kingmustik0402\_70:

(Start: 84 @44160 has 180 MA's), (Start: 104 @44112 has 5 MA's), (Start: 111 @44061 has 4 MA's), (122, 43986), (126, 43962), (127, 43956), (129, 43950), (135, 43899), (142, 43878), (153, 43821), (158, 43782), (168, 43728), (177, 43680),

Gene: Kinmap\_79 Start: 44103, Stop: 43600, Start Num: 93

Candidate Starts for Kinmap\_79:

(Start: 77 @44121 has 160 MA's), (Start: 93 @44103 has 78 MA's), (Start: 111 @44022 has 4 MA's), (112, 44013), (119, 43965), (122, 43947), (131, 43899), (142, 43842), (144, 43827), (150, 43797), (153, 43779), (174, 43656), (178, 43638),

Gene: Kipper29\_78 Start: 44197, Stop: 43682, Start Num: 77

Candidate Starts for Kipper29\_78:

(Start: 72 @44209 has 33 MA's), (Start: 77 @44197 has 160 MA's), (Start: 111 @44110 has 4 MA's), (112, 44101), (119, 44053), (135, 43951), (142, 43930), (146, 43909), (153, 43867), (158, 43828),

Gene: KittenMittens\_67 Start: 43144, Stop: 42638, Start Num: 84

Candidate Starts for KittenMittens\_67:

(Start: 57 @43207 has 1 MA's), (65, 43192), (Start: 84 @43144 has 180 MA's), (Start: 85 @43141 has 5 MA's), (Start: 111 @43048 has 4 MA's), (119, 42991), (122, 42973), (126, 42949), (135, 42889), (142, 42868), (165, 42736), (177, 42670), (183, 42649),

Gene: Koan\_65 Start: 44123, Stop: 43659, Start Num: 104

Candidate Starts for Koan\_65:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: Koguma\_43 Start: 13506, Stop: 14018, Start Num: 91

Candidate Starts for Koguma\_43:

(22, 13317), (Start: 86 @13494 has 6 MA's), (Start: 91 @13506 has 205 MA's), (Start: 104 @13548 has 5 MA's), (Start: 111 @13599 has 4 MA's), (112, 13608), (119, 13656), (126, 13698), (142, 13779), (149, 13821), (183, 14007),

Gene: Koko\_79 Start: 44730, Stop: 44215, Start Num: 77

Candidate Starts for Koko\_79:

(Start: 64 @44766 has 9 MA's), (Start: 72 @44742 has 33 MA's), (Start: 77 @44730 has 160 MA's), (Start: 111 @44643 has 4 MA's), (119, 44586), (135, 44484), (142, 44463), (153, 44400), (158, 44361), (169, 44307), (171, 44298), (185, 44235),

Gene: Koreni\_69 Start: 43852, Stop: 43340, Start Num: 84

Candidate Starts for Koreni\_69:

(Start: 84 @43852 has 180 MA's), (Start: 104 @43804 has 5 MA's), (Start: 111 @43753 has 4 MA's), (122, 43678), (126, 43654), (127, 43648), (129, 43642), (135, 43591), (142, 43570), (153, 43513), (158, 43474), (177, 43372),

Gene: Kratak\_69 Start: 44205, Stop: 43693, Start Num: 84

Candidate Starts for Kratak\_69:

(Start: 84 @44205 has 180 MA's), (Start: 104 @44157 has 5 MA's), (Start: 111 @44106 has 4 MA's), (122, 44031), (126, 44007), (127, 44001), (129, 43995), (135, 43944), (142, 43923), (153, 43866), (158, 43827), (177, 43725),

Gene: Kremtemulon\_69 Start: 44304, Stop: 43792, Start Num: 84

Candidate Starts for Kremtemulon\_69:

(Start: 84 @44304 has 180 MA's), (Start: 104 @44256 has 5 MA's), (Start: 111 @44205 has 4 MA's), (122, 44130), (126, 44106), (129, 44094), (135, 44043), (142, 44022), (158, 43926), (177, 43824),

Gene: Krishelle\_58 Start: 40495, Stop: 39971, Start Num: 78

Candidate Starts for Krishelle\_58:

(Start: 78 @40495 has 23 MA's), (103, 40450), (107, 40432), (122, 40318), (129, 40282), (134, 40255), (135, 40234), (142, 40213), (144, 40198), (150, 40168), (151, 40165), (153, 40150), (169, 40054), (171, 40045), (183, 39988),

Gene: KristaRAM\_40 Start: 32001, Stop: 31465, Start Num: 79

Candidate Starts for KristaRAM\_40:

(Start: 79 @32001 has 14 MA's), (Start: 104 @31935 has 5 MA's), (Start: 111 @31884 has 4 MA's), (112, 31875), (119, 31827), (126, 31785), (142, 31704), (149, 31662), (183, 31476),

Gene: Kristoff\_69 Start: 44449, Stop: 43943, Start Num: 85

Candidate Starts for Kristoff\_69:

(Start: 57 @44515 has 1 MA's), (65, 44500), (Start: 84 @44452 has 180 MA's), (Start: 85 @44449 has 5 MA's), (Start: 111 @44353 has 4 MA's), (113, 44329), (119, 44296), (122, 44278), (126, 44254), (135, 44194), (142, 44173), (153, 44116), (158, 44077), (165, 44041), (177, 43975), (183, 43954),

Gene: Kugel\_77 Start: 47215, Stop: 46703, Start Num: 91

Candidate Starts for Kugel\_77:

(26, 47389), (37, 47356), (Start: 68 @47272 has 2 MA's), (Start: 91 @47215 has 205 MA's), (Start: 104 @47173 has 5 MA's), (Start: 111 @47122 has 4 MA's), (112, 47113), (119, 47065), (126, 47023), (142, 46942), (149, 46900), (183, 46714),

Gene: KyMonks1A\_81 Start: 47684, Stop: 47172, Start Num: 91

Candidate Starts for KyMonks1A\_81:

(26, 47858), (37, 47825), (Start: 68 @47741 has 2 MA's), (Start: 91 @47684 has 205 MA's), (Start: 104 @47642 has 5 MA's), (Start: 111 @47591 has 4 MA's), (112, 47582), (119, 47534), (135, 47432), (142, 47411), (149, 47369), (173, 47225), (183, 47183),

Gene: Kyee\_70 Start: 44166, Stop: 43654, Start Num: 84

Candidate Starts for Kyee\_70:

(Start: 84 @44166 has 180 MA's), (Start: 104 @44118 has 5 MA's), (Start: 111 @44067 has 4 MA's), (122, 43992), (126, 43968), (127, 43962), (129, 43956), (135, 43905), (142, 43884), (153, 43827), (158, 43788), (177, 43686),

Gene: Kykar\_75 Start: 46261, Stop: 45749, Start Num: 91

Candidate Starts for Kykar\_75:

(31, 46420), (Start: 68 @46318 has 2 MA's), (Start: 91 @46261 has 205 MA's), (Start: 104 @46219 has 5 MA's), (Start: 111 @46168 has 4 MA's), (112, 46159), (119, 46111), (142, 45988), (149, 45946), (183, 45760),

Gene: L5\_71 Start: 44882, Stop: 44331, Start Num: 77

Candidate Starts for L5\_71:

(Start: 72 @44894 has 33 MA's), (Start: 77 @44882 has 160 MA's), (90, 44855), (112, 44756), (113, 44741), (119, 44708), (135, 44606), (137, 44600), (142, 44582), (148, 44555), (149, 44540), (153, 44519), (158, 44480), (171, 44417),

Gene: LBerry\_80 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for LBerry\_80:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: LHTSCC\_72 Start: 44607, Stop: 44095, Start Num: 84

Candidate Starts for LHTSCC\_72:

(Start: 84 @44607 has 180 MA's), (Start: 104 @44559 has 5 MA's), (Start: 111 @44508 has 4 MA's), (122, 44433), (126, 44409), (129, 44397), (135, 44346), (142, 44325), (153, 44268), (177, 44127),

Gene: LRRHood\_44 Start: 15429, Stop: 15941, Start Num: 91

Candidate Starts for LRRHood\_44:

(22, 15240), (Start: 86 @15417 has 6 MA's), (Start: 91 @15429 has 205 MA's), (Start: 104 @15471 has 5 MA's), (Start: 111 @15522 has 4 MA's), (112, 15531), (119, 15579), (142, 15702), (149, 15744), (183, 15930),

Gene: LadyBird\_79 Start: 46012, Stop: 45491, Start Num: 100

Candidate Starts for LadyBird\_79:

(Start: 77 @46066 has 160 MA's), (Start: 100 @46012 has 1 MA's), (Start: 111 @45949 has 4 MA's), (112, 45940), (115, 45913), (119, 45892), (120, 45886), (122, 45874), (135, 45790), (138, 45781), (153, 45703), (158, 45664), (179, 45535),

Gene: Lambert1\_73 Start: 44648, Stop: 44139, Start Num: 84

Candidate Starts for Lambert1\_73:

(Start: 84 @44648 has 180 MA's), (107, 44591), (Start: 111 @44552 has 4 MA's), (112, 44543), (121, 44480), (122, 44477), (127, 44447), (130, 44429), (135, 44390), (142, 44369), (158, 44273), (169, 44216), (177, 44171),

Gene: Lamina13\_79 Start: 48707, Stop: 48195, Start Num: 91

Candidate Starts for Lamina13\_79:

(26, 48881), (37, 48848), (Start: 68 @48764 has 2 MA's), (Start: 91 @48707 has 205 MA's), (Start: 104 @48665 has 5 MA's), (Start: 111 @48614 has 4 MA's), (112, 48605), (119, 48557), (135, 48455), (142, 48434), (149, 48392), (173, 48248), (183, 48206),

Gene: Landor\_74 Start: 46607, Stop: 46062, Start Num: 77

Candidate Starts for Landor\_74:

(Start: 72 @46619 has 33 MA's), (Start: 77 @46607 has 160 MA's), (Start: 111 @46490 has 4 MA's), (119, 46433), (127, 46385), (135, 46331), (153, 46244), (158, 46205), (178, 46106),

Gene: LappelDuVide\_70 Start: 44170, Stop: 43658, Start Num: 84

Candidate Starts for LappelDuVide\_70:

(Start: 84 @44170 has 180 MA's), (Start: 104 @44122 has 5 MA's), (Start: 111 @44071 has 4 MA's), (122, 43996), (126, 43972), (127, 43966), (129, 43960), (135, 43909), (142, 43888), (153, 43831), (158, 43792), (168, 43738), (177, 43690),

Gene: Larenn\_72 Start: 45147, Stop: 44536, Start Num: 60

Candidate Starts for Larenn\_72:

(15, 45318), (23, 45267), (Start: 60 @45147 has 4 MA's), (Start: 72 @45117 has 33 MA's), (Start: 77 @45105 has 160 MA's), (Start: 111 @44988 has 4 MA's), (112, 44979), (115, 44952), (119, 44931), (127, 44883), (135, 44829), (153, 44742), (158, 44703), (171, 44640), (175, 44598),

Gene: LarryKay\_79 Start: 45037, Stop: 44528, Start Num: 93

Candidate Starts for LarryKay\_79:

(Start: 75 @45073 has 3 MA's), (Start: 93 @45037 has 78 MA's), (Start: 104 @45001 has 5 MA's), (Start: 111 @44950 has 4 MA's), (122, 44875), (129, 44839), (135, 44791), (142, 44770), (152, 44710), (153, 44707), (154, 44704), (158, 44668), (169, 44605), (177, 44560),

Gene: LastResort\_82 Start: 45683, Stop: 45162, Start Num: 77

Candidate Starts for LastResort\_82:

(Start: 77 @45683 has 160 MA's), (Start: 104 @45638 has 5 MA's), (Start: 111 @45587 has 4 MA's), (112, 45578), (119, 45530), (135, 45428), (142, 45407), (163, 45269), (168, 45251), (171, 45239), (178, 45203),

Gene: Lemur\_70 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Lemur\_70:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: LeoAvram\_69 Start: 44201, Stop: 43689, Start Num: 84

Candidate Starts for LeoAvram\_69:

(Start: 84 @44201 has 180 MA's), (Start: 104 @44153 has 5 MA's), (Start: 111 @44102 has 4 MA's), (122, 44027), (126, 44003), (129, 43991), (135, 43940), (142, 43919), (153, 43862), (168, 43769), (177, 43721),

Gene: Leogania\_74 Start: 45788, Stop: 45216, Start Num: 77

Candidate Starts for Leogania\_74:

(Start: 72 @45800 has 33 MA's), (Start: 77 @45788 has 160 MA's), (90, 45761), (Start: 111 @45671 has 4 MA's), (119, 45614), (125, 45587), (135, 45512), (149, 45446), (153, 45425), (158, 45386), (169, 45332), (178, 45260),

Gene: Lesedi\_72 Start: 44841, Stop: 44329, Start Num: 91

Candidate Starts for Lesedi\_72:



(26, 45015), (37, 44982), (Start: 68 @44898 has 2 MA's), (Start: 91 @44841 has 205 MA's), (Start: 104 @44799 has 5 MA's), (Start: 111 @44748 has 4 MA's), (112, 44739), (119, 44691), (135, 44589), (142, 44568), (149, 44526), (183, 44340),

Gene: Lev2\_70 Start: 43706, Stop: 43176, Start Num: 84

Candidate Starts for Lev2\_70:

(80, 43712), (Start: 84 @43706 has 180 MA's), (133, 43454), (134, 43451), (135, 43430), (142, 43409), (168, 43256), (170, 43250), (176, 43211),

Gene: Levia\_66 Start: 44337, Stop: 43867, Start Num: 104

Candidate Starts for Levia\_66:

(26, 44553), (37, 44520), (58, 44457), (Start: 68 @44436 has 2 MA's), (Start: 91 @44379 has 205 MA's), (Start: 104 @44337 has 5 MA's), (Start: 111 @44286 has 4 MA's), (112, 44277), (119, 44229), (142, 44106), (149, 44064), (183, 43878),

Gene: Leviathan\_77 Start: 45902, Stop: 45327, Start Num: 77

Candidate Starts for Leviathan\_77:

(Start: 60 @45944 has 4 MA's), (66, 45932), (Start: 72 @45914 has 33 MA's), (Start: 77 @45902 has 160 MA's), (Start: 111 @45785 has 4 MA's), (112, 45776), (119, 45728), (135, 45626), (153, 45539), (158, 45500), (171, 45437),

Gene: Licorice\_76 Start: 48364, Stop: 47852, Start Num: 91

Candidate Starts for Licorice\_76:

(26, 48538), (37, 48505), (Start: 68 @48421 has 2 MA's), (Start: 91 @48364 has 205 MA's), (Start: 104 @48322 has 5 MA's), (Start: 111 @48271 has 4 MA's), (112, 48262), (119, 48214), (142, 48091), (149, 48049), (183, 47863),

Gene: LilBib\_72 Start: 46594, Stop: 46082, Start Num: 91

Candidate Starts for LilBib\_72:

(Start: 68 @46651 has 2 MA's), (Start: 91 @46594 has 205 MA's), (Start: 104 @46552 has 5 MA's), (Start: 111 @46501 has 4 MA's), (112, 46492), (119, 46444), (142, 46321), (149, 46279), (183, 46093),

Gene: LilTurb\_76 Start: 45716, Stop: 45141, Start Num: 77

Candidate Starts for LilTurb\_76:

(Start: 60 @45758 has 4 MA's), (66, 45746), (Start: 72 @45728 has 33 MA's), (Start: 77 @45716 has 160 MA's), (Start: 111 @45599 has 4 MA's), (112, 45590), (119, 45542), (135, 45440), (153, 45353), (158, 45314), (171, 45251),

Gene: Lilith\_77 Start: 44998, Stop: 44489, Start Num: 93

Candidate Starts for Lilith\_77:

(Start: 75 @45034 has 3 MA's), (Start: 93 @44998 has 78 MA's), (Start: 104 @44962 has 5 MA's), (Start: 111 @44911 has 4 MA's), (112, 44902), (122, 44836), (129, 44800), (135, 44752), (142, 44731), (152, 44671), (153, 44668), (154, 44665), (158, 44629), (169, 44566), (177, 44521),

Gene: Lilleskat\_74 Start: 44728, Stop: 44192, Start Num: 77

Candidate Starts for Lilleskat\_74:

(Start: 72 @44740 has 33 MA's), (Start: 77 @44728 has 160 MA's), (Start: 111 @44632 has 4 MA's), (112, 44623), (113, 44608), (119, 44575), (142, 44452), (144, 44437), (145, 44434), (152, 44392), (153, 44389), (166, 44311),

Gene: Lillie\_58 Start: 40126, Stop: 39602, Start Num: 78

Candidate Starts for Lillie\_58:

(Start: 78 @40126 has 23 MA's), (103, 40081), (107, 40063), (122, 39949), (129, 39913), (134, 39886), (135, 39865), (142, 39844), (144, 39829), (150, 39799), (151, 39796), (153, 39781), (169, 39685), (171, 39676), (183, 39619),

Gene: LionsBait\_75 Start: 46541, Stop: 45960, Start Num: 77

Candidate Starts for LionsBait\_75:

(Start: 60 @46583 has 4 MA's), (Start: 62 @46580 has 1 MA's), (66, 46571), (Start: 72 @46553 has 33 MA's), (Start: 77 @46541 has 160 MA's), (Start: 111 @46424 has 4 MA's), (112, 46415), (119, 46367), (135, 46265), (150, 46196), (153, 46178), (158, 46139), (169, 46085), (171, 46076),

Gene: LittleB\_70 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for LittleB\_70:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833), (158, 43794), (177, 43692),

Gene: LittleCherry\_68 Start: 43262, Stop: 42732, Start Num: 84

Candidate Starts for LittleCherry\_68:

(Start: 84 @43262 has 180 MA's), (133, 43010), (134, 43007), (135, 42986), (142, 42965), (170, 42806), (176, 42767),

Gene: LittleE\_195 Start: 96949, Stop: 96437, Start Num: 91

Candidate Starts for LittleE\_195:

(5, 97282), (8, 97240), (28, 97111), (49, 97054), (51, 97045), (81, 96973), (Start: 89 @96952 has 2 MA's), (Start: 91 @96949 has 205 MA's), (Start: 104 @96907 has 5 MA's), (Start: 111 @96856 has 4 MA's), (112, 96847), (119, 96799), (126, 96757), (142, 96676), (149, 96634), (183, 96448),

Gene: LittleGuy\_70 Start: 44067, Stop: 43555, Start Num: 84

Candidate Starts for LittleGuy\_70:

(Start: 84 @44067 has 180 MA's), (Start: 104 @44019 has 5 MA's), (Start: 111 @43968 has 4 MA's), (122, 43893), (126, 43869), (127, 43863), (129, 43857), (135, 43806), (142, 43785), (153, 43728), (158, 43689), (168, 43635), (177, 43587),

Gene: LochMonster\_71 Start: 44407, Stop: 43895, Start Num: 84

Candidate Starts for LochMonster\_71:

(Start: 84 @44407 has 180 MA's), (Start: 104 @44359 has 5 MA's), (Start: 111 @44308 has 4 MA's), (122, 44233), (126, 44209), (127, 44203), (129, 44197), (135, 44146), (142, 44125), (153, 44068), (158, 44029), (177, 43927),

Gene: Lockley\_72 Start: 45724, Stop: 45212, Start Num: 91

Candidate Starts for Lockley\_72:

(26, 45898), (37, 45865), (Start: 68 @45781 has 2 MA's), (Start: 91 @45724 has 205 MA's), (Start: 104 @45682 has 5 MA's), (Start: 111 @45631 has 4 MA's), (112, 45622), (119, 45574), (126, 45532), (142, 45451), (149, 45409), (183, 45223),

Gene: Lokk\_69 Start: 43909, Stop: 43337, Start Num: 77

Candidate Starts for Lokk\_69:

(Start: 72 @43921 has 33 MA's), (Start: 77 @43909 has 160 MA's), (Start: 86 @43894 has 6 MA's), (90, 43882), (Start: 111 @43792 has 4 MA's), (112, 43783), (113, 43768), (119, 43735), (122, 43717), (128, 43684), (135, 43633), (149, 43567), (158, 43507), (175, 43402), (186, 43357),

Gene: LoneWolf\_78 Start: 45014, Stop: 44487, Start Num: 77

Candidate Starts for LoneWolf\_78:

(Start: 72 @45026 has 33 MA's), (Start: 77 @45014 has 160 MA's), (Start: 111 @44918 has 4 MA's), (113, 44894), (119, 44861), (122, 44843), (142, 44738), (145, 44720), (152, 44678), (153, 44675), (158, 44636), (166, 44597), (167, 44594), (169, 44576),

Gene: Looper\_83 Start: 45595, Stop: 45074, Start Num: 77

Candidate Starts for Looper\_83:

(Start: 77 @45595 has 160 MA's), (Start: 104 @45550 has 5 MA's), (Start: 111 @45499 has 4 MA's), (112, 45490), (119, 45442), (135, 45340), (142, 45319), (163, 45181), (168, 45163), (171, 45151), (178, 45115),

Gene: Lopton\_74 Start: 47686, Stop: 47174, Start Num: 91

Candidate Starts for Lopton\_74:

(26, 47860), (37, 47827), (Start: 68 @47743 has 2 MA's), (Start: 91 @47686 has 205 MA's), (Start: 104 @47644 has 5 MA's), (Start: 111 @47593 has 4 MA's), (112, 47584), (119, 47536), (142, 47413), (149, 47371), (183, 47185),

Gene: Lorenzo\_70 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Lorenzo\_70:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (168, 43739), (177, 43691),

Gene: Loser\_77 Start: 45980, Stop: 45399, Start Num: 77

Candidate Starts for Loser\_77:

(Start: 60 @46022 has 4 MA's), (Start: 62 @46019 has 1 MA's), (69, 46004), (Start: 72 @45992 has 33 MA's), (Start: 77 @45980 has 160 MA's), (95, 45941), (Start: 111 @45863 has 4 MA's), (112, 45854), (119, 45806), (125, 45779), (135, 45704), (138, 45695), (150, 45635), (153, 45617), (172, 45503),

Gene: Louie6\_78 Start: 44948, Stop: 44526, Start Num: 111

Candidate Starts for Louie6\_78:

(Start: 111 @44948 has 4 MA's), (122, 44873), (129, 44837), (135, 44789), (142, 44768), (152, 44708), (153, 44705), (154, 44702), (158, 44666), (169, 44603), (177, 44558),

Gene: Lowa\_76 Start: 44997, Stop: 44488, Start Num: 93

Candidate Starts for Lowa\_76:

(Start: 75 @45033 has 3 MA's), (Start: 93 @44997 has 78 MA's), (Start: 104 @44961 has 5 MA's), (Start: 111 @44910 has 4 MA's), (112, 44901), (122, 44835), (129, 44799), (135, 44751), (142, 44730), (152, 44670), (153, 44667), (154, 44664), (158, 44628), (169, 44565), (177, 44520),

Gene: Luchador\_78 Start: 46094, Stop: 45567, Start Num: 77

Candidate Starts for Luchador\_78:

(Start: 72 @46106 has 33 MA's), (Start: 77 @46094 has 160 MA's), (Start: 111 @45992 has 4 MA's), (113, 45968), (114, 45959), (119, 45935), (122, 45917), (135, 45833), (136, 45830), (142, 45812), (147, 45788), (161, 45686), (164, 45674), (174, 45629), (178, 45611),

Gene: Lucivia\_79 Start: 45381, Stop: 44830, Start Num: 77

Candidate Starts for Lucivia\_79:

(Start: 60 @45423 has 4 MA's), (Start: 72 @45393 has 33 MA's), (Start: 77 @45381 has 160 MA's), (90, 45354), (Start: 111 @45264 has 4 MA's), (113, 45240), (119, 45207), (135, 45105), (142, 45081), (144, 45066), (149, 45039), (153, 45018), (158, 44979), (178, 44880), (186, 44847),

Gene: Lucyedi\_80 Start: 46110, Stop: 45568, Start Num: 77

Candidate Starts for Lucyedi\_80:

(29, 46242), (38, 46215), (47, 46188), (61, 46152), (Start: 72 @46122 has 33 MA's), (Start: 77 @46110 has 160 MA's), (Start: 111 @46005 has 4 MA's), (112, 45996), (119, 45948), (131, 45882), (135, 45846), (142, 45825), (153, 45762), (158, 45723), (174, 45633), (178, 45615),

Gene: LugYA\_82 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for LugYA\_82:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: Lukilu\_41 Start: 14631, Stop: 15143, Start Num: 91

Candidate Starts for Lukilu\_41:

(22, 14442), (Start: 86 @14619 has 6 MA's), (Start: 91 @14631 has 205 MA's), (Start: 104 @14673 has 5 MA's), (Start: 111 @14724 has 4 MA's), (112, 14733), (119, 14781), (126, 14823), (142, 14904), (149, 14946), (183, 15132),

Gene: LunaBlu\_42 Start: 32167, Stop: 31655, Start Num: 91

Candidate Starts for LunaBlu\_42:

(Start: 67 @32227 has 1 MA's), (Start: 91 @32167 has 205 MA's), (Start: 104 @32125 has 5 MA's), (Start: 111 @32074 has 4 MA's), (112, 32065), (119, 32017), (126, 31975), (142, 31894), (149, 31852), (183, 31666),

Gene: Lunsford\_70 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for Lunsford\_70:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (158, 43787), (177, 43685),

Gene: MPlant7149\_75 Start: 46240, Stop: 45728, Start Num: 91

Candidate Starts for MPlant7149\_75:

(26, 46414), (37, 46381), (Start: 68 @46297 has 2 MA's), (Start: 91 @46240 has 205 MA's), (Start: 104 @46198 has 5 MA's), (Start: 111 @46147 has 4 MA's), (112, 46138), (119, 46090), (142, 45967), (149, 45925), (183, 45739),

Gene: MaCh\_78 Start: 45345, Stop: 44794, Start Num: 77

Candidate Starts for MaCh\_78:

(Start: 60 @45387 has 4 MA's), (Start: 72 @45357 has 33 MA's), (Start: 77 @45345 has 160 MA's), (90, 45318), (Start: 111 @45228 has 4 MA's), (113, 45204), (119, 45171), (135, 45069), (142, 45045), (144, 45030), (149, 45003), (153, 44982), (158, 44943), (178, 44844), (186, 44811),

Gene: Mabel\_78 Start: 45346, Stop: 44795, Start Num: 77

Candidate Starts for Mabel\_78:

(Start: 60 @45388 has 4 MA's), (Start: 72 @45358 has 33 MA's), (Start: 77 @45346 has 160 MA's), (90, 45319), (Start: 111 @45229 has 4 MA's), (113, 45205), (119, 45172), (135, 45070), (142, 45046), (144, 45031), (149, 45004), (153, 44983), (158, 44944), (178, 44845), (186, 44812),

Gene: MadMarie\_77 Start: 45006, Stop: 44497, Start Num: 93

Candidate Starts for MadMarie\_77:

(Start: 75 @45042 has 3 MA's), (Start: 93 @45006 has 78 MA's), (Start: 104 @44970 has 5 MA's), (Start: 111 @44919 has 4 MA's), (112, 44910), (122, 44844), (129, 44808), (135, 44760), (142, 44739), (152, 44679), (153, 44676), (154, 44673), (158, 44637), (169, 44574), (177, 44529),

Gene: Magnar\_71 Start: 45368, Stop: 44856, Start Num: 91

Candidate Starts for Magnar\_71:

(26, 45542), (37, 45509), (Start: 68 @45425 has 2 MA's), (Start: 91 @45368 has 205 MA's), (Start: 104 @45326 has 5 MA's), (Start: 111 @45275 has 4 MA's), (112, 45266), (119, 45218), (142, 45095), (149, 45053), (183, 44867),

Gene: Mainiac\_78 Start: 45034, Stop: 44489, Start Num: 75

Candidate Starts for Mainiac\_78:

(Start: 75 @45034 has 3 MA's), (Start: 93 @44998 has 78 MA's), (Start: 104 @44962 has 5 MA's), (Start: 111 @44911 has 4 MA's), (112, 44902), (122, 44836), (129, 44800), (135, 44752), (142, 44731), (152, 44671), (153, 44668), (154, 44665), (158, 44629), (169, 44566), (177, 44521),

Gene: Malec\_73 Start: 45714, Stop: 45103, Start Num: 60

Candidate Starts for Malec\_73:

(15, 45885), (23, 45834), (Start: 60 @45714 has 4 MA's), (Start: 72 @45684 has 33 MA's), (Start: 77 @45672 has 160 MA's), (Start: 111 @45555 has 4 MA's), (112, 45546), (115, 45519), (119, 45498), (127, 45450), (135, 45396), (153, 45309), (158, 45270), (171, 45207), (175, 45165),

Gene: Malinsilva\_81 Start: 44997, Stop: 44488, Start Num: 93

Candidate Starts for Malinsilva\_81:

(Start: 75 @45033 has 3 MA's), (Start: 93 @44997 has 78 MA's), (Start: 104 @44961 has 5 MA's), (Start: 111 @44910 has 4 MA's), (112, 44901), (122, 44835), (129, 44799), (135, 44751), (142, 44730), (152, 44670), (153, 44667), (154, 44664), (158, 44628), (169, 44565), (177, 44520),

Gene: Maminaiaina\_77 Start: 44943, Stop: 44395, Start Num: 72

Candidate Starts for Maminaiaina\_77:

(Start: 72 @44943 has 33 MA's), (Start: 77 @44931 has 160 MA's), (107, 44874), (Start: 111 @44835 has 4 MA's), (113, 44811), (119, 44778), (142, 44655), (145, 44637), (152, 44595), (153, 44592), (158, 44553), (169, 44493), (171, 44484),

Gene: Manu\_78 Start: 44819, Stop: 44310, Start Num: 93

Candidate Starts for Manu\_78:

(Start: 93 @44819 has 78 MA's), (Start: 104 @44783 has 5 MA's), (Start: 111 @44732 has 4 MA's), (112, 44723), (122, 44657), (129, 44621), (135, 44573), (142, 44552), (152, 44492), (153, 44489), (158, 44450), (169, 44387), (177, 44342),

Gene: MarQuardt\_79 Start: 45007, Stop: 44498, Start Num: 93

Candidate Starts for MarQuardt\_79:

(Start: 93 @45007 has 78 MA's), (Start: 104 @44971 has 5 MA's), (Start: 111 @44920 has 4 MA's), (112, 44911), (122, 44845), (129, 44809), (135, 44761), (142, 44740), (152, 44680), (153, 44677), (154, 44674), (158, 44638), (169, 44575), (177, 44530),

Gene: Marcell\_68 Start: 43988, Stop: 43476, Start Num: 91

Candidate Starts for Marcell\_68:

(26, 44162), (37, 44129), (Start: 68 @44045 has 2 MA's), (Start: 91 @43988 has 205 MA's), (Start: 104 @43946 has 5 MA's), (Start: 111 @43895 has 4 MA's), (112, 43886), (119, 43838), (142, 43715), (149, 43673), (183, 43487),

Gene: Marchy\_67 Start: 42792, Stop: 42280, Start Num: 91

Candidate Starts for Marchy\_67:

(26, 42966), (37, 42933), (Start: 68 @42849 has 2 MA's), (Start: 91 @42792 has 205 MA's), (Start: 104 @42750 has 5 MA's), (Start: 111 @42699 has 4 MA's), (112, 42690), (119, 42642), (142, 42519), (149, 42477), (183, 42291),

Gene: Marge\_72 Start: 45485, Stop: 44973, Start Num: 91

Candidate Starts for Marge\_72:

(26, 45659), (37, 45626), (58, 45563), (Start: 68 @45542 has 2 MA's), (Start: 91 @45485 has 205 MA's), (Start: 104 @45443 has 5 MA's), (Start: 111 @45392 has 4 MA's), (112, 45383), (119, 45335), (142, 45212), (149, 45170), (183, 44984),

Gene: Margo\_73 Start: 44673, Stop: 44164, Start Num: 84

Candidate Starts for Margo\_73:

(Start: 84 @44673 has 180 MA's), (107, 44616), (Start: 111 @44577 has 4 MA's), (112, 44568), (121, 44505), (122, 44502), (127, 44472), (130, 44454), (135, 44415), (142, 44394), (158, 44298), (169, 44241), (177, 44196),

Gene: Marie\_77 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for Marie\_77:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: Marius\_79 Start: 44813, Stop: 44304, Start Num: 93

Candidate Starts for Marius\_79:

(Start: 93 @44813 has 78 MA's), (Start: 104 @44777 has 5 MA's), (Start: 111 @44726 has 4 MA's), (112, 44717), (122, 44651), (129, 44615), (135, 44567), (142, 44546), (152, 44486), (153, 44483), (158, 44444), (169, 44381), (177, 44336),

Gene: Marsha\_75 Start: 47927, Stop: 47415, Start Num: 91

Candidate Starts for Marsha\_75:

(26, 48101), (37, 48068), (Start: 68 @47984 has 2 MA's), (Start: 91 @47927 has 205 MA's), (Start: 104 @47885 has 5 MA's), (Start: 111 @47834 has 4 MA's), (112, 47825), (119, 47777), (142, 47654), (149, 47612), (173, 47468), (183, 47426),

Gene: MaryBeth\_73 Start: 46510, Stop: 45998, Start Num: 91

Candidate Starts for MaryBeth\_73:

(Start: 68 @46567 has 2 MA's), (Start: 91 @46510 has 205 MA's), (Start: 104 @46468 has 5 MA's), (Start: 111 @46417 has 4 MA's), (112, 46408), (119, 46360), (142, 46237), (149, 46195), (183, 46009),

Gene: MarysWell\_69 Start: 43942, Stop: 43412, Start Num: 84

Candidate Starts for MarysWell\_69:

(Start: 84 @43942 has 180 MA's), (133, 43690), (134, 43687), (135, 43666), (142, 43645), (170, 43486), (176, 43447),

Gene: Maverick\_69 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Maverick\_69:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Mayonnaise\_67 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Mayonnaise\_67:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Mazhar510\_70 Start: 44169, Stop: 43657, Start Num: 84

Candidate Starts for Mazhar510\_70:

(Start: 84 @44169 has 180 MA's), (Start: 104 @44121 has 5 MA's), (Start: 111 @44070 has 4 MA's), (122, 43995), (126, 43971), (127, 43965), (129, 43959), (135, 43908), (142, 43887), (153, 43830), (158, 43791), (177, 43689),

Gene: McFly\_79 Start: 44813, Stop: 44298, Start Num: 77

Candidate Starts for McFly\_79:

(Start: 72 @44825 has 33 MA's), (Start: 77 @44813 has 160 MA's), (Start: 111 @44726 has 4 MA's), (112, 44717), (119, 44669), (135, 44567), (142, 44546), (146, 44525), (153, 44483), (158, 44444),

Gene: McGuire\_75 Start: 45524, Stop: 45012, Start Num: 91

Candidate Starts for McGuire\_75:

(25, 45701), (26, 45698), (33, 45680), (37, 45665), (Start: 68 @45581 has 2 MA's), (Start: 91 @45524 has 205 MA's), (Start: 104 @45482 has 5 MA's), (Start: 111 @45431 has 4 MA's), (112, 45422), (119, 45374), (142, 45251), (149, 45209), (183, 45023),

Gene: McSinger\_73 Start: 46654, Stop: 46142, Start Num: 91

Candidate Starts for McSinger\_73:

(26, 46828), (37, 46795), (Start: 68 @46711 has 2 MA's), (Start: 91 @46654 has 205 MA's), (Start: 104 @46612 has 5 MA's), (Start: 111 @46561 has 4 MA's), (112, 46552), (119, 46504), (142, 46381), (149, 46339), (183, 46153),

Gene: Medusa\_70 Start: 44185, Stop: 43673, Start Num: 84

Candidate Starts for Medusa\_70:

(Start: 84 @44185 has 180 MA's), (Start: 104 @44137 has 5 MA's), (Start: 111 @44086 has 4 MA's), (122, 44011), (126, 43987), (127, 43981), (129, 43975), (135, 43924), (142, 43903), (158, 43807), (177, 43705),

Gene: MeeZee\_69 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for MeeZee\_69:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: Melissauren88\_38 Start: 31294, Stop: 30782, Start Num: 91

Candidate Starts for Melissauren88\_38:

(Start: 67 @31354 has 1 MA's), (Start: 91 @31294 has 205 MA's), (Start: 104 @31252 has 5 MA's), (Start: 111 @31201 has 4 MA's), (112, 31192), (119, 31144), (126, 31102), (142, 31021), (149, 30979), (183, 30793),

Gene: Melvin\_72 Start: 44166, Stop: 43654, Start Num: 84

Candidate Starts for Melvin\_72:

(Start: 84 @44166 has 180 MA's), (Start: 104 @44118 has 5 MA's), (Start: 111 @44067 has 4 MA's), (122, 43992), (126, 43968), (127, 43962), (129, 43956), (135, 43905), (142, 43884), (153, 43827), (158, 43788), (177, 43686),

Gene: MetalQZJ\_72 Start: 46510, Stop: 45998, Start Num: 91

Candidate Starts for MetalQZJ\_72:

(Start: 68 @46567 has 2 MA's), (Start: 91 @46510 has 205 MA's), (Start: 104 @46468 has 5 MA's), (Start: 111 @46417 has 4 MA's), (112, 46408), (119, 46360), (142, 46237), (149, 46195), (183, 46009),

Gene: Methuselah\_72 Start: 45029, Stop: 44520, Start Num: 93

Candidate Starts for Methuselah\_72:

(Start: 93 @45029 has 78 MA's), (Start: 104 @44993 has 5 MA's), (Start: 111 @44942 has 4 MA's), (112, 44933), (122, 44867), (129, 44831), (135, 44783), (142, 44762), (152, 44702), (153, 44699), (154, 44696), (158, 44660), (169, 44597), (177, 44552),

Gene: MiaZeal\_196 Start: 94928, Stop: 94416, Start Num: 91

Candidate Starts for MiaZeal\_196:

(5, 95261), (8, 95219), (28, 95090), (49, 95033), (51, 95024), (81, 94952), (Start: 89 @94931 has 2 MA's), (Start: 91 @94928 has 205 MA's), (Start: 104 @94886 has 5 MA's), (Start: 111 @94835 has 4 MA's), (112, 94826), (119, 94778), (126, 94736), (142, 94655), (149, 94613), (183, 94427),

Gene: Micasa\_69 Start: 43664, Stop: 43134, Start Num: 84

Candidate Starts for Micasa\_69:

(Start: 84 @43664 has 180 MA's), (133, 43412), (134, 43409), (135, 43388), (142, 43367), (170, 43208), (176, 43169),

Gene: Michley\_76 Start: 46252, Stop: 45740, Start Num: 91

Candidate Starts for Michley\_76:

(26, 46426), (37, 46393), (Start: 68 @46309 has 2 MA's), (Start: 91 @46252 has 205 MA's), (Start: 104 @46210 has 5 MA's), (Start: 111 @46159 has 4 MA's), (112, 46150), (119, 46102), (142, 45979), (149, 45937), (183, 45751),

Gene: Microwolf\_75 Start: 45021, Stop: 44512, Start Num: 93

Candidate Starts for Microwolf\_75:

(Start: 75 @45057 has 3 MA's), (Start: 93 @45021 has 78 MA's), (Start: 104 @44985 has 5 MA's), (Start: 111 @44934 has 4 MA's), (112, 44925), (122, 44859), (129, 44823), (135, 44775), (142, 44754), (152, 44694), (153, 44691), (154, 44688), (158, 44652), (169, 44589), (177, 44544),

Gene: MiculUcigas\_76 Start: 45315, Stop: 44746, Start Num: 77

Candidate Starts for MiculUcigas\_76:

(Start: 60 @45357 has 4 MA's), (66, 45345), (Start: 72 @45327 has 33 MA's), (Start: 77 @45315 has 160 MA's), (Start: 111 @45198 has 4 MA's), (112, 45189), (115, 45162), (119, 45141), (135, 45039), (149, 44973), (153, 44952), (158, 44913), (171, 44850),

Gene: Midas2\_66 Start: 43560, Stop: 43030, Start Num: 84

Candidate Starts for Midas2\_66:

(Start: 84 @43560 has 180 MA's), (133, 43308), (134, 43305), (135, 43284), (142, 43263), (170, 43104), (176, 43065),

Gene: Miko\_69 Start: 44687, Stop: 44115, Start Num: 77

Candidate Starts for Miko\_69:

(Start: 72 @44699 has 33 MA's), (Start: 77 @44687 has 160 MA's), (90, 44660), (Start: 111 @44570 has 4 MA's), (112, 44561), (113, 44546), (119, 44513), (122, 44495), (128, 44462), (135, 44411), (149, 44345), (158, 44285), (175, 44180), (186, 44135),

Gene: MilanaBonita\_32 Start: 27185, Stop: 26715, Start Num: 104

Candidate Starts for MilanaBonita\_32:

(Start: 91 @27227 has 205 MA's), (Start: 104 @27185 has 5 MA's), (Start: 111 @27134 has 4 MA's), (112, 27125), (119, 27077), (126, 27035), (142, 26954), (149, 26912), (183, 26726),

Gene: Milcery\_69 Start: 43451, Stop: 42921, Start Num: 84

Candidate Starts for Milcery\_69:

(80, 43457), (Start: 84 @43451 has 180 MA's), (133, 43199), (134, 43196), (135, 43175), (142, 43154), (170, 42995), (176, 42956),



Gene: MilleniumForce\_40 Start: 32109, Stop: 31573, Start Num: 79

Candidate Starts for MilleniumForce\_40:

(Start: 79 @32109 has 14 MA's), (Start: 104 @32043 has 5 MA's), (Start: 111 @31992 has 4 MA's), (112, 31983), (119, 31935), (126, 31893), (142, 31812), (149, 31770), (183, 31584),

Gene: Millski\_69 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for Millski\_69:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833), (158, 43794), (177, 43692),

Gene: MinecraftSteve\_84 Start: 45576, Stop: 45055, Start Num: 77

Candidate Starts for MinecraftSteve\_84:

(Start: 77 @45576 has 160 MA's), (Start: 104 @45531 has 5 MA's), (Start: 111 @45480 has 4 MA's), (112, 45471), (119, 45423), (135, 45321), (142, 45300), (163, 45162), (168, 45144), (171, 45132), (178, 45096),

Gene: MinionDave\_41 Start: 32346, Stop: 31810, Start Num: 79

Candidate Starts for MinionDave\_41:

(Start: 79 @32346 has 14 MA's), (Start: 104 @32280 has 5 MA's), (Start: 111 @32229 has 4 MA's), (112, 32220), (119, 32172), (126, 32130), (142, 32049), (149, 32007), (183, 31821),

Gene: Miramae\_69 Start: 43907, Stop: 43407, Start Num: 94

Candidate Starts for Miramae\_69:

(Start: 94 @43907 has 20 MA's), (Start: 111 @43820 has 4 MA's), (113, 43796), (119, 43763), (127, 43715), (129, 43709), (130, 43697), (135, 43658), (142, 43637), (158, 43541), (177, 43439),

Gene: Mkhuseli\_72 Start: 44255, Stop: 43743, Start Num: 91

Candidate Starts for Mkhuseli\_72:

(26, 44429), (33, 44411), (37, 44396), (Start: 68 @44312 has 2 MA's), (Start: 91 @44255 has 205 MA's), (Start: 104 @44213 has 5 MA's), (Start: 111 @44162 has 4 MA's), (112, 44153), (119, 44105), (142, 43982), (149, 43940), (183, 43754),

Gene: Molly\_75 Start: 45897, Stop: 45385, Start Num: 91

Candidate Starts for Molly\_75:

(26, 46071), (37, 46038), (Start: 68 @45954 has 2 MA's), (Start: 91 @45897 has 205 MA's), (Start: 104 @45855 has 5 MA's), (Start: 111 @45804 has 4 MA's), (112, 45795), (119, 45747), (142, 45624), (149, 45582), (173, 45438), (183, 45396),

Gene: Monet\_79 Start: 47934, Stop: 47422, Start Num: 91

Candidate Starts for Monet\_79:

(26, 48108), (37, 48075), (58, 48012), (Start: 68 @47991 has 2 MA's), (Start: 91 @47934 has 205 MA's), (Start: 104 @47892 has 5 MA's), (Start: 111 @47841 has 4 MA's), (112, 47832), (119, 47784), (142, 47661), (149, 47619), (183, 47433),

Gene: MoneyMay\_78 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for MoneyMay\_78:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: Moonbeam\_39 Start: 31863, Stop: 31327, Start Num: 79

Candidate Starts for Moonbeam\_39:

(Start: 79 @31863 has 14 MA's), (Start: 104 @31797 has 5 MA's), (Start: 111 @31746 has 4 MA's), (112, 31737), (119, 31689), (126, 31647), (142, 31566), (149, 31524), (183, 31338),

Gene: Moose\_77 Start: 47070, Stop: 46555, Start Num: 91

Candidate Starts for Moose\_77:

(26, 47244), (37, 47211), (Start: 68 @47127 has 2 MA's), (Start: 91 @47070 has 205 MA's), (Start: 104 @47028 has 5 MA's), (Start: 111 @46977 has 4 MA's), (112, 46968), (119, 46920), (135, 46818), (142, 46797), (149, 46755), (173, 46611), (183, 46569),

Gene: Morizzled23\_50 Start: 15132, Stop: 15644, Start Num: 91

Candidate Starts for Morizzled23\_50:

(22, 14943), (Start: 86 @15120 has 6 MA's), (Start: 91 @15132 has 205 MA's), (Start: 104 @15174 has 5 MA's), (Start: 111 @15225 has 4 MA's), (112, 15234), (119, 15282), (142, 15405), (149, 15447), (173, 15591), (183, 15633),

Gene: Morpher26\_69 Start: 44373, Stop: 43873, Start Num: 94

Candidate Starts for Morpher26\_69:

(Start: 94 @44373 has 20 MA's), (Start: 111 @44286 has 4 MA's), (113, 44262), (127, 44181), (129, 44175), (130, 44163), (135, 44124), (140, 44109), (142, 44103), (158, 44007), (171, 43941), (177, 43905),

Gene: Mova\_39 Start: 30975, Stop: 30466, Start Num: 91

Candidate Starts for Mova\_39:

(12, 31233), (19, 31209), (Start: 91 @30975 has 205 MA's), (Start: 104 @30933 has 5 MA's), (Start: 111 @30882 has 4 MA's), (112, 30873), (119, 30825), (126, 30783), (142, 30702), (149, 30660), (183, 30477),

Gene: MrGordo\_76 Start: 45826, Stop: 45314, Start Num: 91

Candidate Starts for MrGordo\_76:

(26, 46000), (37, 45967), (Start: 68 @45883 has 2 MA's), (Start: 91 @45826 has 205 MA's), (Start: 104 @45784 has 5 MA's), (Start: 111 @45733 has 4 MA's), (112, 45724), (119, 45676), (142, 45553), (149, 45511), (183, 45325),

Gene: Mryolo\_70 Start: 44855, Stop: 44343, Start Num: 91

Candidate Starts for Mryolo\_70:

(26, 45029), (37, 44996), (Start: 68 @44912 has 2 MA's), (Start: 91 @44855 has 205 MA's), (Start: 104 @44813 has 5 MA's), (Start: 111 @44762 has 4 MA's), (112, 44753), (119, 44705), (135, 44603), (142, 44582), (149, 44540), (173, 44396), (183, 44354),

Gene: Ms6\_33 Start: 26759, Stop: 26250, Start Num: 91

Candidate Starts for Ms6\_33:

(12, 27017), (19, 26993), (Start: 91 @26759 has 205 MA's), (Start: 104 @26717 has 5 MA's), (Start: 111 @26666 has 4 MA's), (112, 26657), (119, 26609), (126, 26567), (142, 26486), (149, 26444), (183, 26261),

Gene: MuchMore\_82 Start: 44994, Stop: 44485, Start Num: 93

Candidate Starts for MuchMore\_82:

(Start: 75 @45030 has 3 MA's), (Start: 93 @44994 has 78 MA's), (Start: 104 @44958 has 5 MA's), (Start: 111 @44907 has 4 MA's), (112, 44898), (122, 44832), (129, 44796), (135, 44748), (142, 44727), (152, 44667), (153, 44664), (154, 44661), (158, 44625), (169, 44562), (177, 44517),

Gene: Mulciber\_76 Start: 44899, Stop: 44336, Start Num: 72

Candidate Starts for Mulciber\_76:

(Start: 60 @44929 has 4 MA's), (Start: 72 @44899 has 33 MA's), (Start: 77 @44887 has 160 MA's), (90, 44860), (Start: 111 @44770 has 4 MA's), (113, 44746), (119, 44713), (135, 44611), (142, 44587), (144, 44572), (149, 44545), (153, 44524), (158, 44485), (178, 44386), (186, 44353),

Gene: Mule\_74 Start: 45924, Stop: 45412, Start Num: 91

Candidate Starts for Mule\_74:

(3, 46320), (26, 46098), (37, 46065), (Start: 68 @45981 has 2 MA's), (Start: 91 @45924 has 205 MA's), (Start: 104 @45882 has 5 MA's), (Start: 111 @45831 has 4 MA's), (112, 45822), (119, 45774), (142, 45651), (149, 45609), (183, 45423),

Gene: Munch\_78 Start: 45362, Stop: 44799, Start Num: 72

Candidate Starts for Munch\_78:

(Start: 60 @45392 has 4 MA's), (Start: 72 @45362 has 33 MA's), (Start: 77 @45350 has 160 MA's), (90, 45323), (Start: 111 @45233 has 4 MA's), (113, 45209), (119, 45176), (135, 45074), (142, 45050), (144, 45035), (149, 45008), (153, 44987), (158, 44948), (178, 44849), (186, 44816),

Gene: Mundrea\_69 Start: 44369, Stop: 43869, Start Num: 94

Candidate Starts for Mundrea\_69:

(Start: 94 @44369 has 20 MA's), (107, 44321), (Start: 111 @44282 has 4 MA's), (119, 44225), (127, 44177), (129, 44171), (130, 44159), (135, 44120), (142, 44099), (158, 44003), (171, 43937), (177, 43901),

Gene: MyraDee\_73 Start: 42375, Stop: 41872, Start Num: 93

Candidate Starts for MyraDee\_73:

(Start: 93 @42375 has 78 MA's), (Start: 111 @42288 has 4 MA's), (134, 42150), (135, 42129), (140, 42114), (142, 42108), (171, 41940),

Gene: Myxus\_77 Start: 44781, Stop: 44233, Start Num: 72

Candidate Starts for Myxus\_77:

(Start: 72 @44781 has 33 MA's), (Start: 77 @44769 has 160 MA's), (Start: 111 @44673 has 4 MA's), (112, 44664), (113, 44649), (119, 44616), (142, 44493), (144, 44478), (145, 44475), (152, 44433), (153, 44430), (166, 44352), (178, 44283),

Gene: NEHalo\_71 Start: 45770, Stop: 45255, Start Num: 91

Candidate Starts for NEHalo\_71:

(26, 45944), (37, 45911), (Start: 68 @45827 has 2 MA's), (Start: 91 @45770 has 205 MA's), (Start: 104 @45728 has 5 MA's), (Start: 111 @45677 has 4 MA's), (112, 45668), (119, 45620), (142, 45497), (149, 45455), (173, 45311), (183, 45269),

Gene: NaSiaTalie\_76 Start: 45409, Stop: 44840, Start Num: 77

Candidate Starts for NaSiaTalie\_76:

(Start: 60 @45451 has 4 MA's), (66, 45439), (Start: 72 @45421 has 33 MA's), (Start: 77 @45409 has 160 MA's), (Start: 111 @45292 has 4 MA's), (112, 45283), (115, 45256), (119, 45235), (135, 45133), (149, 45067), (153, 45046), (158, 45007), (171, 44944),

Gene: Naca\_72 Start: 44855, Stop: 44325, Start Num: 84

Candidate Starts for Naca\_72:

(36, 44987), (43, 44954), (45, 44951), (Start: 84 @44855 has 180 MA's), (96, 44825), (124, 44663), (126, 44639), (133, 44603), (135, 44579), (142, 44558), (168, 44405), (170, 44399), (176, 44360),

Gene: Naiad\_57 Start: 40148, Stop: 39624, Start Num: 78

Candidate Starts for Naiad\_57:

(Start: 78 @40148 has 23 MA's), (103, 40103), (107, 40085), (122, 39971), (129, 39935), (134, 39908), (135, 39887), (142, 39866), (144, 39851), (150, 39821), (151, 39818), (153, 39803), (169, 39707), (171, 39698), (183, 39641),

Gene: Naira\_77 Start: 47443, Stop: 46931, Start Num: 91

Candidate Starts for Naira\_77:

(26, 47617), (37, 47584), (Start: 68 @47500 has 2 MA's), (Start: 91 @47443 has 205 MA's), (Start: 104 @47401 has 5 MA's), (Start: 111 @47350 has 4 MA's), (112, 47341), (119, 47293), (142, 47170), (149, 47128), (183, 46942),

Gene: Natosaleda\_57 Start: 40064, Stop: 39540, Start Num: 78

Candidate Starts for Natosaleda\_57:

(Start: 78 @40064 has 23 MA's), (103, 40019), (107, 40001), (122, 39887), (129, 39851), (134, 39824), (135, 39803), (142, 39782), (144, 39767), (150, 39737), (151, 39734), (169, 39623), (171, 39614), (183, 39557),

Gene: NearlyHeadless\_85 Start: 45887, Stop: 45384, Start Num: 93

Candidate Starts for NearlyHeadless\_85:

(Start: 74 @45926 has 3 MA's), (Start: 93 @45887 has 78 MA's), (101, 45863), (107, 45839), (Start: 111 @45800 has 4 MA's), (121, 45728), (123, 45722), (126, 45701), (129, 45689), (142, 45620), (158, 45518), (173, 45434), (177, 45416), (181, 45404),

Gene: Nebs\_71 Start: 44210, Stop: 43698, Start Num: 84

Candidate Starts for Nebs\_71:

(Start: 84 @44210 has 180 MA's), (Start: 104 @44162 has 5 MA's), (Start: 111 @44111 has 4 MA's), (122, 44036), (126, 44012), (129, 44000), (135, 43949), (142, 43928), (153, 43871), (168, 43778), (177, 43730),

Gene: Nebulosus\_81 Start: 45240, Stop: 44719, Start Num: 77

Candidate Starts for Nebulosus\_81:

(Start: 77 @45240 has 160 MA's), (Start: 104 @45195 has 5 MA's), (Start: 111 @45144 has 4 MA's), (112, 45135), (119, 45087), (135, 44985), (142, 44964), (163, 44826), (168, 44808), (171, 44796), (178, 44760),

Gene: Nedarya\_79 Start: 45469, Stop: 44945, Start Num: 77

Candidate Starts for Nedarya\_79:

(Start: 77 @45469 has 160 MA's), (Start: 111 @45370 has 4 MA's), (113, 45346), (115, 45334), (119, 45313), (135, 45211), (142, 45190), (164, 45049), (168, 45034), (171, 45022), (178, 44986),

Gene: Neeharika16\_77 Start: 44280, Stop: 43765, Start Num: 77

Candidate Starts for Neeharika16\_77:

(Start: 72 @44292 has 33 MA's), (Start: 77 @44280 has 160 MA's), (Start: 111 @44193 has 4 MA's), (112, 44184), (119, 44136), (135, 44034), (142, 44013), (146, 43992), (153, 43950), (158, 43911),

Gene: Nemo27\_69 Start: 44167, Stop: 43655, Start Num: 84

Candidate Starts for Nemo27\_69:

(Start: 84 @44167 has 180 MA's), (Start: 104 @44119 has 5 MA's), (Start: 111 @44068 has 4 MA's), (122, 43993), (126, 43969), (127, 43963), (129, 43957), (135, 43906), (142, 43885), (153, 43828), (158, 43789), (177, 43687),

Gene: Nerujay\_79 Start: 48212, Stop: 47700, Start Num: 91

Candidate Starts for Nerujay\_79:

(26, 48386), (37, 48353), (Start: 68 @48269 has 2 MA's), (Start: 91 @48212 has 205 MA's), (Start: 104 @48170 has 5 MA's), (Start: 111 @48119 has 4 MA's), (112, 48110), (119, 48062), (142, 47939), (149, 47897), (183, 47711),

Gene: NewHope4\_43 Start: 31989, Stop: 31453, Start Num: 79

Candidate Starts for NewHope4\_43:

(Start: 79 @31989 has 14 MA's), (Start: 104 @31923 has 5 MA's), (Start: 111 @31872 has 4 MA's), (112, 31863), (119, 31815), (126, 31773), (142, 31692), (149, 31650), (183, 31464),

Gene: Newrala\_77 Start: 44619, Stop: 44104, Start Num: 77

Candidate Starts for Newrala\_77:

(Start: 72 @44631 has 33 MA's), (Start: 77 @44619 has 160 MA's), (Start: 111 @44532 has 4 MA's), (112, 44523), (119, 44475), (135, 44373), (142, 44352), (146, 44331), (153, 44289), (158, 44250),

Gene: Nhonho\_71 Start: 45931, Stop: 45419, Start Num: 91

Candidate Starts for Nhonho\_71:

(26, 46105), (37, 46072), (58, 46009), (Start: 68 @45988 has 2 MA's), (Start: 91 @45931 has 205 MA's), (Start: 104 @45889 has 5 MA's), (Start: 111 @45838 has 4 MA's), (112, 45829), (119, 45781), (142, 45658), (149, 45616), (183, 45430),

Gene: NicoleTera\_73 Start: 45439, Stop: 44858, Start Num: 77

Candidate Starts for NicoleTera\_73:

(Start: 72 @45451 has 33 MA's), (Start: 77 @45439 has 160 MA's), (108, 45355), (Start: 111 @45319 has 4 MA's), (115, 45283), (119, 45262), (135, 45160), (138, 45151), (150, 45091), (153, 45073), (158, 45034), (178, 44908),

Gene: Niza\_75 Start: 47243, Stop: 46731, Start Num: 91

Candidate Starts for Niza\_75:

(26, 47417), (37, 47384), (Start: 68 @47300 has 2 MA's), (Start: 91 @47243 has 205 MA's), (Start: 104 @47201 has 5 MA's), (Start: 111 @47150 has 4 MA's), (112, 47141), (119, 47093), (142, 46970), (149, 46928), (173, 46784), (183, 46742),

Gene: Noelle\_70 Start: 44689, Stop: 44189, Start Num: 94

Candidate Starts for Noelle\_70:

(Start: 94 @44689 has 20 MA's), (Start: 111 @44602 has 4 MA's), (119, 44545), (129, 44491), (130, 44479), (135, 44440), (142, 44419), (144, 44404), (177, 44221),

Gene: Norbert\_69 Start: 44646, Stop: 44137, Start Num: 84

Candidate Starts for Norbert\_69:

(Start: 84 @44646 has 180 MA's), (107, 44589), (Start: 111 @44550 has 4 MA's), (112, 44541), (121, 44478), (122, 44475), (127, 44445), (130, 44427), (135, 44388), (142, 44367), (158, 44271), (169, 44214), (177, 44169),

Gene: NorthStar\_68 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for NorthStar\_68:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: NotAPhaseMom\_69 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for NotAPhaseMom\_69:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833),

(158, 43794), (177, 43692),

Gene: NothingSpecial\_71 Start: 45368, Stop: 44808, Start Num: 72

Candidate Starts for NothingSpecial\_71:

(Start: 72 @45368 has 33 MA's), (Start: 77 @45356 has 160 MA's), (96, 45317), (Start: 111 @45239 has 4 MA's), (113, 45215), (119, 45182), (135, 45080), (142, 45056), (149, 45014), (153, 44993), (158, 44954), (171, 44888), (178, 44852),

Gene: Nyxis\_69 Start: 44061, Stop: 43549, Start Num: 84

Candidate Starts for Nyxis\_69:

(Start: 84 @44061 has 180 MA's), (Start: 104 @44013 has 5 MA's), (Start: 111 @43962 has 4 MA's), (122, 43887), (126, 43863), (127, 43857), (129, 43851), (135, 43800), (142, 43779), (153, 43722), (158, 43683), (168, 43629), (177, 43581),

Gene: OKCentral2016\_68 Start: 43243, Stop: 42737, Start Num: 84

Candidate Starts for OKCentral2016\_68:

(Start: 57 @43306 has 1 MA's), (65, 43291), (Start: 84 @43243 has 180 MA's), (Start: 85 @43240 has 5 MA's), (Start: 111 @43147 has 4 MA's), (113, 43123), (119, 43090), (122, 43072), (126, 43048), (135, 42988), (142, 42967), (144, 42952), (158, 42871), (165, 42835), (177, 42769), (183, 42748),

Gene: OKaNui\_69 Start: 44221, Stop: 43709, Start Num: 84

Candidate Starts for OKaNui\_69:

(Start: 84 @44221 has 180 MA's), (Start: 104 @44173 has 5 MA's), (Start: 111 @44122 has 4 MA's), (122, 44047), (126, 44023), (127, 44017), (129, 44011), (135, 43960), (142, 43939), (153, 43882), (158, 43843), (177, 43741),

Gene: Obama12\_71 Start: 44591, Stop: 44079, Start Num: 84

Candidate Starts for Obama12\_71:

(Start: 84 @44591 has 180 MA's), (Start: 104 @44543 has 5 MA's), (Start: 111 @44492 has 4 MA's), (122, 44417), (126, 44393), (129, 44381), (135, 44330), (142, 44309), (153, 44252), (177, 44111),

Gene: Odin\_77 Start: 45353, Stop: 44817, Start Num: 84

Candidate Starts for Odin\_77:

(Start: 72 @45377 has 33 MA's), (Start: 77 @45365 has 160 MA's), (Start: 84 @45353 has 180 MA's), (Start: 111 @45248 has 4 MA's), (112, 45239), (119, 45191), (122, 45173), (135, 45089), (142, 45065), (149, 45023), (153, 45002), (158, 44963), (178, 44861),

Gene: Ohfah\_71 Start: 44210, Stop: 43698, Start Num: 84

Candidate Starts for Ohfah\_71:

(Start: 84 @44210 has 180 MA's), (Start: 104 @44162 has 5 MA's), (Start: 111 @44111 has 4 MA's), (122, 44036), (126, 44012), (129, 44000), (135, 43949), (142, 43928), (153, 43871), (168, 43778), (177, 43730),

Gene: Ohno789\_78 Start: 47993, Stop: 47478, Start Num: 91

Candidate Starts for Ohno789\_78:

(26, 48167), (37, 48134), (Start: 68 @48050 has 2 MA's), (Start: 91 @47993 has 205 MA's), (Start: 104 @47951 has 5 MA's), (Start: 111 @47900 has 4 MA's), (112, 47891), (119, 47843), (142, 47720), (149, 47678), (173, 47534), (183, 47492),

Gene: OlanP\_77 Start: 44992, Stop: 44483, Start Num: 93

Candidate Starts for OlanP\_77:

(Start: 93 @44992 has 78 MA's), (Start: 104 @44956 has 5 MA's), (Start: 111 @44905 has 4 MA's), (112, 44896), (122, 44830), (129, 44794), (135, 44746), (142, 44725), (152, 44665), (153, 44662),

(158, 44623), (169, 44560), (177, 44515),

Gene: Ollie\_79 Start: 44876, Stop: 44367, Start Num: 93

Candidate Starts for Ollie\_79:

(Start: 93 @44876 has 78 MA's), (Start: 104 @44840 has 5 MA's), (Start: 111 @44789 has 4 MA's), (112, 44780), (122, 44714), (129, 44678), (135, 44630), (142, 44609), (152, 44549), (153, 44546), (154, 44543), (158, 44507), (169, 44444), (177, 44399),

Gene: Onglai\_75 Start: 42975, Stop: 42439, Start Num: 77

Candidate Starts for Onglai\_75:

(Start: 72 @42987 has 33 MA's), (Start: 77 @42975 has 160 MA's), (Start: 111 @42879 has 4 MA's), (112, 42870), (113, 42855), (119, 42822), (142, 42699), (144, 42684), (145, 42681), (152, 42639), (153, 42636), (166, 42558),

Gene: Oofda\_83 Start: 45531, Stop: 45010, Start Num: 77

Candidate Starts for Oofda\_83:

(Start: 77 @45531 has 160 MA's), (Start: 104 @45486 has 5 MA's), (Start: 111 @45435 has 4 MA's), (112, 45426), (119, 45378), (135, 45276), (142, 45255), (163, 45117), (168, 45099), (171, 45087), (178, 45051),

Gene: Oogway\_74 Start: 46824, Stop: 46312, Start Num: 91

Candidate Starts for Oogway\_74:

(26, 46998), (37, 46965), (Start: 68 @46881 has 2 MA's), (Start: 91 @46824 has 205 MA's), (Start: 104 @46782 has 5 MA's), (Start: 111 @46731 has 4 MA's), (112, 46722), (119, 46674), (126, 46632), (142, 46551), (149, 46509), (183, 46323),

Gene: Ovechkin\_39 Start: 32190, Stop: 31654, Start Num: 79

Candidate Starts for Ovechkin\_39:

(Start: 79 @32190 has 14 MA's), (Start: 104 @32124 has 5 MA's), (Start: 111 @32073 has 4 MA's), (112, 32064), (119, 32016), (126, 31974), (142, 31893), (149, 31851), (183, 31665),

Gene: P28Green\_79 Start: 45011, Stop: 44502, Start Num: 93

Candidate Starts for P28Green\_79:

(Start: 93 @45011 has 78 MA's), (Start: 104 @44975 has 5 MA's), (Start: 111 @44924 has 4 MA's), (112, 44915), (122, 44849), (129, 44813), (135, 44765), (142, 44744), (152, 44684), (153, 44681), (154, 44678), (158, 44642), (169, 44579), (177, 44534),

Gene: PGHhamlin\_81 Start: 44997, Stop: 44488, Start Num: 93

Candidate Starts for PGHhamlin\_81:

(Start: 75 @45033 has 3 MA's), (Start: 93 @44997 has 78 MA's), (Start: 104 @44961 has 5 MA's), (Start: 111 @44910 has 4 MA's), (112, 44901), (122, 44835), (129, 44799), (135, 44751), (142, 44730), (152, 44670), (153, 44667), (154, 44664), (158, 44628), (169, 44565), (177, 44520),

Gene: PP\_72 Start: 48590, Stop: 48084, Start Num: 83

Candidate Starts for PP\_72:

(Start: 83 @48590 has 3 MA's), (112, 48485), (122, 48419), (129, 48383), (135, 48335), (142, 48314), (153, 48257), (168, 48164), (169, 48161), (177, 48116),

Gene: PSullivan\_73 Start: 45043, Stop: 44507, Start Num: 91

Candidate Starts for PSullivan\_73:

(26, 45217), (37, 45184), (Start: 68 @45100 has 2 MA's), (Start: 91 @45043 has 205 MA's), (Start: 104 @45001 has 5 MA's), (Start: 111 @44950 has 4 MA's), (112, 44941), (119, 44893), (135, 44791), (142, 44770), (149, 44728), (160, 44650),

Gene: PackMan\_76 Start: 44656, Stop: 44108, Start Num: 72

Candidate Starts for PackMan\_76:

(Start: 72 @44656 has 33 MA's), (Start: 77 @44644 has 160 MA's), (Start: 111 @44548 has 4 MA's), (112, 44539), (113, 44524), (119, 44491), (142, 44368), (144, 44353), (145, 44350), (152, 44308), (153, 44305), (166, 44227), (178, 44158),

Gene: Palestino\_69 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Palestino\_69:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Panamaxus\_71 Start: 44648, Stop: 44139, Start Num: 84

Candidate Starts for Panamaxus\_71:

(Start: 84 @44648 has 180 MA's), (107, 44591), (Start: 111 @44552 has 4 MA's), (112, 44543), (121, 44480), (122, 44477), (127, 44447), (130, 44429), (135, 44390), (142, 44369), (158, 44273), (169, 44216), (177, 44171),

Gene: Papez\_77 Start: 47434, Stop: 46922, Start Num: 91

Candidate Starts for Papez\_77:

(Start: 68 @47491 has 2 MA's), (Start: 91 @47434 has 205 MA's), (Start: 104 @47392 has 5 MA's), (Start: 111 @47341 has 4 MA's), (112, 47332), (119, 47284), (142, 47161), (149, 47119), (183, 46933),

Gene: Paphu\_70 Start: 45468, Stop: 44956, Start Num: 91

Candidate Starts for Paphu\_70:

(26, 45642), (37, 45609), (Start: 68 @45525 has 2 MA's), (Start: 91 @45468 has 205 MA's), (Start: 104 @45426 has 5 MA's), (Start: 111 @45375 has 4 MA's), (112, 45366), (119, 45318), (126, 45276), (142, 45195), (149, 45153), (183, 44967),

Gene: Paraselene\_73 Start: 46117, Stop: 45605, Start Num: 91

Candidate Starts for Paraselene\_73:

(26, 46291), (37, 46258), (58, 46195), (Start: 68 @46174 has 2 MA's), (Start: 91 @46117 has 205 MA's), (Start: 104 @46075 has 5 MA's), (Start: 111 @46024 has 4 MA's), (112, 46015), (119, 45967), (142, 45844), (149, 45802), (183, 45616),

Gene: Pari\_80 Start: 46837, Stop: 46325, Start Num: 91

Candidate Starts for Pari\_80:

(26, 47011), (37, 46978), (Start: 68 @46894 has 2 MA's), (Start: 91 @46837 has 205 MA's), (Start: 104 @46795 has 5 MA's), (Start: 111 @46744 has 4 MA's), (112, 46735), (119, 46687), (142, 46564), (149, 46522), (183, 46336),

Gene: Parliament\_76 Start: 49018, Stop: 48506, Start Num: 91

Candidate Starts for Parliament\_76:

(26, 49192), (37, 49159), (Start: 68 @49075 has 2 MA's), (Start: 91 @49018 has 205 MA's), (Start: 104 @48976 has 5 MA's), (Start: 111 @48925 has 4 MA's), (112, 48916), (119, 48868), (142, 48745), (149, 48703), (183, 48517),

Gene: Partridge\_57 Start: 40427, Stop: 39903, Start Num: 78

Candidate Starts for Partridge\_57:

(Start: 78 @40427 has 23 MA's), (103, 40382), (107, 40364), (122, 40250), (129, 40214), (134, 40187), (135, 40166), (142, 40145), (151, 40097), (169, 39986), (171, 39977), (183, 39920),



Gene: PascalRango\_73 Start: 46112, Stop: 45600, Start Num: 91

Candidate Starts for PascalRango\_73:

(26, 46286), (37, 46253), (Start: 68 @46169 has 2 MA's), (Start: 91 @46112 has 205 MA's), (Start: 104 @46070 has 5 MA's), (Start: 111 @46019 has 4 MA's), (112, 46010), (119, 45962), (142, 45839), (149, 45797), (183, 45611),

Gene: PattyP\_75 Start: 46666, Stop: 46154, Start Num: 91

Candidate Starts for PattyP\_75:

(26, 46840), (37, 46807), (58, 46744), (Start: 68 @46723 has 2 MA's), (Start: 91 @46666 has 205 MA's), (Start: 104 @46624 has 5 MA's), (Start: 111 @46573 has 4 MA's), (112, 46564), (119, 46516), (142, 46393), (149, 46351), (183, 46165),

Gene: Pawn\_77 Start: 44820, Stop: 44311, Start Num: 93

Candidate Starts for Pawn\_77:

(Start: 93 @44820 has 78 MA's), (Start: 104 @44784 has 5 MA's), (Start: 111 @44733 has 4 MA's), (112, 44724), (122, 44658), (129, 44622), (135, 44574), (142, 44553), (152, 44493), (153, 44490), (158, 44451), (169, 44388), (177, 44343),

Gene: PeaceMeal1\_68 Start: 43142, Stop: 42639, Start Num: 85

Candidate Starts for PeaceMeal1\_68:

(Start: 57 @43208 has 1 MA's), (65, 43193), (Start: 84 @43145 has 180 MA's), (Start: 85 @43142 has 5 MA's), (Start: 111 @43049 has 4 MA's), (119, 42992), (122, 42974), (126, 42950), (135, 42890), (142, 42869), (165, 42737), (177, 42671), (183, 42650),

Gene: Peaches\_68 Start: 44170, Stop: 43658, Start Num: 84

Candidate Starts for Peaches\_68:

(Start: 84 @44170 has 180 MA's), (Start: 104 @44122 has 5 MA's), (Start: 111 @44071 has 4 MA's), (122, 43996), (126, 43972), (127, 43966), (129, 43960), (135, 43909), (142, 43888), (153, 43831), (158, 43792), (177, 43690),

Gene: Pelly\_78 Start: 49199, Stop: 48687, Start Num: 91

Candidate Starts for Pelly\_78:

(26, 49373), (37, 49340), (Start: 68 @49256 has 2 MA's), (Start: 91 @49199 has 205 MA's), (Start: 104 @49157 has 5 MA's), (Start: 111 @49106 has 4 MA's), (112, 49097), (119, 49049), (135, 48947), (142, 48926), (149, 48884), (173, 48740), (183, 48698),

Gene: Pembroke\_79 Start: 45006, Stop: 44497, Start Num: 93

Candidate Starts for Pembroke\_79:

(Start: 75 @45042 has 3 MA's), (Start: 93 @45006 has 78 MA's), (Start: 104 @44970 has 5 MA's), (Start: 111 @44919 has 4 MA's), (112, 44910), (122, 44844), (129, 44808), (135, 44760), (142, 44739), (152, 44679), (153, 44676), (154, 44673), (158, 44637), (169, 44574), (177, 44529),

Gene: Penny1\_79 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for Penny1\_79:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: Pepe\_69 Start: 44078, Stop: 43608, Start Num: 104

Candidate Starts for Pepe\_69:

(Start: 104 @44078 has 5 MA's), (Start: 111 @44027 has 4 MA's), (112, 44018), (119, 43970), (142, 43847), (149, 43805), (183, 43619),

Gene: Perplexer\_69 Start: 44349, Stop: 43849, Start Num: 94

Candidate Starts for Perplexer\_69:

(Start: 94 @44349 has 20 MA's), (Start: 111 @44262 has 4 MA's), (113, 44238), (127, 44157), (129, 44151), (130, 44139), (135, 44100), (140, 44085), (142, 44079), (158, 43983), (171, 43917), (177, 43881),

Gene: Perseus\_75 Start: 48099, Stop: 47587, Start Num: 91

Candidate Starts for Perseus\_75:

(26, 48273), (37, 48240), (Start: 68 @48156 has 2 MA's), (Start: 91 @48099 has 205 MA's), (Start: 104 @48057 has 5 MA's), (Start: 111 @48006 has 4 MA's), (112, 47997), (119, 47949), (142, 47826), (149, 47784), (183, 47598),

Gene: PeterPeter\_70 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for PeterPeter\_70:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: Petersenfast\_72 Start: 43781, Stop: 43230, Start Num: 77

Candidate Starts for Petersenfast\_72:

(Start: 60 @43823 has 4 MA's), (Start: 72 @43793 has 33 MA's), (Start: 77 @43781 has 160 MA's), (90, 43754), (Start: 111 @43664 has 4 MA's), (113, 43640), (119, 43607), (135, 43505), (142, 43481), (144, 43466), (149, 43439), (153, 43418), (158, 43379), (178, 43280), (186, 43247),

Gene: PetiteSangsue\_69 Start: 44352, Stop: 43852, Start Num: 94

Candidate Starts for PetiteSangsue\_69:

(Start: 94 @44352 has 20 MA's), (Start: 111 @44265 has 4 MA's), (113, 44241), (127, 44160), (129, 44154), (130, 44142), (135, 44103), (140, 44088), (142, 44082), (158, 43986), (171, 43920), (177, 43884),

Gene: Petp2012\_76 Start: 47447, Stop: 46932, Start Num: 91

Candidate Starts for Petp2012\_76:

(26, 47621), (37, 47588), (Start: 68 @47504 has 2 MA's), (Start: 91 @47447 has 205 MA's), (Start: 104 @47405 has 5 MA's), (Start: 111 @47354 has 4 MA's), (112, 47345), (119, 47297), (135, 47195), (142, 47174), (149, 47132), (173, 46988), (183, 46946),

Gene: PetterN\_77 Start: 44642, Stop: 44112, Start Num: 84

Candidate Starts for PetterN\_77:

(36, 44774), (43, 44741), (Start: 84 @44642 has 180 MA's), (96, 44612), (124, 44450), (133, 44390), (135, 44366), (142, 44345), (168, 44192), (170, 44186), (176, 44147),

Gene: Phacado\_70 Start: 44167, Stop: 43655, Start Num: 84

Candidate Starts for Phacado\_70:

(Start: 84 @44167 has 180 MA's), (Start: 104 @44119 has 5 MA's), (Start: 111 @44068 has 4 MA's), (122, 43993), (126, 43969), (127, 43963), (129, 43957), (135, 43906), (142, 43885), (153, 43828), (158, 43789), (177, 43687),

Gene: Phaded\_71 Start: 46578, Stop: 46021, Start Num: 72

Candidate Starts for Phaded\_71:

(Start: 72 @46578 has 33 MA's), (Start: 77 @46566 has 160 MA's), (Start: 111 @46449 has 4 MA's), (119, 46392), (127, 46344), (135, 46290), (153, 46203), (158, 46164), (178, 46065),

Gene: Phaeder\_77 Start: 44644, Stop: 44108, Start Num: 77

Candidate Starts for Phaeder\_77:

(Start: 72 @44656 has 33 MA's), (Start: 77 @44644 has 160 MA's), (Start: 111 @44548 has 4 MA's), (112, 44539), (113, 44524), (119, 44491), (142, 44368), (144, 44353), (145, 44350), (152, 44308), (153, 44305), (166, 44227), (178, 44158),

Gene: PhailMary\_57 Start: 40448, Stop: 39924, Start Num: 78

Candidate Starts for PhailMary\_57:

(Start: 78 @40448 has 23 MA's), (103, 40403), (107, 40385), (122, 40271), (129, 40235), (134, 40208), (135, 40187), (142, 40166), (151, 40118), (169, 40007), (171, 39998), (183, 39941),

Gene: Phalconet\_39 Start: 31262, Stop: 30750, Start Num: 91

Candidate Starts for Phalconet\_39:

(Start: 91 @31262 has 205 MA's), (Start: 104 @31220 has 5 MA's), (Start: 111 @31169 has 4 MA's), (112, 31160), (119, 31112), (126, 31070), (142, 30989), (149, 30947), (183, 30761),

Gene: Phanphagia\_35 Start: 30304, Stop: 29768, Start Num: 79

Candidate Starts for Phanphagia\_35:

(Start: 79 @30304 has 14 MA's), (Start: 104 @30238 has 5 MA's), (Start: 111 @30187 has 4 MA's), (112, 30178), (119, 30130), (126, 30088), (142, 30007), (149, 29965), (183, 29779),

Gene: Phantastic\_75 Start: 44335, Stop: 43802, Start Num: 84

Candidate Starts for Phantastic\_75:

(Start: 78 @44344 has 23 MA's), (Start: 84 @44335 has 180 MA's), (Start: 111 @44236 has 4 MA's), (122, 44161), (127, 44131), (130, 44113), (135, 44074), (142, 44053), (158, 43957), (180, 43849), (184, 43825),

Gene: Pharaoh\_71 Start: 44723, Stop: 44199, Start Num: 72

Candidate Starts for Pharaoh\_71:

(63, 44747), (Start: 72 @44723 has 33 MA's), (Start: 77 @44711 has 160 MA's), (Start: 111 @44618 has 4 MA's), (112, 44609), (119, 44561), (135, 44459), (142, 44435), (147, 44411), (153, 44372), (154, 44369), (158, 44333), (168, 44282), (171, 44270),

Gene: Phelipe\_71 Start: 44210, Stop: 43698, Start Num: 84

Candidate Starts for Phelipe\_71:

(Start: 84 @44210 has 180 MA's), (Start: 104 @44162 has 5 MA's), (Start: 111 @44111 has 4 MA's), (122, 44036), (126, 44012), (129, 44000), (135, 43949), (142, 43928), (153, 43871), (168, 43778), (177, 43730),

Gene: PherrisBueller\_74 Start: 44385, Stop: 43873, Start Num: 91

Candidate Starts for PherrisBueller\_74:

(26, 44559), (37, 44526), (Start: 68 @44442 has 2 MA's), (Start: 91 @44385 has 205 MA's), (Start: 104 @44343 has 5 MA's), (Start: 111 @44292 has 4 MA's), (112, 44283), (119, 44235), (142, 44112), (149, 44070), (183, 43884),

Gene: Phighter1804\_70 Start: 44232, Stop: 43720, Start Num: 84

Candidate Starts for Phighter1804\_70:

(Start: 84 @44232 has 180 MA's), (Start: 104 @44184 has 5 MA's), (Start: 111 @44133 has 4 MA's), (122, 44058), (126, 44034), (127, 44028), (129, 44022), (135, 43971), (142, 43950), (153, 43893), (158, 43854), (177, 43752),

Gene: Phillis\_81 Start: 44943, Stop: 44401, Start Num: 74

Candidate Starts for Phillis\_81:

(Start: 74 @44943 has 3 MA's), (Start: 93 @44904 has 78 MA's), (101, 44880), (Start: 111 @44817 has 4 MA's), (121, 44745), (122, 44742), (123, 44739), (126, 44718), (128, 44709), (142, 44637), (158, 44535), (171, 44469), (177, 44433), (181, 44421),

Gene: PhineBark\_70 Start: 45355, Stop: 44885, Start Num: 104

Candidate Starts for PhineBark\_70:

(26, 45571), (37, 45538), (58, 45475), (Start: 68 @45454 has 2 MA's), (Start: 91 @45397 has 205 MA's), (Start: 104 @45355 has 5 MA's), (Start: 111 @45304 has 4 MA's), (112, 45295), (119, 45247), (142, 45124), (149, 45082), (183, 44896),

Gene: PhishRPhriends\_75 Start: 44000, Stop: 43491, Start Num: 93

Candidate Starts for PhishRPhriends\_75:

(Start: 93 @44000 has 78 MA's), (Start: 104 @43964 has 5 MA's), (Start: 111 @43913 has 4 MA's), (112, 43904), (122, 43838), (129, 43802), (135, 43754), (142, 43733), (152, 43673), (153, 43670), (158, 43631), (169, 43568), (177, 43523),

Gene: Phlippers\_73 Start: 47748, Stop: 47236, Start Num: 91

Candidate Starts for Phlippers\_73:

(26, 47922), (33, 47904), (37, 47889), (Start: 68 @47805 has 2 MA's), (Start: 91 @47748 has 205 MA's), (Start: 104 @47706 has 5 MA's), (Start: 111 @47655 has 4 MA's), (112, 47646), (119, 47598), (126, 47556), (142, 47475), (149, 47433), (183, 47247),

Gene: Phlorence\_68 Start: 43451, Stop: 42921, Start Num: 84

Candidate Starts for Phlorence\_68:

(80, 43457), (Start: 84 @43451 has 180 MA's), (133, 43199), (134, 43196), (135, 43175), (142, 43154), (168, 43001), (170, 42995), (176, 42956),

Gene: Phoebe\_80 Start: 45001, Stop: 44492, Start Num: 93

Candidate Starts for Phoebe\_80:

(Start: 93 @45001 has 78 MA's), (Start: 104 @44965 has 5 MA's), (Start: 111 @44914 has 4 MA's), (112, 44905), (122, 44839), (129, 44803), (135, 44755), (142, 44734), (152, 44674), (153, 44671), (154, 44668), (158, 44632), (169, 44569), (177, 44524),

Gene: Phonnegut\_77 Start: 44716, Stop: 44180, Start Num: 77

Candidate Starts for Phonnegut\_77:

(Start: 72 @44728 has 33 MA's), (Start: 77 @44716 has 160 MA's), (Start: 111 @44620 has 4 MA's), (112, 44611), (113, 44596), (119, 44563), (142, 44440), (144, 44425), (145, 44422), (152, 44380), (153, 44377), (166, 44299),

Gene: Phontbonne\_70 Start: 44077, Stop: 43565, Start Num: 84

Candidate Starts for Phontbonne\_70:

(Start: 84 @44077 has 180 MA's), (Start: 104 @44029 has 5 MA's), (Start: 111 @43978 has 4 MA's), (122, 43903), (126, 43879), (127, 43873), (129, 43867), (135, 43816), (142, 43795), (153, 43738), (158, 43699), (168, 43645), (177, 43597),

Gene: Phox\_45 Start: 15891, Stop: 16403, Start Num: 91

Candidate Starts for Phox\_45:

(22, 15702), (Start: 86 @15879 has 6 MA's), (Start: 91 @15891 has 205 MA's), (Start: 104 @15933 has 5 MA's), (Start: 111 @15984 has 4 MA's), (112, 15993), (119, 16041), (126, 16083), (142, 16164), (149, 16206), (183, 16392),

Gene: Phoxy\_79 Start: 45030, Stop: 44521, Start Num: 93

Candidate Starts for Phoxy\_79:

(Start: 93 @45030 has 78 MA's), (Start: 104 @44994 has 5 MA's), (Start: 111 @44943 has 4 MA's), (112, 44934), (122, 44868), (129, 44832), (135, 44784), (142, 44763), (152, 44703), (153, 44700), (154, 44697), (158, 44661), (169, 44598), (177, 44553),

Gene: Phranny\_75 Start: 43896, Stop: 43474, Start Num: 111

Candidate Starts for Phranny\_75:

(42, 44106), (101, 43962), (Start: 111 @43896 has 4 MA's), (112, 43887), (122, 43821), (129, 43785), (135, 43737), (142, 43716), (152, 43656), (153, 43653), (158, 43614), (169, 43551), (177, 43506),

Gene: PickleBack\_70 Start: 43628, Stop: 43098, Start Num: 84

Candidate Starts for PickleBack\_70:

(80, 43634), (Start: 84 @43628 has 180 MA's), (133, 43376), (134, 43373), (135, 43352), (142, 43331), (168, 43178), (170, 43172), (176, 43133),

Gene: PinkPlastic\_71 Start: 45033, Stop: 44521, Start Num: 91

Candidate Starts for PinkPlastic\_71:

(26, 45207), (37, 45174), (58, 45111), (Start: 68 @45090 has 2 MA's), (Start: 91 @45033 has 205 MA's), (Start: 104 @44991 has 5 MA's), (Start: 111 @44940 has 4 MA's), (112, 44931), (119, 44883), (142, 44760), (149, 44718), (183, 44532),

Gene: Pinkcreek\_38 Start: 13361, Stop: 13873, Start Num: 91

Candidate Starts for Pinkcreek\_38:

(22, 13172), (Start: 86 @13349 has 6 MA's), (Start: 91 @13361 has 205 MA's), (Start: 104 @13403 has 5 MA's), (Start: 111 @13454 has 4 MA's), (112, 13463), (119, 13511), (142, 13634), (149, 13676), (183, 13862),

Gene: Pinto\_75 Start: 46896, Stop: 46384, Start Num: 91

Candidate Starts for Pinto\_75:

(26, 47070), (37, 47037), (Start: 68 @46953 has 2 MA's), (Start: 91 @46896 has 205 MA's), (Start: 104 @46854 has 5 MA's), (Start: 111 @46803 has 4 MA's), (112, 46794), (119, 46746), (142, 46623), (149, 46581), (173, 46437), (183, 46395),

Gene: Pioneer\_77 Start: 44716, Stop: 44180, Start Num: 77

Candidate Starts for Pioneer\_77:

(Start: 72 @44728 has 33 MA's), (Start: 77 @44716 has 160 MA's), (Start: 111 @44620 has 4 MA's), (112, 44611), (113, 44596), (119, 44563), (142, 44440), (144, 44425), (145, 44422), (152, 44380), (153, 44377), (166, 44299),

Gene: Pipcraft\_67 Start: 44172, Stop: 43660, Start Num: 84

Candidate Starts for Pipcraft\_67:

(Start: 84 @44172 has 180 MA's), (Start: 104 @44124 has 5 MA's), (Start: 111 @44073 has 4 MA's), (122, 43998), (126, 43974), (127, 43968), (129, 43962), (135, 43911), (142, 43890), (153, 43833), (158, 43794), (177, 43692),

Gene: Pippin\_76 Start: 46538, Stop: 46026, Start Num: 91

Candidate Starts for Pippin\_76:

(26, 46712), (37, 46679), (58, 46616), (Start: 68 @46595 has 2 MA's), (Start: 91 @46538 has 205 MA's), (Start: 104 @46496 has 5 MA's), (Start: 111 @46445 has 4 MA's), (112, 46436), (119, 46388), (142, 46265), (149, 46223), (183, 46037),

Gene: Piro94\_75 Start: 45423, Stop: 44806, Start Num: 60

Candidate Starts for Piro94\_75:

(Start: 60 @45423 has 4 MA's), (66, 45411), (Start: 72 @45393 has 33 MA's), (Start: 77 @45381 has 160 MA's), (Start: 111 @45264 has 4 MA's), (112, 45255), (115, 45228), (119, 45207), (135, 45105), (149, 45039), (153, 45018), (158, 44979), (171, 44916),

Gene: Pita2\_76 Start: 46539, Stop: 46027, Start Num: 91

Candidate Starts for Pita2\_76:

(26, 46713), (37, 46680), (Start: 68 @46596 has 2 MA's), (Start: 91 @46539 has 205 MA's), (Start: 104 @46497 has 5 MA's), (Start: 111 @46446 has 4 MA's), (112, 46437), (119, 46389), (135, 46287), (142, 46266), (149, 46224), (173, 46080), (183, 46038),

Gene: Pmask\_77 Start: 44829, Stop: 44302, Start Num: 72

Candidate Starts for Pmask\_77:

(Start: 72 @44829 has 33 MA's), (Start: 77 @44817 has 160 MA's), (Start: 111 @44730 has 4 MA's), (112, 44721), (119, 44673), (135, 44571), (142, 44550), (146, 44529), (153, 44487), (158, 44448),

Gene: Pocahontas\_72 Start: 44643, Stop: 44134, Start Num: 84

Candidate Starts for Pocahontas\_72:

(Start: 84 @44643 has 180 MA's), (107, 44586), (Start: 111 @44547 has 4 MA's), (112, 44538), (121, 44475), (122, 44472), (127, 44442), (130, 44424), (135, 44385), (142, 44364), (158, 44268), (169, 44211), (177, 44166),

Gene: Polo2Bam\_43 Start: 31331, Stop: 30819, Start Num: 91

Candidate Starts for Polo2Bam\_43:

(Start: 67 @31391 has 1 MA's), (Start: 91 @31331 has 205 MA's), (Start: 104 @31289 has 5 MA's), (Start: 111 @31238 has 4 MA's), (112, 31229), (119, 31181), (126, 31139), (142, 31058), (149, 31016), (183, 30830),

Gene: Polymorphads\_70 Start: 44191, Stop: 43679, Start Num: 84

Candidate Starts for Polymorphads\_70:

(Start: 84 @44191 has 180 MA's), (Start: 104 @44143 has 5 MA's), (Start: 111 @44092 has 4 MA's), (122, 44017), (126, 43993), (129, 43981), (135, 43930), (142, 43909), (153, 43852), (168, 43759), (177, 43711),

Gene: Pomar16\_78 Start: 45917, Stop: 45372, Start Num: 77

Candidate Starts for Pomar16\_78:

(Start: 72 @45929 has 33 MA's), (Start: 77 @45917 has 160 MA's), (Start: 111 @45800 has 4 MA's), (112, 45791), (113, 45776), (119, 45743), (135, 45641), (137, 45635), (142, 45617), (148, 45590), (149, 45575), (150, 45572), (152, 45557), (158, 45515), (169, 45461), (174, 45434), (178, 45416),

Gene: Poompha\_67 Start: 43206, Stop: 42637, Start Num: 57

Candidate Starts for Poompha\_67:

(Start: 57 @43206 has 1 MA's), (65, 43191), (Start: 84 @43143 has 180 MA's), (Start: 85 @43140 has 5 MA's), (Start: 111 @43047 has 4 MA's), (119, 42990), (122, 42972), (126, 42948), (135, 42888), (142, 42867), (165, 42735), (177, 42669), (183, 42648),

Gene: Popcicle\_73 Start: 44643, Stop: 44134, Start Num: 84

Candidate Starts for Popcicle\_73:

(Start: 84 @44643 has 180 MA's), (107, 44586), (Start: 111 @44547 has 4 MA's), (112, 44538), (121, 44475), (122, 44472), (127, 44442), (130, 44424), (135, 44385), (142, 44364), (158, 44268), (169, 44211), (177, 44166),

Gene: PotatoSplit\_80 Start: 45009, Stop: 44500, Start Num: 93

Candidate Starts for PotatoSplit\_80:

(Start: 93 @45009 has 78 MA's), (Start: 104 @44973 has 5 MA's), (Start: 111 @44922 has 4 MA's), (112, 44913), (122, 44847), (129, 44811), (135, 44763), (142, 44742), (152, 44682), (153, 44679), (154, 44676), (158, 44640), (169, 44577), (177, 44532),

Gene: Pound\_183 Start: 95495, Stop: 94983, Start Num: 91

Candidate Starts for Pound\_183:

(8, 95786), (28, 95657), (49, 95600), (51, 95591), (81, 95519), (Start: 89 @95498 has 2 MA's), (Start: 91 @95495 has 205 MA's), (Start: 104 @95453 has 5 MA's), (Start: 111 @95402 has 4 MA's), (112, 95393), (119, 95345), (126, 95303), (142, 95222), (149, 95180), (183, 94994),

Gene: Power\_75 Start: 45761, Stop: 45186, Start Num: 77

Candidate Starts for Power\_75:

(Start: 60 @45803 has 4 MA's), (66, 45791), (Start: 72 @45773 has 33 MA's), (Start: 77 @45761 has 160 MA's), (Start: 111 @45644 has 4 MA's), (112, 45635), (119, 45587), (135, 45485), (153, 45398), (158, 45359), (171, 45296),

Gene: Prin Ashe11\_67 Start: 43271, Stop: 42741, Start Num: 84

Candidate Starts for Prin Ashe11\_67:

(80, 43277), (Start: 84 @43271 has 180 MA's), (133, 43019), (134, 43016), (135, 42995), (142, 42974), (170, 42815), (176, 42776),

Gene: Priya\_75 Start: 44441, Stop: 43905, Start Num: 77

Candidate Starts for Priya\_75:

(Start: 72 @44453 has 33 MA's), (Start: 77 @44441 has 160 MA's), (Start: 111 @44345 has 4 MA's), (112, 44336), (113, 44321), (119, 44288), (142, 44165), (144, 44150), (145, 44147), (152, 44105), (153, 44102), (166, 44024), (171, 43994),

Gene: ProMouse\_75 Start: 46038, Stop: 45526, Start Num: 91

Candidate Starts for ProMouse\_75:

(26, 46212), (37, 46179), (58, 46116), (Start: 68 @46095 has 2 MA's), (Start: 91 @46038 has 205 MA's), (Start: 104 @45996 has 5 MA's), (Start: 111 @45945 has 4 MA's), (112, 45936), (119, 45888), (142, 45765), (149, 45723), (183, 45537),

Gene: Pukovnik\_72 Start: 46197, Stop: 45637, Start Num: 72

Candidate Starts for Pukovnik\_72:

(Start: 72 @46197 has 33 MA's), (Start: 77 @46185 has 160 MA's), (Start: 87 @46164 has 1 MA's), (Start: 100 @46131 has 1 MA's), (Start: 111 @46068 has 4 MA's), (119, 46011), (135, 45909), (137, 45903), (142, 45885), (153, 45822), (158, 45783), (171, 45717), (178, 45681),

Gene: Pumbaa\_70 Start: 44116, Stop: 43604, Start Num: 84

Candidate Starts for Pumbaa\_70:

(Start: 84 @44116 has 180 MA's), (Start: 104 @44068 has 5 MA's), (Start: 111 @44017 has 4 MA's), (122, 43942), (126, 43918), (127, 43912), (129, 43906), (135, 43855), (142, 43834), (153, 43777), (158, 43738), (177, 43636),

Gene: Puppy\_74 Start: 44305, Stop: 43799, Start Num: 86

Candidate Starts for Puppy\_74:

(Start: 78 @44320 has 23 MA's), (Start: 84 @44311 has 180 MA's), (Start: 86 @44305 has 6 MA's), (Start: 111 @44212 has 4 MA's), (122, 44137), (123, 44134), (126, 44113), (127, 44107), (130, 44089), (135, 44050), (140, 44035), (142, 44029), (158, 43933), (169, 43876), (177, 43831),

Gene: PurpleHaze\_78 Start: 44815, Stop: 44306, Start Num: 93

Candidate Starts for PurpleHaze\_78:

(Start: 93 @44815 has 78 MA's), (Start: 104 @44779 has 5 MA's), (Start: 111 @44728 has 4 MA's), (112, 44719), (122, 44653), (129, 44617), (135, 44569), (142, 44548), (152, 44488), (153, 44485), (158, 44446), (169, 44383), (177, 44338),

Gene: QTRlifeCrisis\_74 Start: 45881, Stop: 45369, Start Num: 91

Candidate Starts for QTRlifeCrisis\_74:

(26, 46055), (37, 46022), (Start: 68 @45938 has 2 MA's), (Start: 91 @45881 has 205 MA's), (Start: 104 @45839 has 5 MA's), (Start: 111 @45788 has 4 MA's), (112, 45779), (119, 45731), (142, 45608), (149, 45566), (183, 45380),

Gene: Qobbit\_75 Start: 44403, Stop: 43867, Start Num: 77

Candidate Starts for Qobbit\_75:

(Start: 72 @44415 has 33 MA's), (Start: 77 @44403 has 160 MA's), (Start: 111 @44307 has 4 MA's), (112, 44298), (113, 44283), (119, 44250), (142, 44127), (144, 44112), (145, 44109), (152, 44067), (153, 44064), (166, 43986), (171, 43956),

Gene: QueenB2\_73 Start: 45044, Stop: 44466, Start Num: 77

Candidate Starts for QueenB2\_73:

(Start: 34 @45164 has 1 MA's), (Start: 60 @45086 has 4 MA's), (66, 45074), (Start: 72 @45056 has 33 MA's), (Start: 77 @45044 has 160 MA's), (Start: 111 @44927 has 4 MA's), (112, 44918), (119, 44870), (135, 44768), (153, 44681), (156, 44651), (158, 44642), (171, 44579),

Gene: QueenBeesly\_76 Start: 45718, Stop: 45143, Start Num: 77

Candidate Starts for QueenBeesly\_76:

(Start: 60 @45760 has 4 MA's), (66, 45748), (Start: 72 @45730 has 33 MA's), (Start: 77 @45718 has 160 MA's), (Start: 111 @45601 has 4 MA's), (112, 45592), (119, 45544), (135, 45442), (153, 45355), (158, 45316), (171, 45253),

Gene: QuinnKiro\_72 Start: 44647, Stop: 44138, Start Num: 84

Candidate Starts for QuinnKiro\_72:

(Start: 84 @44647 has 180 MA's), (107, 44590), (Start: 111 @44551 has 4 MA's), (112, 44542), (121, 44479), (122, 44476), (127, 44446), (130, 44428), (135, 44389), (142, 44368), (158, 44272), (169, 44215), (177, 44170),

Gene: Rabinovish\_45 Start: 16067, Stop: 16579, Start Num: 91

Candidate Starts for Rabinovish\_45:

(22, 15878), (Start: 86 @16055 has 6 MA's), (Start: 91 @16067 has 205 MA's), (Start: 104 @16109 has 5 MA's), (Start: 111 @16160 has 4 MA's), (112, 16169), (119, 16217), (142, 16340), (149, 16382), (183, 16568),

Gene: Rachaly\_71 Start: 44832, Stop: 44260, Start Num: 77

Candidate Starts for Rachaly\_71:

(Start: 72 @44844 has 33 MA's), (Start: 77 @44832 has 160 MA's), (Start: 86 @44817 has 6 MA's), (90, 44805), (Start: 111 @44715 has 4 MA's), (112, 44706), (113, 44691), (119, 44658), (122, 44640), (128, 44607), (135, 44556), (149, 44490), (158, 44430), (175, 44325), (186, 44280),

Gene: Rahalelujah\_77 Start: 44590, Stop: 44048, Start Num: 72

Candidate Starts for Rahalelujah\_77:

(Start: 72 @44590 has 33 MA's), (Start: 77 @44578 has 160 MA's), (Start: 111 @44482 has 4 MA's), (113, 44458), (119, 44425), (122, 44407), (142, 44302), (145, 44284), (152, 44242), (153, 44239), (158, 44200), (166, 44161), (168, 44143), (169, 44140), (171, 44131), (178, 44092),

Gene: Raid\_73 Start: 45783, Stop: 45271, Start Num: 91



Candidate Starts for Raid\_73:

(26, 45957), (37, 45924), (Start: 68 @45840 has 2 MA's), (Start: 91 @45783 has 205 MA's), (Start: 104 @45741 has 5 MA's), (Start: 111 @45690 has 4 MA's), (112, 45681), (119, 45633), (142, 45510), (149, 45468), (183, 45282),

Gene: Rajelicia\_77 Start: 48719, Stop: 48207, Start Num: 91

Candidate Starts for Rajelicia\_77:

(26, 48893), (37, 48860), (Start: 68 @48776 has 2 MA's), (Start: 91 @48719 has 205 MA's), (Start: 104 @48677 has 5 MA's), (Start: 111 @48626 has 4 MA's), (112, 48617), (119, 48569), (142, 48446), (149, 48404), (183, 48218),

Gene: ReMo\_82 Start: 45680, Stop: 45159, Start Num: 77

Candidate Starts for ReMo\_82:

(Start: 77 @45680 has 160 MA's), (Start: 104 @45635 has 5 MA's), (Start: 111 @45584 has 4 MA's), (112, 45575), (119, 45527), (135, 45425), (142, 45404), (163, 45266), (168, 45248), (171, 45236), (178, 45200),

Gene: Reba\_74 Start: 43656, Stop: 43147, Start Num: 93

Candidate Starts for Reba\_74:

(Start: 93 @43656 has 78 MA's), (Start: 104 @43620 has 5 MA's), (Start: 111 @43569 has 4 MA's), (112, 43560), (122, 43494), (129, 43458), (135, 43410), (142, 43389), (152, 43329), (153, 43326), (158, 43287), (169, 43224), (177, 43179),

Gene: Rebeuca\_71 Start: 44450, Stop: 43944, Start Num: 85

Candidate Starts for Rebeuca\_71:

(Start: 57 @44516 has 1 MA's), (65, 44501), (Start: 84 @44453 has 180 MA's), (Start: 85 @44450 has 5 MA's), (Start: 111 @44354 has 4 MA's), (113, 44330), (119, 44297), (122, 44279), (126, 44255), (135, 44195), (142, 44174), (153, 44117), (158, 44078), (165, 44042), (177, 43976), (183, 43955),

Gene: RedRock\_74 Start: 45760, Stop: 45170, Start Num: 72

Candidate Starts for RedRock\_74:

(69, 45772), (Start: 72 @45760 has 33 MA's), (Start: 77 @45748 has 160 MA's), (95, 45709), (Start: 111 @45631 has 4 MA's), (112, 45622), (119, 45574), (125, 45547), (135, 45472), (138, 45463), (150, 45403), (153, 45385), (158, 45346), (172, 45271),

Gene: Refuge\_73 Start: 45856, Stop: 45341, Start Num: 77

Candidate Starts for Refuge\_73:

(58, 45901), (Start: 77 @45856 has 160 MA's), (Start: 111 @45766 has 4 MA's), (112, 45757), (119, 45709), (135, 45607), (142, 45583), (147, 45559), (153, 45520), (158, 45481), (171, 45418), (178, 45382), (186, 45349),

Gene: Relief\_69 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Relief\_69:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Remus\_84 Start: 45610, Stop: 45089, Start Num: 77

Candidate Starts for Remus\_84:

(Start: 77 @45610 has 160 MA's), (Start: 104 @45565 has 5 MA's), (Start: 111 @45514 has 4 MA's), (112, 45505), (119, 45457), (135, 45355), (142, 45334), (163, 45196), (168, 45178), (171, 45166), (178, 45130),

Gene: ResDef\_71 Start: 44650, Stop: 44138, Start Num: 84

Candidate Starts for ResDef\_71:

(Start: 84 @44650 has 180 MA's), (107, 44593), (Start: 111 @44554 has 4 MA's), (112, 44545), (121, 44482), (122, 44479), (127, 44449), (130, 44428), (135, 44389), (142, 44368), (158, 44272), (169, 44215), (177, 44170),

Gene: Retro23\_76 Start: 45449, Stop: 44871, Start Num: 77

Candidate Starts for Retro23\_76:

(Start: 60 @45491 has 4 MA's), (66, 45479), (Start: 72 @45461 has 33 MA's), (Start: 77 @45449 has 160 MA's), (Start: 111 @45332 has 4 MA's), (112, 45323), (119, 45275), (135, 45173), (150, 45104), (153, 45086), (156, 45056), (158, 45047), (171, 44984),

Gene: RexFury\_57 Start: 40154, Stop: 39630, Start Num: 78

Candidate Starts for RexFury\_57:

(Start: 78 @40154 has 23 MA's), (103, 40109), (107, 40091), (122, 39977), (129, 39941), (134, 39914), (135, 39893), (142, 39872), (144, 39857), (150, 39827), (151, 39824), (169, 39713), (171, 39704), (183, 39647),

Gene: Rhodalysa\_58 Start: 40126, Stop: 39602, Start Num: 78

Candidate Starts for Rhodalysa\_58:

(Start: 78 @40126 has 23 MA's), (103, 40081), (107, 40063), (122, 39949), (129, 39913), (134, 39886), (135, 39865), (142, 39844), (144, 39829), (150, 39799), (151, 39796), (153, 39781), (169, 39685), (171, 39676), (183, 39619),

Gene: Rhynn\_71 Start: 46307, Stop: 45795, Start Num: 91

Candidate Starts for Rhynn\_71:

(31, 46466), (Start: 68 @46364 has 2 MA's), (Start: 91 @46307 has 205 MA's), (Start: 104 @46265 has 5 MA's), (Start: 111 @46214 has 4 MA's), (112, 46205), (119, 46157), (142, 46034), (149, 45992), (173, 45848), (183, 45806),

Gene: Rialto\_43 Start: 33485, Stop: 32973, Start Num: 91

Candidate Starts for Rialto\_43:

(66, 33539), (Start: 91 @33485 has 205 MA's), (Start: 104 @33443 has 5 MA's), (Start: 111 @33392 has 4 MA's), (112, 33383), (119, 33335), (126, 33293), (142, 33212), (149, 33170), (183, 32984),

Gene: Rifter\_78 Start: 43502, Stop: 42987, Start Num: 77

Candidate Starts for Rifter\_78:

(29, 43634), (Start: 64 @43538 has 9 MA's), (Start: 72 @43514 has 33 MA's), (Start: 77 @43502 has 160 MA's), (Start: 111 @43415 has 4 MA's), (119, 43358), (135, 43256), (142, 43235), (153, 43172), (158, 43133), (169, 43079), (171, 43070), (185, 43007),

Gene: Ringer\_75 Start: 47251, Stop: 46739, Start Num: 91

Candidate Starts for Ringer\_75:

(26, 47425), (37, 47392), (Start: 68 @47308 has 2 MA's), (Start: 91 @47251 has 205 MA's), (Start: 104 @47209 has 5 MA's), (Start: 111 @47158 has 4 MA's), (112, 47149), (119, 47101), (142, 46978), (149, 46936), (183, 46750),

Gene: Roary\_86 Start: 46114, Stop: 45572, Start Num: 74

Candidate Starts for Roary\_86:

(Start: 74 @46114 has 3 MA's), (Start: 93 @46075 has 78 MA's), (101, 46051), (107, 46027), (Start: 111 @45988 has 4 MA's), (121, 45916), (123, 45910), (126, 45889), (129, 45877), (142, 45808), (158, 45706), (173, 45622), (177, 45604), (181, 45592),

Gene: Rockstar\_72 Start: 44129, Stop: 43650, Start Num: 99

Candidate Starts for Rockstar\_72:

(Start: 99 @44129 has 1 MA's), (105, 44111), (Start: 111 @44063 has 4 MA's), (122, 43988), (127, 43958), (130, 43940), (135, 43901), (142, 43880), (158, 43784), (169, 43727), (177, 43682),

Gene: Rohr\_78 Start: 48502, Stop: 47990, Start Num: 91

Candidate Starts for Rohr\_78:

(26, 48676), (37, 48643), (Start: 68 @48559 has 2 MA's), (Start: 91 @48502 has 205 MA's), (Start: 104 @48460 has 5 MA's), (Start: 111 @48409 has 4 MA's), (112, 48400), (119, 48352), (135, 48250), (142, 48229), (149, 48187), (173, 48043), (183, 48001),

Gene: Roksolana\_78 Start: 44236, Stop: 43721, Start Num: 77

Candidate Starts for Roksolana\_78:

(Start: 64 @44272 has 9 MA's), (Start: 72 @44248 has 33 MA's), (Start: 77 @44236 has 160 MA's), (Start: 111 @44149 has 4 MA's), (119, 44092), (135, 43990), (142, 43969), (153, 43906), (158, 43867), (169, 43813), (171, 43804), (185, 43741),

Gene: Romney\_69 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Romney\_69:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (158, 43790), (177, 43688),

Gene: Ronan\_41 Start: 12698, Stop: 13210, Start Num: 91

Candidate Starts for Ronan\_41:

(22, 12509), (Start: 86 @12686 has 6 MA's), (Start: 91 @12698 has 205 MA's), (Start: 104 @12740 has 5 MA's), (Start: 111 @12791 has 4 MA's), (112, 12800), (119, 12848), (126, 12890), (142, 12971), (149, 13013), (183, 13199),

Gene: Roosevelt\_68 Start: 44173, Stop: 43661, Start Num: 84

Candidate Starts for Roosevelt\_68:

(Start: 84 @44173 has 180 MA's), (Start: 104 @44125 has 5 MA's), (Start: 111 @44074 has 4 MA's), (122, 43999), (126, 43975), (127, 43969), (129, 43963), (135, 43912), (142, 43891), (153, 43834), (158, 43795), (168, 43741), (177, 43693),

Gene: Rosa24\_67 Start: 44199, Stop: 43687, Start Num: 84

Candidate Starts for Rosa24\_67:

(Start: 84 @44199 has 180 MA's), (Start: 104 @44151 has 5 MA's), (Start: 111 @44100 has 4 MA's), (122, 44025), (126, 44001), (127, 43995), (129, 43989), (135, 43938), (142, 43917), (153, 43860), (158, 43821), (177, 43719),

Gene: Rosalind\_82 Start: 45504, Stop: 44983, Start Num: 77

Candidate Starts for Rosalind\_82:

(Start: 77 @45504 has 160 MA's), (Start: 104 @45459 has 5 MA's), (Start: 111 @45408 has 4 MA's), (112, 45399), (119, 45351), (135, 45249), (142, 45228), (163, 45090), (168, 45072), (171, 45060), (178, 45024),

Gene: Rowdy\_72 Start: 44148, Stop: 43642, Start Num: 85

Candidate Starts for Rowdy\_72:

(Start: 57 @44214 has 1 MA's), (65, 44199), (Start: 85 @44148 has 5 MA's), (Start: 104 @44106 has 5 MA's), (Start: 111 @44055 has 4 MA's), (113, 44031), (119, 43998), (122, 43980), (126, 43956), (135, 43896), (142, 43875), (165, 43743), (177, 43677), (183, 43656),

Gene: Rubeus\_76 Start: 45002, Stop: 44490, Start Num: 91

Candidate Starts for Rubeus\_76:

(26, 45176), (37, 45143), (Start: 68 @45059 has 2 MA's), (Start: 91 @45002 has 205 MA's), (Start: 104 @44960 has 5 MA's), (Start: 111 @44909 has 4 MA's), (112, 44900), (119, 44852), (142, 44729), (149, 44687), (183, 44501),

Gene: Rufus\_78 Start: 47691, Stop: 47179, Start Num: 91

Candidate Starts for Rufus\_78:

(26, 47865), (37, 47832), (Start: 68 @47748 has 2 MA's), (Start: 91 @47691 has 205 MA's), (Start: 104 @47649 has 5 MA's), (Start: 111 @47598 has 4 MA's), (112, 47589), (119, 47541), (142, 47418), (149, 47376), (183, 47190),

Gene: Ruin\_70 Start: 44164, Stop: 43652, Start Num: 84

Candidate Starts for Ruin\_70:

(Start: 84 @44164 has 180 MA's), (Start: 104 @44116 has 5 MA's), (Start: 111 @44065 has 4 MA's), (122, 43990), (126, 43966), (127, 43960), (129, 43954), (135, 43903), (142, 43882), (153, 43825), (158, 43786), (177, 43684),

Gene: Rummer\_78 Start: 45033, Stop: 44524, Start Num: 93

Candidate Starts for Rummer\_78:

(Start: 93 @45033 has 78 MA's), (Start: 104 @44997 has 5 MA's), (Start: 111 @44946 has 4 MA's), (112, 44937), (122, 44871), (129, 44835), (135, 44787), (142, 44766), (152, 44706), (153, 44703), (154, 44700), (158, 44664), (169, 44601), (177, 44556),

Gene: Ruotula\_79 Start: 48104, Stop: 47592, Start Num: 91

Candidate Starts for Ruotula\_79:

(26, 48278), (37, 48245), (Start: 68 @48161 has 2 MA's), (Start: 91 @48104 has 205 MA's), (Start: 104 @48062 has 5 MA's), (Start: 111 @48011 has 4 MA's), (112, 48002), (119, 47954), (142, 47831), (149, 47789), (183, 47603),

Gene: Rutherferd\_77 Start: 47271, Stop: 46759, Start Num: 91

Candidate Starts for Rutherferd\_77:

(26, 47445), (33, 47427), (37, 47412), (Start: 68 @47328 has 2 MA's), (Start: 91 @47271 has 205 MA's), (Start: 104 @47229 has 5 MA's), (Start: 111 @47178 has 4 MA's), (112, 47169), (119, 47121), (142, 46998), (149, 46956), (183, 46770),

Gene: RyeScarlet\_78 Start: 44691, Stop: 44155, Start Num: 77

Candidate Starts for RyeScarlet\_78:

(Start: 72 @44703 has 33 MA's), (Start: 77 @44691 has 160 MA's), (Start: 111 @44595 has 4 MA's), (112, 44586), (113, 44571), (119, 44538), (142, 44415), (144, 44400), (145, 44397), (152, 44355), (153, 44352), (166, 44274),

Gene: STLscum\_81 Start: 47313, Stop: 46801, Start Num: 91

Candidate Starts for STLscum\_81:

(26, 47487), (37, 47454), (Start: 68 @47370 has 2 MA's), (Start: 91 @47313 has 205 MA's), (Start: 104 @47271 has 5 MA's), (Start: 111 @47220 has 4 MA's), (112, 47211), (119, 47163), (142, 47040), (149, 46998), (183, 46812),

Gene: Sabertooth\_70 Start: 44174, Stop: 43662, Start Num: 84

Candidate Starts for Sabertooth\_70:

(Start: 84 @44174 has 180 MA's), (Start: 104 @44126 has 5 MA's), (Start: 111 @44075 has 4 MA's), (122, 44000), (126, 43976), (127, 43970), (129, 43964), (135, 43913), (142, 43892), (153, 43835), (158, 43796), (177, 43694),

Gene: Sabia\_77 Start: 45049, Stop: 44504, Start Num: 75

Candidate Starts for Sabia\_77:

(Start: 75 @45049 has 3 MA's), (Start: 93 @45013 has 78 MA's), (Start: 104 @44977 has 5 MA's), (Start: 111 @44926 has 4 MA's), (112, 44917), (122, 44851), (129, 44815), (135, 44767), (142, 44746), (152, 44686), (153, 44683), (154, 44680), (158, 44644), (169, 44581), (177, 44536),

Gene: Sabinator\_77 Start: 45007, Stop: 44498, Start Num: 93

Candidate Starts for Sabinator\_77:

(Start: 93 @45007 has 78 MA's), (Start: 104 @44971 has 5 MA's), (Start: 111 @44920 has 4 MA's), (112, 44911), (122, 44845), (129, 44809), (135, 44761), (142, 44740), (152, 44680), (153, 44677), (154, 44674), (158, 44638), (169, 44575), (177, 44530),

Gene: Sachima\_73 Start: 44672, Stop: 44136, Start Num: 77

Candidate Starts for Sachima\_73:

(Start: 72 @44684 has 33 MA's), (Start: 77 @44672 has 160 MA's), (Start: 111 @44576 has 4 MA's), (112, 44567), (113, 44552), (119, 44519), (142, 44396), (144, 44381), (145, 44378), (152, 44336), (153, 44333), (166, 44255),

Gene: Sagefire\_72 Start: 46361, Stop: 45849, Start Num: 91

Candidate Starts for Sagefire\_72:

(26, 46535), (37, 46502), (Start: 68 @46418 has 2 MA's), (Start: 91 @46361 has 205 MA's), (Start: 104 @46319 has 5 MA's), (Start: 111 @46268 has 4 MA's), (112, 46259), (119, 46211), (142, 46088), (149, 46046), (183, 45860),

Gene: Saintus\_80 Start: 42723, Stop: 42220, Start Num: 93

Candidate Starts for Saintus\_80:

(Start: 74 @42762 has 3 MA's), (Start: 93 @42723 has 78 MA's), (101, 42699), (107, 42675), (Start: 111 @42636 has 4 MA's), (121, 42564), (123, 42558), (126, 42537), (129, 42525), (142, 42456), (158, 42354), (173, 42270), (177, 42252), (181, 42240),

Gene: Salz\_73 Start: 43696, Stop: 43145, Start Num: 77

Candidate Starts for Salz\_73:

(Start: 60 @43738 has 4 MA's), (Start: 72 @43708 has 33 MA's), (Start: 77 @43696 has 160 MA's), (90, 43669), (Start: 111 @43579 has 4 MA's), (113, 43555), (119, 43522), (135, 43420), (142, 43396), (144, 43381), (149, 43354), (153, 43333), (158, 43294), (178, 43195), (186, 43162),

Gene: SamScheppers\_83 Start: 52699, Stop: 53205, Start Num: 88

Candidate Starts for SamScheppers\_83:

(Start: 88 @52699 has 1 MA's), (Start: 104 @52744 has 5 MA's), (112, 52804), (113, 52819), (122, 52870), (144, 52993), (147, 53002), (155, 53062), (158, 53080), (169, 53137),

Gene: Sandaddy\_73 Start: 46693, Stop: 46181, Start Num: 91

Candidate Starts for Sandaddy\_73:

(26, 46867), (37, 46834), (Start: 68 @46750 has 2 MA's), (Start: 91 @46693 has 205 MA's), (Start: 104 @46651 has 5 MA's), (Start: 111 @46600 has 4 MA's), (112, 46591), (119, 46543), (142, 46420), (149, 46378), (183, 46192),

Gene: Sanya\_70 Start: 46998, Stop: 46486, Start Num: 91

Candidate Starts for Sanya\_70:

(26, 47172), (37, 47139), (Start: 68 @47055 has 2 MA's), (Start: 91 @46998 has 205 MA's), (Start: 104 @46956 has 5 MA's), (Start: 111 @46905 has 4 MA's), (112, 46896), (119, 46848), (142, 46725), (149, 46683), (183, 46497),

Gene: SaturnRing\_73 Start: 44692, Stop: 44180, Start Num: 84

Candidate Starts for SaturnRing\_73:

(Start: 78 @44701 has 23 MA's), (Start: 84 @44692 has 180 MA's), (Start: 86 @44686 has 6 MA's),  
(Start: 111 @44593 has 4 MA's), (122, 44518), (126, 44494), (127, 44488), (130, 44470), (135, 44431),  
(140, 44416), (142, 44410), (158, 44314), (169, 44257), (177, 44212),

Gene: Scamp\_70 Start: 44173, Stop: 43661, Start Num: 84

Candidate Starts for Scamp\_70:

(Start: 84 @44173 has 180 MA's), (Start: 104 @44125 has 5 MA's), (Start: 111 @44074 has 4 MA's),  
(122, 43999), (126, 43975), (127, 43969), (129, 43963), (135, 43912), (142, 43891), (153, 43834),  
(158, 43795), (177, 43693),

Gene: Scherzo\_76 Start: 44948, Stop: 44400, Start Num: 72

Candidate Starts for Scherzo\_76:

(Start: 72 @44948 has 33 MA's), (Start: 77 @44936 has 160 MA's), (Start: 111 @44840 has 4 MA's),  
(113, 44816), (119, 44783), (142, 44660), (144, 44645), (145, 44642), (152, 44600), (153, 44597),  
(166, 44519),

Gene: Scorpio\_73 Start: 44213, Stop: 43683, Start Num: 84

Candidate Starts for Scorpio\_73:

(36, 44345), (43, 44312), (Start: 84 @44213 has 180 MA's), (96, 44183), (124, 44021), (133, 43961),  
(135, 43937), (142, 43916), (168, 43763), (170, 43757), (176, 43718),

Gene: Scout\_72 Start: 43869, Stop: 43357, Start Num: 84

Candidate Starts for Scout\_72:

(61, 43923), (Start: 84 @43869 has 180 MA's), (Start: 86 @43863 has 6 MA's), (Start: 111 @43770  
has 4 MA's), (122, 43695), (123, 43692), (126, 43671), (130, 43647), (135, 43608), (140, 43593), (142,  
43587), (158, 43491), (169, 43434), (177, 43389),

Gene: Scowl\_76 Start: 46658, Stop: 46146, Start Num: 91

Candidate Starts for Scowl\_76:

(26, 46832), (33, 46814), (37, 46799), (Start: 68 @46715 has 2 MA's), (Start: 91 @46658 has 205  
MA's), (Start: 104 @46616 has 5 MA's), (Start: 111 @46565 has 4 MA's), (112, 46556), (119, 46508),  
(142, 46385), (149, 46343), (173, 46199), (183, 46157),

Gene: Seabiscuit\_75 Start: 45167, Stop: 44655, Start Num: 91

Candidate Starts for Seabiscuit\_75:

(1, 45692), (2, 45578), (4, 45509), (26, 45341), (37, 45308), (Start: 68 @45224 has 2 MA's), (Start: 91  
@45167 has 205 MA's), (Start: 104 @45125 has 5 MA's), (Start: 111 @45074 has 4 MA's), (112,  
45065), (119, 45017), (142, 44894), (149, 44852), (183, 44666),

Gene: Seanderson\_75 Start: 48062, Stop: 47550, Start Num: 91

Candidate Starts for Seanderson\_75:

(26, 48236), (37, 48203), (58, 48140), (Start: 68 @48119 has 2 MA's), (Start: 91 @48062 has 205  
MA's), (Start: 104 @48020 has 5 MA's), (Start: 111 @47969 has 4 MA's), (112, 47960), (119, 47912),  
(142, 47789), (149, 47747), (183, 47561),

Gene: SemperFi\_76 Start: 45606, Stop: 45031, Start Num: 77

Candidate Starts for SemperFi\_76:

(Start: 60 @45648 has 4 MA's), (66, 45636), (Start: 72 @45618 has 33 MA's), (Start: 77 @45606 has  
160 MA's), (Start: 111 @45489 has 4 MA's), (112, 45480), (119, 45432), (135, 45330), (153, 45243),  
(158, 45204), (171, 45141),

Gene: SenorClean\_65 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for SenorClean\_65:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: Serenity\_79 Start: 45017, Stop: 44466, Start Num: 77

Candidate Starts for Serenity\_79:

(17, 45218), (39, 45116), (46, 45095), (Start: 62 @45056 has 1 MA's), (Start: 72 @45029 has 33 MA's), (Start: 77 @45017 has 160 MA's), (90, 44990), (112, 44891), (113, 44876), (119, 44843), (135, 44741), (137, 44735), (142, 44717), (148, 44690), (149, 44675), (153, 44654), (158, 44615), (171, 44552),

Gene: Severus\_68 Start: 43143, Stop: 42637, Start Num: 84

Candidate Starts for Severus\_68:

(Start: 57 @43206 has 1 MA's), (65, 43191), (Start: 84 @43143 has 180 MA's), (Start: 85 @43140 has 5 MA's), (Start: 111 @43047 has 4 MA's), (119, 42990), (122, 42972), (126, 42948), (135, 42888), (142, 42867), (165, 42735), (177, 42669), (183, 42648),

Gene: Shaka\_68 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Shaka\_68:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's), (122, 43994), (126, 43970), (129, 43958), (135, 43907), (142, 43886), (153, 43829), (177, 43688),

Gene: Sham4\_74 Start: 43779, Stop: 43276, Start Num: 77

Candidate Starts for Sham4\_74:

(Start: 60 @43821 has 4 MA's), (Start: 72 @43791 has 33 MA's), (Start: 77 @43779 has 160 MA's), (90, 43752), (Start: 111 @43662 has 4 MA's), (113, 43638), (119, 43605), (135, 43503), (142, 43479), (144, 43464), (149, 43437), (153, 43416), (158, 43377),

Gene: Shapes\_72 Start: 44148, Stop: 43642, Start Num: 85

Candidate Starts for Shapes\_72:

(Start: 57 @44214 has 1 MA's), (65, 44199), (Start: 85 @44148 has 5 MA's), (Start: 104 @44106 has 5 MA's), (Start: 111 @44055 has 4 MA's), (113, 44031), (119, 43998), (122, 43980), (126, 43956), (135, 43896), (142, 43875), (165, 43743), (177, 43677), (183, 43656),

Gene: Shaqnato\_43 Start: 13851, Stop: 14363, Start Num: 91

Candidate Starts for Shaqnato\_43:

(22, 13662), (Start: 86 @13839 has 6 MA's), (Start: 91 @13851 has 205 MA's), (Start: 104 @13893 has 5 MA's), (Start: 111 @13944 has 4 MA's), (112, 13953), (119, 14001), (126, 14043), (142, 14124), (149, 14166), (183, 14352),

Gene: Shauna1\_36 Start: 30307, Stop: 29771, Start Num: 79

Candidate Starts for Shauna1\_36:

(Start: 79 @30307 has 14 MA's), (Start: 104 @30241 has 5 MA's), (Start: 111 @30190 has 4 MA's), (112, 30181), (119, 30133), (126, 30091), (142, 30010), (149, 29968), (183, 29782),

Gene: SheaKeira\_71 Start: 43755, Stop: 43222, Start Num: 77

Candidate Starts for SheaKeira\_71:

(Start: 77 @43755 has 160 MA's), (109, 43692), (Start: 111 @43659 has 4 MA's), (113, 43635), (119, 43602), (122, 43584), (142, 43479), (144, 43464), (145, 43461), (152, 43419), (153, 43416), (164, 43341), (167, 43335), (168, 43320), (169, 43317), (171, 43308),

Gene: Sheen\_74 Start: 48075, Stop: 47566, Start Num: 83

Candidate Starts for Sheen\_74:

(Start: 75 @48093 has 3 MA's), (Start: 83 @48075 has 3 MA's), (Start: 111 @47976 has 4 MA's), (119, 47919), (121, 47904), (122, 47901), (123, 47898), (126, 47877), (129, 47865), (142, 47796), (153, 47739), (169, 47643), (177, 47598),

Gene: SheldonCooper\_70 Start: 44608, Stop: 44096, Start Num: 84

Candidate Starts for SheldonCooper\_70:

(Start: 84 @44608 has 180 MA's), (Start: 104 @44560 has 5 MA's), (Start: 111 @44509 has 4 MA's), (122, 44434), (126, 44410), (129, 44398), (135, 44347), (142, 44326), (153, 44269), (177, 44128),

Gene: ShortQueendom\_68 Start: 44367, Stop: 43855, Start Num: 91

Candidate Starts for ShortQueendom\_68:

(26, 44541), (37, 44508), (Start: 68 @44424 has 2 MA's), (Start: 91 @44367 has 205 MA's), (Start: 104 @44325 has 5 MA's), (Start: 111 @44274 has 4 MA's), (112, 44265), (119, 44217), (142, 44094), (149, 44052), (183, 43866),

Gene: Shuman\_59 Start: 40077, Stop: 39553, Start Num: 78

Candidate Starts for Shuman\_59:

(Start: 78 @40077 has 23 MA's), (103, 40032), (107, 40014), (122, 39900), (129, 39864), (134, 39837), (135, 39816), (142, 39795), (144, 39780), (150, 39750), (151, 39747), (169, 39636), (171, 39627), (183, 39570),

Gene: Shygu2\_69 Start: 44403, Stop: 43903, Start Num: 94

Candidate Starts for Shygu2\_69:

(Start: 94 @44403 has 20 MA's), (Start: 111 @44316 has 4 MA's), (113, 44292), (127, 44211), (129, 44205), (130, 44193), (135, 44154), (140, 44139), (142, 44133), (158, 44037), (171, 43971), (177, 43935),

Gene: Sibs6\_75 Start: 44007, Stop: 43492, Start Num: 91

Candidate Starts for Sibs6\_75:

(26, 44181), (37, 44148), (Start: 68 @44064 has 2 MA's), (Start: 91 @44007 has 205 MA's), (Start: 104 @43965 has 5 MA's), (Start: 111 @43914 has 4 MA's), (112, 43905), (119, 43857), (135, 43755), (142, 43734), (149, 43692), (173, 43548), (183, 43506),

Gene: Skipitt\_69 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for Skipitt\_69:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: Sknot\_76 Start: 45409, Stop: 44840, Start Num: 77

Candidate Starts for Sknot\_76:

(Start: 60 @45451 has 4 MA's), (66, 45439), (Start: 72 @45421 has 33 MA's), (Start: 77 @45409 has 160 MA's), (Start: 111 @45292 has 4 MA's), (112, 45283), (115, 45256), (119, 45235), (135, 45133), (149, 45067), (153, 45046), (158, 45007), (171, 44944),

Gene: Slagathor\_76 Start: 47519, Stop: 47007, Start Num: 91

Candidate Starts for Slagathor\_76:

(26, 47693), (37, 47660), (Start: 68 @47576 has 2 MA's), (Start: 91 @47519 has 205 MA's), (Start: 104 @47477 has 5 MA's), (Start: 111 @47426 has 4 MA's), (112, 47417), (119, 47369), (142, 47246), (149, 47204), (183, 47018),



Gene: Smeadley\_84 Start: 45939, Stop: 45436, Start Num: 93

Candidate Starts for Smeadley\_84:

(Start: 74 @45978 has 3 MA's), (Start: 93 @45939 has 78 MA's), (101, 45915), (107, 45891), (Start: 111 @45852 has 4 MA's), (121, 45780), (123, 45774), (126, 45753), (129, 45741), (142, 45672), (158, 45570), (173, 45486), (177, 45468), (181, 45456),

Gene: Smeagan\_78 Start: 45993, Stop: 45418, Start Num: 77

Candidate Starts for Smeagan\_78:

(Start: 60 @46035 has 4 MA's), (66, 46023), (Start: 72 @46005 has 33 MA's), (Start: 77 @45993 has 160 MA's), (Start: 111 @45876 has 4 MA's), (112, 45867), (119, 45819), (135, 45717), (153, 45630), (158, 45591), (171, 45528),

Gene: Smeagol\_78 Start: 48727, Stop: 48215, Start Num: 91

Candidate Starts for Smeagol\_78:

(26, 48901), (37, 48868), (Start: 68 @48784 has 2 MA's), (Start: 91 @48727 has 205 MA's), (Start: 104 @48685 has 5 MA's), (Start: 111 @48634 has 4 MA's), (112, 48625), (119, 48577), (142, 48454), (149, 48412), (183, 48226),

Gene: SmellyB\_78 Start: 44178, Stop: 43663, Start Num: 77

Candidate Starts for SmellyB\_78:

(Start: 72 @44190 has 33 MA's), (Start: 77 @44178 has 160 MA's), (Start: 111 @44091 has 4 MA's), (112, 44082), (119, 44034), (135, 43932), (142, 43911), (146, 43890), (153, 43848), (158, 43809),

Gene: SnapTap\_75 Start: 45417, Stop: 44842, Start Num: 77

Candidate Starts for SnapTap\_75:

(Start: 60 @45459 has 4 MA's), (66, 45447), (Start: 72 @45429 has 33 MA's), (Start: 77 @45417 has 160 MA's), (Start: 111 @45300 has 4 MA's), (112, 45291), (119, 45243), (135, 45141), (153, 45054), (158, 45015), (169, 44961), (171, 44952),

Gene: Snape\_78 Start: 44889, Stop: 44338, Start Num: 77

Candidate Starts for Snape\_78:

(Start: 60 @44931 has 4 MA's), (Start: 72 @44901 has 33 MA's), (Start: 77 @44889 has 160 MA's), (90, 44862), (Start: 111 @44772 has 4 MA's), (113, 44748), (119, 44715), (135, 44613), (142, 44589), (144, 44574), (149, 44547), (153, 44526), (158, 44487), (178, 44388), (186, 44355),

Gene: Snazzy\_76 Start: 47170, Stop: 46655, Start Num: 91

Candidate Starts for Snazzy\_76:

(26, 47344), (37, 47311), (Start: 68 @47227 has 2 MA's), (Start: 91 @47170 has 205 MA's), (Start: 104 @47128 has 5 MA's), (Start: 111 @47077 has 4 MA's), (112, 47068), (119, 47020), (135, 46918), (142, 46897), (149, 46855), (173, 46711), (183, 46669),

Gene: Snickers\_75 Start: 44978, Stop: 44469, Start Num: 93

Candidate Starts for Snickers\_75:

(Start: 93 @44978 has 78 MA's), (Start: 104 @44942 has 5 MA's), (Start: 111 @44891 has 4 MA's), (112, 44882), (122, 44816), (129, 44780), (135, 44732), (142, 44711), (152, 44651), (153, 44648), (154, 44645), (158, 44609), (169, 44546), (177, 44501),

Gene: SoYo\_76 Start: 44920, Stop: 44411, Start Num: 93

Candidate Starts for SoYo\_76:

(Start: 93 @44920 has 78 MA's), (Start: 104 @44884 has 5 MA's), (Start: 111 @44833 has 4 MA's), (112, 44824), (122, 44758), (129, 44722), (135, 44674), (142, 44653), (152, 44593), (153, 44590), (154, 44587), (158, 44551), (169, 44488), (177, 44443),

Gene: SoilDragon\_78 Start: 44449, Stop: 43940, Start Num: 93

Candidate Starts for SoilDragon\_78:

(Start: 93 @44449 has 78 MA's), (Start: 104 @44413 has 5 MA's), (Start: 111 @44362 has 4 MA's), (112, 44353), (122, 44287), (129, 44251), (135, 44203), (142, 44182), (152, 44122), (153, 44119), (158, 44080), (169, 44017), (177, 43972),

Gene: Solon\_71 Start: 44805, Stop: 44293, Start Num: 91

Candidate Starts for Solon\_71:

(26, 44979), (37, 44946), (Start: 68 @44862 has 2 MA's), (Start: 91 @44805 has 205 MA's), (Start: 104 @44763 has 5 MA's), (Start: 111 @44712 has 4 MA's), (112, 44703), (119, 44655), (126, 44613), (142, 44532), (149, 44490), (183, 44304),

Gene: SororFago\_77 Start: 45812, Stop: 45285, Start Num: 77

Candidate Starts for SororFago\_77:

(Start: 77 @45812 has 160 MA's), (Start: 111 @45710 has 4 MA's), (113, 45686), (114, 45677), (119, 45653), (135, 45551), (136, 45548), (142, 45530), (147, 45506), (152, 45470), (161, 45404), (164, 45392), (174, 45347), (178, 45329),

Gene: Sorpresa\_74 Start: 46699, Stop: 46187, Start Num: 91

Candidate Starts for Sorpresa\_74:

(26, 46873), (37, 46840), (Start: 68 @46756 has 2 MA's), (Start: 91 @46699 has 205 MA's), (Start: 104 @46657 has 5 MA's), (Start: 111 @46606 has 4 MA's), (112, 46597), (119, 46549), (142, 46426), (149, 46384), (183, 46198),

Gene: Soshari\_81 Start: 45029, Stop: 44520, Start Num: 93

Candidate Starts for Soshari\_81:

(Start: 93 @45029 has 78 MA's), (Start: 104 @44993 has 5 MA's), (Start: 111 @44942 has 4 MA's), (112, 44933), (122, 44867), (129, 44831), (135, 44783), (142, 44762), (152, 44702), (153, 44699), (154, 44696), (158, 44660), (169, 44597), (177, 44552),

Gene: Soul22\_44 Start: 31554, Stop: 31018, Start Num: 79

Candidate Starts for Soul22\_44:

(Start: 79 @31554 has 14 MA's), (Start: 104 @31488 has 5 MA's), (Start: 111 @31437 has 4 MA's), (112, 31428), (119, 31380), (126, 31338), (142, 31257), (149, 31215), (183, 31029),

Gene: Soups\_83 Start: 45399, Stop: 44878, Start Num: 77

Candidate Starts for Soups\_83:

(Start: 77 @45399 has 160 MA's), (Start: 104 @45354 has 5 MA's), (Start: 111 @45303 has 4 MA's), (112, 45294), (119, 45246), (135, 45144), (142, 45123), (163, 44985), (168, 44967), (171, 44955), (178, 44919),

Gene: Sparxx\_71 Start: 44167, Stop: 43655, Start Num: 84

Candidate Starts for Sparxx\_71:

(Start: 84 @44167 has 180 MA's), (Start: 104 @44119 has 5 MA's), (Start: 111 @44068 has 4 MA's), (122, 43993), (126, 43969), (127, 43963), (129, 43957), (135, 43906), (142, 43885), (153, 43828), (158, 43789), (177, 43687),

Gene: Spike509\_79 Start: 45030, Stop: 44521, Start Num: 93

Candidate Starts for Spike509\_79:

(Start: 93 @45030 has 78 MA's), (Start: 104 @44994 has 5 MA's), (Start: 111 @44943 has 4 MA's), (112, 44934), (122, 44868), (129, 44832), (135, 44784), (142, 44763), (152, 44703), (153, 44700), (154, 44697), (158, 44661), (169, 44598), (177, 44553),

Gene: SpikeBT\_72 Start: 45627, Stop: 45115, Start Num: 91

Candidate Starts for SpikeBT\_72:

(26, 45801), (37, 45768), (Start: 68 @45684 has 2 MA's), (Start: 91 @45627 has 205 MA's), (Start: 104 @45585 has 5 MA's), (Start: 111 @45534 has 4 MA's), (112, 45525), (119, 45477), (142, 45354), (149, 45312), (183, 45126),

Gene: Spino\_69 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for Spino\_69:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (177, 43691),

Gene: Spouty\_75 Start: 44440, Stop: 43904, Start Num: 77

Candidate Starts for Spouty\_75:

(Start: 72 @44452 has 33 MA's), (Start: 77 @44440 has 160 MA's), (Start: 111 @44344 has 4 MA's), (112, 44335), (113, 44320), (119, 44287), (142, 44164), (144, 44149), (145, 44146), (152, 44104), (153, 44101), (166, 44023), (171, 43993),

Gene: Squee\_76 Start: 46243, Stop: 45731, Start Num: 91

Candidate Starts for Squee\_76:

(26, 46417), (37, 46384), (Start: 68 @46300 has 2 MA's), (Start: 91 @46243 has 205 MA's), (Start: 104 @46201 has 5 MA's), (Start: 111 @46150 has 4 MA's), (112, 46141), (119, 46093), (142, 45970), (149, 45928), (183, 45742),

Gene: Squint\_188 Start: 94539, Stop: 94027, Start Num: 91

Candidate Starts for Squint\_188:

(8, 94830), (28, 94701), (49, 94644), (51, 94635), (81, 94563), (Start: 89 @94542 has 2 MA's), (Start: 91 @94539 has 205 MA's), (Start: 104 @94497 has 5 MA's), (Start: 111 @94446 has 4 MA's), (112, 94437), (119, 94389), (126, 94347), (142, 94266), (149, 94224), (183, 94038),

Gene: StAnnes\_38 Start: 31732, Stop: 31220, Start Num: 91

Candidate Starts for StAnnes\_38:

(Start: 91 @31732 has 205 MA's), (Start: 104 @31690 has 5 MA's), (Start: 111 @31639 has 4 MA's), (112, 31630), (119, 31582), (126, 31540), (142, 31459), (149, 31417), (183, 31231),

Gene: StCroix\_57 Start: 40148, Stop: 39624, Start Num: 78

Candidate Starts for StCroix\_57:

(Start: 78 @40148 has 23 MA's), (103, 40103), (107, 40085), (122, 39971), (129, 39935), (134, 39908), (135, 39887), (142, 39866), (144, 39851), (150, 39821), (151, 39818), (153, 39803), (169, 39707), (171, 39698), (183, 39641),

Gene: Stagni\_76 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for Stagni\_76:

(Start: 75 @45044 has 3 MA's), (Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: StarStuff\_78 Start: 45880, Stop: 45335, Start Num: 77

Candidate Starts for StarStuff\_78:

(Start: 72 @45892 has 33 MA's), (Start: 77 @45880 has 160 MA's), (Start: 111 @45763 has 4 MA's), (112, 45754), (113, 45739), (119, 45706), (135, 45604), (137, 45598), (142, 45580), (148, 45553), (149, 45538), (152, 45520), (158, 45478), (169, 45424), (174, 45397), (178, 45379),

Gene: Stasia\_69 Start: 44365, Stop: 43862, Start Num: 92

Candidate Starts for Stasia\_69:

(70, 44416), (73, 44407), (Start: 92 @44365 has 1 MA's), (Start: 111 @44275 has 4 MA's), (113, 44251), (126, 44176), (130, 44152), (135, 44113), (142, 44092), (158, 43996), (165, 43960), (171, 43930), (177, 43894),

Gene: Steamy\_70 Start: 44186, Stop: 43647, Start Num: 77

Candidate Starts for Steamy\_70:

(Start: 77 @44186 has 160 MA's), (113, 44054), (116, 44039), (119, 44021), (122, 44003), (135, 43919), (142, 43895), (154, 43829), (158, 43793), (178, 43694),

Gene: StepMih\_78 Start: 44999, Stop: 44490, Start Num: 93

Candidate Starts for StepMih\_78:

(Start: 75 @45035 has 3 MA's), (Start: 93 @44999 has 78 MA's), (Start: 104 @44963 has 5 MA's), (Start: 111 @44912 has 4 MA's), (112, 44903), (122, 44837), (129, 44801), (135, 44753), (142, 44732), (152, 44672), (153, 44669), (154, 44666), (158, 44630), (169, 44567), (177, 44522),

Gene: Stephig9\_83 Start: 45878, Stop: 45375, Start Num: 93

Candidate Starts for Stephig9\_83:

(Start: 74 @45917 has 3 MA's), (Start: 93 @45878 has 78 MA's), (101, 45854), (107, 45830), (Start: 111 @45791 has 4 MA's), (121, 45719), (123, 45713), (126, 45692), (129, 45680), (142, 45611), (158, 45509), (173, 45425), (177, 45407), (181, 45395),

Gene: Stink\_69 Start: 44187, Stop: 43687, Start Num: 94

Candidate Starts for Stink\_69:

(Start: 94 @44187 has 20 MA's), (Start: 111 @44100 has 4 MA's), (113, 44076), (119, 44043), (127, 43995), (129, 43989), (130, 43977), (135, 43938), (142, 43917), (158, 43821), (177, 43719),

Gene: StrongArm\_71 Start: 46175, Stop: 45663, Start Num: 91

Candidate Starts for StrongArm\_71:

(26, 46349), (37, 46316), (Start: 68 @46232 has 2 MA's), (Start: 91 @46175 has 205 MA's), (Start: 104 @46133 has 5 MA's), (Start: 111 @46082 has 4 MA's), (112, 46073), (119, 46025), (142, 45902), (149, 45860), (183, 45674),

Gene: Strosahl\_84 Start: 45610, Stop: 45089, Start Num: 77

Candidate Starts for Strosahl\_84:

(Start: 77 @45610 has 160 MA's), (Start: 104 @45565 has 5 MA's), (Start: 111 @45514 has 4 MA's), (112, 45505), (119, 45457), (135, 45355), (142, 45334), (163, 45196), (168, 45178), (171, 45166), (178, 45130),

Gene: Stubby\_43 Start: 14678, Stop: 15190, Start Num: 91

Candidate Starts for Stubby\_43:

(22, 14489), (Start: 86 @14666 has 6 MA's), (Start: 91 @14678 has 205 MA's), (Start: 104 @14720 has 5 MA's), (Start: 111 @14771 has 4 MA's), (112, 14780), (119, 14828), (142, 14951), (149, 14993), (183, 15179),

Gene: Success\_38 Start: 23264, Stop: 22725, Start Num: 97

Candidate Starts for Success\_38:

(Start: 97 @23264 has 1 MA's), (113, 23159), (117, 23138), (139, 23015), (142, 23003), (143, 22991), (157, 22904), (159, 22895),

Gene: Sumter\_72 Start: 47168, Stop: 46656, Start Num: 91

Candidate Starts for Sumter\_72:

(26, 47342), (37, 47309), (Start: 68 @47225 has 2 MA's), (Start: 91 @47168 has 205 MA's), (Start: 104 @47126 has 5 MA's), (Start: 111 @47075 has 4 MA's), (112, 47066), (119, 47018), (142, 46895), (149, 46853), (173, 46709), (183, 46667),

Gene: Sunhee\_77 Start: 43894, Stop: 43367, Start Num: 77

Candidate Starts for Sunhee\_77:

(Start: 72 @43906 has 33 MA's), (Start: 77 @43894 has 160 MA's), (107, 43831), (Start: 111 @43792 has 4 MA's), (113, 43768), (114, 43759), (119, 43735), (122, 43717), (135, 43633), (142, 43612), (147, 43588), (161, 43486), (171, 43447), (182, 43393),

Gene: Sunshine924\_76 Start: 45690, Stop: 45178, Start Num: 91

Candidate Starts for Sunshine924\_76:

(26, 45864), (37, 45831), (Start: 68 @45747 has 2 MA's), (Start: 91 @45690 has 205 MA's), (Start: 104 @45648 has 5 MA's), (Start: 111 @45597 has 4 MA's), (112, 45588), (119, 45540), (142, 45417), (149, 45375), (183, 45189),

Gene: SuperAwesome\_78 Start: 44868, Stop: 44341, Start Num: 72

Candidate Starts for SuperAwesome\_78:

(Start: 72 @44868 has 33 MA's), (Start: 77 @44856 has 160 MA's), (Start: 111 @44769 has 4 MA's), (112, 44760), (119, 44712), (135, 44610), (142, 44589), (146, 44568), (153, 44526), (158, 44487),

Gene: SuperCallie99\_75 Start: 44700, Stop: 44185, Start Num: 77

Candidate Starts for SuperCallie99\_75:

(Start: 72 @44712 has 33 MA's), (Start: 77 @44700 has 160 MA's), (Start: 111 @44613 has 4 MA's), (112, 44604), (119, 44556), (135, 44454), (142, 44433), (146, 44412), (153, 44370), (158, 44331),

Gene: Superchunk\_78 Start: 45042, Stop: 44494, Start Num: 77

Candidate Starts for Superchunk\_78:

(Start: 72 @45054 has 33 MA's), (Start: 77 @45042 has 160 MA's), (Start: 84 @45030 has 180 MA's), (Start: 111 @44925 has 4 MA's), (112, 44916), (119, 44868), (122, 44850), (135, 44766), (142, 44742), (149, 44700), (153, 44679), (158, 44640), (178, 44538),

Gene: Superphikiman\_191 Start: 94406, Stop: 93894, Start Num: 91

Candidate Starts for Superphikiman\_191:

(8, 94697), (28, 94568), (49, 94511), (51, 94502), (81, 94430), (Start: 89 @94409 has 2 MA's), (Start: 91 @94406 has 205 MA's), (Start: 104 @94364 has 5 MA's), (Start: 111 @94313 has 4 MA's), (112, 94304), (119, 94256), (126, 94214), (142, 94133), (149, 94091), (183, 93905),

Gene: SweetiePie\_75 Start: 45549, Stop: 44974, Start Num: 77

Candidate Starts for SweetiePie\_75:

(Start: 60 @45591 has 4 MA's), (66, 45579), (Start: 72 @45561 has 33 MA's), (Start: 77 @45549 has 160 MA's), (Start: 111 @45432 has 4 MA's), (112, 45423), (119, 45375), (135, 45273), (153, 45186), (158, 45147), (171, 45084),

Gene: Swirley\_69 Start: 43601, Stop: 43071, Start Num: 84

Candidate Starts for Swirley\_69:

(80, 43607), (Start: 84 @43601 has 180 MA's), (133, 43349), (134, 43346), (135, 43325), (142, 43304), (170, 43145), (176, 43106),

Gene: SwissCheese\_79 Start: 46690, Stop: 46178, Start Num: 91

Candidate Starts for SwissCheese\_79:

(26, 46864), (33, 46846), (37, 46831), (Start: 68 @46747 has 2 MA's), (Start: 91 @46690 has 205 MA's), (Start: 104 @46648 has 5 MA's), (Start: 111 @46597 has 4 MA's), (112, 46588), (119, 46540),

(142, 46417), (149, 46375), (183, 46189),

Gene: Swole\_76 Start: 46449, Stop: 45937, Start Num: 91

Candidate Starts for Swole\_76:

(26, 46623), (37, 46590), (Start: 68 @46506 has 2 MA's), (Start: 91 @46449 has 205 MA's), (Start: 104 @46407 has 5 MA's), (Start: 111 @46356 has 4 MA's), (112, 46347), (119, 46299), (135, 46197), (142, 46176), (149, 46134), (173, 45990), (183, 45948),

Gene: SydNat\_69 Start: 43800, Stop: 43270, Start Num: 84

Candidate Starts for SydNat\_69:

(Start: 84 @43800 has 180 MA's), (126, 43584), (133, 43548), (134, 43545), (135, 43524), (136, 43521), (142, 43503), (168, 43350), (176, 43305),

Gene: TNguyen7\_74 Start: 44652, Stop: 44140, Start Num: 84

Candidate Starts for TNguyen7\_74:

(61, 44703), (Start: 78 @44661 has 23 MA's), (Start: 84 @44652 has 180 MA's), (Start: 86 @44646 has 6 MA's), (Start: 111 @44553 has 4 MA's), (122, 44478), (123, 44475), (126, 44454), (127, 44448), (130, 44430), (135, 44391), (140, 44376), (142, 44370), (158, 44274), (169, 44217), (177, 44172),

Gene: TWAMP\_58 Start: 40126, Stop: 39602, Start Num: 78

Candidate Starts for TWAMP\_58:

(Start: 78 @40126 has 23 MA's), (103, 40081), (107, 40063), (122, 39949), (129, 39913), (134, 39886), (135, 39865), (142, 39844), (144, 39829), (150, 39799), (151, 39796), (153, 39781), (169, 39685), (171, 39676), (183, 39619),

Gene: Taquarus\_69 Start: 44174, Stop: 43662, Start Num: 84

Candidate Starts for Taquarus\_69:

(Start: 84 @44174 has 180 MA's), (Start: 104 @44126 has 5 MA's), (Start: 111 @44075 has 4 MA's), (122, 44000), (126, 43976), (127, 43970), (129, 43964), (135, 43913), (142, 43892), (153, 43835), (158, 43796), (177, 43694),

Gene: Taquito\_84 Start: 52547, Stop: 53173, Start Num: 40

Candidate Starts for Taquito\_84:

(Start: 40 @52547 has 1 MA's), (53, 52583), (Start: 88 @52667 has 1 MA's), (Start: 104 @52712 has 5 MA's), (112, 52772), (113, 52787), (122, 52838), (144, 52961), (147, 52970), (155, 53030), (158, 53048), (169, 53105),

Gene: Target\_75 Start: 45267, Stop: 44755, Start Num: 91

Candidate Starts for Target\_75:

(26, 45441), (37, 45408), (Start: 68 @45324 has 2 MA's), (Start: 91 @45267 has 205 MA's), (Start: 104 @45225 has 5 MA's), (Start: 111 @45174 has 4 MA's), (112, 45165), (119, 45117), (142, 44994), (149, 44952), (183, 44766),

Gene: TarsusIV\_73 Start: 45469, Stop: 44888, Start Num: 72

Candidate Starts for TarsusIV\_73:

(Start: 72 @45469 has 33 MA's), (Start: 77 @45457 has 160 MA's), (90, 45430), (Start: 92 @45427 has 1 MA's), (Start: 111 @45340 has 4 MA's), (112, 45331), (119, 45283), (135, 45181), (158, 45055), (187, 44893),

Gene: Tarynearal\_68 Start: 43437, Stop: 42907, Start Num: 84

Candidate Starts for Tarynearal\_68:

(80, 43443), (Start: 84 @43437 has 180 MA's), (133, 43185), (134, 43182), (135, 43161), (142, 43140), (170, 42981), (176, 42942),

Gene: Tasp14\_74 Start: 46737, Stop: 46225, Start Num: 91

Candidate Starts for Tasp14\_74:

(26, 46911), (37, 46878), (Start: 68 @46794 has 2 MA's), (Start: 91 @46737 has 205 MA's), (Start: 104 @46695 has 5 MA's), (Start: 111 @46644 has 4 MA's), (112, 46635), (119, 46587), (142, 46464), (149, 46422), (183, 46236),

Gene: Taurus\_80 Start: 45008, Stop: 44499, Start Num: 93

Candidate Starts for Taurus\_80:

(Start: 93 @45008 has 78 MA's), (Start: 104 @44972 has 5 MA's), (Start: 111 @44921 has 4 MA's), (112, 44912), (122, 44846), (129, 44810), (135, 44762), (142, 44741), (152, 44681), (153, 44678), (154, 44675), (158, 44639), (169, 44576), (177, 44531),

Gene: Temprado\_79 Start: 44341, Stop: 43826, Start Num: 77

Candidate Starts for Temprado\_79:

(Start: 64 @44377 has 9 MA's), (Start: 72 @44353 has 33 MA's), (Start: 77 @44341 has 160 MA's), (Start: 100 @44317 has 1 MA's), (Start: 111 @44254 has 4 MA's), (119, 44197), (135, 44095), (142, 44074), (153, 44011), (158, 43972), (169, 43918), (171, 43909), (185, 43846),

Gene: Teodoridan\_72 Start: 44574, Stop: 44062, Start Num: 91

Candidate Starts for Teodoridan\_72:

(26, 44748), (37, 44715), (58, 44652), (Start: 68 @44631 has 2 MA's), (Start: 91 @44574 has 205 MA's), (Start: 104 @44532 has 5 MA's), (Start: 111 @44481 has 4 MA's), (112, 44472), (119, 44424), (142, 44301), (149, 44259), (183, 44073),

Gene: Terrific\_76 Start: 45383, Stop: 44814, Start Num: 77

Candidate Starts for Terrific\_76:

(Start: 60 @45425 has 4 MA's), (66, 45413), (Start: 72 @45395 has 33 MA's), (Start: 77 @45383 has 160 MA's), (Start: 111 @45266 has 4 MA's), (112, 45257), (115, 45230), (119, 45209), (135, 45107), (149, 45041), (153, 45020), (158, 44981), (171, 44918),

Gene: Texage\_71 Start: 44648, Stop: 44139, Start Num: 84

Candidate Starts for Texage\_71:

(Start: 84 @44648 has 180 MA's), (107, 44591), (Start: 111 @44552 has 4 MA's), (112, 44543), (121, 44480), (122, 44477), (127, 44447), (130, 44429), (135, 44390), (142, 44369), (158, 44273), (169, 44216), (177, 44171),

Gene: Thanksgivukkah\_69 Start: 44169, Stop: 43657, Start Num: 84

Candidate Starts for Thanksgivukkah\_69:

(Start: 84 @44169 has 180 MA's), (Start: 104 @44121 has 5 MA's), (Start: 111 @44070 has 4 MA's), (122, 43995), (126, 43971), (127, 43965), (129, 43959), (135, 43908), (142, 43887), (153, 43830), (158, 43791), (177, 43689),

Gene: Theia\_68 Start: 43926, Stop: 43396, Start Num: 84

Candidate Starts for Theia\_68:

(Start: 84 @43926 has 180 MA's), (133, 43674), (134, 43671), (135, 43650), (142, 43629), (170, 43470), (176, 43431),

Gene: TheloniousMonk\_77 Start: 47959, Stop: 47447, Start Num: 91

Candidate Starts for TheloniousMonk\_77:

(26, 48133), (37, 48100), (Start: 68 @48016 has 2 MA's), (Start: 91 @47959 has 205 MA's), (Start: 104 @47917 has 5 MA's), (Start: 111 @47866 has 4 MA's), (112, 47857), (119, 47809), (142, 47686), (149, 47644), (183, 47458),

Gene: Tiffany\_78 Start: 44893, Stop: 44384, Start Num: 93

Candidate Starts for Tiffany\_78:

(Start: 93 @44893 has 78 MA's), (Start: 104 @44857 has 5 MA's), (Start: 111 @44806 has 4 MA's), (112, 44797), (122, 44731), (129, 44695), (135, 44647), (142, 44626), (152, 44566), (153, 44563), (154, 44560), (158, 44524), (169, 44461), (177, 44416),

Gene: Tiger\_69 Start: 43372, Stop: 42842, Start Num: 84

Candidate Starts for Tiger\_69:

(80, 43378), (Start: 84 @43372 has 180 MA's), (133, 43120), (134, 43117), (135, 43096), (142, 43075), (168, 42922), (170, 42916), (176, 42877),

Gene: Timothy\_78 Start: 44866, Stop: 44315, Start Num: 77

Candidate Starts for Timothy\_78:

(Start: 60 @44908 has 4 MA's), (Start: 72 @44878 has 33 MA's), (Start: 77 @44866 has 160 MA's), (90, 44839), (Start: 111 @44749 has 4 MA's), (113, 44725), (119, 44692), (135, 44590), (142, 44566), (144, 44551), (149, 44524), (153, 44503), (158, 44464), (178, 44365), (186, 44332),

Gene: Timshel\_71 Start: 47187, Stop: 46681, Start Num: 82

Candidate Starts for Timshel\_71:

(50, 47265), (52, 47256), (54, 47250), (Start: 82 @47187 has 3 MA's), (106, 47139), (123, 47013), (126, 46992), (129, 46980), (135, 46932), (142, 46911), (147, 46887), (153, 46854), (158, 46815), (169, 46758), (171, 46749), (173, 46731), (177, 46713),

Gene: TinaFeyge\_68 Start: 44166, Stop: 43654, Start Num: 84

Candidate Starts for TinaFeyge\_68:

(Start: 84 @44166 has 180 MA's), (Start: 104 @44118 has 5 MA's), (Start: 111 @44067 has 4 MA's), (122, 43992), (126, 43968), (127, 43962), (129, 43956), (135, 43905), (142, 43884), (153, 43827), (158, 43788), (168, 43734), (177, 43686),

Gene: TinyPebbles\_75 Start: 45035, Stop: 44526, Start Num: 93

Candidate Starts for TinyPebbles\_75:

(Start: 75 @45071 has 3 MA's), (Start: 93 @45035 has 78 MA's), (Start: 104 @44999 has 5 MA's), (Start: 111 @44948 has 4 MA's), (122, 44873), (129, 44837), (135, 44789), (142, 44768), (152, 44708), (153, 44705), (154, 44702), (158, 44666), (169, 44603), (177, 44558),

Gene: Tinybot\_69 Start: 44198, Stop: 43686, Start Num: 84

Candidate Starts for Tinybot\_69:

(Start: 84 @44198 has 180 MA's), (Start: 104 @44150 has 5 MA's), (Start: 111 @44099 has 4 MA's), (122, 44024), (126, 44000), (127, 43994), (129, 43988), (135, 43937), (142, 43916), (153, 43859), (158, 43820), (177, 43718),

Gene: TipsytheTRex\_75 Start: 45020, Stop: 44469, Start Num: 77

Candidate Starts for TipsytheTRex\_75:

(Start: 72 @45032 has 33 MA's), (Start: 77 @45020 has 160 MA's), (90, 44993), (112, 44894), (113, 44879), (119, 44846), (135, 44744), (137, 44738), (142, 44720), (148, 44693), (149, 44678), (153, 44657), (158, 44618), (171, 44555),

Gene: TiroTheta9\_69 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for TiroTheta9\_69:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (168, 43733), (177, 43685),



Gene: Toaka\_77 Start: 44975, Stop: 44433, Start Num: 77

Candidate Starts for Toaka\_77:

(Start: 72 @44987 has 33 MA's), (Start: 77 @44975 has 160 MA's), (Start: 100 @44936 has 1 MA's), (Start: 111 @44873 has 4 MA's), (113, 44849), (119, 44816), (142, 44693), (152, 44633), (153, 44630), (158, 44591), (171, 44522),

Gene: Todacoro\_73 Start: 44647, Stop: 44138, Start Num: 84

Candidate Starts for Todacoro\_73:

(Start: 84 @44647 has 180 MA's), (107, 44590), (Start: 111 @44551 has 4 MA's), (112, 44542), (121, 44479), (122, 44476), (127, 44446), (130, 44428), (135, 44389), (142, 44368), (158, 44272), (169, 44215), (177, 44170),

Gene: Tomathan\_78 Start: 45990, Stop: 45445, Start Num: 77

Candidate Starts for Tomathan\_78:

(Start: 72 @46002 has 33 MA's), (Start: 77 @45990 has 160 MA's), (Start: 111 @45873 has 4 MA's), (112, 45864), (113, 45849), (119, 45816), (135, 45714), (137, 45708), (142, 45690), (148, 45663), (149, 45648), (150, 45645), (152, 45630), (158, 45588), (169, 45534), (174, 45507), (178, 45489),

Gene: ToneTone\_75 Start: 43901, Stop: 43386, Start Num: 77

Candidate Starts for ToneTone\_75:

(Start: 64 @43937 has 9 MA's), (Start: 72 @43913 has 33 MA's), (Start: 77 @43901 has 160 MA's), (Start: 100 @43877 has 1 MA's), (Start: 111 @43814 has 4 MA's), (119, 43757), (135, 43655), (142, 43634), (153, 43571), (158, 43532), (169, 43478), (171, 43469), (185, 43406),

Gene: Topgun\_71 Start: 44911, Stop: 44399, Start Num: 91

Candidate Starts for Topgun\_71:

(26, 45085), (37, 45052), (Start: 68 @44968 has 2 MA's), (Start: 91 @44911 has 205 MA's), (Start: 104 @44869 has 5 MA's), (Start: 111 @44818 has 4 MA's), (112, 44809), (119, 44761), (126, 44719), (142, 44638), (149, 44596), (183, 44410),

Gene: Toro\_73 Start: 48186, Stop: 47677, Start Num: 83

Candidate Starts for Toro\_73:

(Start: 75 @48204 has 3 MA's), (Start: 83 @48186 has 3 MA's), (Start: 111 @48087 has 4 MA's), (119, 48030), (121, 48015), (122, 48012), (123, 48009), (126, 47988), (129, 47976), (142, 47907), (153, 47850), (169, 47754), (177, 47709),

Gene: Tote\_71 Start: 43674, Stop: 43204, Start Num: 104

Candidate Starts for Tote\_71:

(Start: 104 @43674 has 5 MA's), (Start: 111 @43623 has 4 MA's), (112, 43614), (119, 43566), (135, 43464), (142, 43443), (149, 43401), (173, 43257), (183, 43215),

Gene: Traft412\_75 Start: 46992, Stop: 46480, Start Num: 91

Candidate Starts for Traft412\_75:

(26, 47166), (37, 47133), (Start: 68 @47049 has 2 MA's), (Start: 91 @46992 has 205 MA's), (Start: 104 @46950 has 5 MA's), (Start: 111 @46899 has 4 MA's), (112, 46890), (119, 46842), (126, 46800), (142, 46719), (149, 46677), (183, 46491),

Gene: Travvers\_77 Start: 45877, Stop: 45332, Start Num: 77

Candidate Starts for Travvers\_77:

(Start: 72 @45889 has 33 MA's), (Start: 77 @45877 has 160 MA's), (Start: 111 @45760 has 4 MA's), (113, 45736), (119, 45703), (135, 45601), (137, 45595), (142, 45577), (148, 45550), (149, 45535), (152, 45517), (158, 45475), (169, 45421), (174, 45394), (178, 45376),

Gene: Treddle\_77 Start: 47722, Stop: 47210, Start Num: 91

Candidate Starts for Treddle\_77:

(26, 47896), (37, 47863), (Start: 68 @47779 has 2 MA's), (Start: 91 @47722 has 205 MA's), (Start: 104 @47680 has 5 MA's), (Start: 111 @47629 has 4 MA's), (112, 47620), (119, 47572), (135, 47470), (142, 47449), (149, 47407), (173, 47263), (183, 47221),

Gene: Tripl3t\_78 Start: 49274, Stop: 48762, Start Num: 91

Candidate Starts for Tripl3t\_78:

(26, 49448), (37, 49415), (Start: 68 @49331 has 2 MA's), (Start: 91 @49274 has 205 MA's), (Start: 104 @49232 has 5 MA's), (Start: 111 @49181 has 4 MA's), (112, 49172), (119, 49124), (142, 49001), (149, 48959), (183, 48773),

Gene: Trixie\_75 Start: 46174, Stop: 45596, Start Num: 77

Candidate Starts for Trixie\_75:

(10, 46402), (13, 46396), (30, 46303), (Start: 60 @46216 has 4 MA's), (Start: 72 @46186 has 33 MA's), (Start: 77 @46174 has 160 MA's), (Start: 111 @46057 has 4 MA's), (115, 46021), (119, 46000), (135, 45898), (138, 45889), (150, 45829), (152, 45814), (153, 45811), (158, 45772),

Gene: Trooper\_75 Start: 45436, Stop: 44858, Start Num: 77

Candidate Starts for Trooper\_75:

(Start: 72 @45448 has 33 MA's), (Start: 77 @45436 has 160 MA's), (90, 45409), (Start: 111 @45319 has 4 MA's), (112, 45310), (119, 45262), (122, 45244), (135, 45160), (150, 45091), (153, 45073), (158, 45034), (171, 44971), (178, 44908),

Gene: TroyPia\_71 Start: 44205, Stop: 43693, Start Num: 84

Candidate Starts for TroyPia\_71:

(Start: 84 @44205 has 180 MA's), (Start: 104 @44157 has 5 MA's), (Start: 111 @44106 has 4 MA's), (122, 44031), (126, 44007), (129, 43995), (135, 43944), (142, 43923), (153, 43866), (168, 43773), (177, 43725),

Gene: Tubs\_77 Start: 44644, Stop: 44108, Start Num: 77

Candidate Starts for Tubs\_77:

(Start: 72 @44656 has 33 MA's), (Start: 77 @44644 has 160 MA's), (Start: 111 @44548 has 4 MA's), (112, 44539), (113, 44524), (119, 44491), (142, 44368), (144, 44353), (145, 44350), (152, 44308), (153, 44305), (166, 44227), (178, 44158),

Gene: Tucker\_78 Start: 44104, Stop: 43589, Start Num: 77

Candidate Starts for Tucker\_78:

(Start: 64 @44140 has 9 MA's), (Start: 72 @44116 has 33 MA's), (Start: 77 @44104 has 160 MA's), (Start: 100 @44080 has 1 MA's), (Start: 111 @44017 has 4 MA's), (119, 43960), (135, 43858), (142, 43837), (153, 43774), (158, 43735), (169, 43681), (171, 43672), (185, 43609),

Gene: Turbido\_76 Start: 45726, Stop: 45139, Start Num: 72

Candidate Starts for Turbido\_76:

(7, 45978), (14, 45930), (16, 45918), (Start: 60 @45756 has 4 MA's), (66, 45744), (Start: 72 @45726 has 33 MA's), (Start: 77 @45714 has 160 MA's), (Start: 111 @45597 has 4 MA's), (112, 45588), (119, 45540), (135, 45438), (153, 45351), (158, 45312), (171, 45249),

Gene: Twigg\_66 Start: 43249, Stop: 42719, Start Num: 84

Candidate Starts for Twigg\_66:

(80, 43255), (Start: 84 @43249 has 180 MA's), (133, 42997), (134, 42994), (135, 42973), (142, 42952), (170, 42793), (176, 42754),

Gene: Twister\_69 Start: 43997, Stop: 43491, Start Num: 84

Candidate Starts for Twister\_69:

(Start: 57 @44060 has 1 MA's), (65, 44045), (Start: 84 @43997 has 180 MA's), (Start: 85 @43994 has 5 MA's), (Start: 111 @43901 has 4 MA's), (113, 43877), (119, 43844), (122, 43826), (126, 43802), (135, 43742), (142, 43721), (153, 43664), (158, 43625), (165, 43589), (177, 43523), (183, 43502),

Gene: TwoPeat\_75 Start: 46254, Stop: 45739, Start Num: 91

Candidate Starts for TwoPeat\_75:

(26, 46428), (37, 46395), (Start: 68 @46311 has 2 MA's), (Start: 91 @46254 has 205 MA's), (Start: 104 @46212 has 5 MA's), (Start: 111 @46161 has 4 MA's), (112, 46152), (119, 46104), (135, 46002), (142, 45981), (149, 45939), (173, 45795), (183, 45753),

Gene: TygerBlood\_70 Start: 44171, Stop: 43659, Start Num: 84

Candidate Starts for TygerBlood\_70:

(Start: 84 @44171 has 180 MA's), (Start: 104 @44123 has 5 MA's), (Start: 111 @44072 has 4 MA's), (122, 43997), (126, 43973), (127, 43967), (129, 43961), (135, 43910), (142, 43889), (153, 43832), (158, 43793), (168, 43739), (177, 43691),

Gene: U2\_69 Start: 46491, Stop: 45979, Start Num: 91

Candidate Starts for U2\_69:

(26, 46665), (37, 46632), (Start: 68 @46548 has 2 MA's), (Start: 91 @46491 has 205 MA's), (Start: 104 @46449 has 5 MA's), (Start: 111 @46398 has 4 MA's), (112, 46389), (119, 46341), (142, 46218), (149, 46176), (183, 45990),

Gene: Ulysses\_69 Start: 43854, Stop: 43342, Start Num: 84

Candidate Starts for Ulysses\_69:

(Start: 84 @43854 has 180 MA's), (Start: 104 @43806 has 5 MA's), (Start: 111 @43755 has 4 MA's), (122, 43680), (126, 43656), (127, 43650), (129, 43644), (135, 43593), (142, 43572), (153, 43515), (158, 43476), (177, 43374),

Gene: UnionJack\_73 Start: 43877, Stop: 43347, Start Num: 84

Candidate Starts for UnionJack\_73:

(Start: 84 @43877 has 180 MA's), (124, 43685), (126, 43661), (133, 43625), (134, 43622), (135, 43601), (142, 43580), (168, 43427), (170, 43421), (176, 43382),

Gene: Updawg\_76 Start: 45271, Stop: 44696, Start Num: 77

Candidate Starts for Updawg\_76:

(11, 45496), (17, 45475), (27, 45406), (Start: 60 @45313 has 4 MA's), (66, 45301), (Start: 72 @45283 has 33 MA's), (Start: 77 @45271 has 160 MA's), (Start: 111 @45154 has 4 MA's), (112, 45145), (115, 45118), (119, 45097), (135, 44995), (149, 44929), (153, 44908), (158, 44869), (171, 44806),

Gene: VA6\_75 Start: 45463, Stop: 44891, Start Num: 77

Candidate Starts for VA6\_75:

(Start: 77 @45463 has 160 MA's), (Start: 100 @45409 has 1 MA's), (Start: 111 @45346 has 4 MA's), (112, 45337), (119, 45289), (122, 45271), (125, 45262), (135, 45187), (138, 45178), (153, 45100), (158, 45061), (179, 44932), (181, 44923),

Gene: Vanisoa\_74 Start: 45312, Stop: 44782, Start Num: 77

Candidate Starts for Vanisoa\_74:

(Start: 77 @45312 has 160 MA's), (Start: 111 @45216 has 4 MA's), (113, 45192), (119, 45159), (142, 45036), (145, 45018), (152, 44976), (153, 44973), (167, 44892), (168, 44877), (169, 44874), (171, 44865),

Gene: Violac\_41 Start: 31903, Stop: 31367, Start Num: 79

Candidate Starts for Violac\_41:

(Start: 79 @31903 has 14 MA's), (Start: 104 @31837 has 5 MA's), (Start: 111 @31786 has 4 MA's), (112, 31777), (119, 31729), (126, 31687), (142, 31606), (149, 31564), (173, 31420), (183, 31378),

Gene: Violet\_70 Start: 46886, Stop: 46374, Start Num: 91

Candidate Starts for Violet\_70:

(26, 47060), (37, 47027), (Start: 68 @46943 has 2 MA's), (Start: 91 @46886 has 205 MA's), (Start: 104 @46844 has 5 MA's), (Start: 111 @46793 has 4 MA's), (112, 46784), (119, 46736), (142, 46613), (149, 46571), (183, 46385),

Gene: Vix\_75 Start: 45088, Stop: 44579, Start Num: 93

Candidate Starts for Vix\_75:

(Start: 93 @45088 has 78 MA's), (Start: 104 @45052 has 5 MA's), (Start: 111 @45001 has 4 MA's), (112, 44992), (122, 44926), (129, 44890), (135, 44842), (142, 44821), (152, 44761), (153, 44758), (154, 44755), (158, 44719), (169, 44656), (177, 44611),

Gene: VohminGhazi\_78 Start: 44179, Stop: 43664, Start Num: 77

Candidate Starts for VohminGhazi\_78:

(Start: 72 @44191 has 33 MA's), (Start: 77 @44179 has 160 MA's), (Start: 111 @44092 has 4 MA's), (112, 44083), (119, 44035), (135, 43933), (142, 43912), (146, 43891), (153, 43849), (158, 43810),

Gene: Waits\_83 Start: 45510, Stop: 44989, Start Num: 77

Candidate Starts for Waits\_83:

(Start: 77 @45510 has 160 MA's), (Start: 104 @45465 has 5 MA's), (Start: 111 @45414 has 4 MA's), (112, 45405), (119, 45357), (135, 45255), (142, 45234), (163, 45096), (168, 45078), (171, 45066), (178, 45030),

Gene: WalterMcMickey\_69 Start: 43994, Stop: 43491, Start Num: 85

Candidate Starts for WalterMcMickey\_69:

(Start: 57 @44060 has 1 MA's), (65, 44045), (Start: 84 @43997 has 180 MA's), (Start: 85 @43994 has 5 MA's), (Start: 111 @43901 has 4 MA's), (113, 43877), (119, 43844), (122, 43826), (126, 43802), (135, 43742), (142, 43721), (153, 43664), (158, 43625), (165, 43589), (177, 43523), (183, 43502),

Gene: Wander\_70 Start: 44165, Stop: 43653, Start Num: 84

Candidate Starts for Wander\_70:

(Start: 84 @44165 has 180 MA's), (Start: 104 @44117 has 5 MA's), (Start: 111 @44066 has 4 MA's), (122, 43991), (126, 43967), (127, 43961), (129, 43955), (135, 43904), (142, 43883), (153, 43826), (158, 43787), (177, 43685),

Gene: Warrior24\_85 Start: 45987, Stop: 45466, Start Num: 77

Candidate Starts for Warrior24\_85:

(Start: 77 @45987 has 160 MA's), (Start: 104 @45942 has 5 MA's), (Start: 111 @45891 has 4 MA's), (112, 45882), (119, 45834), (135, 45732), (142, 45711), (163, 45573), (168, 45555), (171, 45543), (178, 45507),

Gene: Watermelon\_78 Start: 47796, Stop: 47284, Start Num: 91

Candidate Starts for Watermelon\_78:

(26, 47970), (37, 47937), (Start: 68 @47853 has 2 MA's), (Start: 91 @47796 has 205 MA's), (Start: 104 @47754 has 5 MA's), (Start: 111 @47703 has 4 MA's), (112, 47694), (119, 47646), (142, 47523), (149, 47481), (183, 47295),

Gene: Watson\_78 Start: 44997, Stop: 44488, Start Num: 93

Candidate Starts for Watson\_78:

(Start: 75 @45033 has 3 MA's), (Start: 93 @44997 has 78 MA's), (Start: 104 @44961 has 5 MA's),  
(Start: 111 @44910 has 4 MA's), (112, 44901), (122, 44835), (129, 44799), (135, 44751), (142, 44730),  
(152, 44670), (153, 44667), (154, 44664), (158, 44628), (169, 44565), (177, 44520),

Gene: WeiHuaDA\_76 Start: 46220, Stop: 45651, Start Num: 77

Candidate Starts for WeiHuaDA\_76:

(Start: 72 @46232 has 33 MA's), (Start: 77 @46220 has 160 MA's), (Start: 100 @46166 has 1 MA's),  
(Start: 111 @46103 has 4 MA's), (113, 46079), (119, 46046), (122, 46028), (135, 45944), (138, 45935),  
(153, 45857), (158, 45818), (175, 45713),

Gene: Whabigail7\_76 Start: 45712, Stop: 45137, Start Num: 77

Candidate Starts for Whabigail7\_76:

(Start: 60 @45754 has 4 MA's), (66, 45742), (Start: 72 @45724 has 33 MA's), (Start: 77 @45712 has  
160 MA's), (Start: 111 @45595 has 4 MA's), (112, 45586), (119, 45538), (135, 45436), (153, 45349),  
(158, 45310), (171, 45247),

Gene: Wheeler\_79 Start: 47915, Stop: 47403, Start Num: 91

Candidate Starts for Wheeler\_79:

(9, 48194), (26, 48089), (37, 48056), (Start: 68 @47972 has 2 MA's), (Start: 91 @47915 has 205 MA's),  
(Start: 104 @47873 has 5 MA's), (Start: 111 @47822 has 4 MA's), (112, 47813), (119, 47765), (142,  
47642), (149, 47600), (183, 47414),

Gene: WideWale\_76 Start: 45271, Stop: 44696, Start Num: 77

Candidate Starts for WideWale\_76:

(11, 45496), (17, 45475), (27, 45406), (Start: 60 @45313 has 4 MA's), (66, 45301), (Start: 72 @45283  
has 33 MA's), (Start: 77 @45271 has 160 MA's), (Start: 111 @45154 has 4 MA's), (112, 45145), (115,  
45118), (119, 45097), (135, 44995), (149, 44929), (153, 44908), (158, 44869), (171, 44806),

Gene: Wiks\_77 Start: 43972, Stop: 43457, Start Num: 77

Candidate Starts for Wiks\_77:

(Start: 64 @44008 has 9 MA's), (Start: 72 @43984 has 33 MA's), (Start: 77 @43972 has 160 MA's),  
(Start: 100 @43948 has 1 MA's), (Start: 111 @43885 has 4 MA's), (119, 43828), (135, 43726), (142,  
43705), (153, 43642), (158, 43603), (169, 43549), (171, 43540), (185, 43477),

Gene: Wilbur\_70 Start: 44168, Stop: 43656, Start Num: 84

Candidate Starts for Wilbur\_70:

(Start: 84 @44168 has 180 MA's), (Start: 104 @44120 has 5 MA's), (Start: 111 @44069 has 4 MA's),  
(122, 43994), (126, 43970), (127, 43964), (129, 43958), (135, 43907), (142, 43886), (153, 43829),  
(158, 43790), (177, 43688),

Gene: Wile\_68 Start: 44382, Stop: 43882, Start Num: 94

Candidate Starts for Wile\_68:

(Start: 94 @44382 has 20 MA's), (Start: 111 @44295 has 4 MA's), (113, 44271), (127, 44190), (129,  
44184), (130, 44172), (135, 44133), (140, 44118), (142, 44112), (158, 44016), (171, 43950), (177,  
43914),

Gene: Wilkins\_72 Start: 44841, Stop: 44329, Start Num: 91

Candidate Starts for Wilkins\_72:

(26, 45015), (37, 44982), (Start: 68 @44898 has 2 MA's), (Start: 91 @44841 has 205 MA's), (Start: 104  
@44799 has 5 MA's), (Start: 111 @44748 has 4 MA's), (112, 44739), (119, 44691), (126, 44649), (142,  
44568), (149, 44526), (183, 44340),

Gene: Wizard007\_69 Start: 44108, Stop: 43608, Start Num: 94

Candidate Starts for Wizard007\_69:

(Start: 94 @44108 has 20 MA's), (Start: 111 @44021 has 4 MA's), (113, 43997), (127, 43916), (129, 43910), (130, 43898), (135, 43859), (140, 43844), (142, 43838), (158, 43742), (171, 43676), (177, 43640),

Gene: Wooldri\_81 Start: 44914, Stop: 44405, Start Num: 93

Candidate Starts for Wooldri\_81:

(Start: 93 @44914 has 78 MA's), (Start: 104 @44878 has 5 MA's), (Start: 111 @44827 has 4 MA's), (112, 44818), (122, 44752), (129, 44716), (135, 44668), (142, 44647), (152, 44587), (153, 44584), (154, 44581), (158, 44545), (169, 44482), (177, 44437),

Gene: XFactor\_38 Start: 31358, Stop: 30822, Start Num: 79

Candidate Starts for XFactor\_38:

(Start: 79 @31358 has 14 MA's), (Start: 104 @31292 has 5 MA's), (Start: 111 @31241 has 4 MA's), (112, 31232), (119, 31184), (126, 31142), (142, 31061), (149, 31019), (183, 30833),

Gene: Xena\_68 Start: 44349, Stop: 43849, Start Num: 94

Candidate Starts for Xena\_68:

(Start: 94 @44349 has 20 MA's), (Start: 111 @44262 has 4 MA's), (113, 44238), (127, 44157), (129, 44151), (130, 44139), (135, 44100), (140, 44085), (142, 44079), (158, 43983), (171, 43917), (177, 43881),

Gene: XianYue\_71 Start: 45222, Stop: 44638, Start Num: 72

Candidate Starts for XianYue\_71:

(Start: 72 @45222 has 33 MA's), (Start: 77 @45210 has 160 MA's), (Start: 111 @45093 has 4 MA's), (112, 45084), (119, 45036), (125, 45009), (135, 44934), (149, 44868), (153, 44847), (158, 44808), (171, 44745), (175, 44703),

Gene: Yassified\_45 Start: 14688, Stop: 15200, Start Num: 91

Candidate Starts for Yassified\_45:

(22, 14499), (Start: 86 @14676 has 6 MA's), (Start: 91 @14688 has 205 MA's), (Start: 104 @14730 has 5 MA's), (Start: 111 @14781 has 4 MA's), (112, 14790), (119, 14838), (126, 14880), (142, 14961), (149, 15003), (183, 15189),

Gene: Yecey3\_79 Start: 44745, Stop: 44215, Start Num: 77

Candidate Starts for Yecey3\_79:

(Start: 72 @44757 has 33 MA's), (Start: 77 @44745 has 160 MA's), (Start: 104 @44700 has 5 MA's), (Start: 111 @44649 has 4 MA's), (112, 44640), (119, 44592), (135, 44490), (142, 44466), (152, 44406), (153, 44403), (158, 44364), (163, 44331), (164, 44328), (171, 44301), (175, 44277),

Gene: YoSam321\_70 Start: 44166, Stop: 43654, Start Num: 84

Candidate Starts for YoSam321\_70:

(Start: 84 @44166 has 180 MA's), (Start: 104 @44118 has 5 MA's), (Start: 111 @44067 has 4 MA's), (122, 43992), (126, 43968), (127, 43962), (129, 43956), (135, 43905), (142, 43884), (153, 43827), (158, 43788), (177, 43686),

Gene: Yokurt\_77 Start: 43972, Stop: 43457, Start Num: 77

Candidate Starts for Yokurt\_77:

(Start: 64 @44008 has 9 MA's), (Start: 72 @43984 has 33 MA's), (Start: 77 @43972 has 160 MA's), (Start: 100 @43948 has 1 MA's), (Start: 111 @43885 has 4 MA's), (119, 43828), (135, 43726), (142, 43705), (153, 43642), (158, 43603), (169, 43549), (171, 43540), (185, 43477),

Gene: Yoncess\_57 Start: 39880, Stop: 39356, Start Num: 78

Candidate Starts for Yoncess\_57:

(Start: 78 @39880 has 23 MA's), (103, 39835), (107, 39817), (122, 39703), (123, 39700), (129, 39667), (134, 39640), (135, 39619), (142, 39598), (151, 39550), (169, 39439), (171, 39430), (183, 39373),

Gene: Zaka\_78 Start: 44008, Stop: 43457, Start Num: 64

Candidate Starts for Zaka\_78:

(Start: 64 @44008 has 9 MA's), (Start: 72 @43984 has 33 MA's), (Start: 77 @43972 has 160 MA's), (Start: 100 @43948 has 1 MA's), (Start: 111 @43885 has 4 MA's), (119, 43828), (135, 43726), (142, 43705), (153, 43642), (158, 43603), (169, 43549), (171, 43540), (185, 43477),

Gene: Zeeculate\_71 Start: 46614, Stop: 46102, Start Num: 91

Candidate Starts for Zeeculate\_71:

(26, 46788), (37, 46755), (Start: 68 @46671 has 2 MA's), (Start: 91 @46614 has 205 MA's), (Start: 104 @46572 has 5 MA's), (Start: 111 @46521 has 4 MA's), (112, 46512), (119, 46464), (134, 46383), (142, 46341), (149, 46299), (183, 46113),

Gene: Zephyr\_77 Start: 46886, Stop: 46374, Start Num: 91

Candidate Starts for Zephyr\_77:

(26, 47060), (37, 47027), (58, 46964), (Start: 68 @46943 has 2 MA's), (Start: 91 @46886 has 205 MA's), (Start: 104 @46844 has 5 MA's), (Start: 111 @46793 has 4 MA's), (112, 46784), (119, 46736), (142, 46613), (149, 46571), (183, 46385),

Gene: Zeuska\_77 Start: 47851, Stop: 47339, Start Num: 91

Candidate Starts for Zeuska\_77:

(26, 48025), (37, 47992), (Start: 68 @47908 has 2 MA's), (Start: 91 @47851 has 205 MA's), (Start: 104 @47809 has 5 MA's), (Start: 111 @47758 has 4 MA's), (112, 47749), (119, 47701), (142, 47578), (149, 47536), (183, 47350),

Gene: Zimmer\_74 Start: 45769, Stop: 45221, Start Num: 71

Candidate Starts for Zimmer\_74:

(Start: 71 @45769 has 1 MA's), (Start: 111 @45652 has 4 MA's), (112, 45643), (119, 45595), (122, 45577), (135, 45493), (142, 45469), (153, 45406), (171, 45304), (178, 45268),

Gene: Zolita\_68 Start: 43804, Stop: 43274, Start Num: 84

Candidate Starts for Zolita\_68:

(Start: 84 @43804 has 180 MA's), (126, 43588), (133, 43552), (134, 43549), (135, 43528), (136, 43525), (142, 43507), (168, 43354), (176, 43309),

Gene: Zulu\_79 Start: 44386, Stop: 43835, Start Num: 64

Candidate Starts for Zulu\_79:

(Start: 64 @44386 has 9 MA's), (Start: 72 @44362 has 33 MA's), (Start: 77 @44350 has 160 MA's), (Start: 100 @44326 has 1 MA's), (Start: 111 @44263 has 4 MA's), (119, 44206), (135, 44104), (142, 44083), (153, 44020), (158, 43981), (169, 43927), (171, 43918), (185, 43855),