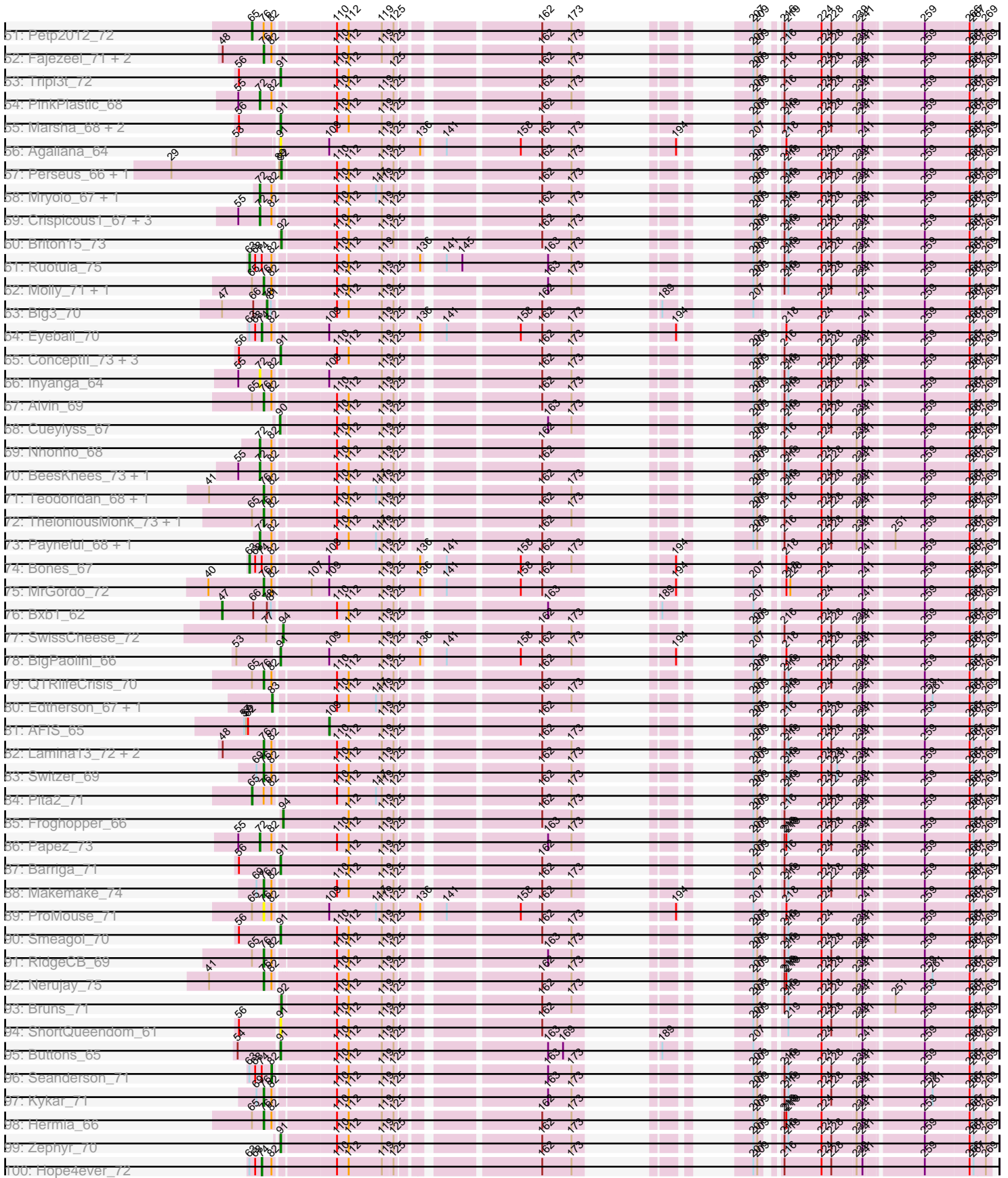
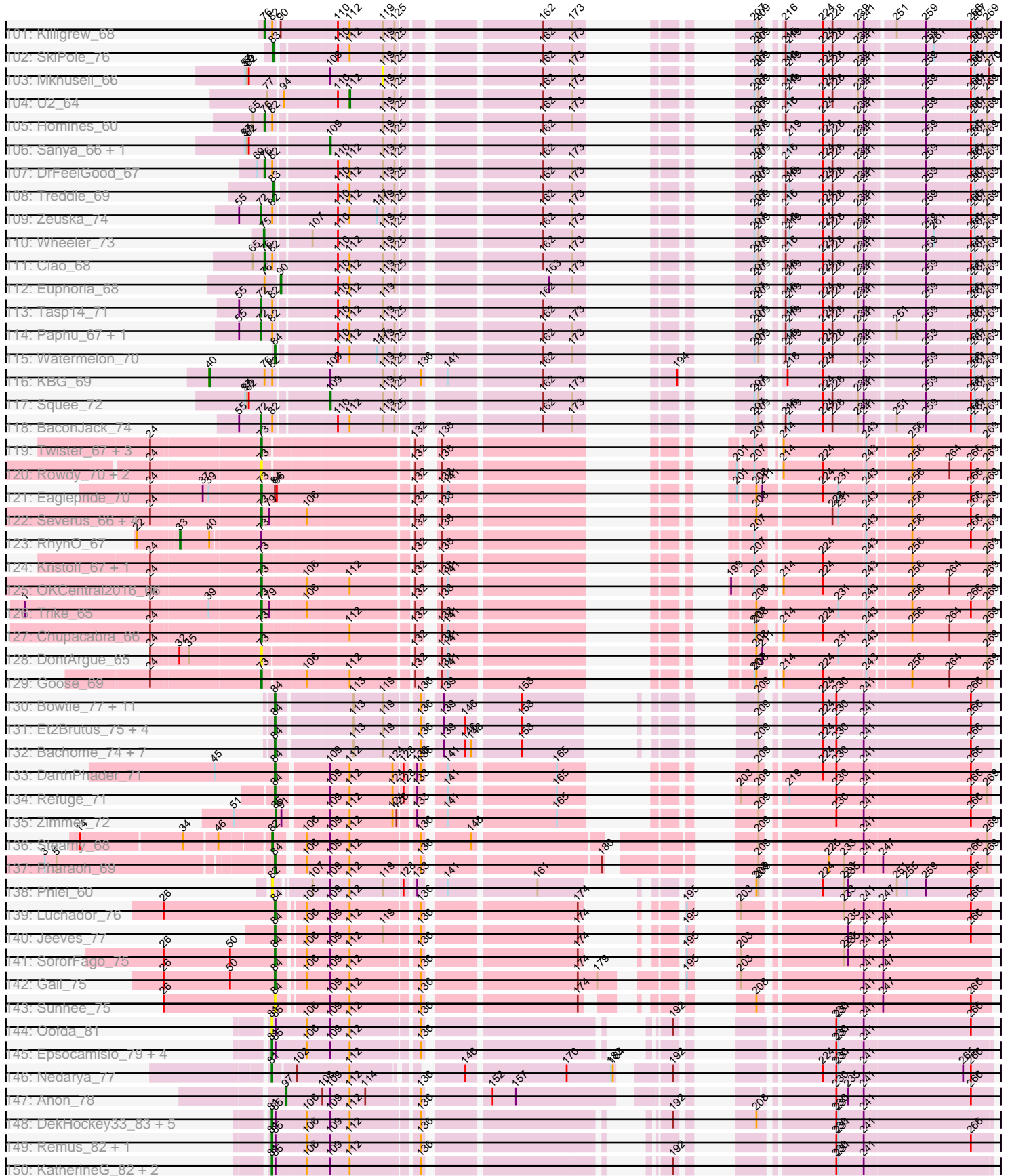


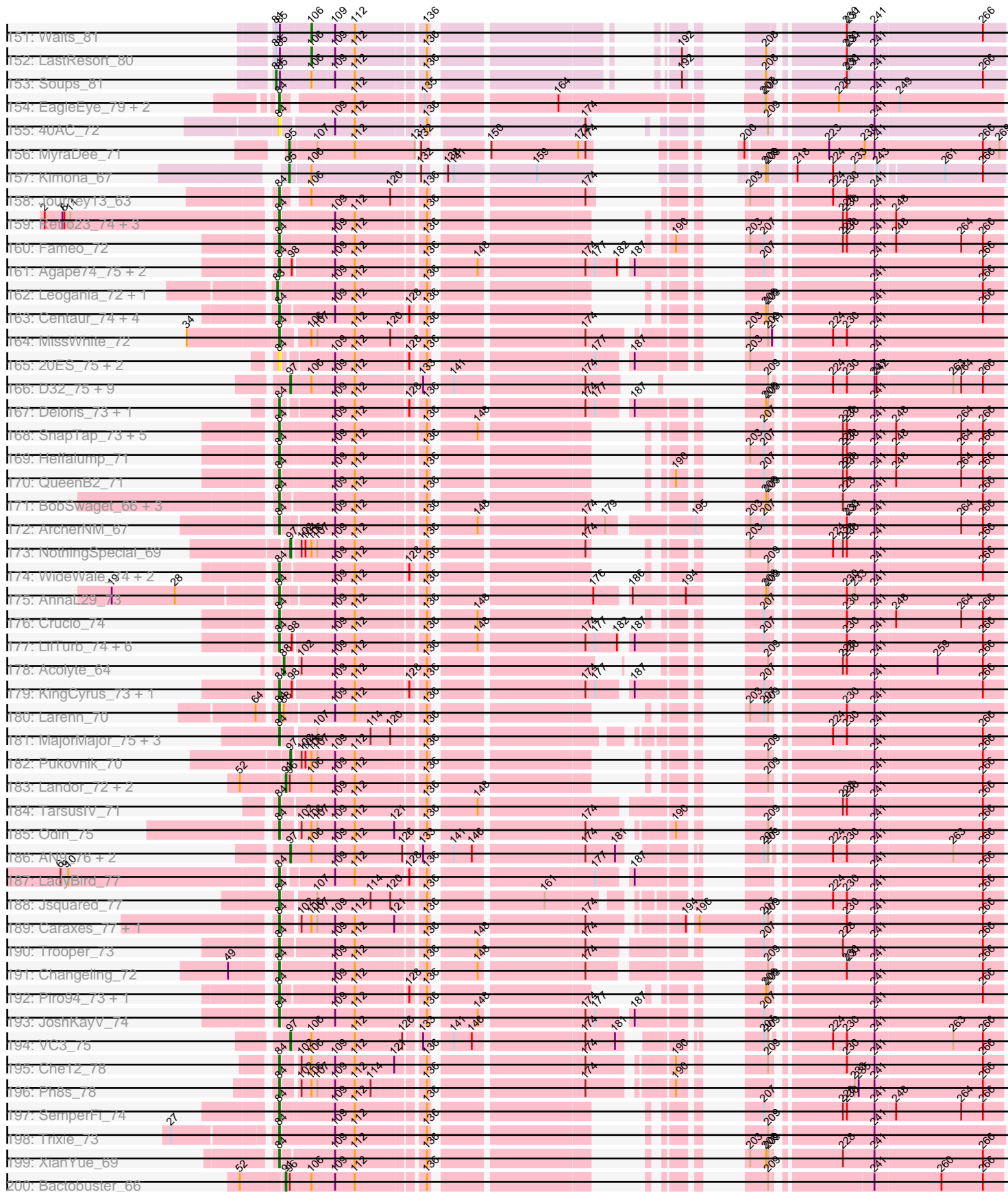
Pham 192173



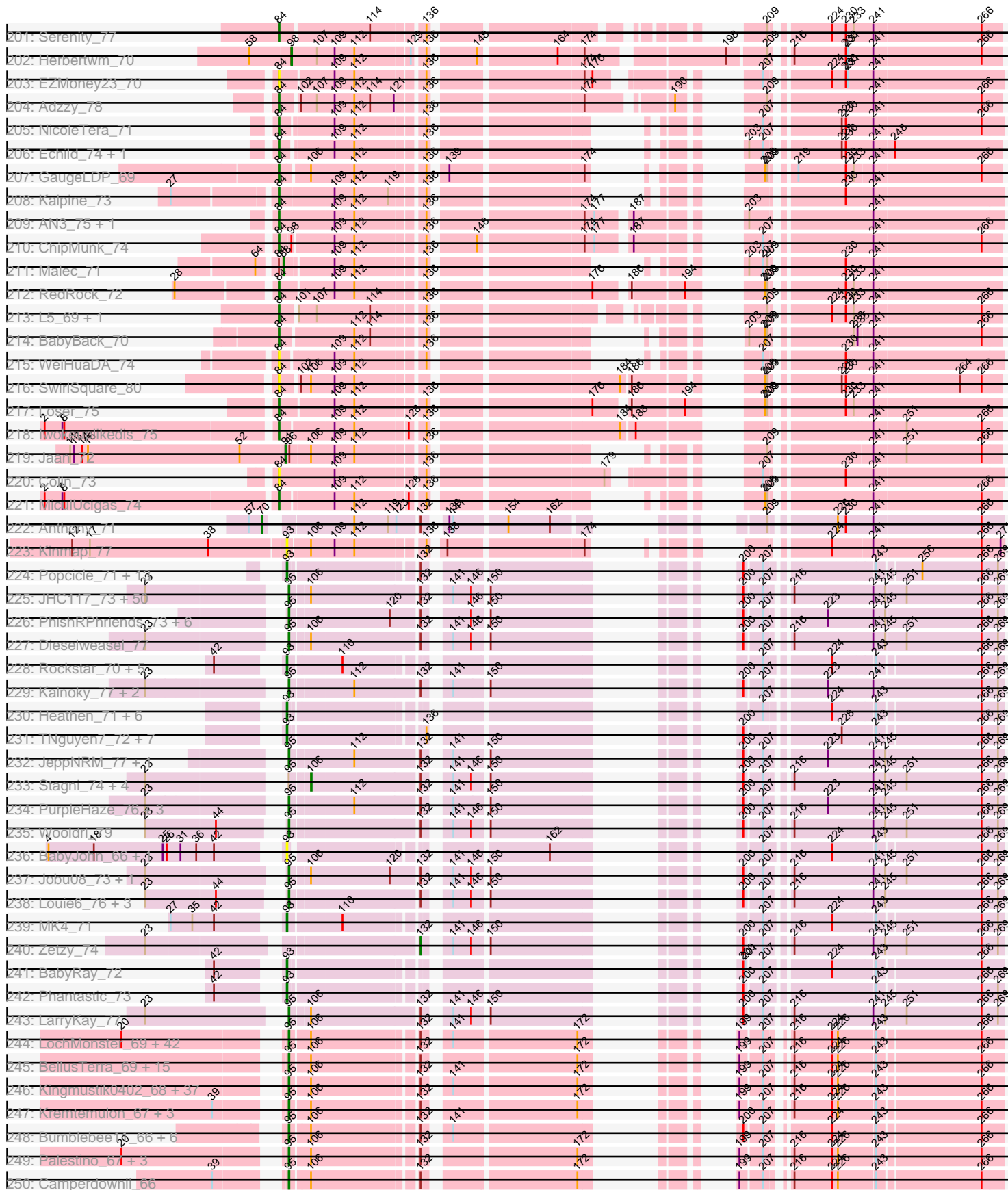
Pham 192173



Pham 192173

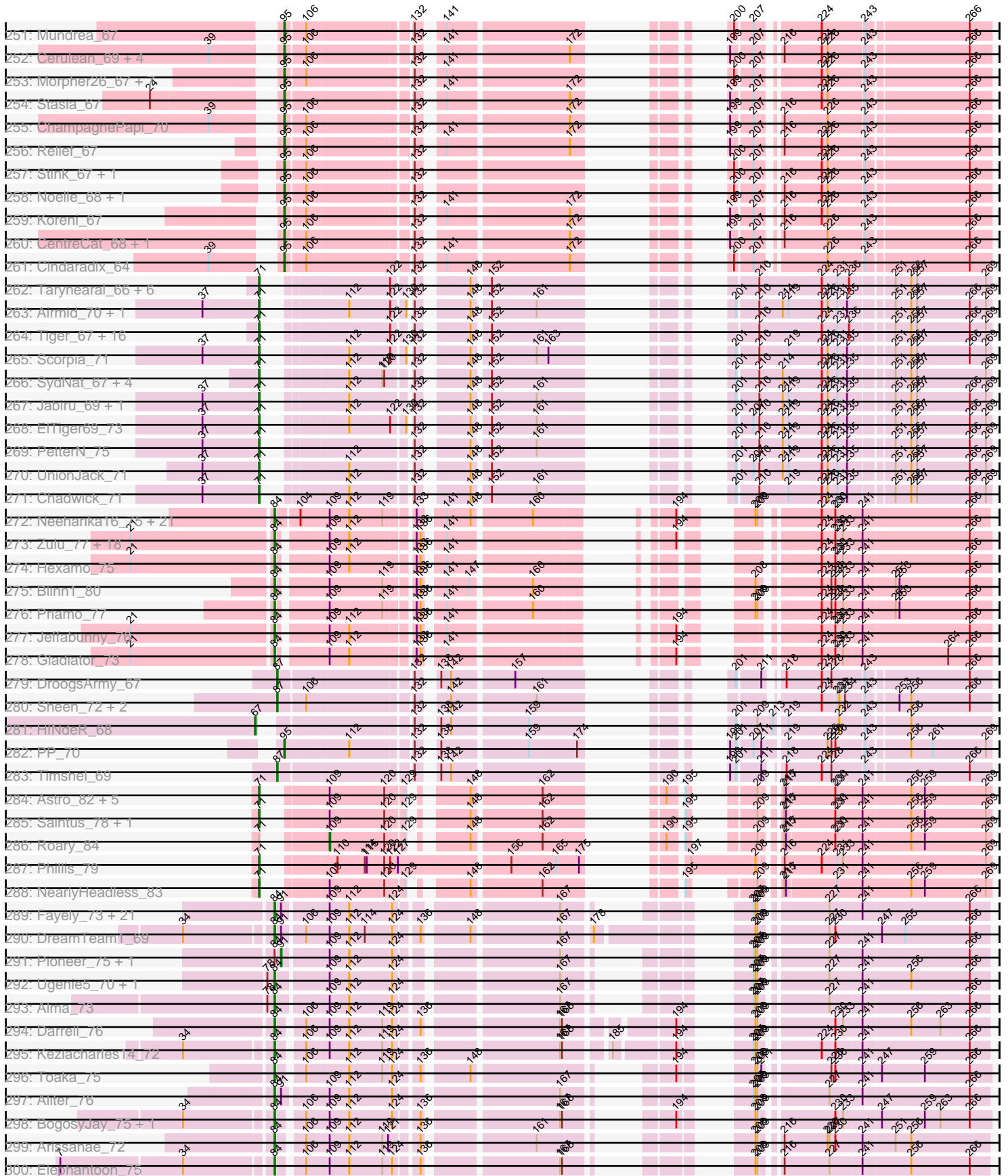


Pham 192173

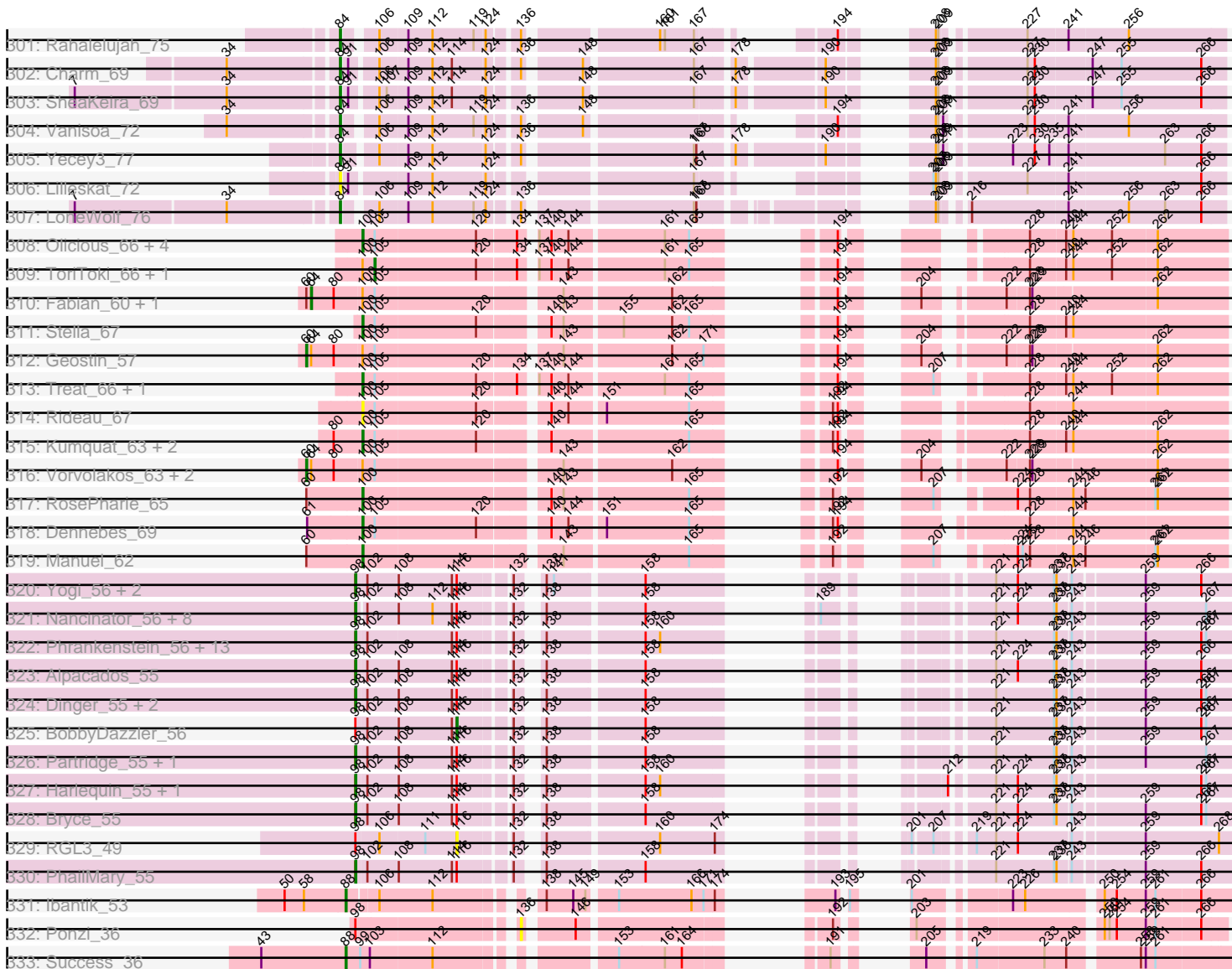




Pham 192173



Pham 192173



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 192173 Report

This analysis was run 11/02/24 on database version 579.

Pham number 192173 has 887 members, 63 are drafts.

Phages represented in each track:

- Track 1 : Chargerpower\_71
- Track 2 : A6\_61, BK1\_61
- Track 3 : DreamCatcher\_71, Ichabod\_73, Lopton\_69, IgnatiusPatJac\_69, Lesedi\_64, BluSpix\_67, McGuire\_70
- Track 4 : Jerm2\_70, Bob3\_70, MPlant7149\_69, BigMau\_71, Rohr\_70, Arlo\_67, HermioneGrange\_71
- Track 5 : Gompeii16\_68, Bircsak\_68
- Track 6 : Rufus\_71, BPBiabs31\_72, Moose\_70, Forsytheast\_70, Rubeus\_68
- Track 7 : Dreamboat\_72, Jasper\_71, Abbysshoes\_71, PherrisBueller\_71, Kenmech\_73, Dussy\_70
- Track 8 : JackSparrow\_72, Niza\_70
- Track 9 : Pinto\_69
- Track 10 : Pari\_73
- Track 11 : PacerPaul\_69, Francis47\_68
- Track 12 : Anglerfish\_70, Fascinus\_65, Bigfoot\_63, Pelly\_71, StewieG\_63, Jorgensen\_74, Maroc7\_69, CactusRose\_71, Burton\_70, Arcanine\_72
- Track 13 : Wilkins\_69, Applejack\_70, Espresso\_65, Ringer\_72, Sunshine924\_73, Topgun\_68, Graduation\_75, Gandalf20\_70
- Track 14 : JC27\_73
- Track 15 : Sagefire\_69, KSSJEB\_69, Peterson\_71, Marcell\_65, Blue\_69, lLeeKay\_70, Kugel\_74, Solon\_68
- Track 16 : HarryOW\_68
- Track 17 : Swole\_69, JuliaChild\_71, Tote\_66, Slagathor\_72, PSullivan\_68
- Track 18 : Aeneas\_71, Mule\_65, PhrostyMug\_68
- Track 19 : Beatrix\_68
- Track 20 : Naira\_74, Fenn\_75
- Track 21 : GrecoEtereo\_70
- Track 22 : KyMonks1A\_73
- Track 23 : Kanely\_70, Altman\_71
- Track 24 : Museum\_71, SpikeBT\_68, Paraselene\_69, Sibs6\_71, NEHalo\_67, PattyP\_71
- Track 25 : StrongArm\_67, Ashballer\_73, Bexan\_66, LilBib\_68, BillKnuckles\_65
- Track 26 : Rajelicia\_70
- Track 27 : GageAP\_70
- Track 28 : STLscum\_77, Pepe\_66
- Track 29 : Alsfro\_74
- Track 30 : Bethlehem\_70



- Track 31 : Corvo\_69, MetalQZJ\_65, MaryBeth\_66
- Track 32 : Chanagan\_63
- Track 33 : SarFire\_69, Thor\_69
- Track 34 : Petruccio\_71, Fushigi\_65, Trouble\_70, Turj99\_67, Magnito\_70
- Track 35 : PascalRango\_67
- Track 36 : Seabiscuit\_70, Ohno789\_70, Manatee\_68
- Track 37 : Atkinbua\_73
- Track 38 : Oogway\_67
- Track 39 : Violet\_66
- Track 40 : Dulcie\_69
- Track 41 : Gyzlar\_64
- Track 42 : Sumter\_65
- Track 43 : Marge\_65
- Track 44 : Rutherford\_70
- Track 45 : Licorice\_69
- Track 46 : Adahisdi\_67
- Track 47 : Hami1\_63
- Track 48 : Gwendoluna\_74
- Track 49 : Abrogate\_690
- Track 50 : Lockley\_68, DD5\_69
- Track 51 : Petp2012\_72
- Track 52 : Fajezeel\_71, Acme\_72, Greg\_71
- Track 53 : Tripl3t\_72
- Track 54 : PinkPlastic\_68
- Track 55 : Marsha\_68, Sorpresa\_67, Sandaddy\_66
- Track 56 : Agaliana\_64
- Track 57 : Perseus\_66, Smairt\_70
- Track 58 : Mryolo\_67, HanShotFirst\_70
- Track 59 : Crispicous1\_67, Michley\_73, Magnar\_68, Dynamix\_72
- Track 60 : Briton15\_73
- Track 61 : Ruotula\_75
- Track 62 : Molly\_71, TwoPeat\_71
- Track 63 : Big3\_70
- Track 64 : Eyeball\_70
- Track 65 : Conceptll\_73, Pippin\_69, Scowl\_69, Rhynn\_65
- Track 66 : Inyanga\_64
- Track 67 : Alvin\_69
- Track 68 : Cueilyss\_67
- Track 69 : Nhonho\_68
- Track 70 : BeesKnees\_73, Doom\_65
- Track 71 : Teodoridan\_68, Ajay\_68
- Track 72 : TheloniousMonk\_73, Target\_71
- Track 73 : Payneful\_68, Marchy\_64
- Track 74 : Bones\_67
- Track 75 : MrGordo\_72
- Track 76 : Bxb1\_62
- Track 77 : SwissCheese\_72
- Track 78 : BigPaolini\_66
- Track 79 : QTRlifeCrisis\_70
- Track 80 : Edtherson\_67, Monet\_71
- Track 81 : AFIS\_65
- Track 82 : Lamina13\_72, Carlyle\_69, Parliament\_69
- Track 83 : Switzer\_69

- Track 84 : Pita2\_71
- Track 85 : Froghopper\_66
- Track 86 : Papez\_73
- Track 87 : Barriga\_71
- Track 88 : Makemake\_74
- Track 89 : ProMouse\_71
- Track 90 : Smeagol\_70
- Track 91 : RidgeCB\_69
- Track 92 : Nerujay\_75
- Track 93 : Bruns\_71
- Track 94 : ShortQueendom\_61
- Track 95 : Buttons\_65
- Track 96 : Seanderson\_71
- Track 97 : Kykar\_71
- Track 98 : Hermia\_66
- Track 99 : Zephyr\_70
- Track 100 : Hope4ever\_72
- Track 101 : Killigrew\_68
- Track 102 : SkiPole\_76
- Track 103 : Mkhusele\_66
- Track 104 : U2\_64
- Track 105 : Homines\_60
- Track 106 : Sanya\_66, Snazzy\_67
- Track 107 : DrFeelGood\_67
- Track 108 : Treddle\_69
- Track 109 : Zeuska\_74
- Track 110 : Wheeler\_73
- Track 111 : Ciao\_68
- Track 112 : Euphoria\_68
- Track 113 : Tasp14\_71
- Track 114 : Paphu\_67, Norz\_68
- Track 115 : Watermelon\_70
- Track 116 : KBG\_69
- Track 117 : Squee\_72
- Track 118 : BaconJack\_74
- Track 119 : Twister\_67, Edison31\_65, WalterMcMickey\_67, Topanga\_65
- Track 120 : Rowdy\_70, DustyMartin\_70, Shapes\_70
- Track 121 : Eaglepride\_70
- Track 122 : Severus\_66, Poompha\_65, KittenMittens\_65, Drake94\_66, PeaceMeal1\_66
- Track 123 : RhynO\_67
- Track 124 : Kristoff\_67, Rebeuca\_69
- Track 125 : OKCentral2016\_66
- Track 126 : Trike\_65
- Track 127 : Chupacabra\_66
- Track 128 : DontArgue\_65
- Track 129 : Goose\_69
- Track 130 : Bowtie\_77, Joselito\_75, Flaverint\_77, Mabel\_76, MaCh\_76, Gilberta\_73, Timothy\_76, Lucivia\_77, Bud\_71, Aneem\_77, Munch\_76, Orange\_75
- Track 131 : Et2Brutus\_75, Snape\_76, Mulciber\_74, Salz\_71, TinyTimmy\_74
- Track 132 : Bachome\_74, Fibonacci\_75, Hutc2\_71, Jabith\_75, Sham4\_72, Insomnia\_75, Ebony\_76, Petersenfast\_70
- Track 133 : DarthPhader\_71

- Track 134 : Refuge\_71
- Track 135 : Zimmer\_72
- Track 136 : Steamy\_68
- Track 137 : Pharaoh\_69
- Track 138 : Phlei\_60
- Track 139 : Luchador\_76
- Track 140 : Jeeves\_77
- Track 141 : SororFago\_75
- Track 142 : Gail\_75
- Track 143 : Sunhee\_75
- Track 144 : Oofda\_81
- Track 145 : Epsocamisio\_79, Switzerland\_81, JSwag\_82, Nebulosus\_79, ShayRa\_82
- Track 146 : Nedarya\_77
- Track 147 : Anon\_78
- Track 148 : DekHockey33\_83, Anaysia\_82, Battleship\_84, Rosalind\_80, Boohoo\_82, ReMo\_80
- Track 149 : Remus\_82, Strosahl\_82
- Track 150 : KatherineG\_82, MinecraftSteve\_82, Looper\_81
- Track 151 : Waits\_81
- Track 152 : LastResort\_80
- Track 153 : Soups\_81
- Track 154 : EagleEye\_79, Lucyedi\_78, PainterBoy\_77
- Track 155 : 40AC\_72
- Track 156 : MyraDee\_71
- Track 157 : Kimona\_67
- Track 158 : Journey13\_63
- Track 159 : Retro23\_74, Dalmatian\_74, Anselm\_75, DudeLittle\_72
- Track 160 : Fameo\_72
- Track 161 : Agape74\_75, Turbido\_74, AbbyPaige\_75
- Track 162 : Leogania\_72, BiancaTri92\_72
- Track 163 : Centaur\_74, NaSiaTalie\_74, Baehexic\_72, Drake55\_75, Flare16\_74
- Track 164 : MissWhite\_72
- Track 165 : 20ES\_75, First\_0074, CRB1\_75
- Track 166 : D32\_75, Pomar16\_76, Naji\_76, D29\_69, Travvers\_75, Duplo\_76, StarStuff\_76, Tomathan\_76, Kerberos\_76, DBQu4n\_76
- Track 167 : Deloris\_73, BengiVuitton\_73
- Track 168 : SnapTap\_73, QueenBeesly\_74, Georgie2\_75, FiringLine\_74, Power\_73, SweetiePie\_73
- Track 169 : Heffalump\_71
- Track 170 : QueenB2\_71
- Track 171 : BobSwaget\_66, Rachaly\_69, Miko\_67, Lokk\_67
- Track 172 : ArcherNM\_67
- Track 173 : NothingSpecial\_69
- Track 174 : WideWale\_74, Updawg\_74, Equemioh13\_73
- Track 175 : AnnaL29\_73
- Track 176 : Crucio\_74
- Track 177 : LilTurb\_74, Buggy\_75, Dignity\_75, Jerm\_75, Leviathan\_75, Smeagan\_76, Whabigail7\_74
- Track 178 : Acolyte\_64
- Track 179 : KingCyrus\_73, EvilGenius\_73
- Track 180 : Larenn\_70
- Track 181 : MajorMajor\_75, Quokka\_75, TipsytheTRex\_73, Bradman\_76

- Track 182 : Pukovnik\_70
- Track 183 : Landor\_72, Phaded\_69, IronMan\_71
- Track 184 : TarsusIV\_71
- Track 185 : Odin\_75
- Track 186 : AN9\_76, ANI8\_76, C3\_69
- Track 187 : LadyBird\_77
- Track 188 : Jsquared\_77
- Track 189 : Caraxes\_77, Superchunk\_76
- Track 190 : Trooper\_73
- Track 191 : Changeling\_72
- Track 192 : Piro94\_73, HarryHoudini\_74
- Track 193 : JoshKayV\_74
- Track 194 : VC3\_75
- Track 195 : Che12\_78
- Track 196 : Ph8s\_78
- Track 197 : SemperFi\_74
- Track 198 : Trixie\_73
- Track 199 : XianYue\_69
- Track 200 : Bactobuster\_66
- Track 201 : Serenity\_77
- Track 202 : Herbertwm\_70
- Track 203 : EZMoney23\_70
- Track 204 : Adzzy\_78
- Track 205 : NicoleTera\_71
- Track 206 : Echild\_74, Benvolio\_71
- Track 207 : GaugeLDP\_69
- Track 208 : Kalpine\_73
- Track 209 : AN3\_75, VA6\_73
- Track 210 : ChipMunk\_74
- Track 211 : Malec\_71
- Track 212 : RedRock\_72
- Track 213 : L5\_69, Koduck\_75
- Track 214 : BabyBack\_70
- Track 215 : WeiHuaDA\_74
- Track 216 : SwirlSquare\_80
- Track 217 : Loser\_75
- Track 218 : Iwokeuplikedis\_75
- Track 219 : Jaan\_72
- Track 220 : Colin\_73
- Track 221 : MiculUcigas\_74
- Track 222 : Anthony\_71
- Track 223 : Kinmap\_77
- Track 224 : Popcicle\_71, QuinnKiro\_70, Veracruz\_68, Norbert\_67, Hookmount\_71, Caviar\_71, Margo\_71, Panamaxus\_69, Lambert1\_71, Noella\_71, Todacoro\_71, ResDef\_69, Pocahontas\_70, Texage\_69
- Track 225 : JHC117\_73, HashRod\_78, Daishi\_76, Penny1\_77, Microwolf\_73, MarQuardt\_77, Aglet\_78, Colbster\_73, GingkoMaracino\_77, MadMarie\_75, Mainiac\_76, Grum1\_76, AugsMagnumOpus\_80, Pembroke\_77, Soshari\_79, GtownJaz\_77, Cullens\_77, Malinsilva\_79, Phoxy\_77, Tiffany\_76, LBerry\_78, Spike509\_77, StepMih\_76, JenCasNa\_78, Grif\_75, Methuselah\_70, Grub\_75, Beauxregard13\_76, Hercules11\_77, Sabinator\_75, LugYA\_80, Bxz2\_72, Sabia\_75, PGHhamlin\_79, PotatoSplit\_78, Anubis\_80, P28Green\_77, SoYo\_74, EpicPhail\_78, BreSam8\_77, Marie\_75, AgronaGT15\_74, Ollie\_77, Taurus\_78, Vix\_73,

MoneyMay\_76, MuchMore\_80, Watson\_76, Farber\_77, DaHudson\_76, Phoebe\_78  
• Track 226 : PhishRPhriends\_73, Gemma\_74, Phranny\_73, Manu\_76, Reba\_72, HaveUMetTed\_77, OlanP\_75  
• Track 227 : Dieselweasel\_77  
• Track 228 : Rockstar\_70, Isca\_69, B1\_63, MA5\_71, JF4\_69, JF2\_69  
• Track 229 : Kalnoky\_77, Pawn\_75, Marius\_77  
• Track 230 : Heathen\_71, Marchesa\_69, Kachowdy\_69, Fred313\_69, Scout\_70, DropBear\_69, HelDan\_71  
• Track 231 : TNguyen7\_72, Bugatti\_71, Giroux\_70, BlueBird\_74, SaturnRing\_71, Pistachio\_71, Idleandcovert\_72, Puppy\_72  
• Track 232 : JeppNRM\_77, ACFishhook\_74  
• Track 233 : Stagni\_74, Rummer\_76, Fernando\_77, Lilith\_75, Snickers\_73  
• Track 234 : PurpleHaze\_76, Heliosoles\_74, Groupthink\_77, Kalb97\_77  
• Track 235 : Wooldri\_79  
• Track 236 : BabyJohn\_66, Chiqui\_66  
• Track 237 : Jobu08\_73, SoilDragon\_76  
• Track 238 : Louie6\_76, BuzzBuzz\_71, Misomonster\_78, KADY\_74  
• Track 239 : MK4\_71  
• Track 240 : Zetzy\_74  
• Track 241 : BabyRay\_72  
• Track 242 : Phantastic\_73  
• Track 243 : LarryKay\_77  
• Track 244 : LochMonster\_69, NorthStar\_66, Eapen\_68, Kye\_68, KFPoly\_67, Scamp\_68, Wilbur\_68, Arturo\_65, Romney\_67, Caelakin\_67, MeeZee\_67, Funston\_67, Phacado\_68, Mazhar510\_68, JoongJeon\_67, Burger\_66, PeterPeter\_68, Millski\_67, Lorenzo\_68, Albee\_68, Wander\_68, Flux\_68, Maverick\_67, Eris\_67, Clarenza\_67, Shaka\_66, Jaykayelowell\_65, Spino\_67, Taquarus\_67, Cocoaberry\_68, Gadost\_68, Alberto7\_69, Annyong\_67, Bruiser\_67, Thanksgivukkah\_67, Lemur\_68, Houdini22\_67, Iceman\_67, Pumbaa\_68, Ruin\_68, Nemo27\_67, Avie17\_68, NotAPhaseMom\_67  
• Track 245 : BellusTerra\_69, ICleared\_67, LittleGuy\_68, Kratark\_67, Lunsford\_68, Phontbonne\_68, OKaNui\_67, TroyPia\_69, Eurydice\_69, Eagle\_67, Ohfah\_69, Felipe\_69, Polymorphads\_68, Nebs\_69, Morrow\_69, Nyxis\_67  
• Track 246 : Kingmustik0402\_68, Sparxx\_69, LappelDuVide\_68, Peaches\_66, Deano\_65, Connomayer\_68, Chaph\_68, Phighter1804\_68, Eros\_68, Ulysses\_67, Holli\_67, Druantia\_67, Kampy\_67, Roosevelt\_66, Citius\_68, Commander\_66, Bartimeaus\_68, YoSam321\_68, Maxo\_69, Blackmoor\_67, Medusa\_68, Florean\_68, HamSlice\_64, Broseidon\_68, Sabertooth\_68, TygerBlood\_68, Baby16\_68, DirtyDunning\_67, Iracema64\_68, Tinybot\_67, BubbleTrouble\_67, TiroTheta9\_67, TinaFeyge\_66, Abdiel\_68, Dhanush\_68, Bombshell\_68, Pipcraft\_65, Rosa24\_65  
• Track 247 : Kremtemulon\_67, Obama12\_69, Cintron\_68, LHTSCC\_70  
• Track 248 : Bumblebee11\_66, AbbysRanger\_67, Backyardigan\_65, Shygu2\_67, Perplexer\_67, Achebe\_66, Badger\_66  
• Track 249 : Palestino\_67, LittleB\_68, Skipitt\_67, Melvin\_70  
• Track 250 : Camperdownii\_66  
• Track 251 : Mundrea\_67  
• Track 252 : Cerulean\_69, Happiness\_67, JetBlade\_68, BangNhom\_66, SheldonCooper\_68  
• Track 253 : Morpher26\_67, Wile\_66, Katalie136\_67, Cici\_67, PetiteSangsue\_67, Datway\_67, Xena\_66, Wizard007\_67  
• Track 254 : Stasia\_67  
• Track 255 : ChampagnePapi\_70  
• Track 256 : Relief\_67



- Track 257 : Stink\_67, Miramae\_67
- Track 258 : Noelle\_68, AvatarAhPeg\_67
- Track 259 : Koreni\_67
- Track 260 : CentreCat\_68, LeoAvram\_67
- Track 261 : Cindaradix\_64
- Track 262 : Tarynearal\_66, George\_63, LittleCherry\_66, Bonamassa\_67, Swirley\_67, HuhtaEnerson15\_65, Milcery\_67
- Track 263 : Airmid\_70, Naca\_70
- Track 264 : Tiger\_67, Phlorence\_66, Theia\_66, Cuco\_66, Jovo\_68, Lev2\_68, AgentM\_67, Dublin\_67, Aragog\_67, ForGetIt\_68, Conspiracy\_68, Coog\_64, MarysWell\_67, PickleBack\_68, Midas2\_64, Micasa\_67, Discoknowium\_65
- Track 265 : Scorpia\_71
- Track 266 : SydNat\_67, Bluefalcon\_63, Ghouboy\_67, Archetta\_65, Zolita\_66
- Track 267 : Jabiru\_69, Benedict\_71
- Track 268 : EITiger69\_73
- Track 269 : PetterN\_75
- Track 270 : UnionJack\_71
- Track 271 : Chadwick\_71
- Track 272 : Neeharika16\_75, Hoot\_71, Jordennis\_74, Candra\_74, SmellyB\_76, GreedyLawyer\_71, DaVinci\_74, EricB\_75, Kipper29\_76, SuperAwesome\_76, Kazan\_77, McFly\_77, VohminGhazi\_76, SuperCallie99\_73, BABullseye\_69, Pmask\_75, Cookiedough\_76, JewelBug\_75, Isiphiwo\_73, Dorothea\_76, Newrala\_75, Chartreuse\_73
- Track 273 : Zulu\_77, Helmet\_77, Indra\_79, Roksolana\_76, Garak\_77, Lilbunny\_75, Zaka\_76, Artemis2UCLA\_75, Hammer\_76, Gruunaga\_75, ToneTone\_73, Blue7\_77, Wiks\_75, Rifter\_76, CloudWang3\_76, Tucker\_76, Yokurt\_75, Koko\_77, WunderPhul\_76
- Track 274 : Hexamo\_75
- Track 275 : Blinn1\_80
- Track 276 : Priamo\_77
- Track 277 : Jeffabunny\_76
- Track 278 : Gladiator\_73
- Track 279 : DroogsArmy\_67
- Track 280 : Sheen\_72, Toro\_71, FlyCatcher\_73
- Track 281 : HINdeR\_68
- Track 282 : PP\_70
- Track 283 : Timshel\_69
- Track 284 : Astro\_82, Groundhog\_80, Smeadley\_82, Danforth\_83, Dixon\_81, Expelliarmus\_79
- Track 285 : Saintus\_78, Stephig9\_81
- Track 286 : Roary\_84
- Track 287 : Phillis\_79
- Track 288 : NearlyHeadless\_83
- Track 289 : Fayely\_73, Myxus\_75, Priya\_73, Sachima\_71, Catalina\_77, Halex\_73, EmyBug\_72, Phonnegut\_75, Conquerage\_73, HortumSL17\_76, PackMan\_74, Jiawan\_72, Tubs\_75, Spouty\_73, ExplosioNervosa\_73, Qobbit\_73, Beemo\_75, Phaeder\_75, RyeScarlet\_76, Onglai\_73, Hanray\_73, Eidsmoe\_73
- Track 290 : DreamTeam1\_69
- Track 291 : Pioneer\_75, EdogawaKiddo\_73
- Track 292 : Ugenie5\_70, Scherzo\_74
- Track 293 : Alma\_73
- Track 294 : Darrell\_76
- Track 295 : Keziacharles14\_72

- Track 296 : Toaka\_75
- Track 297 : Aliter\_76
- Track 298 : BogosyJay\_75, Maminiaina\_75
- Track 299 : Arissanae\_72
- Track 300 : Elephantoan\_75
- Track 301 : Rahalelujah\_75
- Track 302 : Charm\_69
- Track 303 : SheaKeira\_69
- Track 304 : Vanisoa\_72
- Track 305 : Yecey3\_77
- Track 306 : Lilleskat\_72
- Track 307 : LoneWolf\_76
- Track 308 : Olicious\_66, ZooBear\_66, Romero\_66, JPandJE\_66, HaugeAnator\_66
- Track 309 : ToriToki\_66, Immanuel3\_65
- Track 310 : Fabian\_60, RetrieverFever\_62
- Track 311 : Stella\_67
- Track 312 : Geostin\_57
- Track 313 : Treat\_66, Percastrophe\_66
- Track 314 : Rideau\_67
- Track 315 : Kumquat\_63, WRightOn\_67, Zeigle\_63
- Track 316 : Vorvolakos\_63, Gremlin23\_62, FlowerPower\_62
- Track 317 : RosePharie\_65
- Track 318 : Dennebes\_69
- Track 319 : Manuel\_62
- Track 320 : Yogi\_56, Hiro\_56, Bonanza\_57
- Track 321 : Nancinator\_56, Espica\_57, Gollum\_56, Belenaria\_57, UhSalsa\_56, Shuman\_57, RexFury\_55, AppleCloud\_53, Natosaleda\_55
- Track 322 : Phrankenstein\_56, Rhodalysa\_56, Rasputin\_56, Krishelle\_56, Swann\_56, StCroix\_55, Naiad\_55, RER2\_49, Bradshaw\_56, TWAMP\_56, Alatin\_55, Erik\_56, Lillie\_56, CosmicSans\_56
- Track 323 : Alpacados\_55
- Track 324 : Dinger\_55, Yoncess\_55, Takoda\_56
- Track 325 : BobbyDazzler\_56
- Track 326 : Partridge\_55, AngryOrchard\_53
- Track 327 : Harlequin\_55, Jester\_55
- Track 328 : Bryce\_55
- Track 329 : RGL3\_49
- Track 330 : PhailMary\_55
- Track 331 : Ibantik\_53
- Track 332 : Ponzi\_36
- Track 333 : Success\_36

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

The start number called the most often in the published annotations is 95, it was called in 215 of the 824 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ACFishhook\_74, AbbysRanger\_67, Abdiel\_68, Achebe\_66, Aglet\_78, AgronaGT15\_74, Albee\_68, Alberto7\_69, Annyong\_67, Anubis\_80, Arturo\_65,

AugsMagnumOpus\_80, AvatarAhPeg\_67, Avle17\_68, Baby16\_68, Backyardigan\_65, Badger\_66, BangNhom\_66, Bartimeaus\_68, Beauxregard13\_76, BellusTerra\_69, Blackmoor\_67, Bombshell\_68, BreSam8\_77, Broseidon\_68, Bruiser\_67, BubbleTrouble\_67, Bumblebee11\_66, Burger\_66, BuzzBuzz\_71, Bxz2\_72, Caelakin\_67, Camperdownii\_66, CentreCat\_68, Cerulean\_69, ChampagnePapi\_70, Chaph\_68, Cici\_67, Cindaradix\_64, Cintron\_68, Citius\_68, Clarenza\_67, Cocoaberry\_68, Colbster\_73, Commander\_66, Connomayer\_68, Cullens\_77, DaHudson\_76, Daishi\_76, Datway\_67, Deano\_65, Dhanush\_68, Dieselweasel\_77, DirtyDunning\_67, Druantia\_67, Eagle\_67, Eapen\_68, EpicPhail\_78, Eris\_67, Eros\_68, Eurydice\_69, Farber\_77, Florean\_68, Flux\_68, Funston\_67, Gadost\_68, Gemma\_74, GingkoMaracino\_77, Grif\_75, Groupthink\_77, Grub\_75, Grum1\_76, GtownJaz\_77, HamSlice\_64, Happiness\_67, HashRod\_78, HaveUMetTed\_77, Heliosoles\_74, Hercules11\_77, Holli\_67, Houdini22\_67, ICleared\_67, Iceman\_67, Iracema64\_68, JHC117\_73, Jaykayelowell\_65, JenCasNa\_78, JeppNRM\_77, JetBlade\_68, Jobu08\_73, JoongJeon\_67, KADY\_74, KFPoly\_67, Kalb97\_77, Kalnok\_77, Kamy\_67, Katalie136\_67, Kimona\_67, Kingmustik0402\_68, Koreni\_67, Kratark\_67, Kremtemulon\_67, Kyee\_68, LBerry\_78, LHTSCC\_70, LappelDuVide\_68, LarryKay\_77, Lemur\_68, LeoAvram\_67, LittleB\_68, LittleGuy\_68, LochMonster\_69, Lorenzo\_68, Louie6\_76, LugYA\_80, Lunsford\_68, MadMarie\_75, Mainiac\_76, Malinsilva\_79, Manu\_76, MarQuardt\_77, Marie\_75, Marius\_77, Maverick\_67, Maxo\_69, Mazhar510\_68, Medusa\_68, MeeZee\_67, Melvin\_70, Methuselah\_70, Microwolf\_73, Millski\_67, Miramae\_67, Misomonster\_78, MoneyMay\_76, Morpher26\_67, Morrow\_69, MuchMore\_80, Mundrea\_67, MyraDee\_71, Nebs\_69, Nemo27\_67, Noelle\_68, NorthStar\_66, NotAPhaseMom\_67, Nyxis\_67, OKaNui\_67, Obama12\_69, Ohfah\_69, OlanP\_75, Ollie\_77, P28Green\_77, PGHhamlin\_79, PP\_70, Palestino\_67, Pawn\_75, Peaches\_66, Pembroke\_77, Penny1\_77, Perplexer\_67, PeterPeter\_68, PetiteSangsue\_67, Phacado\_68, Phelipe\_69, Phighter1804\_68, PhishRPhriends\_73, Phoebe\_78, Phontbonne\_68, Phoxy\_77, Phranny\_73, Pipcraft\_65, Polymorphads\_68, PotatoSplit\_78, Pumbaa\_68, PurpleHaze\_76, Reba\_72, Relief\_67, Romney\_67, Roosevelt\_66, Rosa24\_65, Ruin\_68, Sabertooth\_68, Sabia\_75, Sabinator\_75, Scamp\_68, Shaka\_66, SheldonCooper\_68, Shygu2\_67, Skipitt\_67, SoYo\_74, SoilDragon\_76, Soshari\_79, Sparxx\_69, Spike509\_77, Spino\_67, Stasia\_67, StepMih\_76, Stink\_67, Taquarus\_67, Taurus\_78, Thanksgivukkah\_67, Tiffany\_76, TinaFeyge\_66, Tinybot\_67, TiroTheta9\_67, TroyPia\_69, TygerBlood\_68, Ulysses\_67, Vix\_73, Wander\_68, Watson\_76, Wilbur\_68, Wile\_66, Wizard007\_67, Wooldri\_79, Xena\_66, YoSam321\_68,

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

- Fernando\_77, Lilith\_75, Rummer\_76, Snickers\_73, Stagni\_74,

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

- 20ES\_75, 40AC\_72, A6\_61, AFIS\_65, AN3\_75, AN9\_76, ANI8\_76, AbbyPaige\_75, Abbyshoes\_71, Abrogate\_690, Acme\_72, Acolyte\_64, Adahisdi\_67, Adzzy\_78, Aeneas\_71, Agaliana\_64, Agape74\_75, AgentM\_67, Airmid\_70, Ajay\_68, Alatin\_55, Aliter\_76, Alma\_73, Alpacados\_55, Alsfro\_74, Altman\_71, Alvin\_69, Anaysia\_82, Aneem\_77, Anglerfish\_70, AngryOrchard\_53, AnnaL29\_73, Anon\_78, Anselm\_75, Anthony\_71, AppleCloud\_53, Applejack\_70, Aragog\_67, Arcanine\_72, ArcherNM\_67, Archetta\_65, Arissanae\_72, Arlo\_67, Artemis2UCLA\_75, Ashballer\_73, Astro\_82, Atkinbua\_73, B1\_63, BABullseye\_69, BK1\_61, BPBiabs31\_72, BabyBack\_70, BabyJohn\_66, BabyRay\_72, Bachome\_74, BaconJack\_74, Bactobuster\_66, Baehexic\_72, Barriga\_71, Battleship\_84, Beatrix\_68, Beemo\_75, BeesKnees\_73, Belenaria\_57, Benedict\_71, BengiVuitton\_73, Benvolio\_71, Bethlehem\_70,

Bexan\_66, BiancaTri92\_72, Big3\_70, BigMau\_71, BigPaolini\_66, Bigfoot\_63, BillKnuckles\_65, Bircsak\_68, Blinn1\_80, BluSpix\_67, Blue7\_77, BlueBird\_74, Blue\_69, Bluefalcon\_63, Bob3\_70, BobSwaget\_66, BobbyDazzler\_56, BogosyJay\_75, Bonamassa\_67, Bonanza\_57, Bones\_67, Boohoo\_82, Bowtie\_77, Bradman\_76, Bradshaw\_56, Briton15\_73, Bruns\_71, Bryce\_55, Bud\_71, Bugatti\_71, Buggy\_75, Burton\_70, Buttons\_65, Bxb1\_62, C3\_69, CRB1\_75, CactusRose\_71, Candra\_74, Caraxes\_77, Carlyle\_69, Catalina\_77, Caviar\_71, Centaur\_74, Chadwick\_71, Chanagan\_63, Changeling\_72, Chargerpower\_71, Charm\_69, Chartreuse\_73, Che12\_78, ChipMunk\_74, Chiqui\_66, Chupacabra\_66, Ciao\_68, CloudWang3\_76, Colin\_73, Conceptll\_73, Conquerage\_73, Conspiracy\_68, Coog\_64, Cookiedough\_76, Corvo\_69, CosmicSans\_56, Crispicous1\_67, Crucio\_74, Cuco\_66, Cueyllyss\_67, D29\_69, D32\_75, DBQu4n\_76, DD5\_69, DaVinci\_74, Dalmatian\_74, Danforth\_83, Darrell\_76, DARTHPhader\_71, DekHockey33\_83, Deloris\_73, Dennebes\_69, Dignity\_75, Dinger\_55, Discoknowium\_65, Dixon\_81, DontArgue\_65, Doom\_65, Dorothea\_76, DrFeelGood\_67, Drake55\_75, Drake94\_66, DreamCatcher\_71, DreamTeam1\_69, Dreamboat\_72, DroogsArmy\_67, DropBear\_69, Dublin\_67, DudeLittle\_72, Dulcie\_69, Duplo\_76, Dussy\_70, DustyMartin\_70, Dynamix\_72, EZMoney23\_70, EagleEye\_79, Eaglepride\_70, Ebony\_76, Echild\_74, Edison31\_65, EdogawaKiddo\_73, Edtherson\_67, Eidsmoe\_73, EITiger69\_73, Elephantoon\_75, EmyBug\_72, Epsocamisio\_79, Equemioh13\_73, EricB\_75, Erik\_56, Espica\_57, Espresso\_65, Et2Brutus\_75, Euphoria\_68, EvilGenius\_73, Expelliarmus\_79, ExplosioNervosa\_73, Eyeball\_70, Fabian\_60, Fajezeel\_71, Fameo\_72, Fascinus\_65, Fayely\_73, Fenn\_75, Fibonacci\_75, FiringLine\_74, First\_0074, Flare16\_74, Flaverint\_77, FlowerPower\_62, FlyCatcher\_73, ForGetIt\_68, Forsytheast\_70, Francis47\_68, Fred313\_69, FrogHopper\_66, Fushigi\_65, GageAP\_70, Gail\_75, Gandalf20\_70, Garak\_77, GaugeLDP\_69, George\_63, Georgie2\_75, Geostin\_57, Ghoulboy\_67, Gilberta\_73, Giroux\_70, Gladiator\_73, Gollum\_56, Gompeii16\_68, Goose\_69, Graduation\_75, GrecoEtereo\_70, GreedyLawyer\_71, Greg\_71, Gremlin23\_62, Groundhog\_80, Gruunaga\_75, Gwendoluna\_74, Gyzlar\_64, HINdeR\_68, Hami1\_63, Hammer\_76, HanShotFirst\_70, Hanray\_73, Harlequin\_55, HarryHoudini\_74, HarryOW\_68, HaugeAnator\_66, Heathen\_71, Heffalump\_71, HelDan\_71, Helmet\_77, Herbertwm\_70, Hermia\_66, HermioneGrange\_71, Hexamo\_75, Hiro\_56, Horex\_73, Homines\_60, Hookmount\_71, Hoot\_71, Hope4ever\_72, HortumSL17\_76, HuhtaEnerson15\_65, Hutc2\_71, ILeeKay\_70, Ibantik\_53, Ichabod\_73, Idleandcovert\_72, IgnatiusPatJac\_69, Immanuel3\_65, Indra\_79, Insomnia\_75, Inyanga\_64, IronMan\_71, Isca\_69, Isiphiwo\_73, Iwokeuplikedis\_75, JC27\_73, JF2\_69, JF4\_69, JPandJE\_66, JSwag\_82, Jaan\_72, Jabiru\_69, Jabith\_75, JackSparrow\_72, Jasper\_71, Jeeves\_77, Jeffabunny\_76, Jerm2\_70, Jerm\_75, Jester\_55, JewelBug\_75, Jiawan\_72, Jordennis\_74, Jorgensen\_74, Joselito\_75, JoshKayV\_74, Journey13\_63, Jovo\_68, Jsquared\_77, JuliaChild\_71, KBG\_69, KSSJEB\_69, Kachowdy\_69, Kalpine\_73, Kanely\_70, KatherineG\_82, Kazan\_77, Kenmech\_73, Kerberos\_76, Keziacharles14\_72, Killigrew\_68, KingCyrus\_73, Kinmap\_77, Kipper29\_76, KittenMittens\_65, Koduck\_75, Koko\_77, Krishelle\_56, Kristoff\_67, Kugel\_74, Kumquat\_63, KyMonks1A\_73, Kykar\_71, L5\_69, LadyBird\_77, Lambert1\_71, Lamina13\_72, Landor\_72, Larenn\_70, LastResort\_80, Leogania\_72, Lesedi\_64, Lev2\_68, Leviathan\_75, Licorice\_69, LilBib\_68, LilTurb\_74, Lilbunny\_75, Lilleskat\_72, Lillie\_56, LittleCherry\_66, Lockley\_68, Lokk\_67, LoneWolf\_76, Looper\_81, Lopton\_69, Loser\_75, Luchador\_76, Lucivia\_77, Lucyedi\_78, MA5\_71, MK4\_71, MPlant7149\_69, MaCh\_76, Mabel\_76, Magnar\_68, Magnito\_70, MajorMajor\_75, Makemake\_74, Malec\_71, Maminiaina\_75, Manatee\_68, Manuel\_62, Marcell\_65, Marchesa\_69, Marchy\_64, Marge\_65, Margo\_71, Maroc7\_69, Marsha\_68, MaryBeth\_66, MarysWell\_67, McFly\_77, McGuire\_70, MetalQZJ\_65,

Micasa\_67, Michley\_73, MiculUcigas\_74, Midas2\_64, Miko\_67, Milcery\_67, MinecraftSteve\_82, MissWhite\_72, Mkhuseleli\_66, Molly\_71, Monet\_71, Moose\_70, MrGordo\_72, Mryolo\_67, Mulciber\_74, Mule\_65, Munch\_76, Museum\_71, Myxus\_75, NEHalo\_67, NaSiaTalie\_74, Naca\_70, Naiad\_55, Naira\_74, Naji\_76, Nancinator\_56, Natosaleda\_55, NearlyHeadless\_83, Nebulosus\_79, Nedarya\_77, Neeharika16\_75, Nerujay\_75, Newrala\_75, Nhonho\_68, NicoleTera\_71, Niza\_70, Noella\_71, Norbert\_67, Norz\_68, NothingSpecial\_69, OKCentral2016\_66, Odin\_75, Ohno789\_70, Olicious\_66, Onglai\_73, Oofda\_81, Oogway\_67, Orange\_75, PSullivan\_68, PacerPaul\_69, PackMan\_74, PainterBoy\_77, Panamaxus\_69, Papez\_73, Paphu\_67, Paraselene\_69, Pari\_73, Parliament\_69, Partridge\_55, PascalRango\_67, PattyP\_71, Payneful\_68, PeaceMeal1\_66, Pelly\_71, Pepe\_66, Percastrophe\_66, Perseus\_66, Petersenfast\_70, Peterson\_71, Petp2012\_72, Petruccio\_71, PetterN\_75, Ph8s\_78, Phaded\_69, Phaeder\_75, PhailMary\_55, Phantastic\_73, Pharaoh\_69, PherrisBueller\_71, Phillis\_79, Phlei\_60, Phlorence\_66, Phonnegut\_75, Phrankenstein\_56, PhrostyMug\_68, PickleBack\_68, PinkPlastic\_68, Pinto\_69, Pioneer\_75, Pippin\_69, Piro94\_73, Pistachio\_71, Pita2\_71, Pmask\_75, Pocahontas\_70, Pomar16\_76, Ponzi\_36, Poompha\_65, Popcicle\_71, Power\_73, Priamo\_77, Priya\_73, ProMouse\_71, Pukovnik\_70, Puppy\_72, QTRLifeCrisis\_70, Qobbit\_73, QueenB2\_71, QueenBeesly\_74, QuinnKiro\_70, Quokka\_75, RER2\_49, RGL3\_49, Rachaly\_69, Rahalelujah\_75, Rajelicia\_70, Rasputin\_56, ReMo\_80, Rebeuca\_69, RedRock\_72, Refuge\_71, Remus\_82, ResDef\_69, RetrieverFever\_62, Retro23\_74, RexFury\_55, Rhodalysa\_56, RhynO\_67, Rhynn\_65, Rideau\_67, RidgeCB\_69, Rifter\_76, Ringer\_72, Roary\_84, Rockstar\_70, Rohr\_70, Roksolana\_76, Romero\_66, Rosalind\_80, RosePharie\_65, Rowdy\_70, Rubeus\_68, Rufus\_71, Ruotula\_75, Rutherford\_70, RyeScarlet\_76, STLscum\_77, Sachima\_71, Sagefire\_69, Saintus\_78, Salz\_71, Sandaddy\_66, Sanya\_66, SarFire\_69, SaturnRing\_71, Scherzo\_74, Scorpia\_71, Scout\_70, Scowl\_69, Seabiscuit\_70, Seanderson\_71, SemperFi\_74, Serenity\_77, Severus\_66, Sham4\_72, Shapes\_70, ShayRa\_82, SheaKeira\_69, Sheen\_72, ShortQueendom\_61, Shuman\_57, Sibs6\_71, SkiPole\_76, Slagathor\_72, Smairt\_70, Smeadley\_82, Smeagan\_76, Smeagol\_70, SmellyB\_76, SnapTap\_73, Snape\_76, Snazzy\_67, Solon\_68, SororFago\_75, Sorpresa\_67, Soups\_81, SpikeBT\_68, Spouty\_73, Squee\_72, StCroix\_55, StarStuff\_76, Steamy\_68, Stella\_67, Stephig9\_81, StewieG\_63, StrongArm\_67, Strosahl\_82, Success\_36, Sumter\_65, Sunhee\_75, Sunshine924\_73, SuperAwesome\_76, SuperCallie99\_73, Superchunk\_76, Swann\_56, SweetiePie\_73, SwirlSquare\_80, Swirley\_67, SwissCheese\_72, Switzer\_69, Switzerland\_81, Swole\_69, SydNat\_67, TNguyen7\_72, TWAMP\_56, Takoda\_56, Target\_71, TarsusIV\_71, Tarynearal\_66, Tasp14\_71, Teodoridan\_68, Texage\_69, Theia\_66, TheloniousMonk\_73, Thor\_69, Tiger\_67, Timothy\_76, Timshel\_69, TinyTimmy\_74, TipsytheTRex\_73, Toaka\_75, Todacoro\_71, Tomathan\_76, ToneTone\_73, Topanga\_65, Topgun\_68, ToriToki\_66, Toro\_71, Tote\_66, Travvers\_75, Treat\_66, Treddle\_69, Trike\_65, Tripl3t\_72, Trixie\_73, Trooper\_73, Trouble\_70, Tubs\_75, Tucker\_76, Turbido\_74, Turj99\_67, Twister\_67, TwoPeat\_71, U2\_64, Ugenie5\_70, UhSalsa\_56, UnionJack\_71, Updawg\_74, VA6\_73, VC3\_75, Vanisoa\_72, Veracruz\_68, Violet\_66, VohminGhazi\_76, Vorvolakos\_63, WRightOn\_67, Waits\_81, WalterMcMickey\_67, Watermelon\_70, WeiHuaDA\_74, Whabigail7\_74, Wheeler\_73, WideWale\_74, Wiks\_75, Wilkins\_69, WunderPhul\_76, XianYue\_69, Yecy3\_77, Yogi\_56, Yokurt\_75, Yoncess\_55, Zaka\_76, Zeigle\_63, Zephyr\_70, Zetzy\_74, Zeuska\_74, Zimmer\_72, Zolita\_66, ZooBear\_66, Zulu\_77,

### Summary by start number:

Start 33:



- Found in 1 of 887 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: RhynO\_67 (A10),

Start 40:

- Found in 6 of 887 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 16.7% of time when present
- Phage (with cluster) where this start called: KBG\_69 (A1),

Start 47:

- Found in 2 of 887 ( 0.2% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bxb1\_62 (A1),

Start 60:

- Found in 8 of 887 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 3 of 824
- Called 50.0% of time when present
- Phage (with cluster) where this start called: FlowerPower\_62 (BF), Geostin\_57 (BF), Gremlin23\_62 (BF), Vorvolakos\_63 (BF),

Start 63:

- Found in 14 of 887 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 7 of 824
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Bones\_67 (A1), Fushigi\_65 (A1), Magnito\_70 (A1), Petruccio\_71 (A1), Ruotula\_75 (A1), Trouble\_70 (A1), Turj99\_67 (A1),

Start 64:

- Found in 8 of 887 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 2 of 824
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Fabian\_60 (BF), RetrieverFever\_62 (BF),

Start 65:

- Found in 24 of 887 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 2 of 824
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Petp2012\_72 (A1), Pita2\_71 (A1),

Start 67:

- Found in 1 of 887 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HINdeR\_68 (A7),

Start 70:

- Found in 1 of 887 ( 0.1% ) of genes in pham

- Manual Annotations of this start: 1 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anthony\_71 (A20),

#### Start 71:

- Found in 49 of 887 ( 5.5% ) of genes in pham
- Manual Annotations of this start: 48 of 824
- Called 98.0% of time when present
- Phage (with cluster) where this start called: AgentM\_67 (A5), Airmid\_70 (A5), Aragog\_67 (A5), Archetta\_65 (A5), Astro\_82 (A8), Benedict\_71 (A5), Bluefalcon\_63 (A5), Bonamassa\_67 (A5), Chadwick\_71 (A5), Conspiracy\_68 (A5), Coog\_64 (A5), Cuco\_66 (A5), Danforth\_83 (A8), Discoknowium\_65 (A5), Dixon\_81 (A8), Dublin\_67 (A5), EITiger69\_73 (A5), Expelliarmus\_79 (A8), ForGetIt\_68 (A5), George\_63 (A5), Ghouhboy\_67 (A5), Groundhog\_80 (A8), HuhtaEnerson15\_65 (A5), Jabiru\_69 (A5), Jovo\_68 (A5), Lev2\_68 (A5), LittleCherry\_66 (A5), MarysWell\_67 (A5), Micasa\_67 (A5), Midas2\_64 (A5), Milcery\_67 (A5), Naca\_70 (A5), NearlyHeadless\_83 (A8), PetterN\_75 (A5), Phillis\_79 (A8), Phlorence\_66 (A5), PickleBack\_68 (A5), Saintus\_78 (A8), Scorpia\_71 (A5), Smeadley\_82 (A8), Stephig9\_81 (A8), Swirley\_67 (A5), SydNat\_67 (A5), Tarynearal\_66 (A5), Theia\_66 (A5), Tiger\_67 (A5), UnionJack\_71 (A5), Zolita\_66 (A5),

#### Start 72:

- Found in 45 of 887 ( 5.1% ) of genes in pham
- Manual Annotations of this start: 44 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abbyshoes\_71 (A1), Abrogate\_690 (A1), Applejack\_70 (A1), BaconJack\_74 (A1), BeesKnees\_73 (A1), Blue\_69 (A1), Crispicious1\_67 (A1), Doom\_65 (A1), Dreamboat\_72 (A1), Dussy\_70 (A1), Dynamix\_72 (A1), Espresso\_65 (A1), Fenn\_75 (A1), Gandalf20\_70 (A1), Graduation\_75 (A1), HanShotFirst\_70 (A1), ILeeKay\_70 (A1), Inyanga\_64 (A1), JC27\_73 (A1), Jasper\_71 (A1), KSSJEB\_69 (A1), Kenmech\_73 (A1), Kugel\_74 (A1), Magnar\_68 (A1), Marcell\_65 (A1), Marchy\_64 (A1), Michley\_73 (A1), Mryolo\_67 (A1), Naira\_74 (A1), Nhonho\_68 (A1), Norz\_68 (A1), Papez\_73 (A1), Paphu\_67 (A1), Payneful\_68 (A1), Peterson\_71 (A1), PherrisBueller\_71 (A1), PinkPlastic\_68 (A1), Ringer\_72 (A1), Sagefire\_69 (A1), Solon\_68 (A1), Sunshine924\_73 (A1), Tasp14\_71 (A1), Topgun\_68 (A1), Wilkins\_69 (A1), Zeuska\_74 (A1),

#### Start 73:

- Found in 21 of 887 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 16 of 824
- Called 95.2% of time when present
- Phage (with cluster) where this start called: Chupacabra\_66 (A10), DontArgue\_65 (A10), Drake94\_66 (A10), DustyMartin\_70 (A10), Eaglepride\_70 (A10), Edison31\_65 (A10), Goose\_69 (A10), KittenMittens\_65 (A10), Kristoff\_67 (A10), OKCentral2016\_66 (A10), PeaceMeal1\_66 (A10), Poompha\_65 (A10), Rebeuca\_69 (A10), Rowdy\_70 (A10), Severus\_66 (A10), Shapes\_70 (A10), Topanga\_65 (A10), Trike\_65 (A10), Twister\_67 (A10), WalterMcMickey\_67 (A10),

#### Start 74:

- Found in 14 of 887 ( 1.6% ) of genes in pham
- Manual Annotations of this start: 6 of 824
- Called 42.9% of time when present

- Phage (with cluster) where this start called: Adahisdi\_67 (A1), DD5\_69 (A1), Eyeball\_70 (A1), Hami1\_63 (A1), Hope4ever\_72 (A1), Lockley\_68 (A1),

#### Start 75:

- Found in 1 of 887 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wheeler\_73 (A1),

#### Start 76:

- Found in 56 of 887 ( 6.3% ) of genes in pham
- Manual Annotations of this start: 49 of 824
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Acme\_72 (A1), Ajay\_68 (A1), Alvin\_69 (A1), Ashballer\_73 (A1), Beatrix\_68 (A1), Bexan\_66 (A1), BillKnuckles\_65 (A1), Carlyle\_69 (A1), Ciao\_68 (A1), DrFeelGood\_67 (A1), Dulcie\_69 (A1), Fajezeel\_71 (A1), Greg\_71 (A1), Gwendoluna\_74 (A1), Gyzlar\_64 (A1), Hermia\_66 (A1), Homines\_60 (A1), JackSparrow\_72 (A1), JuliaChild\_71 (A1), Killigrew\_68 (A1), Kykar\_71 (A1), Lamina13\_72 (A1), Licorice\_69 (A1), LilBib\_68 (A1), Makemake\_74 (A1), Molly\_71 (A1), MrGordo\_72 (A1), Museum\_71 (A1), NEHalo\_67 (A1), Nerujay\_75 (A1), Niza\_70 (A1), PSullivan\_68 (A1), Paraselene\_69 (A1), Parliament\_69 (A1), PattyP\_71 (A1), Pepe\_66 (A1), ProMouse\_71 (A1), QTRLifeCrisis\_70 (A1), RidgeCB\_69 (A1), STLscum\_77 (A1), Sibs6\_71 (A1), Slagathor\_72 (A1), SpikeBT\_68 (A1), StrongArm\_67 (A1), Switzer\_69 (A1), Swole\_69 (A1), Target\_71 (A1), Teodoridan\_68 (A1), TheloniousMonk\_73 (A1), Tote\_66 (A1), TwoPeat\_71 (A1), Violet\_66 (A1),

#### Start 78:

- Found in 5 of 887 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Big3\_70 (A1),

#### Start 81:

- Found in 23 of 887 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 18 of 824
- Called 82.6% of time when present
- Phage (with cluster) where this start called: Anaysia\_82 (A15), Battleship\_84 (A15), Boohoo\_82 (A15), DekHockey33\_83 (A15), Epsocamisio\_79 (A15), JSwag\_82 (A15), KatherineG\_82 (A15), Looper\_81 (A15), MinecraftSteve\_82 (A15), Nebulosus\_79 (A15), Nedarya\_77 (A15), Oofda\_81 (A15), ReMo\_80 (A15), Remus\_82 (A15), Rosalind\_80 (A15), ShayRa\_82 (A15), Soups\_81 (A15), Strosahl\_82 (A15), Switzerland\_81 (A15),

#### Start 82:

- Found in 116 of 887 ( 13.1% ) of genes in pham
- Manual Annotations of this start: 2 of 824
- Called 2.6% of time when present
- Phage (with cluster) where this start called: Phlei\_60 (A13), Seanderson\_71 (A1), Steamy\_68 (A12),

#### Start 83:

- Found in 6 of 887 ( 0.7% ) of genes in pham

- Manual Annotations of this start: 6 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BiancaTri92\_72 (A2), Edtherson\_67 (A1), Leogania\_72 (A2), Monet\_71 (A1), SkiPole\_76 (A1), Treddle\_69 (A1),

Start 84:

- Found in 219 of 887 ( 24.7% ) of genes in pham
- Manual Annotations of this start: 189 of 824
- Called 98.2% of time when present
- Phage (with cluster) where this start called: 20ES\_75 (A2), 40AC\_72 (A17), AN3\_75 (A2), AbbyPaige\_75 (A2), Adzzy\_78 (A2), Agape74\_75 (A2), Aliter\_76 (A9), Alma\_73 (A9), Aneem\_77 (A11), AnnaL29\_73 (A2), Anselm\_75 (A2), ArcherNM\_67 (A2), Arissanae\_72 (A9), Artemis2UCLA\_75 (A6), BABullseye\_69 (A6), BabyBack\_70 (A2), Bachome\_74 (A11), Baehexic\_72 (A2), Beemo\_75 (A9), BengiVuitton\_73 (A2), Benvolio\_71 (A2), Blinn1\_80 (A6), Blue7\_77 (A6), BobSwaget\_66 (A2), BogosyJay\_75 (A9), Bowtie\_77 (A11), Bradman\_76 (A2), Bud\_71 (A11), Bugsy\_75 (A2), CRB1\_75 (A2), Candra\_74 (A6), Caraxes\_77 (A2), Catalina\_77 (A9), Centaur\_74 (A2), Changeling\_72 (A2), Chargerpower\_71 (A), Charm\_69 (A9), Chartreuse\_73 (A6), Che12\_78 (A2), ChipMunk\_74 (A2), CloudWang3\_76 (A6), Colin\_73 (A2), Conquerage\_73 (A9), Cookiedough\_76 (A6), Crucio\_74 (A2), DaVinci\_74 (A6), Dalmatian\_74 (A2), Darrell\_76 (A9), DARTHPhader\_71 (A12), Deloris\_73 (A2), Dignity\_75 (A2), Dorothea\_76 (A6), Drake55\_75 (A2), DreamTeam1\_69 (A9), DudeLittle\_72 (A2), EZMoney23\_70 (A2), EagleEye\_79 (A16), Ebony\_76 (A11), Echid\_74 (A2), Eidsmoe\_73 (A9), Elephantoon\_75 (A9), EmyBug\_72 (A9), Equemioh13\_73 (A2), EricB\_75 (A6), Et2Brutus\_75 (A11), EvilGenius\_73 (A2), ExplosioNervosa\_73 (A9), Fameo\_72 (A2), Fayely\_73 (A9), Fibonacci\_75 (A11), FiringLine\_74 (A2), First\_0074 (A2), Flare16\_74 (A2), Flaverint\_77 (A11), Gail\_75 (A14), Garak\_77 (A6), GaugeLDP\_69 (A2), Georgie2\_75 (A2), Gilberta\_73 (A11), Gladiator\_73 (A6), GreedyLawyer\_71 (A6), Gruunaga\_75 (A6), Hammer\_76 (A6), Hanray\_73 (A9), HarryHoudini\_74 (A2), Heffalump\_71 (A2), Helmet\_77 (A6), Hexamo\_75 (A6), Horex\_73 (A9), Hoot\_71 (A6), HortumSL17\_76 (A9), Hutc2\_71 (A11), Indra\_79 (A6), Insomnia\_75 (A11), Isiphiwo\_73 (A6), Iwokeuplikedis\_75 (A2), Jabith\_75 (A11), Jeeves\_77 (A14), Jeffabunny\_76 (A6), Jerm\_75 (A2), JewelBug\_75 (A6), Jiawan\_72 (A9), Jordennis\_74 (A6), Joselito\_75 (A11), JoshKayV\_74 (A2), Journey13\_63 (A2), Jsquared\_77 (A2), Kalpine\_73 (A2), Kazan\_77 (A6), Keziacharles14\_72 (A9), KingCyrus\_73 (A2), Kipper29\_76 (A6), Koduck\_75 (A2), Koko\_77 (A6), L5\_69 (A2), LadyBird\_77 (A2), Larenn\_70 (A2), Leviathan\_75 (A2), LilTurb\_74 (A2), Lilbunny\_75 (A6), Lilleskat\_72 (A9), Lökk\_67 (A2), LoneWolf\_76 (A9), Loser\_75 (A2), Luchador\_76 (A14), Lucivia\_77 (A11), Lucyedi\_78 (A16), MaCh\_76 (A11), Mabel\_76 (A11), MajorMajor\_75 (A2), Maminiaina\_75 (A9), McFly\_77 (A6), MiculUcigas\_74 (A2), Miko\_67 (A2), MissWhite\_72 (A2), Mulciber\_74 (A11), Munch\_76 (A11), Myxus\_75 (A9), NaSiaTalie\_74 (A2), Neeharika16\_75 (A6), Newrala\_75 (A6), NicoleTera\_71 (A2), Odin\_75 (A2), Onglai\_73 (A9), Orange\_75 (A11), PackMan\_74 (A9), PainterBoy\_77 (A16), Petersenfast\_70 (A11), Ph8s\_78 (A2), Phaeder\_75 (A9), Pharaoh\_69 (A12), Phonnegut\_75 (A9), Piro94\_73 (A2), Pmask\_75 (A6), Power\_73 (A2), Priamo\_77 (A6), Priya\_73 (A9), Qobbit\_73 (A9), QueenB2\_71 (A2), QueenBeesly\_74 (A2), Quokka\_75 (A2), Rachaly\_69 (A2), Rahalelujah\_75 (A9), RedRock\_72 (A2), Refuge\_71 (A12), Retro23\_74 (A2), Rifter\_76 (A6), Roksolana\_76 (A6), RyeScarlet\_76 (A9), Sachima\_71 (A9), Salz\_71 (A11), Scherzo\_74 (A9), SemperFi\_74 (A2), Serenity\_77 (A2), Sham4\_72 (A11), SheaKeira\_69 (A9), Smeagan\_76 (A2), SmellyB\_76 (A6), SnapTap\_73 (A2), Snape\_76 (A11), SororFago\_75 (A14), Spouty\_73 (A9), Sunhee\_75 (A14), SuperAwesome\_76 (A6),

SuperCallie99\_73 (A6), Superchunk\_76 (A2), SweetiePie\_73 (A2), SwirlSquare\_80 (A2), TarsusIV\_71 (A2), Timothy\_76 (A11), TinyTimmy\_74 (A11), TipsytheTRex\_73 (A2), Toaka\_75 (A9), ToneTone\_73 (A6), Trixie\_73 (A2), Trooper\_73 (A2), Tubs\_75 (A9), Tucker\_76 (A6), Turbido\_74 (A2), Ugenie5\_70 (A9), Updawg\_74 (A2), VA6\_73 (A2), Vanisoa\_72 (A9), VohminGhazi\_76 (A6), Watermelon\_70 (A1), WeiHuaDA\_74 (A2), Whabigail7\_74 (A2), WideWale\_74 (A2), Wiks\_75 (A6), WunderPhul\_76 (A6), XianYue\_69 (A2), Yecey3\_77 (A9), Yokurt\_75 (A6), Zaka\_76 (A6), Zulu\_77 (A6),

Start 85:

- Found in 21 of 887 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Zimmer\_72 (A12),

Start 87:

- Found in 5 of 887 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DroogsArmy\_67 (A7), FlyCatcher\_73 (A7), Sheen\_72 (A7), Timshel\_69 (A7), Toro\_71 (A7),

Start 88:

- Found in 5 of 887 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 4 of 824
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Acolyte\_64 (A2), Ibantik\_53 (singleton), Malec\_71 (A2), Success\_36 (singleton),

Start 89:

- Found in 8 of 887 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 3 of 824
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Aeneas\_71 (A1), Mule\_65 (A1), PhrostyMug\_68 (A1),

Start 90:

- Found in 4 of 887 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 3 of 824
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cueyllyss\_67 (A1), Euphoria\_68 (A1), GageAP\_70 (A1),

Start 91:

- Found in 73 of 887 ( 8.2% ) of genes in pham
- Manual Annotations of this start: 39 of 824
- Called 60.3% of time when present
- Phage (with cluster) where this start called: Agaliana\_64 (A1), Altman\_71 (A1), Anglerfish\_70 (A1), Arcanine\_72 (A1), Bactobuster\_66 (A2), Barriga\_71 (A1), BigPaolini\_66 (A1), Bigfoot\_63 (A1), Bircsak\_68 (A1), Burton\_70 (A1), Buttons\_65 (A1), CactusRose\_71 (A1), Chanagan\_63 (A1), ConceptII\_73 (A1), EdogawaKiddo\_73 (A9), Fascinus\_65 (A1), Francis47\_68 (A1), Gompeii16\_68 (A1), HarryOW\_68 (A1), IronMan\_71 (A2), Jaan\_72 (A2), Jorgensen\_74 (A1), Kanely\_70 (A1), Landor\_72 (A2), Maroc7\_69 (A1), Marsha\_68 (A1), PacerPaul\_69 (A1), Pari\_73



(A1), Pelly\_71 (A1), Phaded\_69 (A2), Pinto\_69 (A1), Pioneer\_75 (A9), Pippin\_69 (A1), Rajelicia\_70 (A1), Rhynn\_65 (A1), Sandaddy\_66 (A1), Scowl\_69 (A1), ShortQueendom\_61 (A1), Smeagol\_70 (A1), Sorpresa\_67 (A1), StewieG\_63 (A1), Sumter\_65 (A1), Trip13t\_72 (A1), Zephyr\_70 (A1),

Start 92:

- Found in 11 of 887 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 8 of 824
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Bethlehem\_70 (A1), Briton15\_73 (A1), Bruns\_71 (A1), Marge\_65 (A1), Oogway\_67 (A1), Perseus\_66 (A1), Rutherford\_70 (A1), Smairt\_70 (A1),

Start 93:

- Found in 41 of 887 ( 4.6% ) of genes in pham
- Manual Annotations of this start: 32 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B1\_63 (A3), BabyJohn\_66 (A3), BabyRay\_72 (A3), BlueBird\_74 (A3), Bugatti\_71 (A3), Caviar\_71 (A3), Chiqui\_66 (A3), DropBear\_69 (A3), Fred313\_69 (A3), Giroux\_70 (A3), Heathen\_71 (A3), HelDan\_71 (A3), Hookmount\_71 (A3), Idleandcovert\_72 (A3), Isca\_69 (A3), JF2\_69 (A3), JF4\_69 (A3), Kachowdy\_69 (A3), Kinmap\_77 (A21), Lambert1\_71 (A3), MA5\_71 (A3), MK4\_71 (A3), Marchesa\_69 (A3), Margo\_71 (A3), Noella\_71 (A3), Norbert\_67 (A3), Panamaxus\_69 (A3), Phantastic\_73 (A3), Pistachio\_71 (A3), Pocahontas\_70 (A3), Popticle\_71 (A3), Puppy\_72 (A3), QuinnKiro\_70 (A3), ResDef\_69 (A3), Rockstar\_70 (A3), SaturnRing\_71 (A3), Scout\_70 (A3), TNguyen7\_72 (A3), Texage\_69 (A3), Todacoro\_71 (A3), Veracruz\_68 (A3),

Start 94:

- Found in 26 of 887 ( 2.9% ) of genes in pham
- Manual Annotations of this start: 25 of 824
- Called 96.2% of time when present
- Phage (with cluster) where this start called: A6\_61 (A1), Alsfro\_74 (A1), Arlo\_67 (A1), Atkinbua\_73 (A1), BK1\_61 (A1), BPBiabs31\_72 (A1), BigMau\_71 (A1), Bob3\_70 (A1), Corvo\_69 (A1), Forsytheast\_70 (A1), FrogHopper\_66 (A1), HermioneGrange\_71 (A1), Jerm2\_70 (A1), KyMonks1A\_73 (A1), MPlant7149\_69 (A1), Manatee\_68 (A1), MaryBeth\_66 (A1), MetalQZJ\_65 (A1), Moose\_70 (A1), Ohno789\_70 (A1), Rohr\_70 (A1), Rubeus\_68 (A1), Rufus\_71 (A1), Seabiscuit\_70 (A1), SwissCheese\_72 (A1),

Start 95:

- Found in 222 of 887 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 215 of 824
- Called 97.7% of time when present
- Phage (with cluster) where this start called: ACFishhook\_74 (A3), AbbysRanger\_67 (A4), Abdiel\_68 (A4), Achebe\_66 (A4), Aglet\_78 (A3), AgronaGT15\_74 (A3), Albee\_68 (A4), Alberto7\_69 (A4), Annyong\_67 (A4), Anubis\_80 (A3), Arturo\_65 (A4), AugsMagnumOpus\_80 (A3), AvatarAhPeg\_67 (A4), Avle17\_68 (A4), Baby16\_68 (A4), Backyardigan\_65 (A4), Badger\_66 (A4), BangNhom\_66 (A4), Bartimeaus\_68 (A4), Beauxregard13\_76 (A3), BellusTerra\_69 (A4), Blackmoor\_67 (A4), Bombshell\_68 (A4), BreSam8\_77 (A3), Broseidon\_68 (A4), Bruiser\_67 (A4), BubbleTrouble\_67 (A4), Bumblebee11\_66 (A4), Burger\_66 (A4), BuzzBuzz\_71 (A3), Bxz2\_72 (A3), Caelakin\_67 (A4), Camperdownii\_66 (A4), CentreCat\_68 (A4),

Cerulean\_69 (A4), ChampagnePapi\_70 (A4), Chaph\_68 (A4), Cici\_67 (A4),  
 Cindaradix\_64 (A4), Cintron\_68 (A4), Citius\_68 (A4), Clarenza\_67 (A4),  
 Cocoaberry\_68 (A4), Colbster\_73 (A3), Commander\_66 (A4), Connomayer\_68 (A4),  
 Cullens\_77 (A3), DaHudson\_76 (A3), Daishi\_76 (A3), Datway\_67 (A4), Deano\_65  
 (A4), Dhanush\_68 (A4), Dieselweasel\_77 (A3), DirtyDunning\_67 (A4), Druantia\_67  
 (A4), Eagle\_67 (A4), Eapen\_68 (A4), EpicPhail\_78 (A3), Eris\_67 (A4), Eros\_68 (A4),  
 Eurydice\_69 (A4), Farber\_77 (A3), Florean\_68 (A4), Flux\_68 (A4), Funston\_67 (A4),  
 Gadost\_68 (A4), Gemma\_74 (A3), GingkoMaracino\_77 (A3), Grif\_75 (A3),  
 Groupthink\_77 (A3), Grub\_75 (A3), Grum1\_76 (A3), GtownJaz\_77 (A3),  
 HamSlice\_64 (A4), Happiness\_67 (A4), HashRod\_78 (A3), HaveUMetTed\_77 (A3),  
 Heliosoles\_74 (A3), Hercules11\_77 (A3), Holli\_67 (A4), Houdini22\_67 (A4),  
 ICleared\_67 (A4), Iceman\_67 (A4), Iracema64\_68 (A4), JHC117\_73 (A3),  
 Jaykayelowell\_65 (A4), JenCasNa\_78 (A3), JeppNRM\_77 (A3), JetBlade\_68 (A4),  
 Jobu08\_73 (A3), JoongJeon\_67 (A4), KADY\_74 (A3), KFPoly\_67 (A4), Kalb97\_77  
 (A3), Kalnoky\_77 (A3), Kampy\_67 (A4), Katalie136\_67 (A4), Kimona\_67 (A19),  
 Kingmustik0402\_68 (A4), Koreni\_67 (A4), Kratark\_67 (A4), Kremtemulon\_67 (A4),  
 Kyee\_68 (A4), LBerry\_78 (A3), LHTSCC\_70 (A4), LappelDuVide\_68 (A4),  
 LarryKay\_77 (A3), Lemur\_68 (A4), LeoAvram\_67 (A4), LittleB\_68 (A4), LittleGuy\_68  
 (A4), LochMonster\_69 (A4), Lorenzo\_68 (A4), Louie6\_76 (A3), LugYA\_80 (A3),  
 Lunsford\_68 (A4), MadMarie\_75 (A3), Mainiac\_76 (A3), Malinsilva\_79 (A3), Manu\_76  
 (A3), MarQuardt\_77 (A3), Marie\_75 (A3), Marius\_77 (A3), Maverick\_67 (A4),  
 Maxo\_69 (A4), Mazhar510\_68 (A4), Medusa\_68 (A4), MeeZee\_67 (A4), Melvin\_70  
 (A4), Methuselah\_70 (A3), Microwolf\_73 (A3), Millski\_67 (A4), Miramae\_67 (A4),  
 Misomonster\_78 (A3), MoneyMay\_76 (A3), Morpher26\_67 (A4), Morrow\_69 (A4),  
 MuchMore\_80 (A3), Mundrea\_67 (A4), MyraDee\_71 (A18), Nebs\_69 (A4),  
 Nemo27\_67 (A4), Noelle\_68 (A4), NorthStar\_66 (A4), NotAPhaseMom\_67 (A4),  
 Nyxis\_67 (A4), OKaNui\_67 (A4), Obama12\_69 (A4), Ohfah\_69 (A4), OlanP\_75 (A3),  
 Ollie\_77 (A3), P28Green\_77 (A3), PGHhamlin\_79 (A3), PP\_70 (A7), Palestino\_67  
 (A4), Pawn\_75 (A3), Peaches\_66 (A4), Pembroke\_77 (A3), Penny1\_77 (A3),  
 Perplexer\_67 (A4), PeterPeter\_68 (A4), PetiteSangsue\_67 (A4), Phacado\_68 (A4),  
 Philippe\_69 (A4), Phighter1804\_68 (A4), PhishRPhriends\_73 (A3), Phoebe\_78 (A3),  
 Phontbonne\_68 (A4), Phoxy\_77 (A3), Phranny\_73 (A3), Pipcraft\_65 (A4),  
 Polymorphads\_68 (A4), PotatoSplit\_78 (A3), Pumbaa\_68 (A4), PurpleHaze\_76 (A3),  
 Reba\_72 (A3), Relief\_67 (A4), Romney\_67 (A4), Roosevelt\_66 (A4), Rosa24\_65  
 (A4), Ruin\_68 (A4), Sabertooth\_68 (A4), Sabia\_75 (A3), Sabinator\_75 (A3),  
 Scamp\_68 (A4), Shaka\_66 (A4), SheldonCooper\_68 (A4), Shygu2\_67 (A4),  
 Skipitt\_67 (A4), SoYo\_74 (A3), SoilDragon\_76 (A3), Soshari\_79 (A3), Sparxx\_69  
 (A4), Spike509\_77 (A3), Spino\_67 (A4), Stasia\_67 (A4), StepMih\_76 (A3), Stink\_67  
 (A4), Taquarus\_67 (A4), Taurus\_78 (A3), Thanksgivukkah\_67 (A4), Tiffany\_76 (A3),  
 TinaFeyge\_66 (A4), Tinybot\_67 (A4), TiroTheta9\_67 (A4), TroyPia\_69 (A4),  
 TygerBlood\_68 (A4), Ulysses\_67 (A4), Vix\_73 (A3), Wander\_68 (A4), Watson\_76  
 (A3), Wilbur\_68 (A4), Wile\_66 (A4), Wizard007\_67 (A4), Wooldri\_79 (A3), Xena\_66  
 (A4), YoSam321\_68 (A4),

Start 97:

- Found in 17 of 887 ( 1.9% ) of genes in pham
- Manual Annotations of this start: 16 of 824
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AN9\_76 (A2), ANI8\_76 (A2), Anon\_78 (A15), C3\_69 (A2), D29\_69 (A2), D32\_75 (A2), DBQu4n\_76 (A2), Duplo\_76 (A2), Kerberos\_76 (A2), Naji\_76 (A2), NothingSpecial\_69 (A2), Pomar16\_76 (A2), Pukovnik\_70 (A2), StarStuff\_76 (A2), Tomathan\_76 (A2), Travvers\_75 (A2), VC3\_75 (A2),

Start 98:

- Found in 53 of 887 ( 6.0% ) of genes in pham
- Manual Annotations of this start: 36 of 824
- Called 69.8% of time when present
- Phage (with cluster) where this start called: Alatin\_55 (CA), Alpacados\_55 (CA), AngryOrchard\_53 (CA), AppleCloud\_53 (CA), Belenaria\_57 (CA), Bonanza\_57 (CA), Bradshaw\_56 (CA), Bryce\_55 (CA), CosmicSans\_56 (CA), Dinger\_55 (CA), Erik\_56 (CA), Espica\_57 (CA), Gollum\_56 (CA), Harlequin\_55 (CA), Herbertwm\_70 (A2), Hiro\_56 (CA), Jester\_55 (CA), Krishelle\_56 (CA), Lillie\_56 (CA), Naiad\_55 (CA), Nancinator\_56 (CA), Natosaleda\_55 (CA), Partridge\_55 (CA), PhailMary\_55 (CA), Phrankenstien\_56 (CA), RER2\_49 (CA), Rasputin\_56 (CA), RexFury\_55 (CA), Rhodalysa\_56 (CA), Shuman\_57 (CA), StCroix\_55 (CA), Swann\_56 (CA), TWAMP\_56 (CA), Takoda\_56 (CA), UhSalsa\_56 (CA), Yogi\_56 (CA), Yoncess\_55 (CA),

Start 100:

- Found in 23 of 887 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 14 of 824
- Called 65.2% of time when present
- Phage (with cluster) where this start called: Dennebes\_69 (BF), HaugeAnator\_66 (BF), JPandJE\_66 (BF), Kumquat\_63 (BF), Manuel\_62 (BF), Olicious\_66 (BF), Percastrophe\_66 (BF), Rideau\_67 (BF), Romero\_66 (BF), RosePharie\_65 (BF), Stella\_67 (BF), Treat\_66 (BF), WRightOn\_67 (BF), Zeigle\_63 (BF), ZooBear\_66 (BF),

Start 105:

- Found in 21 of 887 ( 2.4% ) of genes in pham
- Manual Annotations of this start: 2 of 824
- Called 9.5% of time when present
- Phage (with cluster) where this start called: Immanuel3\_65 (BF), ToriToki\_66 (BF),

Start 106:

- Found in 283 of 887 ( 31.9% ) of genes in pham
- Manual Annotations of this start: 6 of 824
- Called 2.5% of time when present
- Phage (with cluster) where this start called: Fernando\_77 (A3), LastResort\_80 (A15), Lilith\_75 (A3), Rummer\_76 (A3), Snickers\_73 (A3), Stagni\_74 (A3), Waits\_81 (A15),

Start 109:

- Found in 268 of 887 ( 30.2% ) of genes in pham
- Manual Annotations of this start: 14 of 824
- Called 5.6% of time when present
- Phage (with cluster) where this start called: AFIS\_65 (A1), BluSpix\_67 (A1), DreamCatcher\_71 (A1), GrecoEtereo\_70 (A1), Ichabod\_73 (A1), IgnatiusPatJac\_69 (A1), Lesedi\_64 (A1), Lopton\_69 (A1), McGuire\_70 (A1), Roary\_84 (A8), Sanya\_66 (A1), SarFire\_69 (A1), Snazzy\_67 (A1), Squee\_72 (A1), Thor\_69 (A1),

Start 112:

- Found in 448 of 887 ( 50.5% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 0.2% of time when present
- Phage (with cluster) where this start called: U2\_64 (A1),

Start 116:

- Found in 38 of 887 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 5.3% of time when present
- Phage (with cluster) where this start called: BobbyDazzler\_56 (CA), RGL3\_49 (CA),

Start 119:

- Found in 278 of 887 ( 31.3% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 0.7% of time when present
- Phage (with cluster) where this start called: Mkhuseleli\_66 (A1), PascalRango\_67 (A1),

Start 132:

- Found in 341 of 887 ( 38.4% ) of genes in pham
- Manual Annotations of this start: 1 of 824
- Called 0.3% of time when present
- Phage (with cluster) where this start called: Zetzy\_74 (A3),

Start 136:

- Found in 219 of 887 ( 24.7% ) of genes in pham
- No Manual Annotations of this start.
- Called 0.5% of time when present
- Phage (with cluster) where this start called: Ponzi\_36 (singleton),

**Summary by clusters:**

There are 25 clusters represented in this pham: BF, singleton, A15, A14, A17, A16, A11, A10, A13, A12, A19, A18, A1, A3, A2, A5, A4, A7, A6, A9, A8, A, CA, A20, A21,

Info for manual annotations of cluster A:

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

Info for manual annotations of cluster A1:

- Start number 40 was manually annotated 1 time for cluster A1.
- Start number 47 was manually annotated 1 time for cluster A1.
- Start number 63 was manually annotated 7 times for cluster A1.
- Start number 65 was manually annotated 2 times for cluster A1.
- Start number 72 was manually annotated 44 times for cluster A1.
- Start number 74 was manually annotated 6 times for cluster A1.
- Start number 75 was manually annotated 1 time for cluster A1.
- Start number 76 was manually annotated 49 times for cluster A1.
- Start number 78 was manually annotated 1 time for cluster A1.
- Start number 82 was manually annotated 1 time for cluster A1.
- Start number 83 was manually annotated 4 times for cluster A1.
- Start number 84 was manually annotated 1 time for cluster A1.
- Start number 89 was manually annotated 3 times for cluster A1.
- Start number 90 was manually annotated 3 times for cluster A1.
- Start number 91 was manually annotated 33 times for cluster A1.
- Start number 92 was manually annotated 8 times for cluster A1.
- Start number 94 was manually annotated 25 times for cluster A1.
- Start number 109 was manually annotated 13 times for cluster A1.

- Start number 112 was manually annotated 1 time for cluster A1.
- Start number 119 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster A10:

- Start number 33 was manually annotated 1 time for cluster A10.
- Start number 73 was manually annotated 16 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 84 was manually annotated 24 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 82 was manually annotated 1 time for cluster A12.
- Start number 84 was manually annotated 3 times for cluster A12.
- Start number 85 was manually annotated 1 time for cluster A12.

Info for manual annotations of cluster A14:

- Start number 84 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 81 was manually annotated 18 times for cluster A15.
- Start number 97 was manually annotated 1 time for cluster A15.
- Start number 106 was manually annotated 2 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 84 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:

- Start number 95 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A19:

- Start number 95 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 83 was manually annotated 2 times for cluster A2.
- Start number 84 was manually annotated 77 times for cluster A2.
- Start number 88 was manually annotated 2 times for cluster A2.
- Start number 91 was manually annotated 5 times for cluster A2.
- Start number 97 was manually annotated 15 times for cluster A2.
- Start number 98 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 70 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:

- Start number 93 was manually annotated 32 times for cluster A3.
- Start number 95 was manually annotated 75 times for cluster A3.
- Start number 106 was manually annotated 4 times for cluster A3.
- Start number 132 was manually annotated 1 time for cluster A3.

Info for manual annotations of cluster A4:

- Start number 95 was manually annotated 137 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 71 was manually annotated 38 times for cluster A5.

Info for manual annotations of cluster A6:

- Start number 84 was manually annotated 42 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 67 was manually annotated 1 time for cluster A7.
- Start number 87 was manually annotated 3 times for cluster A7.
- Start number 95 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster A8:

- Start number 71 was manually annotated 10 times for cluster A8.
- Start number 109 was manually annotated 1 time for cluster A8.

Info for manual annotations of cluster A9:

- Start number 84 was manually annotated 34 times for cluster A9.
- Start number 91 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster BF:

- Start number 60 was manually annotated 3 times for cluster BF.
- Start number 64 was manually annotated 2 times for cluster BF.
- Start number 100 was manually annotated 14 times for cluster BF.
- Start number 105 was manually annotated 2 times for cluster BF.

Info for manual annotations of cluster CA:

- Start number 98 was manually annotated 35 times for cluster CA.
- Start number 116 was manually annotated 1 time for cluster CA.

### ***Gene Information:***

Gene: 20ES\_75 Start: 44462, Stop: 43566, Start Num: 84

Candidate Starts for 20ES\_75:

(Start: 84 @44462 has 189 MA's), (Start: 109 @44396 has 14 MA's), (Start: 112 @44366 has 1 MA's), (128, 44291), (136, 44273), (177, 44051), (187, 44009), (203, 43919), (241, 43757),

Gene: 40AC\_72 Start: 44881, Stop: 44066, Start Num: 84

Candidate Starts for 40AC\_72:

(Start: 84 @44881 has 189 MA's), (Start: 109 @44812 has 14 MA's), (Start: 112 @44782 has 1 MA's), (136, 44689), (174, 44482), (209, 44392), (241, 44260),

Gene: A6\_61 Start: 41484, Stop: 40684, Start Num: 94

Candidate Starts for A6\_61:

(77, 41502), (Start: 94 @41484 has 25 MA's), (110, 41406), (Start: 112 @41388 has 1 MA's), (Start: 119 @41337 has 1 MA's), (125, 41322), (162, 41136), (173, 41091), (207, 41001), (209, 40995), (219, 40974), (224, 40923), (241, 40863), (259, 40782), (266, 40716), (267, 40710), (269, 40692),

Gene: ACFishhook\_74 Start: 43938, Stop: 43123, Start Num: 95

Candidate Starts for ACFishhook\_74:

(Start: 95 @43938 has 215 MA's), (Start: 112 @43848 has 1 MA's), (Start: 132 @43755 has 1 MA's), (141, 43731), (150, 43686), (200, 43485), (207, 43461), (223, 43386), (241, 43317), (245, 43299), (266, 43155), (269, 43131),

Gene: AFIS\_65 Start: 43242, Stop: 42508, Start Num: 109

Candidate Starts for AFIS\_65:

(57, 43356), (59, 43353), (62, 43350), (Start: 109 @43242 has 14 MA's), (Start: 119 @43161 has 1 MA's), (125, 43146), (162, 42960), (207, 42825), (209, 42819), (216, 42804), (224, 42747), (228, 42732), (239, 42696), (241, 42687), (259, 42606), (266, 42540), (267, 42534), (269, 42516),

Gene: AN3\_75 Start: 43243, Stop: 42332, Start Num: 84

Candidate Starts for AN3\_75:

(Start: 84 @43243 has 189 MA's), (Start: 109 @43165 has 14 MA's), (Start: 112 @43135 has 1 MA's), (136, 43042), (174, 42835), (177, 42820), (187, 42778), (203, 42688), (241, 42526),

Gene: AN9\_76 Start: 44381, Stop: 43506, Start Num: 97

Candidate Starts for AN9\_76:

(Start: 97 @44381 has 16 MA's), (Start: 106 @44351 has 6 MA's), (Start: 109 @44318 has 14 MA's), (Start: 112 @44288 has 1 MA's), (126, 44219), (133, 44201), (141, 44171), (146, 44144), (174, 43988), (181, 43943), (207, 43838), (209, 43832), (224, 43760), (230, 43739), (241, 43697), (263, 43580), (266, 43535),

Gene: ANI8\_76 Start: 44381, Stop: 43506, Start Num: 97

Candidate Starts for ANI8\_76:

(Start: 97 @44381 has 16 MA's), (Start: 106 @44351 has 6 MA's), (Start: 109 @44318 has 14 MA's), (Start: 112 @44288 has 1 MA's), (126, 44219), (133, 44201), (141, 44171), (146, 44144), (174, 43988), (181, 43943), (207, 43838), (209, 43832), (224, 43760), (230, 43739), (241, 43697), (263, 43580), (266, 43535),

Gene: AbbyPaige\_75 Start: 44715, Stop: 43816, Start Num: 84

Candidate Starts for AbbyPaige\_75:

(Start: 84 @44715 has 189 MA's), (Start: 98 @44703 has 36 MA's), (Start: 109 @44646 has 14 MA's), (Start: 112 @44616 has 1 MA's), (136, 44523), (148, 44463), (174, 44316), (177, 44301), (182, 44268), (187, 44259), (207, 44148), (241, 44007), (266, 43845),

Gene: AbbysRanger\_67 Start: 43448, Stop: 42657, Start Num: 95

Candidate Starts for AbbysRanger\_67:

(Start: 95 @43448 has 215 MA's), (Start: 106 @43421 has 6 MA's), (Start: 132 @43274 has 1 MA's), (141, 43250), (200, 43004), (207, 42980), (224, 42902), (243, 42839), (266, 42689),

Gene: Abbysshoes\_71 Start: 44628, Stop: 43804, Start Num: 72

Candidate Starts for Abbysshoes\_71:

(55, 44661), (Start: 72 @44628 has 44 MA's), (Start: 82 @44610 has 2 MA's), (110, 44526), (Start: 112 @44508 has 1 MA's), (Start: 119 @44457 has 1 MA's), (125, 44442), (162, 44256), (173, 44211), (207, 44121), (209, 44115), (216, 44100), (224, 44043), (228, 44028), (239, 43992), (241, 43983), (259, 43902), (266, 43836), (267, 43830), (269, 43812),

Gene: Abdiel\_68 Start: 43171, Stop: 42380, Start Num: 95

Candidate Starts for Abdiel\_68:

(Start: 95 @43171 has 215 MA's), (Start: 106 @43144 has 6 MA's), (Start: 132 @42997 has 1 MA's), (141, 42973), (172, 42796), (199, 42730), (207, 42703), (216, 42682), (224, 42625), (226, 42616), (243, 42562), (266, 42412),

Gene: Abrogate\_690 Start: 45556, Stop: 44732, Start Num: 72

Candidate Starts for Abrogate\_690:

(Start: 72 @45556 has 44 MA's), (Start: 82 @45538 has 2 MA's), (110, 45454), (Start: 112 @45436 has 1 MA's), (Start: 119 @45385 has 1 MA's), (125, 45370), (162, 45184), (173, 45139), (207, 45049), (209, 45043), (216, 45028), (224, 44971), (228, 44956), (239, 44920), (241, 44911), (259, 44830), (266, 44764), (267, 44758), (269, 44740),

Gene: Achebe\_66 Start: 43431, Stop: 42640, Start Num: 95

Candidate Starts for Achebe\_66:

(Start: 95 @43431 has 215 MA's), (Start: 106 @43404 has 6 MA's), (Start: 132 @43257 has 1 MA's), (141, 43233), (200, 42987), (207, 42963), (224, 42885), (243, 42822), (266, 42672),

Gene: Acme\_72 Start: 45250, Stop: 44432, Start Num: 76

Candidate Starts for Acme\_72:

(48, 45313), (Start: 76 @45250 has 49 MA's), (Start: 82 @45238 has 2 MA's), (110, 45154), (Start: 112 @45136 has 1 MA's), (Start: 119 @45085 has 1 MA's), (125, 45070), (162, 44884), (173, 44839), (207, 44749), (209, 44743), (216, 44728), (224, 44671), (228, 44656), (239, 44620), (241, 44611), (259, 44530), (266, 44464), (267, 44458), (269, 44440),

Gene: Acolyte\_64 Start: 42384, Stop: 41575, Start Num: 88

Candidate Starts for Acolyte\_64:

(Start: 88 @42384 has 4 MA's), (102, 42369), (Start: 109 @42321 has 14 MA's), (Start: 112 @42291 has 1 MA's), (136, 42198), (209, 41901), (228, 41814), (230, 41808), (241, 41766), (259, 41673), (266, 41604),

Gene: Adahisdi\_67 Start: 44799, Stop: 43981, Start Num: 74

Candidate Starts for Adahisdi\_67:

(Start: 63 @44817 has 7 MA's), (68, 44808), (Start: 74 @44799 has 6 MA's), (Start: 82 @44787 has 2 MA's), (Start: 112 @44685 has 1 MA's), (Start: 119 @44634 has 1 MA's), (125, 44619), (162, 44433), (173, 44388), (207, 44298), (209, 44292), (216, 44277), (219, 44271), (224, 44220), (228, 44205), (239, 44169), (241, 44160), (259, 44079), (266, 44013), (267, 44007), (269, 43989),

Gene: Adzzy\_78 Start: 44166, Stop: 43273, Start Num: 84

Candidate Starts for Adzzy\_78:

(Start: 84 @44166 has 189 MA's), (102, 44145), (107, 44121), (Start: 109 @44097 has 14 MA's), (Start: 112 @44067 has 1 MA's), (114, 44043), (121, 44007), (136, 43974), (174, 43767), (190, 43659), (209, 43599), (241, 43464), (266, 43302),

Gene: Aeneas\_71 Start: 45587, Stop: 44784, Start Num: 89

Candidate Starts for Aeneas\_71:

(29, 45746), (Start: 89 @45587 has 3 MA's), (Start: 92 @45584 has 8 MA's), (110, 45506), (Start: 112 @45488 has 1 MA's), (Start: 119 @45437 has 1 MA's), (125, 45422), (162, 45236), (173, 45191), (207, 45101), (209, 45095), (216, 45080), (219, 45074), (224, 45023), (228, 45008), (239, 44972), (241, 44963), (259, 44882), (266, 44816), (267, 44810), (269, 44792),

Gene: Agaliana\_64 Start: 41294, Stop: 40482, Start Num: 91

Candidate Starts for Agaliana\_64:

(53, 41351), (Start: 91 @41294 has 39 MA's), (Start: 109 @41225 has 14 MA's), (Start: 119 @41144 has 1 MA's), (125, 41129), (136, 41093), (141, 41069), (158, 40967), (162, 40934), (173, 40889), (194, 40838), (207, 40799), (218, 40775), (224, 40721), (241, 40661), (259, 40580), (266, 40514), (267, 40508), (269, 40490),

Gene: Agape74\_75 Start: 44710, Stop: 43811, Start Num: 84



Candidate Starts for Agape74\_75:

(Start: 84 @44710 has 189 MA's), (Start: 98 @44698 has 36 MA's), (Start: 109 @44641 has 14 MA's), (Start: 112 @44611 has 1 MA's), (136, 44518), (148, 44458), (174, 44311), (177, 44296), (182, 44263), (187, 44254), (207, 44143), (241, 44002), (266, 43840),

Gene: AgentM\_67 Start: 42717, Stop: 41902, Start Num: 71

Candidate Starts for AgentM\_67:

(Start: 71 @42717 has 48 MA's), (122, 42564), (Start: 132 @42543 has 1 MA's), (148, 42483), (152, 42462), (210, 42240), (224, 42144), (231, 42120), (236, 42102), (251, 42048), (256, 42024), (257, 42015), (266, 41934), (269, 41910),

Gene: Aglet\_78 Start: 44050, Stop: 43235, Start Num: 95

Candidate Starts for Aglet\_78:

(23, 44230), (Start: 95 @44050 has 215 MA's), (Start: 106 @44023 has 6 MA's), (Start: 132 @43867 has 1 MA's), (141, 43843), (146, 43816), (150, 43798), (200, 43597), (207, 43573), (216, 43549), (241, 43429), (245, 43411), (251, 43381), (266, 43267), (269, 43243),

Gene: AgronaGT15\_74 Start: 43898, Stop: 43083, Start Num: 95

Candidate Starts for AgronaGT15\_74:

(23, 44078), (Start: 95 @43898 has 215 MA's), (Start: 106 @43871 has 6 MA's), (Start: 132 @43715 has 1 MA's), (141, 43691), (146, 43664), (150, 43646), (200, 43445), (207, 43421), (216, 43397), (241, 43277), (245, 43259), (251, 43229), (266, 43115), (269, 43091),

Gene: Airmid\_70 Start: 43550, Stop: 42735, Start Num: 71

Candidate Starts for Airmid\_70:

(37, 43637), (Start: 71 @43550 has 48 MA's), (Start: 112 @43460 has 1 MA's), (122, 43397), (130, 43379), (Start: 132 @43376 has 1 MA's), (148, 43316), (152, 43295), (161, 43226), (201, 43103), (210, 43073), (214, 43037), (219, 43028), (224, 42977), (226, 42968), (231, 42953), (235, 42938), (251, 42881), (256, 42857), (257, 42848), (266, 42767), (269, 42743),

Gene: Ajay\_68 Start: 44055, Stop: 43234, Start Num: 76

Candidate Starts for Ajay\_68:

(41, 44139), (Start: 76 @44055 has 49 MA's), (Start: 82 @44043 has 2 MA's), (110, 43956), (Start: 112 @43938 has 1 MA's), (117, 43896), (Start: 119 @43887 has 1 MA's), (125, 43872), (162, 43686), (173, 43641), (207, 43551), (209, 43545), (216, 43530), (219, 43524), (224, 43473), (228, 43458), (239, 43422), (241, 43413), (259, 43332), (266, 43266), (267, 43260), (269, 43242),

Gene: Alatin\_55 Start: 39421, Stop: 38612, Start Num: 98

Candidate Starts for Alatin\_55:

(Start: 98 @39421 has 36 MA's), (102, 39409), (114, 39307), (Start: 116 @39301 has 1 MA's), (Start: 132 @39247 has 1 MA's), (138, 39232), (158, 39121), (160, 39103), (221, 38896), (237, 38824), (238, 38821), (243, 38806), (259, 38725), (266, 38656), (267, 38650),

Gene: Albee\_68 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Albee\_68:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Alberto7\_69 Start: 43495, Stop: 42704, Start Num: 95

Candidate Starts for Alberto7\_69:

(20, 43708), (Start: 95 @43495 has 215 MA's), (Start: 106 @43468 has 6 MA's), (Start: 132 @43321 has 1 MA's), (141, 43297), (172, 43120), (199, 43054), (207, 43027), (216, 43006), (224, 42949), (226,

42940), (243, 42886), (266, 42736),

Gene: Aliter\_76 Start: 43724, Stop: 42882, Start Num: 84

Candidate Starts for Aliter\_76:

(Start: 84 @43724 has 189 MA's), (Start: 91 @43718 has 39 MA's), (Start: 109 @43655 has 14 MA's), (Start: 112 @43625 has 1 MA's), (124, 43562), (167, 43346), (207, 43214), (208, 43211), (209, 43208), (227, 43121), (241, 43073), (266, 42911),

Gene: Alma\_73 Start: 43701, Stop: 42859, Start Num: 84

Candidate Starts for Alma\_73:

(Start: 78 @43710 has 1 MA's), (Start: 84 @43701 has 189 MA's), (Start: 109 @43632 has 14 MA's), (Start: 112 @43602 has 1 MA's), (124, 43539), (167, 43323), (207, 43191), (208, 43188), (209, 43185), (227, 43098), (241, 43050), (266, 42888),

Gene: Alpacados\_55 Start: 39314, Stop: 38505, Start Num: 98

Candidate Starts for Alpacados\_55:

(Start: 98 @39314 has 36 MA's), (102, 39302), (108, 39266), (114, 39200), (Start: 116 @39194 has 1 MA's), (Start: 132 @39140 has 1 MA's), (138, 39125), (158, 39014), (221, 38789), (224, 38762), (237, 38717), (238, 38714), (243, 38699), (259, 38618), (266, 38549),

Gene: Alsfro\_74 Start: 44187, Stop: 43378, Start Num: 94

Candidate Starts for Alsfro\_74:

(30, 44349), (Start: 91 @44190 has 39 MA's), (Start: 94 @44187 has 25 MA's), (Start: 109 @44121 has 14 MA's), (Start: 119 @44040 has 1 MA's), (125, 44025), (136, 43989), (141, 43965), (158, 43863), (162, 43830), (173, 43785), (194, 43734), (207, 43695), (218, 43671), (224, 43617), (241, 43557), (259, 43476), (266, 43410), (267, 43404), (269, 43386),

Gene: Altman\_71 Start: 44136, Stop: 43333, Start Num: 91

Candidate Starts for Altman\_71:

(56, 44193), (Start: 91 @44136 has 39 MA's), (Start: 112 @44037 has 1 MA's), (Start: 119 @43986 has 1 MA's), (125, 43971), (162, 43785), (173, 43740), (207, 43650), (209, 43644), (216, 43629), (224, 43572), (228, 43557), (239, 43521), (241, 43512), (259, 43431), (266, 43365), (267, 43359), (269, 43341),

Gene: Alvin\_69 Start: 44268, Stop: 43450, Start Num: 76

Candidate Starts for Alvin\_69:

(Start: 65 @44286 has 2 MA's), (Start: 76 @44268 has 49 MA's), (Start: 82 @44256 has 2 MA's), (110, 44172), (Start: 112 @44154 has 1 MA's), (Start: 119 @44103 has 1 MA's), (125, 44088), (162, 43902), (173, 43857), (207, 43767), (209, 43761), (216, 43746), (219, 43740), (224, 43689), (228, 43674), (241, 43629), (259, 43548), (266, 43482), (267, 43476), (269, 43458),

Gene: Anaysia\_82 Start: 44975, Stop: 44127, Start Num: 81

Candidate Starts for Anaysia\_82:

(Start: 81 @44975 has 18 MA's), (Start: 85 @44969 has 1 MA's), (Start: 106 @44927 has 6 MA's), (Start: 109 @44894 has 14 MA's), (Start: 112 @44864 has 1 MA's), (136, 44771), (192, 44507), (208, 44459), (230, 44360), (231, 44357), (241, 44318),

Gene: Aneem\_77 Start: 44375, Stop: 43560, Start Num: 84

Candidate Starts for Aneem\_77:

(Start: 84 @44375 has 189 MA's), (113, 44270), (Start: 119 @44225 has 1 MA's), (136, 44183), (139, 44165), (158, 44057), (209, 43886), (224, 43814), (230, 43793), (241, 43754), (266, 43592),

Gene: Anglerfish\_70 Start: 44466, Stop: 43663, Start Num: 91

Candidate Starts for Anglerfish\_70:

(56, 44523), (Start: 91 @44466 has 39 MA's), (110, 44385), (Start: 112 @44367 has 1 MA's), (Start: 119 @44316 has 1 MA's), (125, 44301), (162, 44115), (173, 44070), (207, 43980), (209, 43974), (216, 43959), (219, 43953), (224, 43902), (228, 43887), (239, 43851), (241, 43842), (259, 43761), (266, 43695), (267, 43689), (269, 43671),

Gene: AngryOrchard\_53 Start: 39474, Stop: 38665, Start Num: 98

Candidate Starts for AngryOrchard\_53:

(Start: 98 @39474 has 36 MA's), (102, 39462), (108, 39426), (114, 39360), (Start: 116 @39354 has 1 MA's), (Start: 132 @39300 has 1 MA's), (138, 39285), (158, 39174), (221, 38949), (237, 38877), (238, 38874), (243, 38859), (259, 38778), (267, 38703),

Gene: AnnaL29\_73 Start: 44675, Stop: 43767, Start Num: 84

Candidate Starts for AnnaL29\_73:

(19, 44906), (28, 44810), (Start: 84 @44675 has 189 MA's), (Start: 109 @44606 has 14 MA's), (Start: 112 @44576 has 1 MA's), (136, 44483), (176, 44264), (186, 44222), (194, 44150), (208, 44096), (209, 44093), (230, 44000), (233, 43988), (241, 43958),

Gene: Annyong\_67 Start: 43203, Stop: 42412, Start Num: 95

Candidate Starts for Annyong\_67:

(20, 43416), (Start: 95 @43203 has 215 MA's), (Start: 106 @43176 has 6 MA's), (Start: 132 @43029 has 1 MA's), (141, 43005), (172, 42828), (199, 42762), (207, 42735), (216, 42714), (224, 42657), (226, 42648), (243, 42594), (266, 42444),

Gene: Anon\_78 Start: 44306, Stop: 43425, Start Num: 97

Candidate Starts for Anon\_78:

(Start: 97 @44306 has 16 MA's), (108, 44255), (Start: 109 @44243 has 14 MA's), (Start: 112 @44213 has 1 MA's), (114, 44189), (136, 44120), (152, 44039), (157, 44003), (230, 43661), (235, 43643), (241, 43619), (266, 43457),

Gene: Anselm\_75 Start: 44777, Stop: 43959, Start Num: 84

Candidate Starts for Anselm\_75:

(2, 45116), (7, 45089), (8, 45086), (11, 45077), (Start: 84 @44777 has 189 MA's), (Start: 109 @44705 has 14 MA's), (Start: 112 @44675 has 1 MA's), (136, 44582), (228, 44198), (230, 44192), (241, 44150), (248, 44120),

Gene: Anthony\_71 Start: 43826, Stop: 43002, Start Num: 70

Candidate Starts for Anthony\_71:

(57, 43844), (Start: 70 @43826 has 1 MA's), (Start: 112 @43718 has 1 MA's), (Start: 119 @43667 has 1 MA's), (123, 43655), (Start: 132 @43625 has 1 MA's), (139, 43607), (141, 43601), (154, 43529), (162, 43466), (209, 43334), (226, 43250), (230, 43238), (241, 43196), (266, 43034),

Gene: Anubis\_80 Start: 43936, Stop: 43121, Start Num: 95

Candidate Starts for Anubis\_80:

(23, 44116), (Start: 95 @43936 has 215 MA's), (Start: 106 @43909 has 6 MA's), (Start: 132 @43753 has 1 MA's), (141, 43729), (146, 43702), (150, 43684), (200, 43483), (207, 43459), (216, 43435), (241, 43315), (245, 43297), (251, 43267), (266, 43153), (269, 43129),

Gene: AppleCloud\_53 Start: 39136, Stop: 38330, Start Num: 98

Candidate Starts for AppleCloud\_53:

(Start: 98 @39136 has 36 MA's), (102, 39127), (108, 39091), (Start: 112 @39049 has 1 MA's), (114, 39025), (Start: 116 @39019 has 1 MA's), (Start: 132 @38965 has 1 MA's), (138, 38950), (158, 38839), (189, 38731), (221, 38614), (224, 38587), (237, 38542), (238, 38539), (243, 38524), (259, 38443),

(267, 38368),

Gene: Applejack\_70 Start: 42883, Stop: 42059, Start Num: 72

Candidate Starts for Applejack\_70:

(Start: 72 @42883 has 44 MA's), (Start: 82 @42865 has 2 MA's), (110, 42781), (Start: 112 @42763 has 1 MA's), (Start: 119 @42712 has 1 MA's), (125, 42697), (162, 42511), (173, 42466), (207, 42376), (209, 42370), (216, 42355), (219, 42349), (224, 42298), (228, 42283), (239, 42247), (241, 42238), (259, 42157), (266, 42091), (267, 42085), (269, 42067),

Gene: Aragog\_67 Start: 42737, Stop: 41922, Start Num: 71

Candidate Starts for Aragog\_67:

(Start: 71 @42737 has 48 MA's), (122, 42584), (Start: 132 @42563 has 1 MA's), (148, 42503), (152, 42482), (210, 42260), (224, 42164), (231, 42140), (236, 42122), (251, 42068), (256, 42044), (257, 42035), (266, 41954), (269, 41930),

Gene: Arcanine\_72 Start: 45190, Stop: 44387, Start Num: 91

Candidate Starts for Arcanine\_72:

(56, 45247), (Start: 91 @45190 has 39 MA's), (110, 45109), (Start: 112 @45091 has 1 MA's), (Start: 119 @45040 has 1 MA's), (125, 45025), (162, 44839), (173, 44794), (207, 44704), (209, 44698), (216, 44683), (219, 44677), (224, 44626), (228, 44611), (239, 44575), (241, 44566), (259, 44485), (266, 44419), (267, 44413), (269, 44395),

Gene: ArcherNM\_67 Start: 43936, Stop: 43034, Start Num: 84

Candidate Starts for ArcherNM\_67:

(Start: 84 @43936 has 189 MA's), (Start: 109 @43867 has 14 MA's), (Start: 112 @43837 has 1 MA's), (136, 43744), (148, 43684), (174, 43537), (179, 43507), (195, 43402), (203, 43387), (207, 43366), (230, 43267), (231, 43264), (241, 43225), (264, 43096), (266, 43063),

Gene: Archetta\_65 Start: 42683, Stop: 41868, Start Num: 71

Candidate Starts for Archetta\_65:

(Start: 71 @42683 has 48 MA's), (Start: 112 @42593 has 1 MA's), (Start: 119 @42542 has 1 MA's), (120, 42539), (Start: 132 @42509 has 1 MA's), (148, 42449), (152, 42428), (201, 42236), (210, 42206), (214, 42170), (224, 42110), (226, 42101), (231, 42086), (235, 42071), (251, 42014), (256, 41990), (257, 41981), (269, 41876),

Gene: Arissanae\_72 Start: 44022, Stop: 43186, Start Num: 84

Candidate Starts for Arissanae\_72:

(Start: 84 @44022 has 189 MA's), (Start: 106 @43992 has 6 MA's), (Start: 109 @43959 has 14 MA's), (Start: 112 @43929 has 1 MA's), (Start: 119 @43878 has 1 MA's), (121, 43869), (136, 43836), (161, 43686), (208, 43515), (209, 43512), (216, 43494), (226, 43428), (227, 43425), (230, 43416), (241, 43377), (251, 43329), (256, 43305),

Gene: Arlo\_67 Start: 43620, Stop: 42820, Start Num: 94

Candidate Starts for Arlo\_67:

(Start: 94 @43620 has 25 MA's), (110, 43542), (Start: 112 @43524 has 1 MA's), (Start: 119 @43473 has 1 MA's), (125, 43458), (162, 43272), (173, 43227), (207, 43137), (209, 43131), (216, 43116), (219, 43110), (224, 43059), (228, 43044), (239, 43008), (241, 42999), (259, 42918), (266, 42852), (267, 42846), (269, 42828),

Gene: Artemis2UCLA\_75 Start: 42931, Stop: 42110, Start Num: 84

Candidate Starts for Artemis2UCLA\_75:

(21, 43144), (Start: 84 @42931 has 189 MA's), (Start: 109 @42868 has 14 MA's), (Start: 112 @42838 has 1 MA's), (133, 42751), (136, 42745), (141, 42721), (194, 42493), (224, 42364), (230, 42343), (231,

42340), (233, 42331), (241, 42304), (266, 42142),

Gene: Arturo\_65 Start: 43285, Stop: 42494, Start Num: 95

Candidate Starts for Arturo\_65:

(20, 43498), (Start: 95 @43285 has 215 MA's), (Start: 106 @43258 has 6 MA's), (Start: 132 @43111 has 1 MA's), (141, 43087), (172, 42910), (199, 42844), (207, 42817), (216, 42796), (224, 42739), (226, 42730), (243, 42676), (266, 42526),

Gene: Ashballer\_73 Start: 45670, Stop: 44852, Start Num: 76

Candidate Starts for Ashballer\_73:

(69, 45679), (Start: 76 @45670 has 49 MA's), (Start: 82 @45658 has 2 MA's), (110, 45574), (Start: 112 @45556 has 1 MA's), (Start: 119 @45505 has 1 MA's), (125, 45490), (162, 45304), (173, 45259), (207, 45169), (209, 45163), (216, 45148), (219, 45142), (224, 45091), (228, 45076), (239, 45040), (241, 45031), (259, 44950), (266, 44884), (267, 44878), (269, 44860),

Gene: Astro\_82 Start: 45252, Stop: 44449, Start Num: 71

Candidate Starts for Astro\_82:

(Start: 71 @45252 has 48 MA's), (Start: 109 @45189 has 14 MA's), (120, 45105), (129, 45078), (148, 45018), (162, 44919), (190, 44838), (195, 44820), (209, 44778), (215, 44760), (217, 44757), (230, 44685), (231, 44682), (241, 44643), (256, 44571), (259, 44550), (269, 44457),

Gene: Atkinbua\_73 Start: 44138, Stop: 43338, Start Num: 94

Candidate Starts for Atkinbua\_73:

(Start: 94 @44138 has 25 MA's), (110, 44060), (Start: 112 @44042 has 1 MA's), (Start: 119 @43991 has 1 MA's), (125, 43976), (162, 43790), (173, 43745), (207, 43655), (209, 43649), (216, 43634), (224, 43577), (239, 43526), (241, 43517), (259, 43436), (261, 43424), (266, 43370), (267, 43364), (269, 43346),

Gene: AugsMagnumOpus\_80 Start: 44041, Stop: 43226, Start Num: 95

Candidate Starts for AugsMagnumOpus\_80:

(23, 44221), (Start: 95 @44041 has 215 MA's), (Start: 106 @44014 has 6 MA's), (Start: 132 @43858 has 1 MA's), (141, 43834), (146, 43807), (150, 43789), (200, 43588), (207, 43564), (216, 43540), (241, 43420), (245, 43402), (251, 43372), (266, 43258), (269, 43234),

Gene: AvatarAhPeg\_67 Start: 43317, Stop: 42526, Start Num: 95

Candidate Starts for AvatarAhPeg\_67:

(Start: 95 @43317 has 215 MA's), (Start: 106 @43290 has 6 MA's), (Start: 132 @43143 has 1 MA's), (200, 42873), (207, 42849), (216, 42828), (224, 42771), (226, 42762), (243, 42708), (266, 42558),

Gene: Avle17\_68 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Avle17\_68:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: B1\_63 Start: 41854, Stop: 41057, Start Num: 93

Candidate Starts for B1\_63:

(42, 41926), (Start: 93 @41854 has 32 MA's), (110, 41779), (207, 41383), (224, 41299), (243, 41239), (266, 41089), (269, 41065),

Gene: BABullseye\_69 Start: 41571, Stop: 40744, Start Num: 84

Candidate Starts for BABullseye\_69:

(Start: 84 @41571 has 189 MA's), (104, 41541), (Start: 109 @41499 has 14 MA's), (Start: 112 @41469 has 1 MA's), (Start: 119 @41418 has 1 MA's), (133, 41382), (141, 41352), (148, 41316), (160, 41232), (194, 41124), (208, 41070), (209, 41067), (224, 40995), (230, 40974), (231, 40971), (241, 40935), (266, 40773),

Gene: BK1\_61 Start: 41484, Stop: 40684, Start Num: 94

Candidate Starts for BK1\_61:

(77, 41502), (Start: 94 @41484 has 25 MA's), (110, 41406), (Start: 112 @41388 has 1 MA's), (Start: 119 @41337 has 1 MA's), (125, 41322), (162, 41136), (173, 41091), (207, 41001), (209, 40995), (219, 40974), (224, 40923), (241, 40863), (259, 40782), (266, 40716), (267, 40710), (269, 40692),

Gene: BPBiebs31\_72 Start: 44726, Stop: 43926, Start Num: 94

Candidate Starts for BPBiebs31\_72:

(Start: 94 @44726 has 25 MA's), (110, 44648), (Start: 112 @44630 has 1 MA's), (Start: 119 @44579 has 1 MA's), (125, 44564), (162, 44378), (173, 44333), (207, 44243), (209, 44237), (216, 44222), (224, 44165), (228, 44150), (239, 44114), (241, 44105), (259, 44024), (266, 43958), (267, 43952), (269, 43934),

Gene: Baby16\_68 Start: 43169, Stop: 42378, Start Num: 95

Candidate Starts for Baby16\_68:

(Start: 95 @43169 has 215 MA's), (Start: 106 @43142 has 6 MA's), (Start: 132 @42995 has 1 MA's), (141, 42971), (172, 42794), (199, 42728), (207, 42701), (216, 42680), (224, 42623), (226, 42614), (243, 42560), (266, 42410),

Gene: BabyBack\_70 Start: 44371, Stop: 43559, Start Num: 84

Candidate Starts for BabyBack\_70:

(Start: 84 @44371 has 189 MA's), (Start: 112 @44272 has 1 MA's), (114, 44248), (136, 44179), (203, 43909), (208, 43885), (209, 43882), (233, 43777), (235, 43771), (241, 43750), (266, 43588),

Gene: BabyJohn\_66 Start: 43673, Stop: 42882, Start Num: 93

Candidate Starts for BabyJohn\_66:

(4, 43997), (18, 43928), (25, 43823), (26, 43817), (31, 43796), (36, 43772), (42, 43745), (Start: 93 @43673 has 32 MA's), (162, 43343), (207, 43208), (224, 43124), (243, 43064), (266, 42914), (269, 42890),

Gene: BabyRay\_72 Start: 43610, Stop: 42816, Start Num: 93

Candidate Starts for BabyRay\_72:

(42, 43682), (Start: 93 @43610 has 32 MA's), (200, 43166), (201, 43163), (207, 43142), (224, 43058), (243, 42998), (266, 42848),

Gene: Bachome\_74 Start: 43254, Stop: 42439, Start Num: 84

Candidate Starts for Bachome\_74:

(Start: 84 @43254 has 189 MA's), (113, 43149), (Start: 119 @43104 has 1 MA's), (136, 43062), (139, 43044), (146, 43011), (148, 43002), (158, 42936), (209, 42765), (224, 42693), (230, 42672), (241, 42633), (266, 42471),

Gene: Backyardigan\_65 Start: 43464, Stop: 42673, Start Num: 95

Candidate Starts for Backyardigan\_65:

(Start: 95 @43464 has 215 MA's), (Start: 106 @43437 has 6 MA's), (Start: 132 @43290 has 1 MA's), (141, 43266), (200, 43020), (207, 42996), (224, 42918), (243, 42855), (266, 42705),

Gene: BaconJack\_74 Start: 47015, Stop: 46191, Start Num: 72

Candidate Starts for BaconJack\_74:

(55, 47048), (Start: 72 @47015 has 44 MA's), (Start: 82 @46997 has 2 MA's), (110, 46913), (Start: 112 @46895 has 1 MA's), (Start: 119 @46844 has 1 MA's), (125, 46829), (162, 46643), (173, 46598), (207, 46508), (209, 46502), (216, 46487), (219, 46481), (224, 46430), (228, 46415), (239, 46379), (241, 46370), (251, 46334), (259, 46289), (266, 46223), (267, 46217), (269, 46199),

Gene: Bactobuster\_66 Start: 44057, Stop: 43245, Start Num: 91

Candidate Starts for Bactobuster\_66:

(52, 44120), (Start: 91 @44057 has 39 MA's), (96, 44051), (Start: 106 @44021 has 6 MA's), (Start: 109 @43988 has 14 MA's), (Start: 112 @43958 has 1 MA's), (136, 43865), (209, 43568), (241, 43436), (260, 43337), (266, 43274),

Gene: Badger\_66 Start: 43432, Stop: 42641, Start Num: 95

Candidate Starts for Badger\_66:

(Start: 95 @43432 has 215 MA's), (Start: 106 @43405 has 6 MA's), (Start: 132 @43258 has 1 MA's), (141, 43234), (200, 42988), (207, 42964), (224, 42886), (243, 42823), (266, 42673),

Gene: Baehexic\_72 Start: 44105, Stop: 43290, Start Num: 84

Candidate Starts for Baehexic\_72:

(Start: 84 @44105 has 189 MA's), (Start: 109 @44036 has 14 MA's), (Start: 112 @44006 has 1 MA's), (128, 43931), (136, 43913), (208, 43619), (209, 43616), (241, 43481), (266, 43319),

Gene: BangNhom\_66 Start: 43597, Stop: 42806, Start Num: 95

Candidate Starts for BangNhom\_66:

(39, 43672), (Start: 95 @43597 has 215 MA's), (Start: 106 @43570 has 6 MA's), (Start: 132 @43423 has 1 MA's), (141, 43399), (172, 43222), (199, 43156), (207, 43129), (216, 43108), (224, 43051), (226, 43042), (243, 42988), (266, 42838),

Gene: Barriga\_71 Start: 42784, Stop: 41981, Start Num: 91

Candidate Starts for Barriga\_71:

(56, 42841), (Start: 91 @42784 has 39 MA's), (Start: 112 @42685 has 1 MA's), (Start: 119 @42634 has 1 MA's), (125, 42619), (162, 42433), (207, 42298), (209, 42292), (216, 42277), (224, 42220), (239, 42169), (241, 42160), (259, 42079), (266, 42013), (267, 42007), (269, 41989),

Gene: Bartimeaus\_68 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Bartimeaus\_68:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Battleship\_84 Start: 44848, Stop: 44000, Start Num: 81

Candidate Starts for Battleship\_84:

(Start: 81 @44848 has 18 MA's), (Start: 85 @44842 has 1 MA's), (Start: 106 @44800 has 6 MA's), (Start: 109 @44767 has 14 MA's), (Start: 112 @44737 has 1 MA's), (136, 44644), (192, 44380), (208, 44332), (230, 44233), (231, 44230), (241, 44191),

Gene: Beatrix\_68 Start: 44872, Stop: 44045, Start Num: 76

Candidate Starts for Beatrix\_68:

(69, 44881), (Start: 76 @44872 has 49 MA's), (Start: 82 @44860 has 2 MA's), (Start: 109 @44788 has 14 MA's), (Start: 119 @44707 has 1 MA's), (125, 44692), (136, 44656), (141, 44632), (162, 44497), (173, 44452), (194, 44401), (218, 44338), (224, 44284), (241, 44224), (259, 44143), (266, 44077), (267, 44071), (269, 44053),

Gene: Beauxregard13\_76 Start: 44053, Stop: 43238, Start Num: 95

Candidate Starts for Beauxregard13\_76:

(23, 44233), (Start: 95 @44053 has 215 MA's), (Start: 106 @44026 has 6 MA's), (Start: 132 @43870 has 1 MA's), (141, 43846), (146, 43819), (150, 43801), (200, 43600), (207, 43576), (216, 43552), (241, 43432), (245, 43414), (251, 43384), (266, 43270), (269, 43246),

Gene: Beemo\_75 Start: 43742, Stop: 42900, Start Num: 84

Candidate Starts for Beemo\_75:

(Start: 84 @43742 has 189 MA's), (Start: 91 @43736 has 39 MA's), (Start: 109 @43673 has 14 MA's), (Start: 112 @43643 has 1 MA's), (124, 43580), (167, 43364), (207, 43232), (208, 43229), (209, 43226), (227, 43139), (241, 43091), (266, 42929),

Gene: BeesKnees\_73 Start: 44123, Stop: 43299, Start Num: 72

Candidate Starts for BeesKnees\_73:

(55, 44156), (Start: 72 @44123 has 44 MA's), (Start: 82 @44105 has 2 MA's), (110, 44021), (Start: 112 @44003 has 1 MA's), (Start: 119 @43952 has 1 MA's), (125, 43937), (162, 43751), (207, 43616), (209, 43610), (216, 43595), (219, 43589), (224, 43538), (228, 43523), (239, 43487), (241, 43478), (259, 43397), (266, 43331), (267, 43325), (269, 43307),

Gene: Belenaria\_57 Start: 39284, Stop: 38478, Start Num: 98

Candidate Starts for Belenaria\_57:

(Start: 98 @39284 has 36 MA's), (102, 39275), (108, 39239), (Start: 112 @39197 has 1 MA's), (114, 39173), (Start: 116 @39167 has 1 MA's), (Start: 132 @39113 has 1 MA's), (138, 39098), (158, 38987), (189, 38879), (221, 38762), (224, 38735), (237, 38690), (238, 38687), (243, 38672), (259, 38591), (267, 38516),

Gene: BellusTerra\_69 Start: 43198, Stop: 42407, Start Num: 95

Candidate Starts for BellusTerra\_69:

(Start: 95 @43198 has 215 MA's), (Start: 106 @43171 has 6 MA's), (Start: 132 @43024 has 1 MA's), (172, 42823), (199, 42757), (207, 42730), (216, 42709), (224, 42652), (226, 42643), (243, 42589), (266, 42439),

Gene: Benedict\_71 Start: 43282, Stop: 42467, Start Num: 71

Candidate Starts for Benedict\_71:

(37, 43369), (Start: 71 @43282 has 48 MA's), (Start: 112 @43192 has 1 MA's), (Start: 132 @43108 has 1 MA's), (148, 43048), (152, 43027), (161, 42958), (201, 42835), (210, 42805), (214, 42769), (219, 42760), (224, 42709), (226, 42700), (231, 42685), (235, 42670), (251, 42613), (256, 42589), (257, 42580), (266, 42499), (269, 42475),

Gene: BengiVuitton\_73 Start: 44412, Stop: 43516, Start Num: 84

Candidate Starts for BengiVuitton\_73:

(Start: 84 @44412 has 189 MA's), (Start: 109 @44346 has 14 MA's), (Start: 112 @44316 has 1 MA's), (128, 44241), (136, 44223), (174, 44016), (177, 44001), (187, 43959), (208, 43845), (209, 43842), (241, 43707),

Gene: Benvolio\_71 Start: 44009, Stop: 43197, Start Num: 84

Candidate Starts for Benvolio\_71:

(Start: 84 @44009 has 189 MA's), (Start: 109 @43943 has 14 MA's), (Start: 112 @43913 has 1 MA's), (136, 43820), (203, 43550), (207, 43529), (228, 43436), (230, 43430), (241, 43388), (248, 43358),

Gene: Bethlehem\_70 Start: 45644, Stop: 44844, Start Num: 92

Candidate Starts for Bethlehem\_70:

(Start: 92 @45644 has 8 MA's), (110, 45566), (Start: 112 @45548 has 1 MA's), (Start: 119 @45497 has 1 MA's), (162, 45296), (173, 45251), (207, 45161), (209, 45155), (216, 45140), (219, 45134), (224,



45083), (228, 45068), (239, 45032), (241, 45023), (259, 44942), (266, 44876), (267, 44870), (269, 44852),

Gene: Bexan\_66 Start: 44663, Stop: 43845, Start Num: 76

Candidate Starts for Bexan\_66:

(69, 44672), (Start: 76 @44663 has 49 MA's), (Start: 82 @44651 has 2 MA's), (110, 44567), (Start: 112 @44549 has 1 MA's), (Start: 119 @44498 has 1 MA's), (125, 44483), (162, 44297), (173, 44252), (207, 44162), (209, 44156), (216, 44141), (219, 44135), (224, 44084), (228, 44069), (239, 44033), (241, 44024), (259, 43943), (266, 43877), (267, 43871), (269, 43853),

Gene: BiancaTri92\_72 Start: 44375, Stop: 43551, Start Num: 83

Candidate Starts for BiancaTri92\_72:

(Start: 83 @44375 has 6 MA's), (Start: 109 @44297 has 14 MA's), (Start: 112 @44267 has 1 MA's), (136, 44174), (241, 43742), (266, 43580),

Gene: Big3\_70 Start: 46040, Stop: 45222, Start Num: 78

Candidate Starts for Big3\_70:

(Start: 47 @46109 has 1 MA's), (66, 46061), (Start: 78 @46040 has 1 MA's), (Start: 81 @46034 has 18 MA's), (110, 45944), (Start: 112 @45926 has 1 MA's), (Start: 119 @45875 has 1 MA's), (125, 45860), (162, 45674), (189, 45599), (207, 45539), (224, 45461), (241, 45401), (259, 45320), (266, 45254), (267, 45248), (269, 45230),

Gene: BigMau\_71 Start: 44534, Stop: 43734, Start Num: 94

Candidate Starts for BigMau\_71:

(Start: 94 @44534 has 25 MA's), (110, 44456), (Start: 112 @44438 has 1 MA's), (Start: 119 @44387 has 1 MA's), (125, 44372), (162, 44186), (173, 44141), (207, 44051), (209, 44045), (216, 44030), (219, 44024), (224, 43973), (228, 43958), (239, 43922), (241, 43913), (259, 43832), (266, 43766), (267, 43760), (269, 43742),

Gene: BigPaolini\_66 Start: 42233, Stop: 41421, Start Num: 91

Candidate Starts for BigPaolini\_66:

(53, 42290), (Start: 91 @42233 has 39 MA's), (Start: 109 @42164 has 14 MA's), (Start: 119 @42083 has 1 MA's), (125, 42068), (136, 42032), (141, 42008), (158, 41906), (162, 41873), (173, 41828), (194, 41777), (207, 41738), (218, 41714), (224, 41660), (228, 41645), (239, 41609), (241, 41600), (259, 41519), (266, 41453), (267, 41447), (269, 41429),

Gene: Bigfoot\_63 Start: 43316, Stop: 42513, Start Num: 91

Candidate Starts for Bigfoot\_63:

(56, 43373), (Start: 91 @43316 has 39 MA's), (110, 43235), (Start: 112 @43217 has 1 MA's), (Start: 119 @43166 has 1 MA's), (125, 43151), (162, 42965), (173, 42920), (207, 42830), (209, 42824), (216, 42809), (219, 42803), (224, 42752), (228, 42737), (239, 42701), (241, 42692), (259, 42611), (266, 42545), (267, 42539), (269, 42521),

Gene: BillKnuckles\_65 Start: 44866, Stop: 44048, Start Num: 76

Candidate Starts for BillKnuckles\_65:

(69, 44875), (Start: 76 @44866 has 49 MA's), (Start: 82 @44854 has 2 MA's), (110, 44770), (Start: 112 @44752 has 1 MA's), (Start: 119 @44701 has 1 MA's), (125, 44686), (162, 44500), (173, 44455), (207, 44365), (209, 44359), (216, 44344), (219, 44338), (224, 44287), (228, 44272), (239, 44236), (241, 44227), (259, 44146), (266, 44080), (267, 44074), (269, 44056),

Gene: Bircsak\_68 Start: 45589, Stop: 44777, Start Num: 91

Candidate Starts for Bircsak\_68:

(53, 45646), (Start: 91 @45589 has 39 MA's), (Start: 109 @45520 has 14 MA's), (Start: 119 @45439 has 1 MA's), (125, 45424), (136, 45388), (141, 45364), (162, 45229), (194, 45133), (218, 45070), (224, 45016), (228, 45001), (239, 44965), (241, 44956), (259, 44875), (266, 44809), (267, 44803), (269, 44785),

Gene: Blackmoor\_67 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Blackmoor\_67:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Blinn1\_80 Start: 44182, Stop: 43361, Start Num: 84

Candidate Starts for Blinn1\_80:

(Start: 84 @44182 has 189 MA's), (Start: 109 @44119 has 14 MA's), (Start: 119 @44038 has 1 MA's), (133, 44002), (136, 43996), (141, 43972), (147, 43939), (160, 43852), (208, 43690), (224, 43615), (228, 43600), (230, 43594), (233, 43582), (241, 43555), (251, 43507), (253, 43501), (266, 43393),

Gene: BluSpix\_67 Start: 39683, Stop: 38949, Start Num: 109

Candidate Starts for BluSpix\_67:

(57, 39797), (59, 39794), (62, 39791), (Start: 109 @39683 has 14 MA's), (Start: 119 @39602 has 1 MA's), (125, 39587), (162, 39401), (173, 39356), (207, 39266), (209, 39260), (216, 39245), (219, 39239), (224, 39188), (228, 39173), (239, 39137), (241, 39128), (259, 39047), (266, 38981), (267, 38975), (269, 38957),

Gene: Blue\_69 Start: 44889, Stop: 44065, Start Num: 72

Candidate Starts for Blue\_69:

(55, 44922), (Start: 72 @44889 has 44 MA's), (Start: 82 @44871 has 2 MA's), (110, 44787), (Start: 112 @44769 has 1 MA's), (Start: 119 @44718 has 1 MA's), (125, 44703), (162, 44517), (173, 44472), (207, 44382), (209, 44376), (216, 44361), (219, 44355), (224, 44304), (228, 44289), (239, 44253), (241, 44244), (259, 44163), (266, 44097), (267, 44091), (269, 44073),

Gene: Blue7\_77 Start: 43151, Stop: 42330, Start Num: 84

Candidate Starts for Blue7\_77:

(21, 43364), (Start: 84 @43151 has 189 MA's), (Start: 109 @43088 has 14 MA's), (Start: 112 @43058 has 1 MA's), (133, 42971), (136, 42965), (141, 42941), (194, 42713), (224, 42584), (230, 42563), (231, 42560), (233, 42551), (241, 42524), (266, 42362),

Gene: BlueBird\_74 Start: 43681, Stop: 42887, Start Num: 93

Candidate Starts for BlueBird\_74:

(Start: 93 @43681 has 32 MA's), (136, 43501), (200, 43237), (228, 43114), (243, 43069), (266, 42919), (269, 42895),

Gene: Bluefalcon\_63 Start: 42703, Stop: 41888, Start Num: 71

Candidate Starts for Bluefalcon\_63:

(Start: 71 @42703 has 48 MA's), (Start: 112 @42613 has 1 MA's), (Start: 119 @42562 has 1 MA's), (120, 42559), (Start: 132 @42529 has 1 MA's), (148, 42469), (152, 42448), (201, 42256), (210, 42226), (214, 42190), (224, 42130), (226, 42121), (231, 42106), (235, 42091), (251, 42034), (256, 42010), (257, 42001), (269, 41896),

Gene: Bob3\_70 Start: 43804, Stop: 43004, Start Num: 94

Candidate Starts for Bob3\_70:

(Start: 94 @43804 has 25 MA's), (110, 43726), (Start: 112 @43708 has 1 MA's), (Start: 119 @43657 has 1 MA's), (125, 43642), (162, 43456), (173, 43411), (207, 43321), (209, 43315), (216, 43300), (219,

43294), (224, 43243), (228, 43228), (239, 43192), (241, 43183), (259, 43102), (266, 43036), (267, 43030), (269, 43012),

Gene: BobSwaget\_66 Start: 42243, Stop: 41428, Start Num: 84

Candidate Starts for BobSwaget\_66:

(Start: 84 @42243 has 189 MA's), (Start: 109 @42174 has 14 MA's), (Start: 112 @42144 has 1 MA's), (136, 42051), (208, 41757), (209, 41754), (228, 41667), (241, 41619), (266, 41457),

Gene: BobbyDazzler\_56 Start: 39271, Stop: 38582, Start Num: 116

Candidate Starts for BobbyDazzler\_56:

(Start: 98 @39391 has 36 MA's), (102, 39379), (108, 39343), (114, 39277), (Start: 116 @39271 has 1 MA's), (Start: 132 @39217 has 1 MA's), (138, 39202), (158, 39091), (221, 38866), (237, 38794), (238, 38791), (243, 38776), (259, 38695), (266, 38626), (267, 38620),

Gene: BogosyJay\_75 Start: 43979, Stop: 43140, Start Num: 84

Candidate Starts for BogosyJay\_75:

(34, 44102), (Start: 84 @43979 has 189 MA's), (Start: 106 @43949 has 6 MA's), (Start: 109 @43916 has 14 MA's), (Start: 112 @43886 has 1 MA's), (124, 43823), (136, 43793), (167, 43607), (168, 43604), (194, 43526), (208, 43472), (209, 43469), (230, 43373), (233, 43361), (247, 43307), (259, 43241), (263, 43217), (266, 43172),

Gene: Bombshell\_68 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Bombshell\_68:

(Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Bonamassa\_67 Start: 42909, Stop: 42097, Start Num: 71

Candidate Starts for Bonamassa\_67:

(Start: 71 @42909 has 48 MA's), (122, 42756), (Start: 132 @42735 has 1 MA's), (148, 42675), (152, 42654), (210, 42432), (224, 42339), (231, 42315), (236, 42297), (251, 42243), (256, 42219), (257, 42210), (269, 42105),

Gene: Bonanza\_57 Start: 39696, Stop: 38887, Start Num: 98

Candidate Starts for Bonanza\_57:

(Start: 98 @39696 has 36 MA's), (102, 39684), (108, 39648), (114, 39582), (Start: 116 @39576 has 1 MA's), (Start: 132 @39522 has 1 MA's), (138, 39507), (141, 39498), (158, 39396), (221, 39171), (224, 39144), (237, 39099), (238, 39096), (243, 39081), (259, 39000), (266, 38931),

Gene: Bones\_67 Start: 44976, Stop: 44131, Start Num: 63

Candidate Starts for Bones\_67:

(Start: 63 @44976 has 7 MA's), (68, 44967), (Start: 74 @44958 has 6 MA's), (Start: 82 @44946 has 2 MA's), (Start: 109 @44874 has 14 MA's), (Start: 119 @44793 has 1 MA's), (125, 44778), (136, 44742), (141, 44718), (158, 44616), (162, 44583), (173, 44538), (194, 44487), (218, 44424), (224, 44370), (241, 44310), (259, 44229), (266, 44163), (267, 44157), (269, 44139),

Gene: Boohoo\_82 Start: 44975, Stop: 44127, Start Num: 81

Candidate Starts for Boohoo\_82:

(Start: 81 @44975 has 18 MA's), (Start: 85 @44969 has 1 MA's), (Start: 106 @44927 has 6 MA's), (Start: 109 @44894 has 14 MA's), (Start: 112 @44864 has 1 MA's), (136, 44771), (192, 44507), (208, 44459), (230, 44360), (231, 44357), (241, 44318),

Gene: Bowtie\_77 Start: 44382, Stop: 43567, Start Num: 84

Candidate Starts for Bowtie\_77:

(Start: 84 @44382 has 189 MA's), (113, 44277), (Start: 119 @44232 has 1 MA's), (136, 44190), (139, 44172), (158, 44064), (209, 43893), (224, 43821), (230, 43800), (241, 43761), (266, 43599),

Gene: Bradman\_76 Start: 43779, Stop: 42910, Start Num: 84

Candidate Starts for Bradman\_76:

(Start: 84 @43779 has 189 MA's), (107, 43734), (114, 43656), (120, 43626), (136, 43587), (224, 43161), (230, 43140), (241, 43101), (266, 42939),

Gene: Bradshaw\_56 Start: 39354, Stop: 38545, Start Num: 98

Candidate Starts for Bradshaw\_56:

(Start: 98 @39354 has 36 MA's), (102, 39342), (114, 39240), (Start: 116 @39234 has 1 MA's), (Start: 132 @39180 has 1 MA's), (138, 39165), (158, 39054), (160, 39036), (221, 38829), (237, 38757), (238, 38754), (243, 38739), (259, 38658), (266, 38589), (267, 38583),

Gene: BreSam8\_77 Start: 44043, Stop: 43228, Start Num: 95

Candidate Starts for BreSam8\_77:

(23, 44223), (Start: 95 @44043 has 215 MA's), (Start: 106 @44016 has 6 MA's), (Start: 132 @43860 has 1 MA's), (141, 43836), (146, 43809), (150, 43791), (200, 43590), (207, 43566), (216, 43542), (241, 43422), (245, 43404), (251, 43374), (266, 43260), (269, 43236),

Gene: Briton15\_73 Start: 45608, Stop: 44808, Start Num: 92

Candidate Starts for Briton15\_73:

(Start: 92 @45608 has 8 MA's), (110, 45530), (Start: 112 @45512 has 1 MA's), (Start: 119 @45461 has 1 MA's), (125, 45446), (162, 45260), (173, 45215), (207, 45125), (209, 45119), (216, 45104), (219, 45098), (224, 45047), (228, 45032), (239, 44996), (241, 44987), (259, 44906), (266, 44840), (267, 44834), (269, 44816),

Gene: Broseidon\_68 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Broseidon\_68:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Bruiser\_67 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Bruiser\_67:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Bruns\_71 Start: 43745, Stop: 42945, Start Num: 92

Candidate Starts for Bruns\_71:

(Start: 92 @43745 has 8 MA's), (110, 43667), (Start: 112 @43649 has 1 MA's), (Start: 119 @43598 has 1 MA's), (125, 43583), (162, 43397), (173, 43352), (207, 43262), (209, 43256), (216, 43241), (219, 43235), (224, 43184), (228, 43169), (239, 43133), (241, 43124), (251, 43088), (259, 43043), (266, 42977), (267, 42971), (269, 42953),

Gene: Bryce\_55 Start: 39099, Stop: 38290, Start Num: 98

Candidate Starts for Bryce\_55:

(Start: 98 @39099 has 36 MA's), (102, 39087), (108, 39051), (114, 38985), (Start: 116 @38979 has 1 MA's), (Start: 132 @38925 has 1 MA's), (138, 38910), (158, 38799), (221, 38574), (224, 38547), (237, 38502), (238, 38499), (243, 38484), (259, 38403), (266, 38334), (267, 38328),

Gene: BubbleTrouble\_67 Start: 43185, Stop: 42394, Start Num: 95

Candidate Starts for BubbleTrouble\_67:

(Start: 95 @43185 has 215 MA's), (Start: 106 @43158 has 6 MA's), (Start: 132 @43011 has 1 MA's), (141, 42987), (172, 42810), (199, 42744), (207, 42717), (216, 42696), (224, 42639), (226, 42630), (243, 42576), (266, 42426),

Gene: Bud\_71 Start: 42812, Stop: 41997, Start Num: 84

Candidate Starts for Bud\_71:

(Start: 84 @42812 has 189 MA's), (113, 42707), (Start: 119 @42662 has 1 MA's), (136, 42620), (139, 42602), (158, 42494), (209, 42323), (224, 42251), (230, 42230), (241, 42191), (266, 42029),

Gene: Bugatti\_71 Start: 43681, Stop: 42887, Start Num: 93

Candidate Starts for Bugatti\_71:

(Start: 93 @43681 has 32 MA's), (136, 43501), (200, 43237), (228, 43114), (243, 43069), (266, 42919), (269, 42895),

Gene: Buggy\_75 Start: 44762, Stop: 43863, Start Num: 84

Candidate Starts for Buggy\_75:

(Start: 84 @44762 has 189 MA's), (Start: 98 @44750 has 36 MA's), (Start: 109 @44693 has 14 MA's), (Start: 112 @44663 has 1 MA's), (136, 44570), (148, 44510), (174, 44363), (177, 44348), (182, 44315), (187, 44306), (207, 44195), (230, 44096), (241, 44054), (266, 43892),

Gene: Bumblebee11\_66 Start: 43434, Stop: 42643, Start Num: 95

Candidate Starts for Bumblebee11\_66:

(Start: 95 @43434 has 215 MA's), (Start: 106 @43407 has 6 MA's), (Start: 132 @43260 has 1 MA's), (141, 43236), (200, 42990), (207, 42966), (224, 42888), (243, 42825), (266, 42675),

Gene: Burger\_66 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Burger\_66:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Burton\_70 Start: 45570, Stop: 44767, Start Num: 91

Candidate Starts for Burton\_70:

(56, 45627), (Start: 91 @45570 has 39 MA's), (110, 45489), (Start: 112 @45471 has 1 MA's), (Start: 119 @45420 has 1 MA's), (125, 45405), (162, 45219), (173, 45174), (207, 45084), (209, 45078), (216, 45063), (219, 45057), (224, 45006), (228, 44991), (239, 44955), (241, 44946), (259, 44865), (266, 44799), (267, 44793), (269, 44775),

Gene: Buttons\_65 Start: 41283, Stop: 40480, Start Num: 91

Candidate Starts for Buttons\_65:

(54, 41340), (Start: 91 @41283 has 39 MA's), (110, 41202), (Start: 112 @41184 has 1 MA's), (Start: 119 @41133 has 1 MA's), (125, 41118), (163, 40923), (169, 40902), (189, 40857), (207, 40797), (224, 40719), (241, 40659), (259, 40578), (266, 40512), (267, 40506), (269, 40488),

Gene: BuzzBuzz\_71 Start: 44077, Stop: 43262, Start Num: 95

Candidate Starts for BuzzBuzz\_71:

(23, 44257), (44, 44152), (Start: 95 @44077 has 215 MA's), (Start: 132 @43894 has 1 MA's), (141, 43870), (146, 43843), (150, 43825), (200, 43624), (207, 43600), (216, 43576), (241, 43456), (245, 43438), (266, 43294), (269, 43270),

Gene: Bxb1\_62 Start: 42480, Stop: 41593, Start Num: 47

Candidate Starts for Bxb1\_62:

(Start: 47 @42480 has 1 MA's), (66, 42432), (Start: 78 @42411 has 1 MA's), (Start: 81 @42405 has 18 MA's), (110, 42315), (Start: 112 @42297 has 1 MA's), (Start: 119 @42246 has 1 MA's), (125, 42231), (163, 42036), (189, 41970), (207, 41910), (224, 41832), (241, 41772), (259, 41691), (266, 41625), (267, 41619), (269, 41601),

Gene: Bxz2\_72 Start: 44084, Stop: 43269, Start Num: 95

Candidate Starts for Bxz2\_72:

(23, 44264), (Start: 95 @44084 has 215 MA's), (Start: 106 @44057 has 6 MA's), (Start: 132 @43901 has 1 MA's), (141, 43877), (146, 43850), (150, 43832), (200, 43631), (207, 43607), (216, 43583), (241, 43463), (245, 43445), (251, 43415), (266, 43301), (269, 43277),

Gene: C3\_69 Start: 44381, Stop: 43506, Start Num: 97

Candidate Starts for C3\_69:

(Start: 97 @44381 has 16 MA's), (Start: 106 @44351 has 6 MA's), (Start: 109 @44318 has 14 MA's), (Start: 112 @44288 has 1 MA's), (126, 44219), (133, 44201), (141, 44171), (146, 44144), (174, 43988), (181, 43943), (207, 43838), (209, 43832), (224, 43760), (230, 43739), (241, 43697), (263, 43580), (266, 43535),

Gene: CRB1\_75 Start: 44957, Stop: 44061, Start Num: 84

Candidate Starts for CRB1\_75:

(Start: 84 @44957 has 189 MA's), (Start: 109 @44891 has 14 MA's), (Start: 112 @44861 has 1 MA's), (128, 44786), (136, 44768), (177, 44546), (187, 44504), (203, 44414), (241, 44252),

Gene: CactusRose\_71 Start: 44336, Stop: 43533, Start Num: 91

Candidate Starts for CactusRose\_71:

(56, 44393), (Start: 91 @44336 has 39 MA's), (110, 44255), (Start: 112 @44237 has 1 MA's), (Start: 119 @44186 has 1 MA's), (125, 44171), (162, 43985), (173, 43940), (207, 43850), (209, 43844), (216, 43829), (219, 43823), (224, 43772), (228, 43757), (239, 43721), (241, 43712), (259, 43631), (266, 43565), (267, 43559), (269, 43541),

Gene: Caelakin\_67 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Caelakin\_67:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Camperdownii\_66 Start: 42832, Stop: 42041, Start Num: 95

Candidate Starts for Camperdownii\_66:

(39, 42907), (Start: 95 @42832 has 215 MA's), (Start: 106 @42805 has 6 MA's), (Start: 132 @42658 has 1 MA's), (172, 42457), (199, 42391), (207, 42364), (216, 42343), (224, 42286), (226, 42277), (243, 42223), (266, 42073),

Gene: Candra\_74 Start: 43266, Stop: 42439, Start Num: 84

Candidate Starts for Candra\_74:

(Start: 84 @43266 has 189 MA's), (104, 43236), (Start: 109 @43194 has 14 MA's), (Start: 112 @43164 has 1 MA's), (Start: 119 @43113 has 1 MA's), (133, 43077), (141, 43047), (148, 43011), (160, 42927), (194, 42819), (208, 42765), (209, 42762), (224, 42690), (230, 42669), (231, 42666), (241, 42630), (266, 42468),

Gene: Caraxes\_77 Start: 44020, Stop: 43061, Start Num: 84

Candidate Starts for Caraxes\_77:

(Start: 84 @44020 has 189 MA's), (102, 43999), (Start: 106 @43984 has 6 MA's), (107, 43975), (Start: 109 @43951 has 14 MA's), (Start: 112 @43921 has 1 MA's), (121, 43861), (136, 43828), (174, 43621), (194, 43498), (196, 43489), (207, 43393), (209, 43387), (230, 43294), (241, 43252), (266, 43090),

Gene: Carlyle\_69 Start: 42672, Stop: 41854, Start Num: 76

Candidate Starts for Carlyle\_69:

(48, 42735), (Start: 76 @42672 has 49 MA's), (Start: 82 @42660 has 2 MA's), (110, 42576), (Start: 112 @42558 has 1 MA's), (Start: 119 @42507 has 1 MA's), (125, 42492), (162, 42306), (173, 42261), (207, 42171), (209, 42165), (216, 42150), (219, 42144), (224, 42093), (228, 42078), (239, 42042), (241, 42033), (259, 41952), (266, 41886), (267, 41880), (269, 41862),

Gene: Catalina\_77 Start: 43798, Stop: 42956, Start Num: 84

Candidate Starts for Catalina\_77:

(Start: 84 @43798 has 189 MA's), (Start: 91 @43792 has 39 MA's), (Start: 109 @43729 has 14 MA's), (Start: 112 @43699 has 1 MA's), (124, 43636), (167, 43420), (207, 43288), (208, 43285), (209, 43282), (227, 43195), (241, 43147), (266, 42985),

Gene: Caviar\_71 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for Caviar\_71:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: Centaur\_74 Start: 44320, Stop: 43505, Start Num: 84

Candidate Starts for Centaur\_74:

(Start: 84 @44320 has 189 MA's), (Start: 109 @44251 has 14 MA's), (Start: 112 @44221 has 1 MA's), (128, 44146), (136, 44128), (208, 43834), (209, 43831), (241, 43696), (266, 43534),

Gene: CentreCat\_68 Start: 43197, Stop: 42406, Start Num: 95

Candidate Starts for CentreCat\_68:

(Start: 95 @43197 has 215 MA's), (Start: 106 @43170 has 6 MA's), (Start: 132 @43023 has 1 MA's), (172, 42822), (199, 42756), (207, 42729), (216, 42708), (226, 42642), (243, 42588), (266, 42438),

Gene: Cerulean\_69 Start: 43598, Stop: 42807, Start Num: 95

Candidate Starts for Cerulean\_69:

(39, 43673), (Start: 95 @43598 has 215 MA's), (Start: 106 @43571 has 6 MA's), (Start: 132 @43424 has 1 MA's), (141, 43400), (172, 43223), (199, 43157), (207, 43130), (216, 43109), (224, 43052), (226, 43043), (243, 42989), (266, 42839),

Gene: Chadwick\_71 Start: 43026, Stop: 42211, Start Num: 71

Candidate Starts for Chadwick\_71:

(37, 43113), (Start: 71 @43026 has 48 MA's), (Start: 112 @42936 has 1 MA's), (Start: 132 @42852 has 1 MA's), (148, 42792), (152, 42771), (161, 42702), (201, 42579), (210, 42549), (219, 42504), (224, 42453), (226, 42444), (231, 42429), (235, 42414), (251, 42357), (256, 42333), (257, 42324), (266, 42243), (269, 42219),

Gene: ChampagnePapi\_70 Start: 43597, Stop: 42806, Start Num: 95

Candidate Starts for ChampagnePapi\_70:

(39, 43672), (Start: 95 @43597 has 215 MA's), (Start: 106 @43570 has 6 MA's), (Start: 132 @43423 has 1 MA's), (172, 43222), (199, 43156), (207, 43129), (216, 43108), (226, 43042), (243, 42988), (266, 42838),

Gene: Chanagan\_63 Start: 41553, Stop: 40750, Start Num: 91

Candidate Starts for Chanagan\_63:

(56, 41610), (Start: 91 @41553 has 39 MA's), (Start: 109 @41484 has 14 MA's), (Start: 119 @41403 has 1 MA's), (125, 41388), (162, 41202), (173, 41157), (207, 41067), (209, 41061), (216, 41046), (219, 41040), (224, 40989), (228, 40974), (239, 40938), (241, 40929), (259, 40848), (266, 40782), (267, 40776), (269, 40758),

Gene: Changeling\_72 Start: 44659, Stop: 43745, Start Num: 84

Candidate Starts for Changeling\_72:

(49, 44719), (Start: 84 @44659 has 189 MA's), (Start: 109 @44581 has 14 MA's), (Start: 112 @44551 has 1 MA's), (136, 44458), (148, 44398), (174, 44251), (209, 44071), (230, 43978), (231, 43975), (241, 43936), (266, 43774),

Gene: Chaph\_68 Start: 43169, Stop: 42378, Start Num: 95

Candidate Starts for Chaph\_68:

(Start: 95 @43169 has 215 MA's), (Start: 106 @43142 has 6 MA's), (Start: 132 @42995 has 1 MA's), (141, 42971), (172, 42794), (199, 42728), (207, 42701), (216, 42680), (224, 42623), (226, 42614), (243, 42560), (266, 42410),

Gene: Chargerpower\_71 Start: 42831, Stop: 42025, Start Num: 84

Candidate Starts for Chargerpower\_71:

(15, 43122), (50, 42894), (Start: 84 @42831 has 189 MA's), (Start: 106 @42801 has 6 MA's), (Start: 112 @42738 has 1 MA's), (118, 42690), (136, 42645), (174, 42438), (202, 42378), (203, 42375), (233, 42243), (241, 42216), (266, 42054),

Gene: Charm\_69 Start: 42916, Stop: 42008, Start Num: 84

Candidate Starts for Charm\_69:

(34, 43042), (Start: 84 @42916 has 189 MA's), (Start: 91 @42910 has 39 MA's), (Start: 106 @42880 has 6 MA's), (Start: 109 @42847 has 14 MA's), (Start: 112 @42817 has 1 MA's), (114, 42793), (124, 42754), (136, 42724), (148, 42664), (167, 42538), (178, 42502), (190, 42406), (208, 42337), (209, 42334), (227, 42247), (230, 42238), (247, 42172), (255, 42136), (266, 42037),

Gene: Chartreuse\_73 Start: 42577, Stop: 41750, Start Num: 84

Candidate Starts for Chartreuse\_73:

(Start: 84 @42577 has 189 MA's), (104, 42547), (Start: 109 @42505 has 14 MA's), (Start: 112 @42475 has 1 MA's), (Start: 119 @42424 has 1 MA's), (133, 42388), (141, 42358), (148, 42322), (160, 42238), (194, 42130), (208, 42076), (209, 42073), (224, 42001), (230, 41980), (231, 41977), (241, 41941), (266, 41779),

Gene: Che12\_78 Start: 44065, Stop: 43172, Start Num: 84

Candidate Starts for Che12\_78:

(Start: 84 @44065 has 189 MA's), (102, 44044), (Start: 106 @44029 has 6 MA's), (Start: 109 @43996 has 14 MA's), (Start: 112 @43966 has 1 MA's), (121, 43906), (136, 43873), (174, 43666), (190, 43558), (209, 43498), (230, 43405), (241, 43363), (266, 43201),

Gene: ChipMunk\_74 Start: 45803, Stop: 44904, Start Num: 84

Candidate Starts for ChipMunk\_74:

(Start: 84 @45803 has 189 MA's), (Start: 98 @45791 has 36 MA's), (Start: 109 @45734 has 14 MA's), (Start: 112 @45704 has 1 MA's), (136, 45611), (148, 45551), (174, 45404), (177, 45389), (187, 45347), (207, 45236), (241, 45095), (266, 44933),

Gene: Chiqui\_66 Start: 43682, Stop: 42891, Start Num: 93

Candidate Starts for Chiqui\_66:



(4, 44006), (18, 43937), (25, 43832), (26, 43826), (31, 43805), (36, 43781), (42, 43754), (Start: 93 @43682 has 32 MA's), (162, 43352), (207, 43217), (224, 43133), (243, 43073), (266, 42923), (269, 42899),

Gene: Chupacabra\_66 Start: 42951, Stop: 42124, Start Num: 73

Candidate Starts for Chupacabra\_66:

(24, 43110), (Start: 73 @42951 has 16 MA's), (Start: 112 @42825 has 1 MA's), (Start: 132 @42741 has 1 MA's), (138, 42726), (141, 42717), (207, 42447), (208, 42444), (214, 42429), (224, 42369), (243, 42306), (256, 42246), (264, 42189), (269, 42132),

Gene: Ciao\_68 Start: 43525, Stop: 42707, Start Num: 76

Candidate Starts for Ciao\_68:

(Start: 65 @43543 has 2 MA's), (Start: 76 @43525 has 49 MA's), (Start: 82 @43513 has 2 MA's), (110, 43429), (Start: 112 @43411 has 1 MA's), (Start: 119 @43360 has 1 MA's), (125, 43345), (162, 43159), (173, 43114), (207, 43024), (209, 43018), (216, 43003), (224, 42946), (228, 42931), (239, 42895), (241, 42886), (259, 42805), (266, 42739), (267, 42733), (269, 42715),

Gene: Cici\_67 Start: 43449, Stop: 42658, Start Num: 95

Candidate Starts for Cici\_67:

(Start: 95 @43449 has 215 MA's), (Start: 106 @43422 has 6 MA's), (Start: 132 @43275 has 1 MA's), (141, 43251), (200, 43005), (207, 42981), (224, 42903), (226, 42894), (243, 42840), (266, 42690),

Gene: Cindaradix\_64 Start: 43060, Stop: 42269, Start Num: 95

Candidate Starts for Cindaradix\_64:

(39, 43135), (Start: 95 @43060 has 215 MA's), (Start: 106 @43033 has 6 MA's), (Start: 132 @42886 has 1 MA's), (141, 42862), (172, 42685), (200, 42616), (207, 42592), (226, 42505), (243, 42451), (266, 42301),

Gene: Cintron\_68 Start: 43308, Stop: 42517, Start Num: 95

Candidate Starts for Cintron\_68:

(39, 43383), (Start: 95 @43308 has 215 MA's), (Start: 106 @43281 has 6 MA's), (Start: 132 @43134 has 1 MA's), (172, 42933), (199, 42867), (207, 42840), (216, 42819), (224, 42762), (226, 42753), (243, 42699), (266, 42549),

Gene: Citius\_68 Start: 43179, Stop: 42388, Start Num: 95

Candidate Starts for Citius\_68:

(Start: 95 @43179 has 215 MA's), (Start: 106 @43152 has 6 MA's), (Start: 132 @43005 has 1 MA's), (141, 42981), (172, 42804), (199, 42738), (207, 42711), (216, 42690), (224, 42633), (226, 42624), (243, 42570), (266, 42420),

Gene: Clarenza\_67 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Clarenza\_67:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: CloudWang3\_76 Start: 43443, Stop: 42622, Start Num: 84

Candidate Starts for CloudWang3\_76:

(21, 43656), (Start: 84 @43443 has 189 MA's), (Start: 109 @43380 has 14 MA's), (Start: 112 @43350 has 1 MA's), (133, 43263), (136, 43257), (141, 43233), (194, 43005), (224, 42876), (230, 42855), (231, 42852), (233, 42843), (241, 42816), (266, 42654),

Gene: Cocoaberry\_68 Start: 43162, Stop: 42371, Start Num: 95

Candidate Starts for Cocoaberry\_68:

(20, 43375), (Start: 95 @43162 has 215 MA's), (Start: 106 @43135 has 6 MA's), (Start: 132 @42988 has 1 MA's), (141, 42964), (172, 42787), (199, 42721), (207, 42694), (216, 42673), (224, 42616), (226, 42607), (243, 42553), (266, 42403),

Gene: Colbster\_73 Start: 44053, Stop: 43238, Start Num: 95

Candidate Starts for Colbster\_73:

(23, 44233), (Start: 95 @44053 has 215 MA's), (Start: 106 @44026 has 6 MA's), (Start: 132 @43870 has 1 MA's), (141, 43846), (146, 43819), (150, 43801), (200, 43600), (207, 43576), (216, 43552), (241, 43432), (245, 43414), (251, 43384), (266, 43270), (269, 43246),

Gene: Colin\_73 Start: 45378, Stop: 44485, Start Num: 84

Candidate Starts for Colin\_73:

(Start: 84 @45378 has 189 MA's), (Start: 109 @45303 has 14 MA's), (136, 45180), (179, 44943), (207, 44820), (230, 44721), (241, 44679),

Gene: Commander\_66 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for Commander\_66:

(Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: Conceptll\_73 Start: 45364, Stop: 44561, Start Num: 91

Candidate Starts for Conceptll\_73:

(56, 45421), (Start: 91 @45364 has 39 MA's), (110, 45283), (Start: 112 @45265 has 1 MA's), (Start: 119 @45214 has 1 MA's), (125, 45199), (162, 45013), (173, 44968), (207, 44878), (209, 44872), (216, 44857), (224, 44800), (228, 44785), (239, 44749), (241, 44740), (259, 44659), (266, 44593), (267, 44587), (269, 44569),

Gene: Connomayer\_68 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Connomayer\_68:

(Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Conquerage\_73 Start: 43473, Stop: 42631, Start Num: 84

Candidate Starts for Conquerage\_73:

(Start: 84 @43473 has 189 MA's), (Start: 91 @43467 has 39 MA's), (Start: 109 @43404 has 14 MA's), (Start: 112 @43374 has 1 MA's), (124, 43311), (167, 43095), (207, 42963), (208, 42960), (209, 42957), (227, 42870), (241, 42822), (266, 42660),

Gene: Conspiracy\_68 Start: 42959, Stop: 42144, Start Num: 71

Candidate Starts for Conspiracy\_68:

(Start: 71 @42959 has 48 MA's), (122, 42806), (Start: 132 @42785 has 1 MA's), (148, 42725), (152, 42704), (210, 42482), (224, 42386), (231, 42362), (236, 42344), (251, 42290), (256, 42266), (257, 42257), (266, 42176), (269, 42152),

Gene: Coog\_64 Start: 42730, Stop: 41915, Start Num: 71

Candidate Starts for Coog\_64:

(Start: 71 @42730 has 48 MA's), (122, 42577), (Start: 132 @42556 has 1 MA's), (148, 42496), (152, 42475), (210, 42253), (224, 42157), (231, 42133), (236, 42115), (251, 42061), (256, 42037), (257, 42028), (266, 41947), (269, 41923),

Gene: Cookiedough\_76 Start: 43881, Stop: 43054, Start Num: 84

Candidate Starts for Cookiedough\_76:

(Start: 84 @43881 has 189 MA's), (104, 43851), (Start: 109 @43809 has 14 MA's), (Start: 112 @43779 has 1 MA's), (Start: 119 @43728 has 1 MA's), (133, 43692), (141, 43662), (148, 43626), (160, 43542), (194, 43434), (208, 43380), (209, 43377), (224, 43305), (230, 43284), (231, 43281), (241, 43245), (266, 43083),

Gene: Corvo\_69 Start: 44673, Stop: 43873, Start Num: 94

Candidate Starts for Corvo\_69:

(77, 44691), (Start: 94 @44673 has 25 MA's), (110, 44595), (Start: 112 @44577 has 1 MA's), (Start: 119 @44526 has 1 MA's), (125, 44511), (162, 44325), (173, 44280), (207, 44190), (209, 44184), (216, 44169), (224, 44112), (228, 44097), (239, 44061), (241, 44052), (259, 43971), (266, 43905), (267, 43899), (269, 43881),

Gene: CosmicSans\_56 Start: 39345, Stop: 38536, Start Num: 98

Candidate Starts for CosmicSans\_56:

(Start: 98 @39345 has 36 MA's), (102, 39333), (114, 39231), (Start: 116 @39225 has 1 MA's), (Start: 132 @39171 has 1 MA's), (138, 39156), (158, 39045), (160, 39027), (221, 38820), (237, 38748), (238, 38745), (243, 38730), (259, 38649), (266, 38580), (267, 38574),

Gene: Crispicious1\_67 Start: 43224, Stop: 42400, Start Num: 72

Candidate Starts for Crispicious1\_67:

(55, 43257), (Start: 72 @43224 has 44 MA's), (Start: 82 @43206 has 2 MA's), (110, 43122), (Start: 112 @43104 has 1 MA's), (Start: 119 @43053 has 1 MA's), (125, 43038), (162, 42852), (173, 42807), (207, 42717), (209, 42711), (216, 42696), (219, 42690), (224, 42639), (228, 42624), (239, 42588), (241, 42579), (259, 42498), (266, 42432), (267, 42426), (269, 42408),

Gene: Crucio\_74 Start: 44678, Stop: 43860, Start Num: 84

Candidate Starts for Crucio\_74:

(Start: 84 @44678 has 189 MA's), (Start: 109 @44606 has 14 MA's), (Start: 112 @44576 has 1 MA's), (136, 44483), (148, 44423), (207, 44192), (230, 44093), (241, 44051), (248, 44021), (264, 43922), (266, 43889),

Gene: Cuco\_66 Start: 42590, Stop: 41775, Start Num: 71

Candidate Starts for Cuco\_66:

(Start: 71 @42590 has 48 MA's), (122, 42437), (Start: 132 @42416 has 1 MA's), (148, 42356), (152, 42335), (210, 42113), (224, 42017), (231, 41993), (236, 41975), (251, 41921), (256, 41897), (257, 41888), (266, 41807), (269, 41783),

Gene: Cueyllyss\_67 Start: 44703, Stop: 43903, Start Num: 90

Candidate Starts for Cueyllyss\_67:

(Start: 90 @44703 has 3 MA's), (110, 44625), (Start: 112 @44607 has 1 MA's), (Start: 119 @44556 has 1 MA's), (125, 44541), (163, 44346), (173, 44310), (207, 44220), (209, 44214), (216, 44199), (219, 44193), (224, 44142), (228, 44127), (239, 44091), (241, 44082), (259, 44001), (266, 43935), (267, 43929), (269, 43911),

Gene: Cullens\_77 Start: 44049, Stop: 43234, Start Num: 95

Candidate Starts for Cullens\_77:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: D29\_69 Start: 44861, Stop: 44052, Start Num: 97

Candidate Starts for D29\_69:

(Start: 97 @44861 has 16 MA's), (Start: 106 @44831 has 6 MA's), (Start: 109 @44798 has 14 MA's), (Start: 112 @44768 has 1 MA's), (133, 44681), (141, 44651), (174, 44468), (209, 44378), (224, 44306), (230, 44285), (241, 44243), (242, 44240), (263, 44126), (264, 44114), (266, 44081),

Gene: D32\_75 Start: 44861, Stop: 44052, Start Num: 97

Candidate Starts for D32\_75:

(Start: 97 @44861 has 16 MA's), (Start: 106 @44831 has 6 MA's), (Start: 109 @44798 has 14 MA's), (Start: 112 @44768 has 1 MA's), (133, 44681), (141, 44651), (174, 44468), (209, 44378), (224, 44306), (230, 44285), (241, 44243), (242, 44240), (263, 44126), (264, 44114), (266, 44081),

Gene: DBQu4n\_76 Start: 44841, Stop: 44032, Start Num: 97

Candidate Starts for DBQu4n\_76:

(Start: 97 @44841 has 16 MA's), (Start: 106 @44811 has 6 MA's), (Start: 109 @44778 has 14 MA's), (Start: 112 @44748 has 1 MA's), (133, 44661), (141, 44631), (174, 44448), (209, 44358), (224, 44286), (230, 44265), (241, 44223), (242, 44220), (263, 44106), (264, 44094), (266, 44061),

Gene: DD5\_69 Start: 45084, Stop: 44266, Start Num: 74

Candidate Starts for DD5\_69:

(Start: 63 @45102 has 7 MA's), (68, 45093), (Start: 74 @45084 has 6 MA's), (Start: 82 @45072 has 2 MA's), (110, 44988), (Start: 112 @44970 has 1 MA's), (125, 44904), (162, 44718), (173, 44673), (207, 44583), (209, 44577), (216, 44562), (219, 44556), (224, 44505), (228, 44490), (239, 44454), (241, 44445), (259, 44364), (261, 44352), (266, 44298), (267, 44292), (269, 44274),

Gene: DaHudson\_76 Start: 44042, Stop: 43227, Start Num: 95

Candidate Starts for DaHudson\_76:

(23, 44222), (Start: 95 @44042 has 215 MA's), (Start: 106 @44015 has 6 MA's), (Start: 132 @43859 has 1 MA's), (141, 43835), (146, 43808), (150, 43790), (200, 43589), (207, 43565), (216, 43541), (241, 43421), (245, 43403), (251, 43373), (266, 43259), (269, 43235),

Gene: DaVinci\_74 Start: 42631, Stop: 41804, Start Num: 84

Candidate Starts for DaVinci\_74:

(Start: 84 @42631 has 189 MA's), (104, 42601), (Start: 109 @42559 has 14 MA's), (Start: 112 @42529 has 1 MA's), (Start: 119 @42478 has 1 MA's), (133, 42442), (141, 42412), (148, 42376), (160, 42292), (194, 42184), (208, 42130), (209, 42127), (224, 42055), (230, 42034), (231, 42031), (241, 41995), (266, 41833),

Gene: Daishi\_76 Start: 42917, Stop: 42102, Start Num: 95

Candidate Starts for Daishi\_76:

(23, 43097), (Start: 95 @42917 has 215 MA's), (Start: 106 @42890 has 6 MA's), (Start: 132 @42734 has 1 MA's), (141, 42710), (146, 42683), (150, 42665), (200, 42464), (207, 42440), (216, 42416), (241, 42296), (245, 42278), (251, 42248), (266, 42134), (269, 42110),

Gene: Dalmatian\_74 Start: 44496, Stop: 43678, Start Num: 84

Candidate Starts for Dalmatian\_74:

(2, 44835), (7, 44808), (8, 44805), (11, 44796), (Start: 84 @44496 has 189 MA's), (Start: 109 @44424 has 14 MA's), (Start: 112 @44394 has 1 MA's), (136, 44301), (228, 43917), (230, 43911), (241, 43869), (248, 43839),

Gene: Danforth\_83 Start: 45329, Stop: 44526, Start Num: 71

Candidate Starts for Danforth\_83:

(Start: 71 @45329 has 48 MA's), (Start: 109 @45266 has 14 MA's), (120, 45182), (129, 45155), (148, 45095), (162, 44996), (190, 44915), (195, 44897), (209, 44855), (215, 44837), (217, 44834), (230,

44762), (231, 44759), (241, 44720), (256, 44648), (259, 44627), (269, 44534),

Gene: Darrell\_76 Start: 44385, Stop: 43495, Start Num: 84

Candidate Starts for Darrell\_76:

(Start: 84 @44385 has 189 MA's), (Start: 106 @44355 has 6 MA's), (Start: 109 @44322 has 14 MA's), (Start: 112 @44292 has 1 MA's), (Start: 119 @44241 has 1 MA's), (124, 44229), (136, 44199), (167, 44013), (168, 44010), (194, 43878), (208, 43824), (209, 43821), (230, 43725), (233, 43713), (241, 43686), (256, 43614), (263, 43569), (266, 43524),

Gene: DarthPhader\_71 Start: 44873, Stop: 44058, Start Num: 84

Candidate Starts for DarthPhader\_71:

(45, 44966), (Start: 84 @44873 has 189 MA's), (Start: 109 @44804 has 14 MA's), (Start: 112 @44774 has 1 MA's), (124, 44711), (128, 44699), (133, 44687), (136, 44681), (141, 44657), (165, 44501), (209, 44384), (224, 44312), (230, 44291), (241, 44249), (266, 44087),

Gene: Datway\_67 Start: 43420, Stop: 42629, Start Num: 95

Candidate Starts for Datway\_67:

(Start: 95 @43420 has 215 MA's), (Start: 106 @43393 has 6 MA's), (Start: 132 @43246 has 1 MA's), (141, 43222), (200, 42976), (207, 42952), (224, 42874), (226, 42865), (243, 42811), (266, 42661),

Gene: Deano\_65 Start: 43166, Stop: 42375, Start Num: 95

Candidate Starts for Deano\_65:

(Start: 95 @43166 has 215 MA's), (Start: 106 @43139 has 6 MA's), (Start: 132 @42992 has 1 MA's), (141, 42968), (172, 42791), (199, 42725), (207, 42698), (216, 42677), (224, 42620), (226, 42611), (243, 42557), (266, 42407),

Gene: DekHockey33\_83 Start: 44933, Stop: 44085, Start Num: 81

Candidate Starts for DekHockey33\_83:

(Start: 81 @44933 has 18 MA's), (Start: 85 @44927 has 1 MA's), (Start: 106 @44885 has 6 MA's), (Start: 109 @44852 has 14 MA's), (Start: 112 @44822 has 1 MA's), (136, 44729), (192, 44465), (208, 44417), (230, 44318), (231, 44315), (241, 44276),

Gene: Deloris\_73 Start: 44108, Stop: 43212, Start Num: 84

Candidate Starts for Deloris\_73:

(Start: 84 @44108 has 189 MA's), (Start: 109 @44042 has 14 MA's), (Start: 112 @44012 has 1 MA's), (128, 43937), (136, 43919), (174, 43712), (177, 43697), (187, 43655), (208, 43541), (209, 43538), (241, 43403),

Gene: Dennebes\_69 Start: 34407, Stop: 33568, Start Num: 100

Candidate Starts for Dennebes\_69:

(61, 34473), (Start: 100 @34407 has 14 MA's), (Start: 105 @34392 has 2 MA's), (120, 34269), (140, 34197), (144, 34176), (151, 34137), (165, 34035), (192, 33963), (194, 33957), (228, 33807), (244, 33756),

Gene: Dhanush\_68 Start: 43161, Stop: 42370, Start Num: 95

Candidate Starts for Dhanush\_68:

(Start: 95 @43161 has 215 MA's), (Start: 106 @43134 has 6 MA's), (Start: 132 @42987 has 1 MA's), (141, 42963), (172, 42786), (199, 42720), (207, 42693), (216, 42672), (224, 42615), (226, 42606), (243, 42552), (266, 42402),

Gene: Dieselweasel\_77 Start: 44051, Stop: 43236, Start Num: 95

Candidate Starts for Dieselweasel\_77:

(23, 44231), (Start: 95 @44051 has 215 MA's), (Start: 106 @44024 has 6 MA's), (Start: 132 @43868 has 1 MA's), (141, 43844), (146, 43817), (150, 43799), (200, 43598), (207, 43574), (216, 43550), (241, 43430), (245, 43412), (251, 43382), (266, 43268), (269, 43244),

Gene: Dignity\_75 Start: 44800, Stop: 43901, Start Num: 84

Candidate Starts for Dignity\_75:

(Start: 84 @44800 has 189 MA's), (Start: 98 @44788 has 36 MA's), (Start: 109 @44731 has 14 MA's), (Start: 112 @44701 has 1 MA's), (136, 44608), (148, 44548), (174, 44401), (177, 44386), (182, 44353), (187, 44344), (207, 44233), (230, 44134), (241, 44092), (266, 43930),

Gene: Dinger\_55 Start: 39487, Stop: 38678, Start Num: 98

Candidate Starts for Dinger\_55:

(Start: 98 @39487 has 36 MA's), (102, 39475), (108, 39439), (114, 39373), (Start: 116 @39367 has 1 MA's), (Start: 132 @39313 has 1 MA's), (138, 39298), (158, 39187), (221, 38962), (237, 38890), (238, 38887), (243, 38872), (259, 38791), (266, 38722), (267, 38716),

Gene: DirtyDunning\_67 Start: 43173, Stop: 42382, Start Num: 95

Candidate Starts for DirtyDunning\_67:

(Start: 95 @43173 has 215 MA's), (Start: 106 @43146 has 6 MA's), (Start: 132 @42999 has 1 MA's), (141, 42975), (172, 42798), (199, 42732), (207, 42705), (216, 42684), (224, 42627), (226, 42618), (243, 42564), (266, 42414),

Gene: Discoknowium\_65 Start: 42476, Stop: 41661, Start Num: 71

Candidate Starts for Discoknowium\_65:

(Start: 71 @42476 has 48 MA's), (122, 42323), (Start: 132 @42302 has 1 MA's), (148, 42242), (152, 42221), (210, 41999), (224, 41903), (231, 41879), (236, 41861), (251, 41807), (256, 41783), (257, 41774), (266, 41693), (269, 41669),

Gene: Dixon\_81 Start: 44811, Stop: 44008, Start Num: 71

Candidate Starts for Dixon\_81:

(Start: 71 @44811 has 48 MA's), (Start: 109 @44748 has 14 MA's), (120, 44664), (129, 44637), (148, 44577), (162, 44478), (190, 44397), (195, 44379), (209, 44337), (215, 44319), (217, 44316), (230, 44244), (231, 44241), (241, 44202), (256, 44130), (259, 44109), (269, 44016),

Gene: DontArgue\_65 Start: 41931, Stop: 41092, Start Num: 73

Candidate Starts for DontArgue\_65:

(24, 42090), (32, 42051), (35, 42036), (Start: 73 @41931 has 16 MA's), (Start: 132 @41724 has 1 MA's), (138, 41709), (141, 41700), (208, 41427), (211, 41421), (231, 41313), (243, 41274), (269, 41100),

Gene: Doom\_65 Start: 43936, Stop: 43112, Start Num: 72

Candidate Starts for Doom\_65:

(55, 43969), (Start: 72 @43936 has 44 MA's), (Start: 82 @43918 has 2 MA's), (110, 43834), (Start: 112 @43816 has 1 MA's), (Start: 119 @43765 has 1 MA's), (125, 43750), (162, 43564), (207, 43429), (209, 43423), (216, 43408), (219, 43402), (224, 43351), (228, 43336), (239, 43300), (241, 43291), (259, 43210), (266, 43144), (267, 43138), (269, 43120),

Gene: Dorothea\_76 Start: 43877, Stop: 43050, Start Num: 84

Candidate Starts for Dorothea\_76:

(Start: 84 @43877 has 189 MA's), (104, 43847), (Start: 109 @43805 has 14 MA's), (Start: 112 @43775 has 1 MA's), (Start: 119 @43724 has 1 MA's), (133, 43688), (141, 43658), (148, 43622), (160, 43538), (194, 43430), (208, 43376), (209, 43373), (224, 43301), (230, 43280), (231, 43277), (241, 43241), (266, 43079),

Gene: DrFeelGood\_67 Start: 43181, Stop: 42363, Start Num: 76

Candidate Starts for DrFeelGood\_67:

(69, 43190), (Start: 76 @43181 has 49 MA's), (Start: 82 @43169 has 2 MA's), (110, 43085), (Start: 112 @43067 has 1 MA's), (Start: 119 @43016 has 1 MA's), (125, 43001), (162, 42815), (173, 42770), (207, 42680), (209, 42674), (216, 42659), (224, 42602), (228, 42587), (239, 42551), (241, 42542), (259, 42461), (266, 42395), (267, 42389), (269, 42371),

Gene: Drake55\_75 Start: 44394, Stop: 43579, Start Num: 84

Candidate Starts for Drake55\_75:

(Start: 84 @44394 has 189 MA's), (Start: 109 @44325 has 14 MA's), (Start: 112 @44295 has 1 MA's), (128, 44220), (136, 44202), (208, 43908), (209, 43905), (241, 43770), (266, 43608),

Gene: Drake94\_66 Start: 42082, Stop: 41240, Start Num: 73

Candidate Starts for Drake94\_66:

(24, 42241), (Start: 73 @42082 has 16 MA's), (79, 42070), (Start: 106 @42019 has 6 MA's), (Start: 132 @41872 has 1 MA's), (138, 41857), (208, 41575), (228, 41470), (231, 41461), (243, 41422), (256, 41362), (266, 41272), (269, 41248),

Gene: DreamCatcher\_71 Start: 44247, Stop: 43513, Start Num: 109

Candidate Starts for DreamCatcher\_71:

(57, 44361), (59, 44358), (62, 44355), (Start: 109 @44247 has 14 MA's), (Start: 119 @44166 has 1 MA's), (125, 44151), (162, 43965), (173, 43920), (207, 43830), (209, 43824), (216, 43809), (219, 43803), (224, 43752), (228, 43737), (239, 43701), (241, 43692), (259, 43611), (266, 43545), (267, 43539), (269, 43521),

Gene: DreamTeam1\_69 Start: 42763, Stop: 41855, Start Num: 84

Candidate Starts for DreamTeam1\_69:

(34, 42889), (Start: 84 @42763 has 189 MA's), (Start: 91 @42757 has 39 MA's), (Start: 106 @42727 has 6 MA's), (Start: 109 @42694 has 14 MA's), (Start: 112 @42664 has 1 MA's), (114, 42640), (124, 42601), (136, 42571), (148, 42511), (167, 42385), (178, 42349), (208, 42184), (209, 42181), (227, 42094), (230, 42085), (247, 42019), (255, 41983), (266, 41884),

Gene: Dreamboat\_72 Start: 43583, Stop: 42759, Start Num: 72

Candidate Starts for Dreamboat\_72:

(55, 43616), (Start: 72 @43583 has 44 MA's), (Start: 82 @43565 has 2 MA's), (110, 43481), (Start: 112 @43463 has 1 MA's), (Start: 119 @43412 has 1 MA's), (125, 43397), (162, 43211), (173, 43166), (207, 43076), (209, 43070), (216, 43055), (224, 42998), (228, 42983), (239, 42947), (241, 42938), (259, 42857), (266, 42791), (267, 42785), (269, 42767),

Gene: DroogsArmy\_67 Start: 46599, Stop: 45799, Start Num: 87

Candidate Starts for DroogsArmy\_67:

(Start: 87 @46599 has 3 MA's), (Start: 132 @46416 has 1 MA's), (138, 46401), (142, 46386), (157, 46299), (201, 46143), (211, 46113), (218, 46098), (224, 46044), (228, 46029), (243, 45981), (266, 45831),

Gene: DropBear\_69 Start: 43599, Stop: 42805, Start Num: 93

Candidate Starts for DropBear\_69:

(Start: 93 @43599 has 32 MA's), (207, 43131), (224, 43047), (243, 42987), (266, 42837), (269, 42813),

Gene: Druantia\_67 Start: 43161, Stop: 42370, Start Num: 95

Candidate Starts for Druantia\_67:

(Start: 95 @43161 has 215 MA's), (Start: 106 @43134 has 6 MA's), (Start: 132 @42987 has 1 MA's), (141, 42963), (172, 42786), (199, 42720), (207, 42693), (216, 42672), (224, 42615), (226, 42606), (243, 42552), (266, 42402),

Gene: Dublin\_67 Start: 42869, Stop: 42054, Start Num: 71

Candidate Starts for Dublin\_67:

(Start: 71 @42869 has 48 MA's), (122, 42716), (Start: 132 @42695 has 1 MA's), (148, 42635), (152, 42614), (210, 42392), (224, 42296), (231, 42272), (236, 42254), (251, 42200), (256, 42176), (257, 42167), (266, 42086), (269, 42062),

Gene: DudeLittle\_72 Start: 44262, Stop: 43444, Start Num: 84

Candidate Starts for DudeLittle\_72:

(2, 44601), (7, 44574), (8, 44571), (11, 44562), (Start: 84 @44262 has 189 MA's), (Start: 109 @44190 has 14 MA's), (Start: 112 @44160 has 1 MA's), (136, 44067), (228, 43683), (230, 43677), (241, 43635), (248, 43605),

Gene: Dulcie\_69 Start: 45497, Stop: 44679, Start Num: 76

Candidate Starts for Dulcie\_69:

(48, 45560), (Start: 76 @45497 has 49 MA's), (Start: 82 @45485 has 2 MA's), (110, 45401), (Start: 112 @45383 has 1 MA's), (Start: 119 @45332 has 1 MA's), (125, 45317), (163, 45122), (173, 45086), (207, 44996), (209, 44990), (216, 44975), (219, 44969), (224, 44918), (228, 44903), (239, 44867), (241, 44858), (259, 44777), (266, 44711), (267, 44705), (269, 44687),

Gene: Duplo\_76 Start: 44898, Stop: 44089, Start Num: 97

Candidate Starts for Duplo\_76:

(Start: 97 @44898 has 16 MA's), (Start: 106 @44868 has 6 MA's), (Start: 109 @44835 has 14 MA's), (Start: 112 @44805 has 1 MA's), (133, 44718), (141, 44688), (174, 44505), (209, 44415), (224, 44343), (230, 44322), (241, 44280), (242, 44277), (263, 44163), (264, 44151), (266, 44118),

Gene: Dussy\_70 Start: 44648, Stop: 43824, Start Num: 72

Candidate Starts for Dussy\_70:

(55, 44681), (Start: 72 @44648 has 44 MA's), (Start: 82 @44630 has 2 MA's), (110, 44546), (Start: 112 @44528 has 1 MA's), (Start: 119 @44477 has 1 MA's), (125, 44462), (162, 44276), (173, 44231), (207, 44141), (209, 44135), (216, 44120), (224, 44063), (228, 44048), (239, 44012), (241, 44003), (259, 43922), (266, 43856), (267, 43850), (269, 43832),

Gene: DustyMartin\_70 Start: 43100, Stop: 42276, Start Num: 73

Candidate Starts for DustyMartin\_70:

(24, 43259), (Start: 73 @43100 has 16 MA's), (Start: 132 @42893 has 1 MA's), (138, 42878), (201, 42620), (207, 42599), (214, 42581), (224, 42521), (243, 42458), (256, 42398), (264, 42341), (266, 42308), (269, 42284),

Gene: Dynamix\_72 Start: 44029, Stop: 43205, Start Num: 72

Candidate Starts for Dynamix\_72:

(55, 44062), (Start: 72 @44029 has 44 MA's), (Start: 82 @44011 has 2 MA's), (110, 43927), (Start: 112 @43909 has 1 MA's), (Start: 119 @43858 has 1 MA's), (125, 43843), (162, 43657), (173, 43612), (207, 43522), (209, 43516), (216, 43501), (219, 43495), (224, 43444), (228, 43429), (239, 43393), (241, 43384), (259, 43303), (266, 43237), (267, 43231), (269, 43213),

Gene: EZMoney23\_70 Start: 44170, Stop: 43283, Start Num: 84

Candidate Starts for EZMoney23\_70:

(Start: 84 @44170 has 189 MA's), (Start: 109 @44101 has 14 MA's), (Start: 112 @44071 has 1 MA's), (136, 43978), (174, 43771), (176, 43759), (207, 43618), (224, 43540), (230, 43519), (231, 43516),



(241, 43477),

Gene: Eagle\_67 Start: 43219, Stop: 42428, Start Num: 95

Candidate Starts for Eagle\_67:

(Start: 95 @43219 has 215 MA's), (Start: 106 @43192 has 6 MA's), (Start: 132 @43045 has 1 MA's), (172, 42844), (199, 42778), (207, 42751), (216, 42730), (224, 42673), (226, 42664), (243, 42610), (266, 42460),

Gene: EagleEye\_79 Start: 44952, Stop: 44032, Start Num: 84

Candidate Starts for EagleEye\_79:

(Start: 84 @44952 has 189 MA's), (Start: 112 @44859 has 1 MA's), (135, 44769), (164, 44595), (207, 44361), (208, 44358), (226, 44274), (241, 44223), (249, 44187),

Gene: Eaglepride\_70 Start: 43072, Stop: 42227, Start Num: 73

Candidate Starts for Eaglepride\_70:

(24, 43237), (37, 43159), (39, 43150), (Start: 73 @43072 has 16 MA's), (Start: 84 @43051 has 189 MA's), (86, 43048), (Start: 132 @42859 has 1 MA's), (138, 42844), (141, 42835), (201, 42586), (208, 42562), (211, 42556), (224, 42472), (231, 42448), (243, 42409), (256, 42349), (266, 42259), (269, 42235),

Gene: Eapen\_68 Start: 43153, Stop: 42362, Start Num: 95

Candidate Starts for Eapen\_68:

(20, 43366), (Start: 95 @43153 has 215 MA's), (Start: 106 @43126 has 6 MA's), (Start: 132 @42979 has 1 MA's), (141, 42955), (172, 42778), (199, 42712), (207, 42685), (216, 42664), (224, 42607), (226, 42598), (243, 42544), (266, 42394),

Gene: Ebony\_76 Start: 43946, Stop: 43131, Start Num: 84

Candidate Starts for Ebony\_76:

(Start: 84 @43946 has 189 MA's), (113, 43841), (Start: 119 @43796 has 1 MA's), (136, 43754), (139, 43736), (146, 43703), (148, 43694), (158, 43628), (209, 43457), (224, 43385), (230, 43364), (241, 43325), (266, 43163),

Gene: Echild\_74 Start: 44033, Stop: 43221, Start Num: 84

Candidate Starts for Echild\_74:

(Start: 84 @44033 has 189 MA's), (Start: 109 @43967 has 14 MA's), (Start: 112 @43937 has 1 MA's), (136, 43844), (203, 43574), (207, 43553), (228, 43460), (230, 43454), (241, 43412), (248, 43382),

Gene: Edison31\_65 Start: 42815, Stop: 41991, Start Num: 73

Candidate Starts for Edison31\_65:

(24, 42974), (Start: 73 @42815 has 16 MA's), (Start: 132 @42608 has 1 MA's), (138, 42593), (207, 42314), (214, 42296), (243, 42173), (256, 42113), (269, 41999),

Gene: EdogawaKiddo\_73 Start: 43758, Stop: 42922, Start Num: 91

Candidate Starts for EdogawaKiddo\_73:

(Start: 84 @43764 has 189 MA's), (Start: 91 @43758 has 39 MA's), (Start: 109 @43695 has 14 MA's), (Start: 112 @43665 has 1 MA's), (124, 43602), (167, 43386), (207, 43254), (208, 43251), (209, 43248), (227, 43161), (241, 43113), (266, 42951),

Gene: Edtherson\_67 Start: 44196, Stop: 43393, Start Num: 83

Candidate Starts for Edtherson\_67:

(Start: 83 @44196 has 6 MA's), (110, 44115), (Start: 112 @44097 has 1 MA's), (117, 44055), (Start: 119 @44046 has 1 MA's), (125, 44031), (162, 43845), (173, 43800), (207, 43710), (209, 43704), (216, 43689), (219, 43683), (224, 43632), (239, 43581), (241, 43572), (259, 43491), (261, 43479), (266,

43425), (267, 43419), (269, 43401),

Gene: Eidsmoe\_73 Start: 43465, Stop: 42623, Start Num: 84

Candidate Starts for Eidsmoe\_73:

(Start: 84 @43465 has 189 MA's), (Start: 91 @43459 has 39 MA's), (Start: 109 @43396 has 14 MA's), (Start: 112 @43366 has 1 MA's), (124, 43303), (167, 43087), (207, 42955), (208, 42952), (209, 42949), (227, 42862), (241, 42814), (266, 42652),

Gene: EITiger69\_73 Start: 43953, Stop: 43138, Start Num: 71

Candidate Starts for EITiger69\_73:

(37, 44040), (Start: 71 @43953 has 48 MA's), (Start: 112 @43863 has 1 MA's), (122, 43800), (130, 43782), (Start: 132 @43779 has 1 MA's), (148, 43719), (152, 43698), (161, 43629), (201, 43506), (207, 43485), (210, 43476), (214, 43440), (219, 43431), (224, 43380), (226, 43371), (231, 43356), (235, 43341), (251, 43284), (256, 43260), (257, 43251), (266, 43170), (269, 43146),

Gene: Elephantoon\_75 Start: 43618, Stop: 42782, Start Num: 84

Candidate Starts for Elephantoon\_75:

(7, 43927), (34, 43744), (Start: 84 @43618 has 189 MA's), (Start: 106 @43588 has 6 MA's), (Start: 109 @43555 has 14 MA's), (Start: 112 @43525 has 1 MA's), (Start: 119 @43474 has 1 MA's), (124, 43462), (136, 43432), (167, 43246), (168, 43243), (208, 43111), (209, 43108), (216, 43090), (227, 43021), (241, 42973), (256, 42901), (266, 42811),

Gene: EmyBug\_72 Start: 43467, Stop: 42625, Start Num: 84

Candidate Starts for EmyBug\_72:

(Start: 84 @43467 has 189 MA's), (Start: 91 @43461 has 39 MA's), (Start: 109 @43398 has 14 MA's), (Start: 112 @43368 has 1 MA's), (124, 43305), (167, 43089), (207, 42957), (208, 42954), (209, 42951), (227, 42864), (241, 42816), (266, 42654),

Gene: EpicPhail\_78 Start: 44053, Stop: 43238, Start Num: 95

Candidate Starts for EpicPhail\_78:

(23, 44233), (Start: 95 @44053 has 215 MA's), (Start: 106 @44026 has 6 MA's), (Start: 132 @43870 has 1 MA's), (141, 43846), (146, 43819), (150, 43801), (200, 43600), (207, 43576), (216, 43552), (241, 43432), (245, 43414), (251, 43384), (266, 43270), (269, 43246),

Gene: Epsocamisio\_79 Start: 44223, Stop: 43375, Start Num: 81

Candidate Starts for Epsocamisio\_79:

(Start: 81 @44223 has 18 MA's), (Start: 85 @44217 has 1 MA's), (Start: 106 @44175 has 6 MA's), (Start: 109 @44142 has 14 MA's), (Start: 112 @44112 has 1 MA's), (136, 44019), (230, 43608), (231, 43605), (241, 43566),

Gene: Equemioh13\_73 Start: 44225, Stop: 43410, Start Num: 84

Candidate Starts for Equemioh13\_73:

(Start: 84 @44225 has 189 MA's), (Start: 109 @44156 has 14 MA's), (Start: 112 @44126 has 1 MA's), (128, 44051), (136, 44033), (209, 43736), (241, 43601), (266, 43439),

Gene: EricB\_75 Start: 43223, Stop: 42396, Start Num: 84

Candidate Starts for EricB\_75:

(Start: 84 @43223 has 189 MA's), (104, 43193), (Start: 109 @43151 has 14 MA's), (Start: 112 @43121 has 1 MA's), (Start: 119 @43070 has 1 MA's), (133, 43034), (141, 43004), (148, 42968), (160, 42884), (194, 42776), (208, 42722), (209, 42719), (224, 42647), (230, 42626), (231, 42623), (241, 42587), (266, 42425),

Gene: Erik\_56 Start: 39277, Stop: 38468, Start Num: 98

Candidate Starts for Erik\_56:

(Start: 98 @39277 has 36 MA's), (102, 39265), (114, 39163), (Start: 116 @39157 has 1 MA's), (Start: 132 @39103 has 1 MA's), (138, 39088), (158, 38977), (160, 38959), (221, 38752), (237, 38680), (238, 38677), (243, 38662), (259, 38581), (266, 38512), (267, 38506),

Gene: Eris\_67 Start: 43173, Stop: 42382, Start Num: 95

Candidate Starts for Eris\_67:

(20, 43386), (Start: 95 @43173 has 215 MA's), (Start: 106 @43146 has 6 MA's), (Start: 132 @42999 has 1 MA's), (141, 42975), (172, 42798), (199, 42732), (207, 42705), (216, 42684), (224, 42627), (226, 42618), (243, 42564), (266, 42414),

Gene: Eros\_68 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Eros\_68:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Espica\_57 Start: 39284, Stop: 38478, Start Num: 98

Candidate Starts for Espica\_57:

(Start: 98 @39284 has 36 MA's), (102, 39275), (108, 39239), (Start: 112 @39197 has 1 MA's), (114, 39173), (Start: 116 @39167 has 1 MA's), (Start: 132 @39113 has 1 MA's), (138, 39098), (158, 38987), (189, 38879), (221, 38762), (224, 38735), (237, 38690), (238, 38687), (243, 38672), (259, 38591), (267, 38516),

Gene: Espresso\_65 Start: 43554, Stop: 42730, Start Num: 72

Candidate Starts for Espresso\_65:

(Start: 72 @43554 has 44 MA's), (Start: 82 @43536 has 2 MA's), (110, 43452), (Start: 112 @43434 has 1 MA's), (Start: 119 @43383 has 1 MA's), (125, 43368), (162, 43182), (173, 43137), (207, 43047), (209, 43041), (216, 43026), (219, 43020), (224, 42969), (228, 42954), (239, 42918), (241, 42909), (259, 42828), (266, 42762), (267, 42756), (269, 42738),

Gene: Et2Brutus\_75 Start: 43909, Stop: 43094, Start Num: 84

Candidate Starts for Et2Brutus\_75:

(Start: 84 @43909 has 189 MA's), (113, 43804), (Start: 119 @43759 has 1 MA's), (136, 43717), (139, 43699), (146, 43666), (158, 43591), (209, 43420), (224, 43348), (230, 43327), (241, 43288), (266, 43126),

Gene: Euphoria\_68 Start: 43689, Stop: 42889, Start Num: 90

Candidate Starts for Euphoria\_68:

(Start: 76 @43707 has 49 MA's), (Start: 90 @43689 has 3 MA's), (110, 43611), (Start: 112 @43593 has 1 MA's), (Start: 119 @43542 has 1 MA's), (125, 43527), (163, 43332), (173, 43296), (207, 43206), (209, 43200), (216, 43185), (219, 43179), (224, 43128), (228, 43113), (239, 43077), (241, 43068), (259, 42987), (266, 42921), (267, 42915), (269, 42897),

Gene: Eurydice\_69 Start: 43194, Stop: 42403, Start Num: 95

Candidate Starts for Eurydice\_69:

(Start: 95 @43194 has 215 MA's), (Start: 106 @43167 has 6 MA's), (Start: 132 @43020 has 1 MA's), (172, 42819), (199, 42753), (207, 42726), (216, 42705), (224, 42648), (226, 42639), (243, 42585), (266, 42435),

Gene: EvilGenius\_73 Start: 45804, Stop: 44905, Start Num: 84

Candidate Starts for EvilGenius\_73:

(Start: 84 @45804 has 189 MA's), (Start: 98 @45792 has 36 MA's), (Start: 109 @45735 has 14 MA's), (Start: 112 @45705 has 1 MA's), (128, 45630), (136, 45612), (174, 45405), (177, 45390), (187, 45348), (207, 45237), (241, 45096), (266, 44934),

Gene: Expelliarmus\_79 Start: 45025, Stop: 44222, Start Num: 71

Candidate Starts for Expelliarmus\_79:

(Start: 71 @45025 has 48 MA's), (Start: 109 @44962 has 14 MA's), (120, 44878), (129, 44851), (148, 44791), (162, 44692), (190, 44611), (195, 44593), (209, 44551), (215, 44533), (217, 44530), (230, 44458), (231, 44455), (241, 44416), (256, 44344), (259, 44323), (269, 44230),

Gene: ExplosioNervosa\_73 Start: 43533, Stop: 42691, Start Num: 84

Candidate Starts for ExplosioNervosa\_73:

(Start: 84 @43533 has 189 MA's), (Start: 91 @43527 has 39 MA's), (Start: 109 @43464 has 14 MA's), (Start: 112 @43434 has 1 MA's), (124, 43371), (167, 43155), (207, 43023), (208, 43020), (209, 43017), (227, 42930), (241, 42882), (266, 42720),

Gene: Eyeball\_70 Start: 44866, Stop: 44039, Start Num: 74

Candidate Starts for Eyeball\_70:

(Start: 63 @44884 has 7 MA's), (68, 44875), (Start: 74 @44866 has 6 MA's), (Start: 82 @44854 has 2 MA's), (Start: 109 @44782 has 14 MA's), (Start: 119 @44701 has 1 MA's), (125, 44686), (136, 44650), (141, 44626), (158, 44524), (162, 44491), (173, 44446), (194, 44395), (218, 44332), (224, 44278), (241, 44218), (259, 44137), (266, 44071), (267, 44065), (269, 44047),

Gene: Fabian\_60 Start: 33698, Stop: 32811, Start Num: 64

Candidate Starts for Fabian\_60:

(Start: 60 @33704 has 3 MA's), (Start: 64 @33698 has 2 MA's), (80, 33671), (Start: 100 @33638 has 14 MA's), (Start: 105 @33623 has 2 MA's), (143, 33413), (162, 33287), (194, 33188), (204, 33143), (222, 33068), (228, 33044), (229, 33041), (262, 32897),

Gene: Fajezeel\_71 Start: 44540, Stop: 43722, Start Num: 76

Candidate Starts for Fajezeel\_71:

(48, 44603), (Start: 76 @44540 has 49 MA's), (Start: 82 @44528 has 2 MA's), (110, 44444), (Start: 112 @44426 has 1 MA's), (Start: 119 @44375 has 1 MA's), (125, 44360), (162, 44174), (173, 44129), (207, 44039), (209, 44033), (216, 44018), (224, 43961), (228, 43946), (239, 43910), (241, 43901), (259, 43820), (266, 43754), (267, 43748), (269, 43730),

Gene: Fameo\_72 Start: 44305, Stop: 43487, Start Num: 84

Candidate Starts for Fameo\_72:

(Start: 84 @44305 has 189 MA's), (Start: 109 @44233 has 14 MA's), (Start: 112 @44203 has 1 MA's), (136, 44110), (190, 43873), (203, 43840), (207, 43819), (228, 43726), (230, 43720), (241, 43678), (248, 43648), (264, 43549), (266, 43516),

Gene: Farber\_77 Start: 44039, Stop: 43224, Start Num: 95

Candidate Starts for Farber\_77:

(23, 44219), (Start: 95 @44039 has 215 MA's), (Start: 106 @44012 has 6 MA's), (Start: 132 @43856 has 1 MA's), (141, 43832), (146, 43805), (150, 43787), (200, 43586), (207, 43562), (216, 43538), (241, 43418), (245, 43400), (251, 43370), (266, 43256), (269, 43232),

Gene: Fascinus\_65 Start: 43830, Stop: 43027, Start Num: 91

Candidate Starts for Fascinus\_65:

(56, 43887), (Start: 91 @43830 has 39 MA's), (110, 43749), (Start: 112 @43731 has 1 MA's), (Start: 119 @43680 has 1 MA's), (125, 43665), (162, 43479), (173, 43434), (207, 43344), (209, 43338), (216, 43323), (219, 43317), (224, 43266), (228, 43251), (239, 43215), (241, 43206), (259, 43125), (266,

43059), (267, 43053), (269, 43035),

Gene: Fayely\_73 Start: 43434, Stop: 42592, Start Num: 84

Candidate Starts for Fayely\_73:

(Start: 84 @43434 has 189 MA's), (Start: 91 @43428 has 39 MA's), (Start: 109 @43365 has 14 MA's), (Start: 112 @43335 has 1 MA's), (124, 43272), (167, 43056), (207, 42924), (208, 42921), (209, 42918), (227, 42831), (241, 42783), (266, 42621),

Gene: Fenn\_75 Start: 46122, Stop: 45298, Start Num: 72

Candidate Starts for Fenn\_75:

(55, 46155), (Start: 72 @46122 has 44 MA's), (Start: 82 @46104 has 2 MA's), (110, 46020), (Start: 112 @46002 has 1 MA's), (Start: 119 @45951 has 1 MA's), (125, 45936), (162, 45750), (173, 45705), (207, 45615), (209, 45609), (224, 45537), (228, 45522), (239, 45486), (241, 45477), (259, 45396), (266, 45330), (267, 45324), (269, 45306),

Gene: Fernando\_77 Start: 44022, Stop: 43234, Start Num: 106

Candidate Starts for Fernando\_77:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: Fibonacci\_75 Start: 43915, Stop: 43100, Start Num: 84

Candidate Starts for Fibonacci\_75:

(Start: 84 @43915 has 189 MA's), (113, 43810), (Start: 119 @43765 has 1 MA's), (136, 43723), (139, 43705), (146, 43672), (148, 43663), (158, 43597), (209, 43426), (224, 43354), (230, 43333), (241, 43294), (266, 43132),

Gene: FiringLine\_74 Start: 44660, Stop: 43842, Start Num: 84

Candidate Starts for FiringLine\_74:

(Start: 84 @44660 has 189 MA's), (Start: 109 @44588 has 14 MA's), (Start: 112 @44558 has 1 MA's), (136, 44465), (148, 44405), (207, 44174), (228, 44081), (230, 44075), (241, 44033), (248, 44003), (264, 43904), (266, 43871),

Gene: First\_0074 Start: 44362, Stop: 43466, Start Num: 84

Candidate Starts for First\_0074:

(Start: 84 @44362 has 189 MA's), (Start: 109 @44296 has 14 MA's), (Start: 112 @44266 has 1 MA's), (128, 44191), (136, 44173), (177, 43951), (187, 43909), (203, 43819), (241, 43657),

Gene: Flare16\_74 Start: 44364, Stop: 43549, Start Num: 84

Candidate Starts for Flare16\_74:

(Start: 84 @44364 has 189 MA's), (Start: 109 @44295 has 14 MA's), (Start: 112 @44265 has 1 MA's), (128, 44190), (136, 44172), (208, 43878), (209, 43875), (241, 43740), (266, 43578),

Gene: Flaverint\_77 Start: 44373, Stop: 43558, Start Num: 84

Candidate Starts for Flaverint\_77:

(Start: 84 @44373 has 189 MA's), (113, 44268), (Start: 119 @44223 has 1 MA's), (136, 44181), (139, 44163), (158, 44055), (209, 43884), (224, 43812), (230, 43791), (241, 43752), (266, 43590),

Gene: Florean\_68 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for Florean\_68:

(Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: FlowerPower\_62 Start: 33704, Stop: 32811, Start Num: 60

Candidate Starts for FlowerPower\_62:

(Start: 60 @33704 has 3 MA's), (Start: 64 @33698 has 2 MA's), (80, 33671), (Start: 100 @33638 has 14 MA's), (Start: 105 @33623 has 2 MA's), (143, 33413), (162, 33287), (194, 33188), (204, 33143), (222, 33068), (228, 33044), (229, 33041), (262, 32897),

Gene: Flux\_68 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for Flux\_68:

(20, 43370), (Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: FlyCatcher\_73 Start: 47184, Stop: 46387, Start Num: 87

Candidate Starts for FlyCatcher\_73:

(Start: 87 @47184 has 3 MA's), (Start: 106 @47148 has 6 MA's), (Start: 132 @47001 has 1 MA's), (142, 46971), (161, 46851), (224, 46629), (231, 46608), (232, 46605), (234, 46596), (243, 46569), (253, 46527), (256, 46509), (266, 46419),

Gene: ForGetIt\_68 Start: 42984, Stop: 42169, Start Num: 71

Candidate Starts for ForGetIt\_68:

(Start: 71 @42984 has 48 MA's), (122, 42831), (Start: 132 @42810 has 1 MA's), (148, 42750), (152, 42729), (210, 42507), (224, 42411), (231, 42387), (236, 42369), (251, 42315), (256, 42291), (257, 42282), (266, 42201), (269, 42177),

Gene: Forsytheast\_70 Start: 43742, Stop: 42942, Start Num: 94

Candidate Starts for Forsytheast\_70:

(Start: 94 @43742 has 25 MA's), (110, 43664), (Start: 112 @43646 has 1 MA's), (Start: 119 @43595 has 1 MA's), (125, 43580), (162, 43394), (173, 43349), (207, 43259), (209, 43253), (216, 43238), (224, 43181), (228, 43166), (239, 43130), (241, 43121), (259, 43040), (266, 42974), (267, 42968), (269, 42950),

Gene: Francis47\_68 Start: 45138, Stop: 44326, Start Num: 91

Candidate Starts for Francis47\_68:

(53, 45195), (Start: 91 @45138 has 39 MA's), (Start: 109 @45069 has 14 MA's), (Start: 119 @44988 has 1 MA's), (125, 44973), (136, 44937), (141, 44913), (158, 44811), (162, 44778), (194, 44682), (207, 44643), (218, 44619), (224, 44565), (241, 44505), (259, 44424), (266, 44358), (267, 44352), (269, 44334),

Gene: Fred313\_69 Start: 43293, Stop: 42499, Start Num: 93

Candidate Starts for Fred313\_69:

(Start: 93 @43293 has 32 MA's), (207, 42825), (224, 42741), (243, 42681), (266, 42531), (269, 42507),

Gene: Froghopper\_66 Start: 42801, Stop: 42001, Start Num: 94

Candidate Starts for Froghopper\_66:

(Start: 94 @42801 has 25 MA's), (Start: 112 @42705 has 1 MA's), (Start: 119 @42654 has 1 MA's), (125, 42639), (162, 42453), (173, 42408), (207, 42318), (209, 42312), (216, 42297), (224, 42240), (228, 42225), (239, 42189), (241, 42180), (259, 42099), (266, 42033), (267, 42027), (269, 42009),

Gene: Funston\_67 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Funston\_67:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Fushigi\_65 Start: 41928, Stop: 41092, Start Num: 63

Candidate Starts for Fushigi\_65:

(Start: 63 @41928 has 7 MA's), (68, 41919), (Start: 74 @41910 has 6 MA's), (Start: 82 @41898 has 2 MA's), (110, 41814), (Start: 112 @41796 has 1 MA's), (Start: 119 @41745 has 1 MA's), (125, 41730), (162, 41544), (173, 41499), (207, 41409), (209, 41403), (216, 41388), (219, 41382), (224, 41331), (228, 41316), (239, 41280), (241, 41271), (259, 41190), (266, 41124), (267, 41118), (269, 41100),

Gene: Gadost\_68 Start: 43162, Stop: 42371, Start Num: 95

Candidate Starts for Gadost\_68:

(20, 43375), (Start: 95 @43162 has 215 MA's), (Start: 106 @43135 has 6 MA's), (Start: 132 @42988 has 1 MA's), (141, 42964), (172, 42787), (199, 42721), (207, 42694), (216, 42673), (224, 42616), (226, 42607), (243, 42553), (266, 42403),

Gene: GageAP\_70 Start: 44975, Stop: 44175, Start Num: 90

Candidate Starts for GageAP\_70:

(Start: 90 @44975 has 3 MA's), (Start: 119 @44828 has 1 MA's), (125, 44813), (163, 44618), (173, 44582), (207, 44492), (209, 44486), (216, 44471), (219, 44465), (224, 44414), (228, 44399), (236, 44372), (239, 44363), (241, 44354), (259, 44273), (266, 44207), (267, 44201), (269, 44183),

Gene: Gail\_75 Start: 44762, Stop: 43887, Start Num: 84

Candidate Starts for Gail\_75:

(26, 44933), (50, 44831), (Start: 84 @44762 has 189 MA's), (Start: 106 @44732 has 6 MA's), (Start: 109 @44699 has 14 MA's), (Start: 112 @44669 has 1 MA's), (136, 44576), (174, 44369), (179, 44339), (195, 44252), (203, 44237), (241, 44078), (247, 44051),

Gene: Gandalf20\_70 Start: 44839, Stop: 44015, Start Num: 72

Candidate Starts for Gandalf20\_70:

(Start: 72 @44839 has 44 MA's), (Start: 82 @44821 has 2 MA's), (110, 44737), (Start: 112 @44719 has 1 MA's), (Start: 119 @44668 has 1 MA's), (125, 44653), (162, 44467), (173, 44422), (207, 44332), (209, 44326), (216, 44311), (219, 44305), (224, 44254), (228, 44239), (239, 44203), (241, 44194), (259, 44113), (266, 44047), (267, 44041), (269, 44023),

Gene: Garak\_77 Start: 43394, Stop: 42573, Start Num: 84

Candidate Starts for Garak\_77:

(21, 43607), (Start: 84 @43394 has 189 MA's), (Start: 109 @43331 has 14 MA's), (Start: 112 @43301 has 1 MA's), (133, 43214), (136, 43208), (141, 43184), (194, 42956), (224, 42827), (230, 42806), (231, 42803), (233, 42794), (241, 42767), (266, 42605),

Gene: GaugeLDP\_69 Start: 43938, Stop: 43126, Start Num: 84

Candidate Starts for GaugeLDP\_69:

(Start: 84 @43938 has 189 MA's), (Start: 106 @43902 has 6 MA's), (Start: 112 @43839 has 1 MA's), (136, 43746), (139, 43728), (174, 43539), (208, 43452), (209, 43449), (219, 43428), (230, 43356), (233, 43344), (241, 43317), (266, 43155),

Gene: Gemma\_74 Start: 43862, Stop: 43047, Start Num: 95

Candidate Starts for Gemma\_74:

(Start: 95 @43862 has 215 MA's), (120, 43718), (Start: 132 @43679 has 1 MA's), (146, 43628), (150, 43610), (200, 43409), (207, 43385), (223, 43310), (241, 43241), (245, 43223), (266, 43079), (269, 43055),

Gene: George\_63 Start: 42653, Stop: 41841, Start Num: 71

Candidate Starts for George\_63:

(Start: 71 @42653 has 48 MA's), (122, 42500), (Start: 132 @42479 has 1 MA's), (148, 42419), (152, 42398), (210, 42176), (224, 42083), (231, 42059), (236, 42041), (251, 41987), (256, 41963), (257, 41954), (269, 41849),

Gene: Georgie2\_75 Start: 44705, Stop: 43887, Start Num: 84

Candidate Starts for Georgie2\_75:

(Start: 84 @44705 has 189 MA's), (Start: 109 @44633 has 14 MA's), (Start: 112 @44603 has 1 MA's), (136, 44510), (148, 44450), (207, 44219), (228, 44126), (230, 44120), (241, 44078), (248, 44048), (264, 43949), (266, 43916),

Gene: Geostin\_57 Start: 33704, Stop: 32811, Start Num: 60

Candidate Starts for Geostin\_57:

(Start: 60 @33704 has 3 MA's), (Start: 64 @33698 has 2 MA's), (80, 33671), (Start: 100 @33638 has 14 MA's), (Start: 105 @33623 has 2 MA's), (143, 33413), (162, 33287), (171, 33248), (194, 33188), (204, 33143), (222, 33068), (228, 33044), (229, 33041), (262, 32897),

Gene: Ghoulboy\_67 Start: 42957, Stop: 42142, Start Num: 71

Candidate Starts for Ghoulboy\_67:

(Start: 71 @42957 has 48 MA's), (Start: 112 @42867 has 1 MA's), (Start: 119 @42816 has 1 MA's), (120, 42813), (Start: 132 @42783 has 1 MA's), (148, 42723), (152, 42702), (201, 42510), (210, 42480), (214, 42444), (224, 42384), (226, 42375), (231, 42360), (235, 42345), (251, 42288), (256, 42264), (257, 42255), (269, 42150),

Gene: Gilberta\_73 Start: 43249, Stop: 42434, Start Num: 84

Candidate Starts for Gilberta\_73:

(Start: 84 @43249 has 189 MA's), (113, 43144), (Start: 119 @43099 has 1 MA's), (136, 43057), (139, 43039), (158, 42931), (209, 42760), (224, 42688), (230, 42667), (241, 42628), (266, 42466),

Gene: GingkoMaracino\_77 Start: 43935, Stop: 43120, Start Num: 95

Candidate Starts for GingkoMaracino\_77:

(23, 44115), (Start: 95 @43935 has 215 MA's), (Start: 106 @43908 has 6 MA's), (Start: 132 @43752 has 1 MA's), (141, 43728), (146, 43701), (150, 43683), (200, 43482), (207, 43458), (216, 43434), (241, 43314), (245, 43296), (251, 43266), (266, 43152), (269, 43128),

Gene: Giroux\_70 Start: 43680, Stop: 42886, Start Num: 93

Candidate Starts for Giroux\_70:

(Start: 93 @43680 has 32 MA's), (136, 43500), (200, 43236), (228, 43113), (243, 43068), (266, 42918), (269, 42894),

Gene: Gladiator\_73 Start: 43297, Stop: 42476, Start Num: 84

Candidate Starts for Gladiator\_73:

(21, 43510), (Start: 84 @43297 has 189 MA's), (Start: 109 @43234 has 14 MA's), (Start: 112 @43204 has 1 MA's), (133, 43117), (136, 43111), (141, 43087), (194, 42859), (224, 42730), (230, 42709), (231, 42706), (233, 42697), (241, 42670), (264, 42541), (266, 42508),

Gene: Gollum\_56 Start: 39340, Stop: 38534, Start Num: 98

Candidate Starts for Gollum\_56:

(Start: 98 @39340 has 36 MA's), (102, 39331), (108, 39295), (Start: 112 @39253 has 1 MA's), (114, 39229), (Start: 116 @39223 has 1 MA's), (Start: 132 @39169 has 1 MA's), (138, 39154), (158, 39043), (189, 38935), (221, 38818), (224, 38791), (237, 38746), (238, 38743), (243, 38728), (259, 38647),



(267, 38572),

Gene: Gompeii16\_68 Start: 45590, Stop: 44778, Start Num: 91

Candidate Starts for Gompeii16\_68:

(53, 45647), (Start: 91 @45590 has 39 MA's), (Start: 109 @45521 has 14 MA's), (Start: 119 @45440 has 1 MA's), (125, 45425), (136, 45389), (141, 45365), (162, 45230), (194, 45134), (218, 45071), (224, 45017), (228, 45002), (239, 44966), (241, 44957), (259, 44876), (266, 44810), (267, 44804), (269, 44786),

Gene: Goose\_69 Start: 42764, Stop: 41940, Start Num: 73

Candidate Starts for Goose\_69:

(24, 42923), (Start: 73 @42764 has 16 MA's), (Start: 106 @42704 has 6 MA's), (Start: 112 @42641 has 1 MA's), (Start: 132 @42557 has 1 MA's), (138, 42542), (141, 42533), (207, 42263), (208, 42260), (214, 42245), (224, 42185), (243, 42122), (256, 42062), (264, 42005), (269, 41948),

Gene: Graduation\_75 Start: 45662, Stop: 44838, Start Num: 72

Candidate Starts for Graduation\_75:

(Start: 72 @45662 has 44 MA's), (Start: 82 @45644 has 2 MA's), (110, 45560), (Start: 112 @45542 has 1 MA's), (Start: 119 @45491 has 1 MA's), (125, 45476), (162, 45290), (173, 45245), (207, 45155), (209, 45149), (216, 45134), (219, 45128), (224, 45077), (228, 45062), (239, 45026), (241, 45017), (259, 44936), (266, 44870), (267, 44864), (269, 44846),

Gene: GrecoEtereo\_70 Start: 44027, Stop: 43293, Start Num: 109

Candidate Starts for GrecoEtereo\_70:

(57, 44141), (59, 44138), (62, 44135), (Start: 109 @44027 has 14 MA's), (Start: 119 @43946 has 1 MA's), (125, 43931), (162, 43745), (173, 43700), (207, 43610), (209, 43604), (219, 43583), (224, 43532), (228, 43517), (239, 43481), (241, 43472), (259, 43391), (266, 43325), (267, 43319), (269, 43301),

Gene: GreedyLawyer\_71 Start: 43196, Stop: 42369, Start Num: 84

Candidate Starts for GreedyLawyer\_71:

(Start: 84 @43196 has 189 MA's), (104, 43166), (Start: 109 @43124 has 14 MA's), (Start: 112 @43094 has 1 MA's), (Start: 119 @43043 has 1 MA's), (133, 43007), (141, 42977), (148, 42941), (160, 42857), (194, 42749), (208, 42695), (209, 42692), (224, 42620), (230, 42599), (231, 42596), (241, 42560), (266, 42398),

Gene: Greg\_71 Start: 44540, Stop: 43722, Start Num: 76

Candidate Starts for Greg\_71:

(48, 44603), (Start: 76 @44540 has 49 MA's), (Start: 82 @44528 has 2 MA's), (110, 44444), (Start: 112 @44426 has 1 MA's), (Start: 119 @44375 has 1 MA's), (125, 44360), (162, 44174), (173, 44129), (207, 44039), (209, 44033), (216, 44018), (224, 43961), (228, 43946), (239, 43910), (241, 43901), (259, 43820), (266, 43754), (267, 43748), (269, 43730),

Gene: Gremlin23\_62 Start: 33704, Stop: 32811, Start Num: 60

Candidate Starts for Gremlin23\_62:

(Start: 60 @33704 has 3 MA's), (Start: 64 @33698 has 2 MA's), (80, 33671), (Start: 100 @33638 has 14 MA's), (Start: 105 @33623 has 2 MA's), (143, 33413), (162, 33287), (194, 33188), (204, 33143), (222, 33068), (228, 33044), (229, 33041), (262, 32897),

Gene: Grif\_75 Start: 44123, Stop: 43308, Start Num: 95

Candidate Starts for Grif\_75:

(23, 44303), (Start: 95 @44123 has 215 MA's), (Start: 106 @44096 has 6 MA's), (Start: 132 @43940 has 1 MA's), (141, 43916), (146, 43889), (150, 43871), (200, 43670), (207, 43646), (216, 43622), (241,

43502), (245, 43484), (251, 43454), (266, 43340), (269, 43316),

Gene: Groundhog\_80 Start: 45081, Stop: 44278, Start Num: 71

Candidate Starts for Groundhog\_80:

(Start: 71 @45081 has 48 MA's), (Start: 109 @45018 has 14 MA's), (120, 44934), (129, 44907), (148, 44847), (162, 44748), (190, 44667), (195, 44649), (209, 44607), (215, 44589), (217, 44586), (230, 44514), (231, 44511), (241, 44472), (256, 44400), (259, 44379), (269, 44286),

Gene: Groupthink\_77 Start: 43866, Stop: 43051, Start Num: 95

Candidate Starts for Groupthink\_77:

(23, 44043), (Start: 95 @43866 has 215 MA's), (Start: 112 @43776 has 1 MA's), (Start: 132 @43683 has 1 MA's), (141, 43659), (150, 43614), (200, 43413), (207, 43389), (223, 43314), (241, 43245), (245, 43227), (266, 43083), (269, 43059),

Gene: Grub\_75 Start: 44041, Stop: 43226, Start Num: 95

Candidate Starts for Grub\_75:

(23, 44221), (Start: 95 @44041 has 215 MA's), (Start: 106 @44014 has 6 MA's), (Start: 132 @43858 has 1 MA's), (141, 43834), (146, 43807), (150, 43789), (200, 43588), (207, 43564), (216, 43540), (241, 43420), (245, 43402), (251, 43372), (266, 43258), (269, 43234),

Gene: Grum1\_76 Start: 44049, Stop: 43234, Start Num: 95

Candidate Starts for Grum1\_76:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: Gruunaga\_75 Start: 43252, Stop: 42431, Start Num: 84

Candidate Starts for Gruunaga\_75:

(21, 43465), (Start: 84 @43252 has 189 MA's), (Start: 109 @43189 has 14 MA's), (Start: 112 @43159 has 1 MA's), (133, 43072), (136, 43066), (141, 43042), (194, 42814), (224, 42685), (230, 42664), (231, 42661), (233, 42652), (241, 42625), (266, 42463),

Gene: GtownJaz\_77 Start: 44050, Stop: 43235, Start Num: 95

Candidate Starts for GtownJaz\_77:

(23, 44230), (Start: 95 @44050 has 215 MA's), (Start: 106 @44023 has 6 MA's), (Start: 132 @43867 has 1 MA's), (141, 43843), (146, 43816), (150, 43798), (200, 43597), (207, 43573), (216, 43549), (241, 43429), (245, 43411), (251, 43381), (266, 43267), (269, 43243),

Gene: Gwendoluna\_74 Start: 46147, Stop: 45317, Start Num: 76

Candidate Starts for Gwendoluna\_74:

(Start: 40 @46231 has 1 MA's), (Start: 76 @46147 has 49 MA's), (Start: 82 @46135 has 2 MA's), (107, 46084), (Start: 109 @46060 has 14 MA's), (Start: 119 @45979 has 1 MA's), (125, 45964), (136, 45928), (141, 45904), (158, 45802), (162, 45769), (194, 45673), (218, 45610), (224, 45556), (241, 45496), (259, 45415), (266, 45349), (267, 45343), (269, 45325),

Gene: Gyzlar\_64 Start: 41854, Stop: 41036, Start Num: 76

Candidate Starts for Gyzlar\_64:

(69, 41863), (Start: 76 @41854 has 49 MA's), (Start: 82 @41842 has 2 MA's), (Start: 112 @41740 has 1 MA's), (Start: 119 @41689 has 1 MA's), (125, 41674), (162, 41488), (173, 41443), (207, 41353), (209, 41347), (216, 41332), (219, 41326), (224, 41275), (228, 41260), (239, 41224), (241, 41215), (259, 41134), (266, 41068), (267, 41062), (269, 41044),

Gene: HINdeR\_68 Start: 46021, Stop: 45206, Start Num: 67

Candidate Starts for HINdeR\_68:

(Start: 67 @46021 has 1 MA's), (Start: 132 @45835 has 1 MA's), (138, 45820), (142, 45805), (159, 45697), (201, 45562), (209, 45535), (213, 45514), (219, 45499), (232, 45424), (243, 45388), (256, 45328),

Gene: HamSlice\_64 Start: 43156, Stop: 42365, Start Num: 95

Candidate Starts for HamSlice\_64:

(Start: 95 @43156 has 215 MA's), (Start: 106 @43129 has 6 MA's), (Start: 132 @42982 has 1 MA's), (141, 42958), (172, 42781), (199, 42715), (207, 42688), (216, 42667), (224, 42610), (226, 42601), (243, 42547), (266, 42397),

Gene: Hami1\_63 Start: 39492, Stop: 38674, Start Num: 74

Candidate Starts for Hami1\_63:

(Start: 63 @39510 has 7 MA's), (68, 39501), (Start: 74 @39492 has 6 MA's), (Start: 82 @39480 has 2 MA's), (110, 39396), (Start: 112 @39378 has 1 MA's), (Start: 119 @39327 has 1 MA's), (125, 39312), (162, 39126), (173, 39081), (207, 38991), (209, 38985), (216, 38970), (219, 38964), (224, 38913), (228, 38898), (239, 38862), (241, 38853), (259, 38772), (266, 38706), (267, 38700), (269, 38682),

Gene: Hammer\_76 Start: 42959, Stop: 42138, Start Num: 84

Candidate Starts for Hammer\_76:

(21, 43172), (Start: 84 @42959 has 189 MA's), (Start: 109 @42896 has 14 MA's), (Start: 112 @42866 has 1 MA's), (133, 42779), (136, 42773), (141, 42749), (194, 42521), (224, 42392), (230, 42371), (231, 42368), (233, 42359), (241, 42332), (266, 42170),

Gene: HanShotFirst\_70 Start: 45581, Stop: 44757, Start Num: 72

Candidate Starts for HanShotFirst\_70:

(Start: 72 @45581 has 44 MA's), (Start: 82 @45563 has 2 MA's), (110, 45479), (Start: 112 @45461 has 1 MA's), (117, 45419), (Start: 119 @45410 has 1 MA's), (125, 45395), (162, 45209), (173, 45164), (207, 45074), (209, 45068), (216, 45053), (219, 45047), (224, 44996), (228, 44981), (239, 44945), (241, 44936), (259, 44855), (266, 44789), (267, 44783), (269, 44765),

Gene: Hanray\_73 Start: 43796, Stop: 42954, Start Num: 84

Candidate Starts for Hanray\_73:

(Start: 84 @43796 has 189 MA's), (Start: 91 @43790 has 39 MA's), (Start: 109 @43727 has 14 MA's), (Start: 112 @43697 has 1 MA's), (124, 43634), (167, 43418), (207, 43286), (208, 43283), (209, 43280), (227, 43193), (241, 43145), (266, 42983),

Gene: Happiness\_67 Start: 43180, Stop: 42389, Start Num: 95

Candidate Starts for Happiness\_67:

(39, 43255), (Start: 95 @43180 has 215 MA's), (Start: 106 @43153 has 6 MA's), (Start: 132 @43006 has 1 MA's), (141, 42982), (172, 42805), (199, 42739), (207, 42712), (216, 42691), (224, 42634), (226, 42625), (243, 42571), (266, 42421),

Gene: Harlequin\_55 Start: 39129, Stop: 38320, Start Num: 98

Candidate Starts for Harlequin\_55:

(Start: 98 @39129 has 36 MA's), (102, 39117), (108, 39081), (114, 39015), (Start: 116 @39009 has 1 MA's), (Start: 132 @38955 has 1 MA's), (138, 38940), (158, 38829), (160, 38811), (212, 38646), (221, 38604), (224, 38577), (237, 38532), (238, 38529), (243, 38514), (266, 38364), (267, 38358),

Gene: HarryHoudini\_74 Start: 44395, Stop: 43580, Start Num: 84

Candidate Starts for HarryHoudini\_74:

(Start: 84 @44395 has 189 MA's), (Start: 109 @44326 has 14 MA's), (Start: 112 @44296 has 1 MA's), (128, 44221), (136, 44203), (208, 43909), (209, 43906), (241, 43771), (266, 43609),

Gene: HarryOW\_68 Start: 44600, Stop: 43800, Start Num: 91

Candidate Starts for HarryOW\_68:

(Start: 91 @44600 has 39 MA's), (110, 44522), (Start: 112 @44504 has 1 MA's), (Start: 119 @44453 has 1 MA's), (125, 44438), (162, 44252), (173, 44207), (207, 44117), (209, 44111), (219, 44090), (224, 44039), (228, 44024), (239, 43988), (241, 43979), (259, 43898), (266, 43832), (267, 43826), (269, 43808),

Gene: HashRod\_78 Start: 44077, Stop: 43262, Start Num: 95

Candidate Starts for HashRod\_78:

(23, 44257), (Start: 95 @44077 has 215 MA's), (Start: 106 @44050 has 6 MA's), (Start: 132 @43894 has 1 MA's), (141, 43870), (146, 43843), (150, 43825), (200, 43624), (207, 43600), (216, 43576), (241, 43456), (245, 43438), (251, 43408), (266, 43294), (269, 43270),

Gene: HaugeAnator\_66 Start: 34368, Stop: 33547, Start Num: 100

Candidate Starts for HaugeAnator\_66:

(Start: 100 @34368 has 14 MA's), (Start: 105 @34353 has 2 MA's), (120, 34230), (134, 34185), (137, 34173), (140, 34158), (144, 34137), (161, 34026), (165, 33996), (194, 33918), (228, 33786), (240, 33744), (244, 33735), (252, 33687), (262, 33633),

Gene: HaveUMetTed\_77 Start: 43851, Stop: 43036, Start Num: 95

Candidate Starts for HaveUMetTed\_77:

(Start: 95 @43851 has 215 MA's), (120, 43707), (Start: 132 @43668 has 1 MA's), (146, 43617), (150, 43599), (200, 43398), (207, 43374), (223, 43299), (241, 43230), (245, 43212), (266, 43068), (269, 43044),

Gene: Heathen\_71 Start: 43388, Stop: 42594, Start Num: 93

Candidate Starts for Heathen\_71:

(Start: 93 @43388 has 32 MA's), (207, 42920), (224, 42836), (243, 42776), (266, 42626), (269, 42602),

Gene: Heffalump\_71 Start: 44773, Stop: 43955, Start Num: 84

Candidate Starts for Heffalump\_71:

(Start: 84 @44773 has 189 MA's), (Start: 109 @44701 has 14 MA's), (Start: 112 @44671 has 1 MA's), (136, 44578), (203, 44308), (207, 44287), (228, 44194), (230, 44188), (241, 44146), (248, 44116), (264, 44017), (266, 43984),

Gene: HelDan\_71 Start: 43604, Stop: 42810, Start Num: 93

Candidate Starts for HelDan\_71:

(Start: 93 @43604 has 32 MA's), (207, 43136), (224, 43052), (243, 42992), (266, 42842), (269, 42818),

Gene: Heliosoles\_74 Start: 43869, Stop: 43054, Start Num: 95

Candidate Starts for Heliosoles\_74:

(23, 44046), (Start: 95 @43869 has 215 MA's), (Start: 112 @43779 has 1 MA's), (Start: 132 @43686 has 1 MA's), (141, 43662), (150, 43617), (200, 43416), (207, 43392), (223, 43317), (241, 43248), (245, 43230), (266, 43086), (269, 43062),

Gene: Helmet\_77 Start: 43394, Stop: 42573, Start Num: 84

Candidate Starts for Helmet\_77:

(21, 43607), (Start: 84 @43394 has 189 MA's), (Start: 109 @43331 has 14 MA's), (Start: 112 @43301 has 1 MA's), (133, 43214), (136, 43208), (141, 43184), (194, 42956), (224, 42827), (230, 42806), (231, 42803), (233, 42794), (241, 42767), (266, 42605),

Gene: Herbertwm\_70 Start: 44082, Stop: 43123, Start Num: 98

Candidate Starts for Herbertwm\_70:

(58, 44142), (Start: 98 @44082 has 36 MA's), (107, 44043), (Start: 109 @44019 has 14 MA's), (Start: 112 @43989 has 1 MA's), (129, 43911), (136, 43896), (148, 43836), (164, 43725), (174, 43689), (198, 43503), (209, 43449), (216, 43434), (230, 43356), (231, 43353), (241, 43314), (266, 43152),

Gene: Hercules11\_77 Start: 44058, Stop: 43243, Start Num: 95

Candidate Starts for Hercules11\_77:

(23, 44238), (Start: 95 @44058 has 215 MA's), (Start: 106 @44031 has 6 MA's), (Start: 132 @43875 has 1 MA's), (141, 43851), (146, 43824), (150, 43806), (200, 43605), (207, 43581), (216, 43557), (241, 43437), (245, 43419), (251, 43389), (266, 43275), (269, 43251),

Gene: Hermia\_66 Start: 43541, Stop: 42723, Start Num: 76

Candidate Starts for Hermia\_66:

(Start: 65 @43559 has 2 MA's), (Start: 76 @43541 has 49 MA's), (Start: 82 @43529 has 2 MA's), (110, 43445), (Start: 112 @43427 has 1 MA's), (Start: 119 @43376 has 1 MA's), (125, 43361), (162, 43175), (173, 43130), (207, 43040), (209, 43034), (216, 43019), (218, 43016), (219, 43013), (224, 42962), (239, 42911), (241, 42902), (259, 42821), (266, 42755), (267, 42749), (269, 42731),

Gene: HermioneGrange\_71 Start: 45028, Stop: 44228, Start Num: 94

Candidate Starts for HermioneGrange\_71:

(Start: 94 @45028 has 25 MA's), (110, 44950), (Start: 112 @44932 has 1 MA's), (Start: 119 @44881 has 1 MA's), (125, 44866), (162, 44680), (173, 44635), (207, 44545), (209, 44539), (216, 44524), (219, 44518), (224, 44467), (228, 44452), (239, 44416), (241, 44407), (259, 44326), (266, 44260), (267, 44254), (269, 44236),

Gene: Hexamo\_75 Start: 42928, Stop: 42107, Start Num: 84

Candidate Starts for Hexamo\_75:

(21, 43141), (Start: 84 @42928 has 189 MA's), (Start: 109 @42865 has 14 MA's), (Start: 112 @42835 has 1 MA's), (133, 42748), (136, 42742), (141, 42718), (224, 42361), (230, 42340), (231, 42337), (233, 42328), (241, 42301), (266, 42139),

Gene: Hiro\_56 Start: 39605, Stop: 38796, Start Num: 98

Candidate Starts for Hiro\_56:

(Start: 98 @39605 has 36 MA's), (102, 39593), (108, 39557), (114, 39491), (Start: 116 @39485 has 1 MA's), (Start: 132 @39431 has 1 MA's), (138, 39416), (141, 39407), (158, 39305), (221, 39080), (224, 39053), (237, 39008), (238, 39005), (243, 38990), (259, 38909), (266, 38840),

Gene: Horex\_73 Start: 43812, Stop: 42970, Start Num: 84

Candidate Starts for Horex\_73:

(Start: 84 @43812 has 189 MA's), (Start: 91 @43806 has 39 MA's), (Start: 109 @43743 has 14 MA's), (Start: 112 @43713 has 1 MA's), (124, 43650), (167, 43434), (207, 43302), (208, 43299), (209, 43296), (227, 43209), (241, 43161), (266, 42999),

Gene: Holli\_67 Start: 42948, Stop: 42157, Start Num: 95

Candidate Starts for Holli\_67:

(Start: 95 @42948 has 215 MA's), (Start: 106 @42921 has 6 MA's), (Start: 132 @42774 has 1 MA's), (141, 42750), (172, 42573), (199, 42507), (207, 42480), (216, 42459), (224, 42402), (226, 42393), (243, 42339), (266, 42189),

Gene: Homines\_60 Start: 39871, Stop: 39053, Start Num: 76

Candidate Starts for Homines\_60:

(Start: 65 @39889 has 2 MA's), (Start: 76 @39871 has 49 MA's), (Start: 82 @39859 has 2 MA's), (Start: 119 @39706 has 1 MA's), (125, 39691), (162, 39505), (173, 39460), (207, 39370), (209, 39364), (216, 39349), (224, 39292), (239, 39241), (241, 39232), (259, 39151), (266, 39085), (267, 39079), (269, 39061),

Gene: Hookmount\_71 Start: 43639, Stop: 42845, Start Num: 93

Candidate Starts for Hookmount\_71:

(Start: 93 @43639 has 32 MA's), (Start: 132 @43465 has 1 MA's), (200, 43195), (207, 43171), (243, 43027), (256, 42967), (266, 42877), (269, 42853),

Gene: Hoot\_71 Start: 41081, Stop: 40254, Start Num: 84

Candidate Starts for Hoot\_71:

(Start: 84 @41081 has 189 MA's), (104, 41051), (Start: 109 @41009 has 14 MA's), (Start: 112 @40979 has 1 MA's), (Start: 119 @40928 has 1 MA's), (133, 40892), (141, 40862), (148, 40826), (160, 40742), (194, 40634), (208, 40580), (209, 40577), (224, 40505), (230, 40484), (231, 40481), (241, 40445), (266, 40283),

Gene: Hope4ever\_72 Start: 45094, Stop: 44276, Start Num: 74

Candidate Starts for Hope4ever\_72:

(Start: 63 @45112 has 7 MA's), (68, 45103), (Start: 74 @45094 has 6 MA's), (Start: 82 @45082 has 2 MA's), (110, 44998), (Start: 112 @44980 has 1 MA's), (Start: 119 @44929 has 1 MA's), (125, 44914), (162, 44728), (173, 44683), (207, 44593), (209, 44587), (216, 44572), (224, 44515), (228, 44500), (239, 44464), (241, 44455), (259, 44374), (266, 44308), (267, 44302), (269, 44284),

Gene: HortumSL17\_76 Start: 43796, Stop: 42954, Start Num: 84

Candidate Starts for HortumSL17\_76:

(Start: 84 @43796 has 189 MA's), (Start: 91 @43790 has 39 MA's), (Start: 109 @43727 has 14 MA's), (Start: 112 @43697 has 1 MA's), (124, 43634), (167, 43418), (207, 43286), (208, 43283), (209, 43280), (227, 43193), (241, 43145), (266, 42983),

Gene: Houdini22\_67 Start: 43162, Stop: 42371, Start Num: 95

Candidate Starts for Houdini22\_67:

(20, 43375), (Start: 95 @43162 has 215 MA's), (Start: 106 @43135 has 6 MA's), (Start: 132 @42988 has 1 MA's), (141, 42964), (172, 42787), (199, 42721), (207, 42694), (216, 42673), (224, 42616), (226, 42607), (243, 42553), (266, 42403),

Gene: HuhtaEnerson15\_65 Start: 42562, Stop: 41750, Start Num: 71

Candidate Starts for HuhtaEnerson15\_65:

(Start: 71 @42562 has 48 MA's), (122, 42409), (Start: 132 @42388 has 1 MA's), (148, 42328), (152, 42307), (210, 42085), (224, 41992), (231, 41968), (236, 41950), (251, 41896), (256, 41872), (257, 41863), (269, 41758),

Gene: Hutc2\_71 Start: 42798, Stop: 41983, Start Num: 84

Candidate Starts for Hutc2\_71:

(Start: 84 @42798 has 189 MA's), (113, 42693), (Start: 119 @42648 has 1 MA's), (136, 42606), (139, 42588), (146, 42555), (148, 42546), (158, 42480), (209, 42309), (224, 42237), (230, 42216), (241, 42177), (266, 42015),

Gene: ICleared\_67 Start: 43226, Stop: 42435, Start Num: 95

Candidate Starts for ICleared\_67:

(Start: 95 @43226 has 215 MA's), (Start: 106 @43199 has 6 MA's), (Start: 132 @43052 has 1 MA's), (172, 42851), (199, 42785), (207, 42758), (216, 42737), (224, 42680), (226, 42671), (243, 42617), (266, 42467),

Gene: lLeeKay\_70 Start: 43616, Stop: 42792, Start Num: 72

Candidate Starts for lLeeKay\_70:

(55, 43649), (Start: 72 @43616 has 44 MA's), (Start: 82 @43598 has 2 MA's), (110, 43514), (Start: 112 @43496 has 1 MA's), (Start: 119 @43445 has 1 MA's), (125, 43430), (162, 43244), (173, 43199), (207, 43109), (209, 43103), (216, 43088), (219, 43082), (224, 43031), (228, 43016), (239, 42980), (241, 42971), (259, 42890), (266, 42824), (267, 42818), (269, 42800),

Gene: lbantik\_53 Start: 23276, Stop: 22473, Start Num: 88

Candidate Starts for lbantik\_53:

(50, 23351), (58, 23327), (Start: 88 @23276 has 4 MA's), (Start: 106 @23243 has 6 MA's), (Start: 112 @23177 has 1 MA's), (138, 23078), (145, 23045), (149, 23030), (153, 23000), (166, 22910), (171, 22895), (174, 22883), (193, 22835), (195, 22829), (201, 22820), (223, 22721), (226, 22706), (250, 22625), (254, 22610), (259, 22574), (261, 22562), (266, 22508),

Gene: Iceman\_67 Start: 43447, Stop: 42656, Start Num: 95

Candidate Starts for Iceman\_67:

(20, 43660), (Start: 95 @43447 has 215 MA's), (Start: 106 @43420 has 6 MA's), (Start: 132 @43273 has 1 MA's), (141, 43249), (172, 43072), (199, 43006), (207, 42979), (216, 42958), (224, 42901), (226, 42892), (243, 42838), (266, 42688),

Gene: Ichabod\_73 Start: 45056, Stop: 44322, Start Num: 109

Candidate Starts for Ichabod\_73:

(57, 45170), (59, 45167), (62, 45164), (Start: 109 @45056 has 14 MA's), (Start: 119 @44975 has 1 MA's), (125, 44960), (162, 44774), (173, 44729), (207, 44639), (209, 44633), (216, 44618), (219, 44612), (224, 44561), (228, 44546), (239, 44510), (241, 44501), (259, 44420), (266, 44354), (267, 44348), (269, 44330),

Gene: Idleandcovert\_72 Start: 43681, Stop: 42887, Start Num: 93

Candidate Starts for Idleandcovert\_72:

(Start: 93 @43681 has 32 MA's), (136, 43501), (200, 43237), (228, 43114), (243, 43069), (266, 42919), (269, 42895),

Gene: IgnatiusPatJac\_69 Start: 43628, Stop: 42894, Start Num: 109

Candidate Starts for IgnatiusPatJac\_69:

(57, 43742), (59, 43739), (62, 43736), (Start: 109 @43628 has 14 MA's), (Start: 119 @43547 has 1 MA's), (125, 43532), (162, 43346), (173, 43301), (207, 43211), (209, 43205), (216, 43190), (219, 43184), (224, 43133), (228, 43118), (239, 43082), (241, 43073), (259, 42992), (266, 42926), (267, 42920), (269, 42902),

Gene: Immanuel3\_65 Start: 34356, Stop: 33550, Start Num: 105

Candidate Starts for Immanuel3\_65:

(Start: 100 @34371 has 14 MA's), (Start: 105 @34356 has 2 MA's), (120, 34233), (134, 34188), (137, 34176), (140, 34161), (144, 34140), (161, 34029), (165, 33999), (194, 33921), (228, 33789), (240, 33747), (244, 33738), (252, 33690), (262, 33636),

Gene: Indra\_79 Start: 43395, Stop: 42574, Start Num: 84

Candidate Starts for Indra\_79:

(21, 43608), (Start: 84 @43395 has 189 MA's), (Start: 109 @43332 has 14 MA's), (Start: 112 @43302 has 1 MA's), (133, 43215), (136, 43209), (141, 43185), (194, 42957), (224, 42828), (230, 42807), (231, 42804), (233, 42795), (241, 42768), (266, 42606),

Gene: Insomnia\_75 Start: 44090, Stop: 43275, Start Num: 84

Candidate Starts for Insomnia\_75:

(Start: 84 @44090 has 189 MA's), (113, 43985), (Start: 119 @43940 has 1 MA's), (136, 43898), (139, 43880), (146, 43847), (148, 43838), (158, 43772), (209, 43601), (224, 43529), (230, 43508), (241, 43469), (266, 43307),

Gene: Inyanga\_64 Start: 43810, Stop: 42986, Start Num: 72

Candidate Starts for Inyanga\_64:

(55, 43843), (Start: 72 @43810 has 44 MA's), (Start: 82 @43792 has 2 MA's), (Start: 109 @43720 has 14 MA's), (Start: 119 @43639 has 1 MA's), (125, 43624), (162, 43438), (173, 43393), (207, 43303), (209, 43297), (216, 43282), (219, 43276), (224, 43225), (228, 43210), (239, 43174), (241, 43165), (259, 43084), (266, 43018), (267, 43012), (269, 42994),

Gene: Iracema64\_68 Start: 43425, Stop: 42634, Start Num: 95

Candidate Starts for Iracema64\_68:

(Start: 95 @43425 has 215 MA's), (Start: 106 @43398 has 6 MA's), (Start: 132 @43251 has 1 MA's), (141, 43227), (172, 43050), (199, 42984), (207, 42957), (216, 42936), (224, 42879), (226, 42870), (243, 42816), (266, 42666),

Gene: IronMan\_71 Start: 45521, Stop: 44709, Start Num: 91

Candidate Starts for IronMan\_71:

(52, 45584), (Start: 91 @45521 has 39 MA's), (96, 45515), (Start: 106 @45485 has 6 MA's), (Start: 109 @45452 has 14 MA's), (Start: 112 @45422 has 1 MA's), (136, 45329), (209, 45032), (241, 44900), (266, 44738),

Gene: Isca\_69 Start: 43159, Stop: 42362, Start Num: 93

Candidate Starts for Isca\_69:

(42, 43231), (Start: 93 @43159 has 32 MA's), (110, 43084), (207, 42688), (224, 42604), (243, 42544), (266, 42394), (269, 42370),

Gene: Isiphiwo\_73 Start: 43247, Stop: 42420, Start Num: 84

Candidate Starts for Isiphiwo\_73:

(Start: 84 @43247 has 189 MA's), (104, 43217), (Start: 109 @43175 has 14 MA's), (Start: 112 @43145 has 1 MA's), (Start: 119 @43094 has 1 MA's), (133, 43058), (141, 43028), (148, 42992), (160, 42908), (194, 42800), (208, 42746), (209, 42743), (224, 42671), (230, 42650), (231, 42647), (241, 42611), (266, 42449),

Gene: Iwokeuplikedis\_75 Start: 44845, Stop: 43922, Start Num: 84

Candidate Starts for Iwokeuplikedis\_75:

(2, 45181), (7, 45154), (8, 45151), (Start: 84 @44845 has 189 MA's), (Start: 109 @44773 has 14 MA's), (Start: 112 @44743 has 1 MA's), (128, 44668), (136, 44650), (184, 44389), (188, 44371), (241, 44113), (251, 44065), (266, 43951),

Gene: JC27\_73 Start: 44892, Stop: 44068, Start Num: 72

Candidate Starts for JC27\_73:

(55, 44925), (Start: 72 @44892 has 44 MA's), (Start: 82 @44874 has 2 MA's), (110, 44790), (Start: 112 @44772 has 1 MA's), (Start: 119 @44721 has 1 MA's), (125, 44706), (163, 44511), (173, 44475), (206, 44388), (207, 44385), (209, 44379), (216, 44364), (219, 44358), (224, 44307), (228, 44292), (239, 44256), (241, 44247), (259, 44166), (266, 44100), (267, 44094), (269, 44076),

Gene: JF2\_69 Start: 41854, Stop: 41057, Start Num: 93

Candidate Starts for JF2\_69:

(42, 41926), (Start: 93 @41854 has 32 MA's), (110, 41779), (207, 41383), (224, 41299), (243, 41239), (266, 41089), (269, 41065),



Gene: JF4\_69 Start: 41854, Stop: 41057, Start Num: 93

Candidate Starts for JF4\_69:

(42, 41926), (Start: 93 @41854 has 32 MA's), (110, 41779), (207, 41383), (224, 41299), (243, 41239), (266, 41089), (269, 41065),

Gene: JHC117\_73 Start: 44047, Stop: 43232, Start Num: 95

Candidate Starts for JHC117\_73:

(23, 44227), (Start: 95 @44047 has 215 MA's), (Start: 106 @44020 has 6 MA's), (Start: 132 @43864 has 1 MA's), (141, 43840), (146, 43813), (150, 43795), (200, 43594), (207, 43570), (216, 43546), (241, 43426), (245, 43408), (251, 43378), (266, 43264), (269, 43240),

Gene: JPandJE\_66 Start: 34887, Stop: 34066, Start Num: 100

Candidate Starts for JPandJE\_66:

(Start: 100 @34887 has 14 MA's), (Start: 105 @34872 has 2 MA's), (120, 34749), (134, 34704), (137, 34692), (140, 34677), (144, 34656), (161, 34545), (165, 34515), (194, 34437), (228, 34305), (240, 34263), (244, 34254), (252, 34206), (262, 34152),

Gene: JSwag\_82 Start: 44508, Stop: 43660, Start Num: 81

Candidate Starts for JSwag\_82:

(Start: 81 @44508 has 18 MA's), (Start: 85 @44502 has 1 MA's), (Start: 106 @44460 has 6 MA's), (Start: 109 @44427 has 14 MA's), (Start: 112 @44397 has 1 MA's), (136, 44304), (230, 43893), (231, 43890), (241, 43851),

Gene: Jaan\_72 Start: 45691, Stop: 44879, Start Num: 91

Candidate Starts for Jaan\_72:

(11, 46012), (13, 46006), (14, 45994), (16, 45985), (52, 45754), (Start: 91 @45691 has 39 MA's), (96, 45685), (Start: 106 @45655 has 6 MA's), (Start: 109 @45622 has 14 MA's), (Start: 112 @45592 has 1 MA's), (136, 45499), (209, 45202), (241, 45070), (251, 45022), (266, 44908),

Gene: Jabiru\_69 Start: 43137, Stop: 42322, Start Num: 71

Candidate Starts for Jabiru\_69:

(37, 43224), (Start: 71 @43137 has 48 MA's), (Start: 112 @43047 has 1 MA's), (Start: 132 @42963 has 1 MA's), (148, 42903), (152, 42882), (161, 42813), (201, 42690), (210, 42660), (214, 42624), (219, 42615), (224, 42564), (226, 42555), (231, 42540), (235, 42525), (251, 42468), (256, 42444), (257, 42435), (266, 42354), (269, 42330),

Gene: Jabith\_75 Start: 44107, Stop: 43292, Start Num: 84

Candidate Starts for Jabith\_75:

(Start: 84 @44107 has 189 MA's), (113, 44002), (Start: 119 @43957 has 1 MA's), (136, 43915), (139, 43897), (146, 43864), (148, 43855), (158, 43789), (209, 43618), (224, 43546), (230, 43525), (241, 43486), (266, 43324),

Gene: JackSparrow\_72 Start: 44260, Stop: 43439, Start Num: 76

Candidate Starts for JackSparrow\_72:

(41, 44344), (Start: 76 @44260 has 49 MA's), (Start: 82 @44248 has 2 MA's), (110, 44161), (Start: 112 @44143 has 1 MA's), (Start: 119 @44092 has 1 MA's), (125, 44077), (162, 43891), (173, 43846), (207, 43756), (209, 43750), (216, 43735), (219, 43729), (224, 43678), (228, 43663), (239, 43627), (241, 43618), (259, 43537), (266, 43471), (267, 43465), (269, 43447),

Gene: Jasper\_71 Start: 43469, Stop: 42645, Start Num: 72

Candidate Starts for Jasper\_71:

(55, 43502), (Start: 72 @43469 has 44 MA's), (Start: 82 @43451 has 2 MA's), (110, 43367), (Start: 112 @43349 has 1 MA's), (Start: 119 @43298 has 1 MA's), (125, 43283), (162, 43097), (173, 43052), (207, 42962), (209, 42956), (216, 42941), (224, 42884), (228, 42869), (239, 42833), (241, 42824), (259, 42743), (266, 42677), (267, 42671), (269, 42653),

Gene: Jaykayelowell\_65 Start: 43151, Stop: 42360, Start Num: 95

Candidate Starts for Jaykayelowell\_65:

(20, 43364), (Start: 95 @43151 has 215 MA's), (Start: 106 @43124 has 6 MA's), (Start: 132 @42977 has 1 MA's), (141, 42953), (172, 42776), (199, 42710), (207, 42683), (216, 42662), (224, 42605), (226, 42596), (243, 42542), (266, 42392),

Gene: Jeeves\_77 Start: 43678, Stop: 42872, Start Num: 84

Candidate Starts for Jeeves\_77:

(Start: 84 @43678 has 189 MA's), (Start: 106 @43648 has 6 MA's), (Start: 109 @43615 has 14 MA's), (Start: 112 @43585 has 1 MA's), (Start: 119 @43534 has 1 MA's), (136, 43492), (174, 43285), (195, 43237), (235, 43084), (241, 43063), (247, 43036), (266, 42901),

Gene: Jeffabunny\_76 Start: 43021, Stop: 42200, Start Num: 84

Candidate Starts for Jeffabunny\_76:

(21, 43234), (Start: 84 @43021 has 189 MA's), (Start: 109 @42958 has 14 MA's), (Start: 112 @42928 has 1 MA's), (133, 42841), (136, 42835), (141, 42811), (194, 42583), (224, 42454), (230, 42433), (231, 42430), (233, 42421), (241, 42394), (266, 42232),

Gene: JenCasNa\_78 Start: 44049, Stop: 43234, Start Num: 95

Candidate Starts for JenCasNa\_78:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: JeppNRM\_77 Start: 43867, Stop: 43052, Start Num: 95

Candidate Starts for JeppNRM\_77:

(Start: 95 @43867 has 215 MA's), (Start: 112 @43777 has 1 MA's), (Start: 132 @43684 has 1 MA's), (141, 43660), (150, 43615), (200, 43414), (207, 43390), (223, 43315), (241, 43246), (245, 43228), (266, 43084), (269, 43060),

Gene: Jerm\_75 Start: 44782, Stop: 43883, Start Num: 84

Candidate Starts for Jerm\_75:

(Start: 84 @44782 has 189 MA's), (Start: 98 @44770 has 36 MA's), (Start: 109 @44713 has 14 MA's), (Start: 112 @44683 has 1 MA's), (136, 44590), (148, 44530), (174, 44383), (177, 44368), (182, 44335), (187, 44326), (207, 44215), (230, 44116), (241, 44074), (266, 43912),

Gene: Jerm2\_70 Start: 45098, Stop: 44298, Start Num: 94

Candidate Starts for Jerm2\_70:

(Start: 94 @45098 has 25 MA's), (110, 45020), (Start: 112 @45002 has 1 MA's), (Start: 119 @44951 has 1 MA's), (125, 44936), (162, 44750), (173, 44705), (207, 44615), (209, 44609), (216, 44594), (219, 44588), (224, 44537), (228, 44522), (239, 44486), (241, 44477), (259, 44396), (266, 44330), (267, 44324), (269, 44306),

Gene: Jester\_55 Start: 39060, Stop: 38251, Start Num: 98

Candidate Starts for Jester\_55:

(Start: 98 @39060 has 36 MA's), (102, 39048), (108, 39012), (114, 38946), (Start: 116 @38940 has 1 MA's), (Start: 132 @38886 has 1 MA's), (138, 38871), (158, 38760), (160, 38742), (212, 38577), (221, 38535), (224, 38508), (237, 38463), (238, 38460), (243, 38445), (266, 38295), (267, 38289),

Gene: JetBlade\_68 Start: 43188, Stop: 42397, Start Num: 95

Candidate Starts for JetBlade\_68:

(39, 43263), (Start: 95 @43188 has 215 MA's), (Start: 106 @43161 has 6 MA's), (Start: 132 @43014 has 1 MA's), (141, 42990), (172, 42813), (199, 42747), (207, 42720), (216, 42699), (224, 42642), (226, 42633), (243, 42579), (266, 42429),

Gene: JewelBug\_75 Start: 43968, Stop: 43141, Start Num: 84

Candidate Starts for JewelBug\_75:

(Start: 84 @43968 has 189 MA's), (104, 43938), (Start: 109 @43896 has 14 MA's), (Start: 112 @43866 has 1 MA's), (Start: 119 @43815 has 1 MA's), (133, 43779), (141, 43749), (148, 43713), (160, 43629), (194, 43521), (208, 43467), (209, 43464), (224, 43392), (230, 43371), (231, 43368), (241, 43332), (266, 43170),

Gene: Jiawan\_72 Start: 43828, Stop: 42986, Start Num: 84

Candidate Starts for Jiawan\_72:

(Start: 84 @43828 has 189 MA's), (Start: 91 @43822 has 39 MA's), (Start: 109 @43759 has 14 MA's), (Start: 112 @43729 has 1 MA's), (124, 43666), (167, 43450), (207, 43318), (208, 43315), (209, 43312), (227, 43225), (241, 43177), (266, 43015),

Gene: Jobu08\_73 Start: 43880, Stop: 43065, Start Num: 95

Candidate Starts for Jobu08\_73:

(23, 44060), (Start: 95 @43880 has 215 MA's), (Start: 106 @43853 has 6 MA's), (120, 43736), (Start: 132 @43697 has 1 MA's), (141, 43673), (146, 43646), (150, 43628), (200, 43427), (207, 43403), (216, 43379), (241, 43259), (245, 43241), (251, 43211), (266, 43097), (269, 43073),

Gene: JoongJeon\_67 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for JoongJeon\_67:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Jordennis\_74 Start: 43462, Stop: 42635, Start Num: 84

Candidate Starts for Jordennis\_74:

(Start: 84 @43462 has 189 MA's), (104, 43432), (Start: 109 @43390 has 14 MA's), (Start: 112 @43360 has 1 MA's), (Start: 119 @43309 has 1 MA's), (133, 43273), (141, 43243), (148, 43207), (160, 43123), (194, 43015), (208, 42961), (209, 42958), (224, 42886), (230, 42865), (231, 42862), (241, 42826), (266, 42664),

Gene: Jorgensen\_74 Start: 44667, Stop: 43864, Start Num: 91

Candidate Starts for Jorgensen\_74:

(56, 44724), (Start: 91 @44667 has 39 MA's), (110, 44586), (Start: 112 @44568 has 1 MA's), (Start: 119 @44517 has 1 MA's), (125, 44502), (162, 44316), (173, 44271), (207, 44181), (209, 44175), (216, 44160), (219, 44154), (224, 44103), (228, 44088), (239, 44052), (241, 44043), (259, 43962), (266, 43896), (267, 43890), (269, 43872),

Gene: Joselito\_75 Start: 44127, Stop: 43312, Start Num: 84

Candidate Starts for Joselito\_75:

(Start: 84 @44127 has 189 MA's), (113, 44022), (Start: 119 @43977 has 1 MA's), (136, 43935), (139, 43917), (158, 43809), (209, 43638), (224, 43566), (230, 43545), (241, 43506), (266, 43344),

Gene: JoshKayV\_74 Start: 44814, Stop: 43909, Start Num: 84

Candidate Starts for JoshKayV\_74:

(Start: 84 @44814 has 189 MA's), (Start: 109 @44739 has 14 MA's), (Start: 112 @44709 has 1 MA's), (136, 44616), (148, 44556), (174, 44409), (177, 44394), (187, 44352), (207, 44241), (241, 44100),

Gene: Journey13\_63 Start: 40978, Stop: 40169, Start Num: 84

Candidate Starts for Journey13\_63:

(Start: 84 @40978 has 189 MA's), (Start: 106 @40948 has 6 MA's), (120, 40831), (136, 40792), (174, 40585), (203, 40522), (224, 40423), (230, 40402), (241, 40360),

Gene: Jovo\_68 Start: 43240, Stop: 42425, Start Num: 71

Candidate Starts for Jovo\_68:

(Start: 71 @43240 has 48 MA's), (122, 43087), (Start: 132 @43066 has 1 MA's), (148, 43006), (152, 42985), (210, 42763), (224, 42667), (231, 42643), (236, 42625), (251, 42571), (256, 42547), (257, 42538), (266, 42457), (269, 42433),

Gene: Jsquared\_77 Start: 43912, Stop: 43043, Start Num: 84

Candidate Starts for Jsquared\_77:

(Start: 84 @43912 has 189 MA's), (107, 43867), (114, 43789), (120, 43759), (136, 43720), (161, 43570), (224, 43294), (230, 43273), (241, 43234), (266, 43072),

Gene: JuliaChild\_71 Start: 45234, Stop: 44416, Start Num: 76

Candidate Starts for JuliaChild\_71:

(Start: 65 @45252 has 2 MA's), (Start: 76 @45234 has 49 MA's), (Start: 82 @45222 has 2 MA's), (110, 45138), (Start: 112 @45120 has 1 MA's), (117, 45078), (Start: 119 @45069 has 1 MA's), (125, 45054), (162, 44868), (173, 44823), (207, 44733), (209, 44727), (216, 44712), (219, 44706), (224, 44655), (228, 44640), (239, 44604), (241, 44595), (259, 44514), (266, 44448), (267, 44442), (269, 44424),

Gene: KADY\_74 Start: 44077, Stop: 43262, Start Num: 95

Candidate Starts for KADY\_74:

(23, 44257), (44, 44152), (Start: 95 @44077 has 215 MA's), (Start: 132 @43894 has 1 MA's), (141, 43870), (146, 43843), (150, 43825), (200, 43624), (207, 43600), (216, 43576), (241, 43456), (245, 43438), (266, 43294), (269, 43270),

Gene: KBG\_69 Start: 45672, Stop: 44758, Start Num: 40

Candidate Starts for KBG\_69:

(Start: 40 @45672 has 1 MA's), (Start: 76 @45588 has 49 MA's), (Start: 82 @45576 has 2 MA's), (Start: 109 @45501 has 14 MA's), (Start: 119 @45420 has 1 MA's), (125, 45405), (136, 45369), (141, 45345), (162, 45210), (194, 45114), (218, 45051), (224, 44997), (241, 44937), (259, 44856), (266, 44790), (267, 44784), (269, 44766),

Gene: KFPoly\_67 Start: 43152, Stop: 42361, Start Num: 95

Candidate Starts for KFPoly\_67:

(20, 43365), (Start: 95 @43152 has 215 MA's), (Start: 106 @43125 has 6 MA's), (Start: 132 @42978 has 1 MA's), (141, 42954), (172, 42777), (199, 42711), (207, 42684), (216, 42663), (224, 42606), (226, 42597), (243, 42543), (266, 42393),

Gene: KSSJEB\_69 Start: 43942, Stop: 43118, Start Num: 72

Candidate Starts for KSSJEB\_69:

(55, 43975), (Start: 72 @43942 has 44 MA's), (Start: 82 @43924 has 2 MA's), (110, 43840), (Start: 112 @43822 has 1 MA's), (Start: 119 @43771 has 1 MA's), (125, 43756), (162, 43570), (173, 43525), (207, 43435), (209, 43429), (216, 43414), (219, 43408), (224, 43357), (228, 43342), (239, 43306), (241, 43297), (259, 43216), (266, 43150), (267, 43144), (269, 43126),

Gene: Kachowdy\_69 Start: 43640, Stop: 42846, Start Num: 93

Candidate Starts for Kachowdy\_69:

(Start: 93 @43640 has 32 MA's), (207, 43172), (224, 43088), (243, 43028), (266, 42878), (269, 42854),

Gene: Kalb97\_77 Start: 43865, Stop: 43050, Start Num: 95

Candidate Starts for Kalb97\_77:

(23, 44042), (Start: 95 @43865 has 215 MA's), (Start: 112 @43775 has 1 MA's), (Start: 132 @43682 has 1 MA's), (141, 43658), (150, 43613), (200, 43412), (207, 43388), (223, 43313), (241, 43244), (245, 43226), (266, 43082), (269, 43058),

Gene: Kalnoky\_77 Start: 43863, Stop: 43048, Start Num: 95

Candidate Starts for Kalnoky\_77:

(23, 44040), (Start: 95 @43863 has 215 MA's), (Start: 112 @43773 has 1 MA's), (Start: 132 @43680 has 1 MA's), (141, 43656), (150, 43611), (200, 43410), (207, 43386), (223, 43311), (241, 43242), (266, 43080), (269, 43056),

Gene: Kalpine\_73 Start: 44727, Stop: 43903, Start Num: 84

Candidate Starts for Kalpine\_73:

(27, 44868), (Start: 84 @44727 has 189 MA's), (Start: 109 @44652 has 14 MA's), (Start: 112 @44622 has 1 MA's), (Start: 119 @44571 has 1 MA's), (136, 44529), (230, 44139), (241, 44097),

Gene: Kampy\_67 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Kampy\_67:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Kanely\_70 Start: 43913, Stop: 43110, Start Num: 91

Candidate Starts for Kanely\_70:

(56, 43970), (Start: 91 @43913 has 39 MA's), (Start: 112 @43814 has 1 MA's), (Start: 119 @43763 has 1 MA's), (125, 43748), (162, 43562), (173, 43517), (207, 43427), (209, 43421), (216, 43406), (224, 43349), (228, 43334), (239, 43298), (241, 43289), (259, 43208), (266, 43142), (267, 43136), (269, 43118),

Gene: Katalie136\_67 Start: 43434, Stop: 42643, Start Num: 95

Candidate Starts for Katalie136\_67:

(Start: 95 @43434 has 215 MA's), (Start: 106 @43407 has 6 MA's), (Start: 132 @43260 has 1 MA's), (141, 43236), (200, 42990), (207, 42966), (224, 42888), (226, 42879), (243, 42825), (266, 42675),

Gene: KatherineG\_82 Start: 44820, Stop: 43972, Start Num: 81

Candidate Starts for KatherineG\_82:

(Start: 81 @44820 has 18 MA's), (Start: 85 @44814 has 1 MA's), (Start: 106 @44772 has 6 MA's), (Start: 109 @44739 has 14 MA's), (Start: 112 @44709 has 1 MA's), (136, 44616), (192, 44352), (230, 44205), (231, 44202), (241, 44163),

Gene: Kazan\_77 Start: 43236, Stop: 42409, Start Num: 84

Candidate Starts for Kazan\_77:

(Start: 84 @43236 has 189 MA's), (104, 43206), (Start: 109 @43164 has 14 MA's), (Start: 112 @43134 has 1 MA's), (Start: 119 @43083 has 1 MA's), (133, 43047), (141, 43017), (148, 42981), (160, 42897), (194, 42789), (208, 42735), (209, 42732), (224, 42660), (230, 42639), (231, 42636), (241, 42600), (266, 42438),

Gene: Kenmech\_73 Start: 45774, Stop: 44950, Start Num: 72

Candidate Starts for Kenmech\_73:

(55, 45807), (Start: 72 @45774 has 44 MA's), (Start: 82 @45756 has 2 MA's), (110, 45672), (Start: 112 @45654 has 1 MA's), (Start: 119 @45603 has 1 MA's), (125, 45588), (162, 45402), (173, 45357), (207, 45267), (209, 45261), (216, 45246), (224, 45189), (228, 45174), (239, 45138), (241, 45129), (259, 45048), (266, 44982), (267, 44976), (269, 44958),

Gene: Kerberos\_76 Start: 44860, Stop: 44051, Start Num: 97

Candidate Starts for Kerberos\_76:

(Start: 97 @44860 has 16 MA's), (Start: 106 @44830 has 6 MA's), (Start: 109 @44797 has 14 MA's), (Start: 112 @44767 has 1 MA's), (133, 44680), (141, 44650), (174, 44467), (209, 44377), (224, 44305), (230, 44284), (241, 44242), (242, 44239), (263, 44125), (264, 44113), (266, 44080),

Gene: Keziacharles14\_72 Start: 44422, Stop: 43532, Start Num: 84

Candidate Starts for Keziacharles14\_72:

(34, 44545), (Start: 84 @44422 has 189 MA's), (Start: 106 @44392 has 6 MA's), (Start: 109 @44359 has 14 MA's), (Start: 112 @44329 has 1 MA's), (Start: 119 @44278 has 1 MA's), (124, 44266), (167, 44050), (168, 44047), (185, 43999), (194, 43915), (207, 43864), (208, 43861), (209, 43858), (224, 43783), (230, 43762), (241, 43723), (266, 43561),

Gene: Killigrew\_68 Start: 44132, Stop: 43311, Start Num: 76

Candidate Starts for Killigrew\_68:

(Start: 76 @44132 has 49 MA's), (Start: 82 @44120 has 2 MA's), (Start: 90 @44114 has 3 MA's), (110, 44033), (Start: 112 @44015 has 1 MA's), (Start: 119 @43964 has 1 MA's), (125, 43949), (162, 43763), (173, 43718), (207, 43628), (209, 43622), (216, 43607), (224, 43550), (228, 43535), (239, 43499), (241, 43490), (251, 43454), (259, 43409), (266, 43343), (267, 43337), (269, 43319),

Gene: Kimona\_67 Start: 42304, Stop: 41501, Start Num: 95

Candidate Starts for Kimona\_67:

(Start: 95 @42304 has 215 MA's), (Start: 106 @42274 has 6 MA's), (Start: 132 @42127 has 1 MA's), (138, 42112), (141, 42103), (159, 41989), (208, 41830), (209, 41827), (218, 41797), (224, 41743), (233, 41710), (243, 41683), (261, 41590), (266, 41533),

Gene: KingCyrus\_73 Start: 45799, Stop: 44900, Start Num: 84

Candidate Starts for KingCyrus\_73:

(Start: 84 @45799 has 189 MA's), (Start: 98 @45787 has 36 MA's), (Start: 109 @45730 has 14 MA's), (Start: 112 @45700 has 1 MA's), (128, 45625), (136, 45607), (174, 45400), (177, 45385), (187, 45343), (207, 45232), (241, 45091), (266, 44929),

Gene: Kingmustik0402\_68 Start: 43147, Stop: 42356, Start Num: 95

Candidate Starts for Kingmustik0402\_68:

(Start: 95 @43147 has 215 MA's), (Start: 106 @43120 has 6 MA's), (Start: 132 @42973 has 1 MA's), (141, 42949), (172, 42772), (199, 42706), (207, 42679), (216, 42658), (224, 42601), (226, 42592), (243, 42538), (266, 42388),

Gene: Kinmap\_77 Start: 43185, Stop: 42373, Start Num: 93

Candidate Starts for Kinmap\_77:

(12, 43503), (17, 43476), (38, 43296), (Start: 93 @43185 has 32 MA's), (Start: 106 @43152 has 6 MA's), (Start: 109 @43119 has 14 MA's), (Start: 112 @43089 has 1 MA's), (136, 42996), (138, 42981), (174, 42789), (224, 42627), (241, 42567), (266, 42405), (271, 42378),

Gene: Kipper29\_76 Start: 43249, Stop: 42422, Start Num: 84

Candidate Starts for Kipper29\_76:

(Start: 84 @43249 has 189 MA's), (104, 43219), (Start: 109 @43177 has 14 MA's), (Start: 112 @43147 has 1 MA's), (Start: 119 @43096 has 1 MA's), (133, 43060), (141, 43030), (148, 42994), (160, 42910), (194, 42802), (208, 42748), (209, 42745), (224, 42673), (230, 42652), (231, 42649), (241, 42613), (266, 42451),

Gene: KittenMittens\_65 Start: 42090, Stop: 41248, Start Num: 73

Candidate Starts for KittenMittens\_65:

(24, 42249), (Start: 73 @42090 has 16 MA's), (79, 42078), (Start: 106 @42027 has 6 MA's), (Start: 132 @41880 has 1 MA's), (138, 41865), (208, 41583), (228, 41478), (231, 41469), (243, 41430), (256, 41370), (266, 41280), (269, 41256),

Gene: Koduck\_75 Start: 43689, Stop: 42817, Start Num: 84

Candidate Starts for Koduck\_75:

(Start: 84 @43689 has 189 MA's), (101, 43671), (107, 43644), (114, 43566), (136, 43497), (209, 43143), (224, 43071), (230, 43050), (233, 43038), (241, 43008), (266, 42846),

Gene: Koko\_77 Start: 43783, Stop: 42962, Start Num: 84

Candidate Starts for Koko\_77:

(21, 43996), (Start: 84 @43783 has 189 MA's), (Start: 109 @43720 has 14 MA's), (Start: 112 @43690 has 1 MA's), (133, 43603), (136, 43597), (141, 43573), (194, 43345), (224, 43216), (230, 43195), (231, 43192), (233, 43183), (241, 43156), (266, 42994),

Gene: Koreni\_67 Start: 42839, Stop: 42048, Start Num: 95

Candidate Starts for Koreni\_67:

(Start: 95 @42839 has 215 MA's), (Start: 106 @42812 has 6 MA's), (Start: 132 @42665 has 1 MA's), (141, 42641), (172, 42464), (199, 42398), (207, 42371), (216, 42350), (224, 42293), (226, 42284), (243, 42230), (266, 42080),

Gene: Kratark\_67 Start: 43195, Stop: 42404, Start Num: 95

Candidate Starts for Kratark\_67:

(Start: 95 @43195 has 215 MA's), (Start: 106 @43168 has 6 MA's), (Start: 132 @43021 has 1 MA's), (172, 42820), (199, 42754), (207, 42727), (216, 42706), (224, 42649), (226, 42640), (243, 42586), (266, 42436),

Gene: Kremtemulon\_67 Start: 43291, Stop: 42500, Start Num: 95

Candidate Starts for Kremtemulon\_67:

(39, 43366), (Start: 95 @43291 has 215 MA's), (Start: 106 @43264 has 6 MA's), (Start: 132 @43117 has 1 MA's), (172, 42916), (199, 42850), (207, 42823), (216, 42802), (224, 42745), (226, 42736), (243, 42682), (266, 42532),

Gene: Krishelle\_56 Start: 39714, Stop: 38905, Start Num: 98

Candidate Starts for Krishelle\_56:

(Start: 98 @39714 has 36 MA's), (102, 39702), (114, 39600), (Start: 116 @39594 has 1 MA's), (Start: 132 @39540 has 1 MA's), (138, 39525), (158, 39414), (160, 39396), (221, 39189), (237, 39117), (238, 39114), (243, 39099), (259, 39018), (266, 38949), (267, 38943),

Gene: Kristoff\_67 Start: 43392, Stop: 42565, Start Num: 73

Candidate Starts for Kristoff\_67:

(24, 43551), (Start: 73 @43392 has 16 MA's), (Start: 132 @43182 has 1 MA's), (138, 43167), (207, 42888), (224, 42810), (243, 42747), (256, 42687), (269, 42573),

Gene: Kugel\_74 Start: 45950, Stop: 45126, Start Num: 72

Candidate Starts for Kugel\_74:

(55, 45983), (Start: 72 @45950 has 44 MA's), (Start: 82 @45932 has 2 MA's), (110, 45848), (Start: 112 @45830 has 1 MA's), (Start: 119 @45779 has 1 MA's), (125, 45764), (162, 45578), (173, 45533), (207, 45443), (209, 45437), (216, 45422), (219, 45416), (224, 45365), (228, 45350), (239, 45314), (241, 45305), (259, 45224), (266, 45158), (267, 45152), (269, 45134),

Gene: Kumquat\_63 Start: 33623, Stop: 32784, Start Num: 100

Candidate Starts for Kumquat\_63:

(80, 33659), (Start: 100 @33623 has 14 MA's), (Start: 105 @33608 has 2 MA's), (120, 33485), (140, 33413), (165, 33251), (192, 33179), (194, 33173), (228, 33023), (240, 32981), (244, 32972), (262, 32870),

Gene: KyMonks1A\_73 Start: 44221, Stop: 43421, Start Num: 94

Candidate Starts for KyMonks1A\_73:

(77, 44239), (Start: 94 @44221 has 25 MA's), (110, 44143), (Start: 112 @44125 has 1 MA's), (117, 44083), (Start: 119 @44074 has 1 MA's), (125, 44059), (162, 43873), (173, 43828), (207, 43738), (209, 43732), (219, 43711), (224, 43660), (228, 43645), (239, 43609), (241, 43600), (259, 43519), (266, 43453), (267, 43447), (269, 43429),

Gene: Kyee\_68 Start: 43156, Stop: 42365, Start Num: 95

Candidate Starts for Kyee\_68:

(20, 43369), (Start: 95 @43156 has 215 MA's), (Start: 106 @43129 has 6 MA's), (Start: 132 @42982 has 1 MA's), (141, 42958), (172, 42781), (199, 42715), (207, 42688), (216, 42667), (224, 42610), (226, 42601), (243, 42547), (266, 42397),

Gene: Kykar\_71 Start: 44877, Stop: 44059, Start Num: 76

Candidate Starts for Kykar\_71:

(69, 44886), (Start: 76 @44877 has 49 MA's), (Start: 82 @44865 has 2 MA's), (110, 44781), (Start: 112 @44763 has 1 MA's), (Start: 119 @44712 has 1 MA's), (125, 44697), (163, 44502), (173, 44466), (207, 44376), (209, 44370), (216, 44355), (219, 44349), (224, 44298), (228, 44283), (239, 44247), (241, 44238), (259, 44157), (261, 44145), (266, 44091), (267, 44085), (269, 44067),

Gene: L5\_69 Start: 43842, Stop: 42970, Start Num: 84

Candidate Starts for L5\_69:

(Start: 84 @43842 has 189 MA's), (101, 43824), (107, 43797), (114, 43719), (136, 43650), (209, 43296), (224, 43224), (230, 43203), (233, 43191), (241, 43161), (266, 42999),

Gene: LBerry\_78 Start: 44053, Stop: 43238, Start Num: 95

Candidate Starts for LBerry\_78:

(23, 44233), (Start: 95 @44053 has 215 MA's), (Start: 106 @44026 has 6 MA's), (Start: 132 @43870 has 1 MA's), (141, 43846), (146, 43819), (150, 43801), (200, 43600), (207, 43576), (216, 43552), (241, 43432), (245, 43414), (251, 43384), (266, 43270), (269, 43246),

Gene: LHTSCC\_70 Start: 43597, Stop: 42806, Start Num: 95

Candidate Starts for LHTSCC\_70:

(39, 43672), (Start: 95 @43597 has 215 MA's), (Start: 106 @43570 has 6 MA's), (Start: 132 @43423 has 1 MA's), (172, 43222), (199, 43156), (207, 43129), (216, 43108), (224, 43051), (226, 43042), (243, 42988), (266, 42838),

Gene: LadyBird\_77 Start: 45024, Stop: 44128, Start Num: 84

Candidate Starts for LadyBird\_77:

(6, 45339), (9, 45330), (10, 45327), (Start: 84 @45024 has 189 MA's), (Start: 109 @44958 has 14 MA's), (Start: 112 @44928 has 1 MA's), (128, 44853), (136, 44835), (177, 44613), (187, 44571), (241, 44319), (266, 44157),



Gene: Lambert1\_71 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for Lambert1\_71:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: Lamina13\_72 Start: 45682, Stop: 44864, Start Num: 76

Candidate Starts for Lamina13\_72:

(48, 45745), (Start: 76 @45682 has 49 MA's), (Start: 82 @45670 has 2 MA's), (110, 45586), (Start: 112 @45568 has 1 MA's), (Start: 119 @45517 has 1 MA's), (125, 45502), (162, 45316), (173, 45271), (207, 45181), (209, 45175), (216, 45160), (219, 45154), (224, 45103), (228, 45088), (239, 45052), (241, 45043), (259, 44962), (266, 44896), (267, 44890), (269, 44872),

Gene: Landor\_72 Start: 45614, Stop: 44802, Start Num: 91

Candidate Starts for Landor\_72:

(52, 45677), (Start: 91 @45614 has 39 MA's), (96, 45608), (Start: 106 @45578 has 6 MA's), (Start: 109 @45545 has 14 MA's), (Start: 112 @45515 has 1 MA's), (136, 45422), (209, 45125), (241, 44993), (266, 44831),

Gene: LappelDuVide\_68 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for LappelDuVide\_68:

(Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: Larenn\_70 Start: 44060, Stop: 43245, Start Num: 84

Candidate Starts for Larenn\_70:

(Start: 64 @44084 has 2 MA's), (Start: 84 @44060 has 189 MA's), (Start: 88 @44057 has 4 MA's), (Start: 109 @43991 has 14 MA's), (Start: 112 @43961 has 1 MA's), (136, 43868), (203, 43598), (207, 43577), (209, 43571), (230, 43478), (241, 43436),

Gene: LarryKay\_77 Start: 44078, Stop: 43263, Start Num: 95

Candidate Starts for LarryKay\_77:

(23, 44261), (Start: 95 @44078 has 215 MA's), (Start: 106 @44051 has 6 MA's), (Start: 132 @43895 has 1 MA's), (141, 43871), (146, 43844), (150, 43826), (200, 43625), (207, 43601), (216, 43577), (241, 43457), (245, 43439), (251, 43409), (266, 43295), (269, 43271),

Gene: LastResort\_80 Start: 44703, Stop: 43903, Start Num: 106

Candidate Starts for LastResort\_80:

(Start: 81 @44751 has 18 MA's), (Start: 85 @44745 has 1 MA's), (Start: 106 @44703 has 6 MA's), (Start: 109 @44670 has 14 MA's), (Start: 112 @44640 has 1 MA's), (136, 44547), (192, 44283), (208, 44235), (230, 44136), (231, 44133), (241, 44094),

Gene: Lemur\_68 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Lemur\_68:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: LeoAvram\_67 Start: 43188, Stop: 42397, Start Num: 95

Candidate Starts for LeoAvram\_67:

(Start: 95 @43188 has 215 MA's), (Start: 106 @43161 has 6 MA's), (Start: 132 @43014 has 1 MA's), (172, 42813), (199, 42747), (207, 42720), (216, 42699), (226, 42633), (243, 42579), (266, 42429),

Gene: Leogania\_72 Start: 44753, Stop: 43929, Start Num: 83

Candidate Starts for Leogania\_72:

(Start: 83 @44753 has 6 MA's), (Start: 109 @44675 has 14 MA's), (Start: 112 @44645 has 1 MA's), (136, 44552), (241, 44120), (266, 43958),

Gene: Lesedi\_64 Start: 41932, Stop: 41198, Start Num: 109

Candidate Starts for Lesedi\_64:

(57, 42046), (59, 42043), (62, 42040), (Start: 109 @41932 has 14 MA's), (Start: 119 @41851 has 1 MA's), (125, 41836), (162, 41650), (173, 41605), (207, 41515), (209, 41509), (216, 41494), (219, 41488), (224, 41437), (228, 41422), (239, 41386), (241, 41377), (259, 41296), (266, 41230), (267, 41224), (269, 41206),

Gene: Lev2\_68 Start: 42872, Stop: 42057, Start Num: 71

Candidate Starts for Lev2\_68:

(Start: 71 @42872 has 48 MA's), (122, 42719), (Start: 132 @42698 has 1 MA's), (148, 42638), (152, 42617), (210, 42395), (224, 42299), (231, 42275), (236, 42257), (251, 42203), (256, 42179), (257, 42170), (266, 42089), (269, 42065),

Gene: Leviathan\_75 Start: 44849, Stop: 43950, Start Num: 84

Candidate Starts for Leviathan\_75:

(Start: 84 @44849 has 189 MA's), (Start: 98 @44837 has 36 MA's), (Start: 109 @44780 has 14 MA's), (Start: 112 @44750 has 1 MA's), (136, 44657), (148, 44597), (174, 44450), (177, 44435), (182, 44402), (187, 44393), (207, 44282), (230, 44183), (241, 44141), (266, 43979),

Gene: Licorice\_69 Start: 45231, Stop: 44413, Start Num: 76

Candidate Starts for Licorice\_69:

(48, 45294), (Start: 76 @45231 has 49 MA's), (Start: 82 @45219 has 2 MA's), (110, 45135), (Start: 112 @45117 has 1 MA's), (Start: 119 @45066 has 1 MA's), (125, 45051), (162, 44865), (207, 44730), (209, 44724), (216, 44709), (219, 44703), (224, 44652), (228, 44637), (239, 44601), (241, 44592), (259, 44511), (266, 44445), (267, 44439), (269, 44421),

Gene: LilBib\_68 Start: 45196, Stop: 44378, Start Num: 76

Candidate Starts for LilBib\_68:

(69, 45205), (Start: 76 @45196 has 49 MA's), (Start: 82 @45184 has 2 MA's), (110, 45100), (Start: 112 @45082 has 1 MA's), (Start: 119 @45031 has 1 MA's), (125, 45016), (162, 44830), (173, 44785), (207, 44695), (209, 44689), (216, 44674), (219, 44668), (224, 44617), (228, 44602), (239, 44566), (241, 44557), (259, 44476), (266, 44410), (267, 44404), (269, 44386),

Gene: LilTurb\_74 Start: 44663, Stop: 43764, Start Num: 84

Candidate Starts for LilTurb\_74:

(Start: 84 @44663 has 189 MA's), (Start: 98 @44651 has 36 MA's), (Start: 109 @44594 has 14 MA's), (Start: 112 @44564 has 1 MA's), (136, 44471), (148, 44411), (174, 44264), (177, 44249), (182, 44216), (187, 44207), (207, 44096), (230, 43997), (241, 43955), (266, 43793),

Gene: Lilbunny\_75 Start: 43025, Stop: 42204, Start Num: 84

Candidate Starts for Lilbunny\_75:

(21, 43238), (Start: 84 @43025 has 189 MA's), (Start: 109 @42962 has 14 MA's), (Start: 112 @42932 has 1 MA's), (133, 42845), (136, 42839), (141, 42815), (194, 42587), (224, 42458), (230, 42437), (231, 42434), (233, 42425), (241, 42398), (266, 42236),

Gene: Lilith\_75 Start: 44015, Stop: 43227, Start Num: 106

Candidate Starts for Lilith\_75:

(23, 44222), (Start: 95 @44042 has 215 MA's), (Start: 106 @44015 has 6 MA's), (Start: 132 @43859 has 1 MA's), (141, 43835), (146, 43808), (150, 43790), (200, 43589), (207, 43565), (216, 43541), (241, 43421), (245, 43403), (251, 43373), (266, 43259), (269, 43235),

Gene: Lilleskat\_72 Start: 43753, Stop: 42911, Start Num: 84

Candidate Starts for Lilleskat\_72:

(Start: 84 @43753 has 189 MA's), (Start: 91 @43747 has 39 MA's), (Start: 109 @43684 has 14 MA's), (Start: 112 @43654 has 1 MA's), (124, 43591), (167, 43375), (207, 43243), (208, 43240), (209, 43237), (227, 43150), (241, 43102), (266, 42940),

Gene: Lillie\_56 Start: 39345, Stop: 38536, Start Num: 98

Candidate Starts for Lillie\_56:

(Start: 98 @39345 has 36 MA's), (102, 39333), (114, 39231), (Start: 116 @39225 has 1 MA's), (Start: 132 @39171 has 1 MA's), (138, 39156), (158, 39045), (160, 39027), (221, 38820), (237, 38748), (238, 38745), (243, 38730), (259, 38649), (266, 38580), (267, 38574),

Gene: LittleB\_68 Start: 43159, Stop: 42368, Start Num: 95

Candidate Starts for LittleB\_68:

(20, 43372), (Start: 95 @43159 has 215 MA's), (Start: 106 @43132 has 6 MA's), (Start: 132 @42985 has 1 MA's), (172, 42784), (199, 42718), (207, 42691), (216, 42670), (224, 42613), (226, 42604), (243, 42550), (266, 42400),

Gene: LittleCherry\_66 Start: 42432, Stop: 41620, Start Num: 71

Candidate Starts for LittleCherry\_66:

(Start: 71 @42432 has 48 MA's), (122, 42279), (Start: 132 @42258 has 1 MA's), (148, 42198), (152, 42177), (210, 41955), (224, 41862), (231, 41838), (236, 41820), (251, 41766), (256, 41742), (257, 41733), (269, 41628),

Gene: LittleGuy\_68 Start: 43054, Stop: 42263, Start Num: 95

Candidate Starts for LittleGuy\_68:

(Start: 95 @43054 has 215 MA's), (Start: 106 @43027 has 6 MA's), (Start: 132 @42880 has 1 MA's), (172, 42679), (199, 42613), (207, 42586), (216, 42565), (224, 42508), (226, 42499), (243, 42445), (266, 42295),

Gene: LochMonster\_69 Start: 43397, Stop: 42606, Start Num: 95

Candidate Starts for LochMonster\_69:

(20, 43610), (Start: 95 @43397 has 215 MA's), (Start: 106 @43370 has 6 MA's), (Start: 132 @43223 has 1 MA's), (141, 43199), (172, 43022), (199, 42956), (207, 42929), (216, 42908), (224, 42851), (226, 42842), (243, 42788), (266, 42638),

Gene: Lockley\_68 Start: 44246, Stop: 43428, Start Num: 74

Candidate Starts for Lockley\_68:

(Start: 63 @44264 has 7 MA's), (68, 44255), (Start: 74 @44246 has 6 MA's), (Start: 82 @44234 has 2 MA's), (110, 44150), (Start: 112 @44132 has 1 MA's), (125, 44066), (162, 43880), (173, 43835), (207, 43745), (209, 43739), (216, 43724), (219, 43718), (224, 43667), (228, 43652), (239, 43616), (241, 43607), (259, 43526), (261, 43514), (266, 43460), (267, 43454), (269, 43436),

Gene: Lokk\_67 Start: 42867, Stop: 42052, Start Num: 84

Candidate Starts for Lokk\_67:

(Start: 84 @42867 has 189 MA's), (Start: 109 @42798 has 14 MA's), (Start: 112 @42768 has 1 MA's), (136, 42675), (208, 42381), (209, 42378), (228, 42291), (241, 42243), (266, 42081),

Gene: LoneWolf\_76 Start: 44044, Stop: 43154, Start Num: 84

Candidate Starts for LoneWolf\_76:

(7, 44353), (34, 44170), (Start: 84 @44044 has 189 MA's), (Start: 106 @44014 has 6 MA's), (Start: 109 @43981 has 14 MA's), (Start: 112 @43951 has 1 MA's), (Start: 119 @43900 has 1 MA's), (124, 43888), (136, 43858), (167, 43672), (168, 43669), (208, 43483), (209, 43480), (216, 43462), (241, 43345), (256, 43273), (263, 43228), (266, 43183),

Gene: Looper\_81 Start: 44663, Stop: 43815, Start Num: 81

Candidate Starts for Looper\_81:

(Start: 81 @44663 has 18 MA's), (Start: 85 @44657 has 1 MA's), (Start: 106 @44615 has 6 MA's), (Start: 109 @44582 has 14 MA's), (Start: 112 @44552 has 1 MA's), (136, 44459), (192, 44195), (230, 44048), (231, 44045), (241, 44006),

Gene: Lopton\_69 Start: 45704, Stop: 44970, Start Num: 109

Candidate Starts for Lopton\_69:

(57, 45818), (59, 45815), (62, 45812), (Start: 109 @45704 has 14 MA's), (Start: 119 @45623 has 1 MA's), (125, 45608), (162, 45422), (173, 45377), (207, 45287), (209, 45281), (216, 45266), (219, 45260), (224, 45209), (228, 45194), (239, 45158), (241, 45149), (259, 45068), (266, 45002), (267, 44996), (269, 44978),

Gene: Lorenzo\_68 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Lorenzo\_68:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Loser\_75 Start: 44950, Stop: 44042, Start Num: 84

Candidate Starts for Loser\_75:

(Start: 84 @44950 has 189 MA's), (Start: 109 @44881 has 14 MA's), (Start: 112 @44851 has 1 MA's), (136, 44758), (176, 44539), (186, 44497), (194, 44425), (208, 44371), (209, 44368), (230, 44275), (233, 44263), (241, 44233),

Gene: Louie6\_76 Start: 44079, Stop: 43264, Start Num: 95

Candidate Starts for Louie6\_76:

(23, 44259), (44, 44154), (Start: 95 @44079 has 215 MA's), (Start: 132 @43896 has 1 MA's), (141, 43872), (146, 43845), (150, 43827), (200, 43626), (207, 43602), (216, 43578), (241, 43458), (245, 43440), (266, 43296), (269, 43272),

Gene: Luchador\_76 Start: 45162, Stop: 44356, Start Num: 84

Candidate Starts for Luchador\_76:

(26, 45333), (Start: 84 @45162 has 189 MA's), (Start: 106 @45132 has 6 MA's), (Start: 109 @45099 has 14 MA's), (Start: 112 @45069 has 1 MA's), (136, 44976), (174, 44769), (195, 44721), (203, 44706), (233, 44574), (241, 44547), (247, 44520), (266, 44385),

Gene: Lucivia\_77 Start: 44406, Stop: 43591, Start Num: 84

Candidate Starts for Lucivia\_77:

(Start: 84 @44406 has 189 MA's), (113, 44301), (Start: 119 @44256 has 1 MA's), (136, 44214), (139, 44196), (158, 44088), (209, 43917), (224, 43845), (230, 43824), (241, 43785), (266, 43623),

Gene: Lucyedi\_78 Start: 45148, Stop: 44228, Start Num: 84

Candidate Starts for Lucyedi\_78:

(Start: 84 @45148 has 189 MA's), (Start: 112 @45055 has 1 MA's), (135, 44965), (164, 44791), (207, 44557), (208, 44554), (226, 44470), (241, 44419), (249, 44383),

Gene: LugYA\_80 Start: 44050, Stop: 43235, Start Num: 95

Candidate Starts for LugYA\_80:

(23, 44230), (Start: 95 @44050 has 215 MA's), (Start: 106 @44023 has 6 MA's), (Start: 132 @43867 has 1 MA's), (141, 43843), (146, 43816), (150, 43798), (200, 43597), (207, 43573), (216, 43549), (241, 43429), (245, 43411), (251, 43381), (266, 43267), (269, 43243),

Gene: Lunsford\_68 Start: 43152, Stop: 42361, Start Num: 95

Candidate Starts for Lunsford\_68:

(Start: 95 @43152 has 215 MA's), (Start: 106 @43125 has 6 MA's), (Start: 132 @42978 has 1 MA's), (172, 42777), (199, 42711), (207, 42684), (216, 42663), (224, 42606), (226, 42597), (243, 42543), (266, 42393),

Gene: MA5\_71 Start: 43063, Stop: 42266, Start Num: 93

Candidate Starts for MA5\_71:

(42, 43135), (Start: 93 @43063 has 32 MA's), (110, 42988), (207, 42592), (224, 42508), (243, 42448), (266, 42298), (269, 42274),

Gene: MK4\_71 Start: 43138, Stop: 42341, Start Num: 93

Candidate Starts for MK4\_71:

(27, 43276), (35, 43243), (42, 43210), (Start: 93 @43138 has 32 MA's), (110, 43063), (207, 42667), (224, 42583), (243, 42523), (266, 42373), (269, 42349),

Gene: MPlant7149\_69 Start: 42916, Stop: 42116, Start Num: 94

Candidate Starts for MPlant7149\_69:

(Start: 94 @42916 has 25 MA's), (110, 42838), (Start: 112 @42820 has 1 MA's), (Start: 119 @42769 has 1 MA's), (125, 42754), (162, 42568), (173, 42523), (207, 42433), (209, 42427), (216, 42412), (219, 42406), (224, 42355), (228, 42340), (239, 42304), (241, 42295), (259, 42214), (266, 42148), (267, 42142), (269, 42124),

Gene: MaCh\_76 Start: 44370, Stop: 43555, Start Num: 84

Candidate Starts for MaCh\_76:

(Start: 84 @44370 has 189 MA's), (113, 44265), (Start: 119 @44220 has 1 MA's), (136, 44178), (139, 44160), (158, 44052), (209, 43881), (224, 43809), (230, 43788), (241, 43749), (266, 43587),

Gene: Mabel\_76 Start: 44371, Stop: 43556, Start Num: 84

Candidate Starts for Mabel\_76:

(Start: 84 @44371 has 189 MA's), (113, 44266), (Start: 119 @44221 has 1 MA's), (136, 44179), (139, 44161), (158, 44053), (209, 43882), (224, 43810), (230, 43789), (241, 43750), (266, 43588),

Gene: MadMarie\_75 Start: 44050, Stop: 43235, Start Num: 95

Candidate Starts for MadMarie\_75:

(23, 44230), (Start: 95 @44050 has 215 MA's), (Start: 106 @44023 has 6 MA's), (Start: 132 @43867 has 1 MA's), (141, 43843), (146, 43816), (150, 43798), (200, 43597), (207, 43573), (216, 43549), (241, 43429), (245, 43411), (251, 43381), (266, 43267), (269, 43243),

Gene: Magnar\_68 Start: 44115, Stop: 43291, Start Num: 72

Candidate Starts for Magnar\_68:

(55, 44148), (Start: 72 @44115 has 44 MA's), (Start: 82 @44097 has 2 MA's), (110, 44013), (Start: 112 @43995 has 1 MA's), (Start: 119 @43944 has 1 MA's), (125, 43929), (162, 43743), (173, 43698), (207, 43608), (209, 43602), (216, 43587), (219, 43581), (224, 43530), (228, 43515), (239, 43479), (241, 43470), (259, 43389), (266, 43323), (267, 43317), (269, 43299),

Gene: Magnito\_70 Start: 44221, Stop: 43385, Start Num: 63

Candidate Starts for Magnito\_70:

(Start: 63 @44221 has 7 MA's), (68, 44212), (Start: 74 @44203 has 6 MA's), (Start: 82 @44191 has 2 MA's), (110, 44107), (Start: 112 @44089 has 1 MA's), (Start: 119 @44038 has 1 MA's), (125, 44023), (162, 43837), (173, 43792), (207, 43702), (209, 43696), (216, 43681), (219, 43675), (224, 43624), (228, 43609), (239, 43573), (241, 43564), (259, 43483), (266, 43417), (267, 43411), (269, 43393),

Gene: Mainiac\_76 Start: 44042, Stop: 43227, Start Num: 95

Candidate Starts for Mainiac\_76:

(23, 44222), (Start: 95 @44042 has 215 MA's), (Start: 106 @44015 has 6 MA's), (Start: 132 @43859 has 1 MA's), (141, 43835), (146, 43808), (150, 43790), (200, 43589), (207, 43565), (216, 43541), (241, 43421), (245, 43403), (251, 43373), (266, 43259), (269, 43235),

Gene: MajorMajor\_75 Start: 43779, Stop: 42910, Start Num: 84

Candidate Starts for MajorMajor\_75:

(Start: 84 @43779 has 189 MA's), (107, 43734), (114, 43656), (120, 43626), (136, 43587), (224, 43161), (230, 43140), (241, 43101), (266, 42939),

Gene: Makemake\_74 Start: 45907, Stop: 45089, Start Num: 76

Candidate Starts for Makemake\_74:

(69, 45916), (Start: 76 @45907 has 49 MA's), (Start: 82 @45895 has 2 MA's), (110, 45811), (Start: 112 @45793 has 1 MA's), (Start: 119 @45742 has 1 MA's), (125, 45727), (162, 45541), (173, 45496), (207, 45406), (216, 45385), (219, 45379), (224, 45328), (228, 45313), (239, 45277), (241, 45268), (259, 45187), (266, 45121), (267, 45115), (269, 45097),

Gene: Malec\_71 Start: 44624, Stop: 43812, Start Num: 88

Candidate Starts for Malec\_71:

(Start: 64 @44651 has 2 MA's), (Start: 84 @44627 has 189 MA's), (Start: 88 @44624 has 4 MA's), (Start: 109 @44558 has 14 MA's), (Start: 112 @44528 has 1 MA's), (136, 44435), (203, 44165), (207, 44144), (209, 44138), (230, 44045), (241, 44003),

Gene: Malinsilva\_79 Start: 44041, Stop: 43226, Start Num: 95

Candidate Starts for Malinsilva\_79:

(23, 44221), (Start: 95 @44041 has 215 MA's), (Start: 106 @44014 has 6 MA's), (Start: 132 @43858 has 1 MA's), (141, 43834), (146, 43807), (150, 43789), (200, 43588), (207, 43564), (216, 43540), (241, 43420), (245, 43402), (251, 43372), (266, 43258), (269, 43234),

Gene: Maminiaina\_75 Start: 43961, Stop: 43122, Start Num: 84

Candidate Starts for Maminiaina\_75:

(34, 44084), (Start: 84 @43961 has 189 MA's), (Start: 106 @43931 has 6 MA's), (Start: 109 @43898 has 14 MA's), (Start: 112 @43868 has 1 MA's), (124, 43805), (136, 43775), (167, 43589), (168, 43586), (194, 43508), (208, 43454), (209, 43451), (230, 43355), (233, 43343), (247, 43289), (259, 43223), (263, 43199), (266, 43154),

Gene: Manatee\_68 Start: 43340, Stop: 42540, Start Num: 94

Candidate Starts for Manatee\_68:

(77, 43358), (Start: 94 @43340 has 25 MA's), (110, 43262), (Start: 112 @43244 has 1 MA's), (Start: 119 @43193 has 1 MA's), (125, 43178), (162, 42992), (173, 42947), (207, 42857), (209, 42851), (216, 42836), (219, 42830), (224, 42779), (228, 42764), (239, 42728), (241, 42719), (259, 42638), (266, 42572), (267, 42566), (269, 42548),

Gene: Manu\_76 Start: 43866, Stop: 43051, Start Num: 95

Candidate Starts for Manu\_76:

(Start: 95 @43866 has 215 MA's), (120, 43722), (Start: 132 @43683 has 1 MA's), (146, 43632), (150, 43614), (200, 43413), (207, 43389), (223, 43314), (241, 43245), (245, 43227), (266, 43083), (269, 43059),

Gene: Manuel\_62 Start: 33910, Stop: 33089, Start Num: 100

Candidate Starts for Manuel\_62:

(Start: 60 @33979 has 3 MA's), (Start: 100 @33910 has 14 MA's), (143, 33685), (165, 33538), (192, 33466), (207, 33400), (224, 33343), (225, 33337), (228, 33328), (244, 33277), (246, 33262), (261, 33178), (262, 33175),

Gene: MarQuardt\_77 Start: 44051, Stop: 43236, Start Num: 95

Candidate Starts for MarQuardt\_77:

(23, 44231), (Start: 95 @44051 has 215 MA's), (Start: 106 @44024 has 6 MA's), (Start: 132 @43868 has 1 MA's), (141, 43844), (146, 43817), (150, 43799), (200, 43598), (207, 43574), (216, 43550), (241, 43430), (245, 43412), (251, 43382), (266, 43268), (269, 43244),

Gene: Marcell\_65 Start: 42723, Stop: 41899, Start Num: 72

Candidate Starts for Marcell\_65:

(55, 42756), (Start: 72 @42723 has 44 MA's), (Start: 82 @42705 has 2 MA's), (110, 42621), (Start: 112 @42603 has 1 MA's), (Start: 119 @42552 has 1 MA's), (125, 42537), (162, 42351), (173, 42306), (207, 42216), (209, 42210), (216, 42195), (219, 42189), (224, 42138), (228, 42123), (239, 42087), (241, 42078), (259, 41997), (266, 41931), (267, 41925), (269, 41907),

Gene: Marchesa\_69 Start: 43590, Stop: 42796, Start Num: 93

Candidate Starts for Marchesa\_69:

(Start: 93 @43590 has 32 MA's), (207, 43122), (224, 43038), (243, 42978), (266, 42828), (269, 42804),

Gene: Marchy\_64 Start: 41527, Stop: 40703, Start Num: 72

Candidate Starts for Marchy\_64:

(Start: 72 @41527 has 44 MA's), (Start: 82 @41509 has 2 MA's), (110, 41425), (Start: 112 @41407 has 1 MA's), (117, 41365), (Start: 119 @41356 has 1 MA's), (125, 41341), (162, 41155), (207, 41020), (209, 41014), (216, 40999), (224, 40942), (228, 40927), (239, 40891), (241, 40882), (251, 40846), (259, 40801), (266, 40735), (267, 40729), (269, 40711),

Gene: Marge\_65 Start: 43205, Stop: 42405, Start Num: 92

Candidate Starts for Marge\_65:

(29, 43367), (Start: 89 @43208 has 3 MA's), (Start: 92 @43205 has 8 MA's), (110, 43127), (Start: 112 @43109 has 1 MA's), (Start: 119 @43058 has 1 MA's), (125, 43043), (162, 42857), (173, 42812), (209, 42716), (216, 42701), (219, 42695), (224, 42644), (228, 42629), (239, 42593), (241, 42584), (259, 42503), (261, 42491), (266, 42437), (267, 42431), (269, 42413),

Gene: Margo\_71 Start: 43664, Stop: 42870, Start Num: 93

Candidate Starts for Margo\_71:

(Start: 93 @43664 has 32 MA's), (Start: 132 @43490 has 1 MA's), (200, 43220), (207, 43196), (243, 43052), (256, 42992), (266, 42902), (269, 42878),

Gene: Marie\_75 Start: 44049, Stop: 43234, Start Num: 95

Candidate Starts for Marie\_75:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: Marius\_77 Start: 43863, Stop: 43048, Start Num: 95

Candidate Starts for Marius\_77:

(23, 44040), (Start: 95 @43863 has 215 MA's), (Start: 112 @43773 has 1 MA's), (Start: 132 @43680 has 1 MA's), (141, 43656), (150, 43611), (200, 43410), (207, 43386), (223, 43311), (241, 43242), (266, 43080), (269, 43056),

Gene: Maroc7\_69 Start: 44820, Stop: 44017, Start Num: 91

Candidate Starts for Maroc7\_69:

(56, 44877), (Start: 91 @44820 has 39 MA's), (110, 44739), (Start: 112 @44721 has 1 MA's), (Start: 119 @44670 has 1 MA's), (125, 44655), (162, 44469), (173, 44424), (207, 44334), (209, 44328), (216, 44313), (219, 44307), (224, 44256), (228, 44241), (239, 44205), (241, 44196), (259, 44115), (266, 44049), (267, 44043), (269, 44025),

Gene: Marsha\_68 Start: 44905, Stop: 44102, Start Num: 91

Candidate Starts for Marsha\_68:

(56, 44962), (Start: 91 @44905 has 39 MA's), (110, 44824), (Start: 112 @44806 has 1 MA's), (Start: 119 @44755 has 1 MA's), (125, 44740), (162, 44554), (207, 44419), (209, 44413), (216, 44398), (219, 44392), (224, 44341), (228, 44326), (239, 44290), (241, 44281), (259, 44200), (266, 44134), (267, 44128), (269, 44110),

Gene: MaryBeth\_66 Start: 44050, Stop: 43250, Start Num: 94

Candidate Starts for MaryBeth\_66:

(77, 44068), (Start: 94 @44050 has 25 MA's), (110, 43972), (Start: 112 @43954 has 1 MA's), (Start: 119 @43903 has 1 MA's), (125, 43888), (162, 43702), (173, 43657), (207, 43567), (209, 43561), (216, 43546), (224, 43489), (228, 43474), (239, 43438), (241, 43429), (259, 43348), (266, 43282), (267, 43276), (269, 43258),

Gene: MarysWell\_67 Start: 43112, Stop: 42297, Start Num: 71

Candidate Starts for MarysWell\_67:

(Start: 71 @43112 has 48 MA's), (122, 42959), (Start: 132 @42938 has 1 MA's), (148, 42878), (152, 42857), (210, 42635), (224, 42539), (231, 42515), (236, 42497), (251, 42443), (256, 42419), (257, 42410), (266, 42329), (269, 42305),

Gene: Maverick\_67 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Maverick\_67:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Maxo\_69 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Maxo\_69:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Mazhar510\_68 Start: 43159, Stop: 42368, Start Num: 95

Candidate Starts for Mazhar510\_68:

(20, 43372), (Start: 95 @43159 has 215 MA's), (Start: 106 @43132 has 6 MA's), (Start: 132 @42985 has 1 MA's), (141, 42961), (172, 42784), (199, 42718), (207, 42691), (216, 42670), (224, 42613), (226, 42604), (243, 42550), (266, 42400),

Gene: McFly\_77 Start: 43865, Stop: 43038, Start Num: 84

Candidate Starts for McFly\_77:



(Start: 84 @43865 has 189 MA's), (104, 43835), (Start: 109 @43793 has 14 MA's), (Start: 112 @43763 has 1 MA's), (Start: 119 @43712 has 1 MA's), (133, 43676), (141, 43646), (148, 43610), (160, 43526), (194, 43418), (208, 43364), (209, 43361), (224, 43289), (230, 43268), (231, 43265), (241, 43229), (266, 43067),

Gene: McGuire\_70 Start: 43576, Stop: 42842, Start Num: 109

Candidate Starts for McGuire\_70:

(57, 43690), (59, 43687), (62, 43684), (Start: 109 @43576 has 14 MA's), (Start: 119 @43495 has 1 MA's), (125, 43480), (162, 43294), (173, 43249), (207, 43159), (209, 43153), (216, 43138), (219, 43132), (224, 43081), (228, 43066), (239, 43030), (241, 43021), (259, 42940), (266, 42874), (267, 42868), (269, 42850),

Gene: Medusa\_68 Start: 43172, Stop: 42381, Start Num: 95

Candidate Starts for Medusa\_68:

(Start: 95 @43172 has 215 MA's), (Start: 106 @43145 has 6 MA's), (Start: 132 @42998 has 1 MA's), (141, 42974), (172, 42797), (199, 42731), (207, 42704), (216, 42683), (224, 42626), (226, 42617), (243, 42563), (266, 42413),

Gene: MeeZee\_67 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for MeeZee\_67:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Melvin\_70 Start: 43153, Stop: 42362, Start Num: 95

Candidate Starts for Melvin\_70:

(20, 43366), (Start: 95 @43153 has 215 MA's), (Start: 106 @43126 has 6 MA's), (Start: 132 @42979 has 1 MA's), (172, 42778), (199, 42712), (207, 42685), (216, 42664), (224, 42607), (226, 42598), (243, 42544), (266, 42394),

Gene: MetalQZJ\_65 Start: 44050, Stop: 43250, Start Num: 94

Candidate Starts for MetalQZJ\_65:

(77, 44068), (Start: 94 @44050 has 25 MA's), (110, 43972), (Start: 112 @43954 has 1 MA's), (Start: 119 @43903 has 1 MA's), (125, 43888), (162, 43702), (173, 43657), (207, 43567), (209, 43561), (216, 43546), (224, 43489), (228, 43474), (239, 43438), (241, 43429), (259, 43348), (266, 43282), (267, 43276), (269, 43258),

Gene: Methuselah\_70 Start: 44073, Stop: 43258, Start Num: 95

Candidate Starts for Methuselah\_70:

(23, 44253), (Start: 95 @44073 has 215 MA's), (Start: 106 @44046 has 6 MA's), (Start: 132 @43890 has 1 MA's), (141, 43866), (146, 43839), (150, 43821), (200, 43620), (207, 43596), (216, 43572), (241, 43452), (245, 43434), (251, 43404), (266, 43290), (269, 43266),

Gene: Micasa\_67 Start: 42834, Stop: 42019, Start Num: 71

Candidate Starts for Micasa\_67:

(Start: 71 @42834 has 48 MA's), (122, 42681), (Start: 132 @42660 has 1 MA's), (148, 42600), (152, 42579), (210, 42357), (224, 42261), (231, 42237), (236, 42219), (251, 42165), (256, 42141), (257, 42132), (266, 42051), (269, 42027),

Gene: Michley\_73 Start: 44999, Stop: 44175, Start Num: 72

Candidate Starts for Michley\_73:

(55, 45032), (Start: 72 @44999 has 44 MA's), (Start: 82 @44981 has 2 MA's), (110, 44897), (Start: 112 @44879 has 1 MA's), (Start: 119 @44828 has 1 MA's), (125, 44813), (162, 44627), (173, 44582),

(207, 44492), (209, 44486), (216, 44471), (219, 44465), (224, 44414), (228, 44399), (239, 44363), (241, 44354), (259, 44273), (266, 44207), (267, 44201), (269, 44183),

Gene: Microwolf\_73 Start: 44065, Stop: 43250, Start Num: 95

Candidate Starts for Microwolf\_73:

(23, 44245), (Start: 95 @44065 has 215 MA's), (Start: 106 @44038 has 6 MA's), (Start: 132 @43882 has 1 MA's), (141, 43858), (146, 43831), (150, 43813), (200, 43612), (207, 43588), (216, 43564), (241, 43444), (245, 43426), (251, 43396), (266, 43282), (269, 43258),

Gene: MiculUcigas\_74 Start: 44267, Stop: 43452, Start Num: 84

Candidate Starts for MiculUcigas\_74:

(2, 44606), (7, 44579), (8, 44576), (Start: 84 @44267 has 189 MA's), (Start: 109 @44198 has 14 MA's), (Start: 112 @44168 has 1 MA's), (128, 44093), (136, 44075), (208, 43781), (209, 43778), (241, 43643), (266, 43481),

Gene: Midas2\_64 Start: 42730, Stop: 41915, Start Num: 71

Candidate Starts for Midas2\_64:

(Start: 71 @42730 has 48 MA's), (122, 42577), (Start: 132 @42556 has 1 MA's), (148, 42496), (152, 42475), (210, 42253), (224, 42157), (231, 42133), (236, 42115), (251, 42061), (256, 42037), (257, 42028), (266, 41947), (269, 41923),

Gene: Miko\_67 Start: 43645, Stop: 42830, Start Num: 84

Candidate Starts for Miko\_67:

(Start: 84 @43645 has 189 MA's), (Start: 109 @43576 has 14 MA's), (Start: 112 @43546 has 1 MA's), (136, 43453), (208, 43159), (209, 43156), (228, 43069), (241, 43021), (266, 42859),

Gene: Milcery\_67 Start: 42621, Stop: 41809, Start Num: 71

Candidate Starts for Milcery\_67:

(Start: 71 @42621 has 48 MA's), (122, 42468), (Start: 132 @42447 has 1 MA's), (148, 42387), (152, 42366), (210, 42144), (224, 42051), (231, 42027), (236, 42009), (251, 41955), (256, 41931), (257, 41922), (269, 41817),

Gene: Millski\_67 Start: 43159, Stop: 42368, Start Num: 95

Candidate Starts for Millski\_67:

(20, 43372), (Start: 95 @43159 has 215 MA's), (Start: 106 @43132 has 6 MA's), (Start: 132 @42985 has 1 MA's), (141, 42961), (172, 42784), (199, 42718), (207, 42691), (216, 42670), (224, 42613), (226, 42604), (243, 42550), (266, 42400),

Gene: MinecraftSteve\_82 Start: 44644, Stop: 43796, Start Num: 81

Candidate Starts for MinecraftSteve\_82:

(Start: 81 @44644 has 18 MA's), (Start: 85 @44638 has 1 MA's), (Start: 106 @44596 has 6 MA's), (Start: 109 @44563 has 14 MA's), (Start: 112 @44533 has 1 MA's), (136, 44440), (192, 44176), (230, 44029), (231, 44026), (241, 43987),

Gene: Miramae\_67 Start: 42979, Stop: 42188, Start Num: 95

Candidate Starts for Miramae\_67:

(Start: 95 @42979 has 215 MA's), (Start: 106 @42952 has 6 MA's), (Start: 132 @42805 has 1 MA's), (200, 42535), (207, 42511), (224, 42433), (226, 42424), (243, 42370), (266, 42220),

Gene: Misomonster\_78 Start: 44076, Stop: 43261, Start Num: 95

Candidate Starts for Misomonster\_78:

(23, 44256), (44, 44151), (Start: 95 @44076 has 215 MA's), (Start: 132 @43893 has 1 MA's), (141, 43869), (146, 43842), (150, 43824), (200, 43623), (207, 43599), (216, 43575), (241, 43455), (245,

43437), (266, 43293), (269, 43269),

Gene: MissWhite\_72 Start: 42829, Stop: 41936, Start Num: 84

Candidate Starts for MissWhite\_72:

(34, 42964), (Start: 84 @42829 has 189 MA's), (Start: 106 @42793 has 6 MA's), (107, 42784), (Start: 112 @42730 has 1 MA's), (120, 42676), (136, 42637), (174, 42430), (203, 42289), (209, 42262), (211, 42259), (224, 42190), (230, 42169), (241, 42127),

Gene: Mkhuseleli\_66 Start: 42204, Stop: 41551, Start Num: 119

Candidate Starts for Mkhuseleli\_66:

(57, 42399), (59, 42396), (62, 42393), (Start: 109 @42285 has 14 MA's), (Start: 119 @42204 has 1 MA's), (125, 42189), (162, 42003), (173, 41958), (207, 41868), (209, 41862), (216, 41847), (219, 41841), (224, 41790), (228, 41775), (239, 41739), (241, 41730), (259, 41649), (266, 41583), (267, 41577), (270, 41556),

Gene: Molly\_71 Start: 44467, Stop: 43649, Start Num: 76

Candidate Starts for Molly\_71:

(Start: 65 @44485 has 2 MA's), (Start: 76 @44467 has 49 MA's), (Start: 82 @44455 has 2 MA's), (110, 44371), (Start: 112 @44353 has 1 MA's), (Start: 119 @44302 has 1 MA's), (125, 44287), (163, 44092), (173, 44056), (207, 43966), (209, 43960), (216, 43945), (219, 43939), (224, 43888), (228, 43873), (239, 43837), (241, 43828), (259, 43747), (266, 43681), (267, 43675), (269, 43657),

Gene: Monet\_71 Start: 45587, Stop: 44784, Start Num: 83

Candidate Starts for Monet\_71:

(Start: 83 @45587 has 6 MA's), (110, 45506), (Start: 112 @45488 has 1 MA's), (117, 45446), (Start: 119 @45437 has 1 MA's), (125, 45422), (162, 45236), (173, 45191), (207, 45101), (209, 45095), (216, 45080), (219, 45074), (224, 45023), (239, 44972), (241, 44963), (259, 44882), (261, 44870), (266, 44816), (267, 44810), (269, 44792),

Gene: MoneyMay\_76 Start: 44049, Stop: 43234, Start Num: 95

Candidate Starts for MoneyMay\_76:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: Moose\_70 Start: 43742, Stop: 42942, Start Num: 94

Candidate Starts for Moose\_70:

(Start: 94 @43742 has 25 MA's), (110, 43664), (Start: 112 @43646 has 1 MA's), (Start: 119 @43595 has 1 MA's), (125, 43580), (162, 43394), (173, 43349), (207, 43259), (209, 43253), (216, 43238), (224, 43181), (228, 43166), (239, 43130), (241, 43121), (259, 43040), (266, 42974), (267, 42968), (269, 42950),

Gene: Morpher26\_67 Start: 43455, Stop: 42664, Start Num: 95

Candidate Starts for Morpher26\_67:

(Start: 95 @43455 has 215 MA's), (Start: 106 @43428 has 6 MA's), (Start: 132 @43281 has 1 MA's), (141, 43257), (200, 43011), (207, 42987), (224, 42909), (226, 42900), (243, 42846), (266, 42696),

Gene: Morrow\_69 Start: 43200, Stop: 42409, Start Num: 95

Candidate Starts for Morrow\_69:

(Start: 95 @43200 has 215 MA's), (Start: 106 @43173 has 6 MA's), (Start: 132 @43026 has 1 MA's), (172, 42825), (199, 42759), (207, 42732), (216, 42711), (224, 42654), (226, 42645), (243, 42591), (266, 42441),

Gene: MrGordo\_72 Start: 44403, Stop: 43573, Start Num: 76

Candidate Starts for MrGordo\_72:

(Start: 40 @44487 has 1 MA's), (Start: 76 @44403 has 49 MA's), (Start: 82 @44391 has 2 MA's), (107, 44340), (Start: 109 @44316 has 14 MA's), (Start: 119 @44235 has 1 MA's), (125, 44220), (136, 44184), (141, 44160), (158, 44058), (162, 44025), (194, 43929), (207, 43890), (218, 43866), (220, 43860), (224, 43812), (241, 43752), (259, 43671), (266, 43605), (267, 43599), (269, 43581),

Gene: Mryolo\_67 Start: 43590, Stop: 42766, Start Num: 72

Candidate Starts for Mryolo\_67:

(Start: 72 @43590 has 44 MA's), (Start: 82 @43572 has 2 MA's), (110, 43488), (Start: 112 @43470 has 1 MA's), (117, 43428), (Start: 119 @43419 has 1 MA's), (125, 43404), (162, 43218), (173, 43173), (207, 43083), (209, 43077), (216, 43062), (219, 43056), (224, 43005), (228, 42990), (239, 42954), (241, 42945), (259, 42864), (266, 42798), (267, 42792), (269, 42774),

Gene: MuchMore\_80 Start: 44041, Stop: 43226, Start Num: 95

Candidate Starts for MuchMore\_80:

(23, 44221), (Start: 95 @44041 has 215 MA's), (Start: 106 @44014 has 6 MA's), (Start: 132 @43858 has 1 MA's), (141, 43834), (146, 43807), (150, 43789), (200, 43588), (207, 43564), (216, 43540), (241, 43420), (245, 43402), (251, 43372), (266, 43258), (269, 43234),

Gene: Mulciber\_74 Start: 43912, Stop: 43097, Start Num: 84

Candidate Starts for Mulciber\_74:

(Start: 84 @43912 has 189 MA's), (113, 43807), (Start: 119 @43762 has 1 MA's), (136, 43720), (139, 43702), (146, 43669), (158, 43594), (209, 43423), (224, 43351), (230, 43330), (241, 43291), (266, 43129),

Gene: Mule\_65 Start: 42960, Stop: 42157, Start Num: 89

Candidate Starts for Mule\_65:

(29, 43119), (Start: 89 @42960 has 3 MA's), (Start: 92 @42957 has 8 MA's), (110, 42879), (Start: 112 @42861 has 1 MA's), (Start: 119 @42810 has 1 MA's), (125, 42795), (162, 42609), (173, 42564), (207, 42474), (209, 42468), (216, 42453), (219, 42447), (224, 42396), (228, 42381), (239, 42345), (241, 42336), (259, 42255), (266, 42189), (267, 42183), (269, 42165),

Gene: Munch\_76 Start: 44375, Stop: 43560, Start Num: 84

Candidate Starts for Munch\_76:

(Start: 84 @44375 has 189 MA's), (113, 44270), (Start: 119 @44225 has 1 MA's), (136, 44183), (139, 44165), (158, 44057), (209, 43886), (224, 43814), (230, 43793), (241, 43754), (266, 43592),

Gene: Mundrea\_67 Start: 43448, Stop: 42657, Start Num: 95

Candidate Starts for Mundrea\_67:

(Start: 95 @43448 has 215 MA's), (Start: 106 @43421 has 6 MA's), (Start: 132 @43274 has 1 MA's), (141, 43250), (200, 43004), (207, 42980), (224, 42902), (243, 42839), (266, 42689),

Gene: Museum\_71 Start: 45530, Stop: 44712, Start Num: 76

Candidate Starts for Museum\_71:

(Start: 65 @45548 has 2 MA's), (Start: 76 @45530 has 49 MA's), (Start: 82 @45518 has 2 MA's), (110, 45434), (Start: 112 @45416 has 1 MA's), (Start: 119 @45365 has 1 MA's), (125, 45350), (162, 45164), (173, 45119), (207, 45029), (209, 45023), (216, 45008), (219, 45002), (224, 44951), (228, 44936), (239, 44900), (241, 44891), (259, 44810), (266, 44744), (267, 44738), (269, 44720),

Gene: MyraDee\_71 Start: 41512, Stop: 40682, Start Num: 95

Candidate Starts for MyraDee\_71:

(Start: 95 @41512 has 215 MA's), (107, 41473), (Start: 112 @41419 has 1 MA's), (131, 41329), (Start: 132 @41326 has 1 MA's), (150, 41257), (172, 41125), (174, 41116), (200, 41056), (223, 40945), (238, 40891), (241, 40876), (266, 40714), (269, 40690),

Gene: Myxus\_75 Start: 43796, Stop: 42954, Start Num: 84

Candidate Starts for Myxus\_75:

(Start: 84 @43796 has 189 MA's), (Start: 91 @43790 has 39 MA's), (Start: 109 @43727 has 14 MA's), (Start: 112 @43697 has 1 MA's), (124, 43634), (167, 43418), (207, 43286), (208, 43283), (209, 43280), (227, 43193), (241, 43145), (266, 42983),

Gene: NEHalo\_67 Start: 44340, Stop: 43522, Start Num: 76

Candidate Starts for NEHalo\_67:

(Start: 65 @44358 has 2 MA's), (Start: 76 @44340 has 49 MA's), (Start: 82 @44328 has 2 MA's), (110, 44244), (Start: 112 @44226 has 1 MA's), (Start: 119 @44175 has 1 MA's), (125, 44160), (162, 43974), (173, 43929), (207, 43839), (209, 43833), (216, 43818), (219, 43812), (224, 43761), (228, 43746), (239, 43710), (241, 43701), (259, 43620), (266, 43554), (267, 43548), (269, 43530),

Gene: NaSiaTalie\_74 Start: 44361, Stop: 43546, Start Num: 84

Candidate Starts for NaSiaTalie\_74:

(Start: 84 @44361 has 189 MA's), (Start: 109 @44292 has 14 MA's), (Start: 112 @44262 has 1 MA's), (128, 44187), (136, 44169), (208, 43875), (209, 43872), (241, 43737), (266, 43575),

Gene: Naca\_70 Start: 44025, Stop: 43210, Start Num: 71

Candidate Starts for Naca\_70:

(37, 44112), (Start: 71 @44025 has 48 MA's), (Start: 112 @43935 has 1 MA's), (122, 43872), (130, 43854), (Start: 132 @43851 has 1 MA's), (148, 43791), (152, 43770), (161, 43701), (201, 43578), (210, 43548), (214, 43512), (219, 43503), (224, 43452), (226, 43443), (231, 43428), (235, 43413), (251, 43356), (256, 43332), (257, 43323), (266, 43242), (269, 43218),

Gene: Naiad\_55 Start: 39367, Stop: 38558, Start Num: 98

Candidate Starts for Naiad\_55:

(Start: 98 @39367 has 36 MA's), (102, 39355), (114, 39253), (Start: 116 @39247 has 1 MA's), (Start: 132 @39193 has 1 MA's), (138, 39178), (158, 39067), (160, 39049), (221, 38842), (237, 38770), (238, 38767), (243, 38752), (259, 38671), (266, 38602), (267, 38596),

Gene: Naira\_74 Start: 46178, Stop: 45354, Start Num: 72

Candidate Starts for Naira\_74:

(55, 46211), (Start: 72 @46178 has 44 MA's), (Start: 82 @46160 has 2 MA's), (110, 46076), (Start: 112 @46058 has 1 MA's), (Start: 119 @46007 has 1 MA's), (125, 45992), (162, 45806), (173, 45761), (207, 45671), (209, 45665), (224, 45593), (228, 45578), (239, 45542), (241, 45533), (259, 45452), (266, 45386), (267, 45380), (269, 45362),

Gene: Naji\_76 Start: 44861, Stop: 44052, Start Num: 97

Candidate Starts for Naji\_76:

(Start: 97 @44861 has 16 MA's), (Start: 106 @44831 has 6 MA's), (Start: 109 @44798 has 14 MA's), (Start: 112 @44768 has 1 MA's), (133, 44681), (141, 44651), (174, 44468), (209, 44378), (224, 44306), (230, 44285), (241, 44243), (242, 44240), (263, 44126), (264, 44114), (266, 44081),

Gene: Nancinator\_56 Start: 39284, Stop: 38478, Start Num: 98

Candidate Starts for Nancinator\_56:

(Start: 98 @39284 has 36 MA's), (102, 39275), (108, 39239), (Start: 112 @39197 has 1 MA's), (114, 39173), (Start: 116 @39167 has 1 MA's), (Start: 132 @39113 has 1 MA's), (138, 39098), (158, 38987), (189, 38879), (221, 38762), (224, 38735), (237, 38690), (238, 38687), (243, 38672), (259, 38591),

(267, 38516),

Gene: Natosaleda\_55 Start: 39283, Stop: 38477, Start Num: 98

Candidate Starts for Natosaleda\_55:

(Start: 98 @39283 has 36 MA's), (102, 39274), (108, 39238), (Start: 112 @39196 has 1 MA's), (114, 39172), (Start: 116 @39166 has 1 MA's), (Start: 132 @39112 has 1 MA's), (138, 39097), (158, 38986), (189, 38878), (221, 38761), (224, 38734), (237, 38689), (238, 38686), (243, 38671), (259, 38590), (267, 38515),

Gene: NearlyHeadless\_83 Start: 45095, Stop: 44292, Start Num: 71

Candidate Starts for NearlyHeadless\_83:

(Start: 71 @45095 has 48 MA's), (Start: 109 @45032 has 14 MA's), (120, 44948), (129, 44921), (148, 44861), (162, 44762), (195, 44663), (209, 44621), (215, 44603), (217, 44600), (231, 44525), (241, 44486), (256, 44414), (259, 44393), (269, 44300),

Gene: Nebs\_69 Start: 43197, Stop: 42406, Start Num: 95

Candidate Starts for Nebs\_69:

(Start: 95 @43197 has 215 MA's), (Start: 106 @43170 has 6 MA's), (Start: 132 @43023 has 1 MA's), (172, 42822), (199, 42756), (207, 42729), (216, 42708), (224, 42651), (226, 42642), (243, 42588), (266, 42438),

Gene: Nebulosus\_79 Start: 44308, Stop: 43460, Start Num: 81

Candidate Starts for Nebulosus\_79:

(Start: 81 @44308 has 18 MA's), (Start: 85 @44302 has 1 MA's), (Start: 106 @44260 has 6 MA's), (Start: 109 @44227 has 14 MA's), (Start: 112 @44197 has 1 MA's), (136, 44104), (230, 43693), (231, 43690), (241, 43651),

Gene: Nedarya\_77 Start: 44538, Stop: 43654, Start Num: 81

Candidate Starts for Nedarya\_77:

(Start: 81 @44538 has 18 MA's), (102, 44511), (Start: 112 @44433 has 1 MA's), (146, 44304), (170, 44163), (183, 44097), (184, 44094), (192, 44037), (224, 43911), (230, 43890), (231, 43887), (241, 43848), (265, 43698), (266, 43686),

Gene: Neeharika16\_75 Start: 43332, Stop: 42505, Start Num: 84

Candidate Starts for Neeharika16\_75:

(Start: 84 @43332 has 189 MA's), (104, 43302), (Start: 109 @43260 has 14 MA's), (Start: 112 @43230 has 1 MA's), (Start: 119 @43179 has 1 MA's), (133, 43143), (141, 43113), (148, 43077), (160, 42993), (194, 42885), (208, 42831), (209, 42828), (224, 42756), (230, 42735), (231, 42732), (241, 42696), (266, 42534),

Gene: Nemo27\_67 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for Nemo27\_67:

(20, 43370), (Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: Nerujay\_75 Start: 46801, Stop: 45980, Start Num: 76

Candidate Starts for Nerujay\_75:

(41, 46885), (Start: 76 @46801 has 49 MA's), (Start: 82 @46789 has 2 MA's), (110, 46702), (Start: 112 @46684 has 1 MA's), (Start: 119 @46633 has 1 MA's), (125, 46618), (162, 46432), (173, 46387), (207, 46297), (209, 46291), (216, 46276), (218, 46273), (219, 46270), (224, 46219), (228, 46204), (239, 46168), (241, 46159), (259, 46078), (261, 46066), (266, 46012), (267, 46006), (269, 45988),

Gene: Newrala\_75 Start: 43671, Stop: 42844, Start Num: 84

Candidate Starts for Newrala\_75:

(Start: 84 @43671 has 189 MA's), (104, 43641), (Start: 109 @43599 has 14 MA's), (Start: 112 @43569 has 1 MA's), (Start: 119 @43518 has 1 MA's), (133, 43482), (141, 43452), (148, 43416), (160, 43332), (194, 43224), (208, 43170), (209, 43167), (224, 43095), (230, 43074), (231, 43071), (241, 43035), (266, 42873),

Gene: Nhonho\_68 Start: 44680, Stop: 43856, Start Num: 72

Candidate Starts for Nhonho\_68:

(Start: 72 @44680 has 44 MA's), (Start: 82 @44662 has 2 MA's), (110, 44578), (Start: 112 @44560 has 1 MA's), (Start: 119 @44509 has 1 MA's), (125, 44494), (162, 44308), (207, 44173), (209, 44167), (216, 44152), (224, 44095), (239, 44044), (241, 44035), (259, 43954), (266, 43888), (267, 43882), (269, 43864),

Gene: NicoleTera\_71 Start: 44384, Stop: 43566, Start Num: 84

Candidate Starts for NicoleTera\_71:

(Start: 84 @44384 has 189 MA's), (Start: 109 @44315 has 14 MA's), (Start: 112 @44285 has 1 MA's), (136, 44192), (207, 43901), (228, 43808), (230, 43802), (241, 43760), (266, 43598),

Gene: Niza\_70 Start: 45506, Stop: 44685, Start Num: 76

Candidate Starts for Niza\_70:

(41, 45590), (Start: 76 @45506 has 49 MA's), (Start: 82 @45494 has 2 MA's), (110, 45407), (Start: 112 @45389 has 1 MA's), (Start: 119 @45338 has 1 MA's), (125, 45323), (162, 45137), (173, 45092), (207, 45002), (209, 44996), (216, 44981), (219, 44975), (224, 44924), (228, 44909), (239, 44873), (241, 44864), (259, 44783), (266, 44717), (267, 44711), (269, 44693),

Gene: Noella\_71 Start: 43639, Stop: 42845, Start Num: 93

Candidate Starts for Noella\_71:

(Start: 93 @43639 has 32 MA's), (Start: 132 @43465 has 1 MA's), (200, 43195), (207, 43171), (243, 43027), (256, 42967), (266, 42877), (269, 42853),

Gene: Noelle\_68 Start: 43762, Stop: 42971, Start Num: 95

Candidate Starts for Noelle\_68:

(Start: 95 @43762 has 215 MA's), (Start: 106 @43735 has 6 MA's), (Start: 132 @43588 has 1 MA's), (200, 43318), (207, 43294), (216, 43273), (224, 43216), (226, 43207), (243, 43153), (266, 43003),

Gene: Norbert\_67 Start: 43637, Stop: 42843, Start Num: 93

Candidate Starts for Norbert\_67:

(Start: 93 @43637 has 32 MA's), (Start: 132 @43463 has 1 MA's), (200, 43193), (207, 43169), (243, 43025), (256, 42965), (266, 42875), (269, 42851),

Gene: NorthStar\_66 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for NorthStar\_66:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Norz\_68 Start: 46168, Stop: 45344, Start Num: 72

Candidate Starts for Norz\_68:

(55, 46201), (Start: 72 @46168 has 44 MA's), (Start: 82 @46150 has 2 MA's), (110, 46066), (Start: 112 @46048 has 1 MA's), (Start: 119 @45997 has 1 MA's), (125, 45982), (162, 45796), (173, 45751), (207, 45661), (209, 45655), (216, 45640), (219, 45634), (224, 45583), (228, 45568), (239, 45532), (241, 45523), (251, 45487), (259, 45442), (266, 45376), (267, 45370), (269, 45352),

Gene: NotAPhaseMom\_67 Start: 43162, Stop: 42371, Start Num: 95

Candidate Starts for NotAPhaseMom\_67:

(20, 43375), (Start: 95 @43162 has 215 MA's), (Start: 106 @43135 has 6 MA's), (Start: 132 @42988 has 1 MA's), (141, 42964), (172, 42787), (199, 42721), (207, 42694), (216, 42673), (224, 42616), (226, 42607), (243, 42553), (266, 42403),

Gene: NothingSpecial\_69 Start: 44384, Stop: 43581, Start Num: 97

Candidate Starts for NothingSpecial\_69:

(Start: 97 @44384 has 16 MA's), (102, 44375), (104, 44369), (Start: 106 @44360 has 6 MA's), (107, 44351), (Start: 109 @44327 has 14 MA's), (Start: 112 @44297 has 1 MA's), (136, 44204), (174, 43997), (203, 43934), (224, 43835), (228, 43820), (230, 43814), (241, 43772), (266, 43610),

Gene: Nyxis\_67 Start: 43048, Stop: 42257, Start Num: 95

Candidate Starts for Nyxis\_67:

(Start: 95 @43048 has 215 MA's), (Start: 106 @43021 has 6 MA's), (Start: 132 @42874 has 1 MA's), (172, 42673), (199, 42607), (207, 42580), (216, 42559), (224, 42502), (226, 42493), (243, 42439), (266, 42289),

Gene: OKCentral2016\_66 Start: 42189, Stop: 41362, Start Num: 73

Candidate Starts for OKCentral2016\_66:

(24, 42348), (Start: 73 @42189 has 16 MA's), (Start: 106 @42126 has 6 MA's), (Start: 112 @42063 has 1 MA's), (Start: 132 @41979 has 1 MA's), (138, 41964), (141, 41955), (199, 41712), (207, 41685), (214, 41667), (224, 41607), (243, 41544), (256, 41484), (264, 41427), (269, 41370),

Gene: OKaNui\_67 Start: 43208, Stop: 42417, Start Num: 95

Candidate Starts for OKaNui\_67:

(Start: 95 @43208 has 215 MA's), (Start: 106 @43181 has 6 MA's), (Start: 132 @43034 has 1 MA's), (172, 42833), (199, 42767), (207, 42740), (216, 42719), (224, 42662), (226, 42653), (243, 42599), (266, 42449),

Gene: Obama12\_69 Start: 43581, Stop: 42790, Start Num: 95

Candidate Starts for Obama12\_69:

(39, 43656), (Start: 95 @43581 has 215 MA's), (Start: 106 @43554 has 6 MA's), (Start: 132 @43407 has 1 MA's), (172, 43206), (199, 43140), (207, 43113), (216, 43092), (224, 43035), (226, 43026), (243, 42972), (266, 42822),

Gene: Odin\_75 Start: 44342, Stop: 43449, Start Num: 84

Candidate Starts for Odin\_75:

(Start: 84 @44342 has 189 MA's), (102, 44321), (Start: 106 @44306 has 6 MA's), (107, 44297), (Start: 109 @44273 has 14 MA's), (Start: 112 @44243 has 1 MA's), (121, 44183), (136, 44150), (174, 43943), (190, 43835), (209, 43775), (241, 43640), (266, 43478),

Gene: Ohfah\_69 Start: 43197, Stop: 42406, Start Num: 95

Candidate Starts for Ohfah\_69:

(Start: 95 @43197 has 215 MA's), (Start: 106 @43170 has 6 MA's), (Start: 132 @43023 has 1 MA's), (172, 42822), (199, 42756), (207, 42729), (216, 42708), (224, 42651), (226, 42642), (243, 42588), (266, 42438),

Gene: Ohno789\_70 Start: 44630, Stop: 43830, Start Num: 94

Candidate Starts for Ohno789\_70:

(77, 44648), (Start: 94 @44630 has 25 MA's), (110, 44552), (Start: 112 @44534 has 1 MA's), (Start: 119 @44483 has 1 MA's), (125, 44468), (162, 44282), (173, 44237), (207, 44147), (209, 44141), (216,



44126), (219, 44120), (224, 44069), (228, 44054), (239, 44018), (241, 44009), (259, 43928), (266, 43862), (267, 43856), (269, 43838),

Gene: OlanP\_75 Start: 44039, Stop: 43224, Start Num: 95

Candidate Starts for OlanP\_75:

(Start: 95 @44039 has 215 MA's), (120, 43895), (Start: 132 @43856 has 1 MA's), (146, 43805), (150, 43787), (200, 43586), (207, 43562), (223, 43487), (241, 43418), (245, 43400), (266, 43256), (269, 43232),

Gene: Olicious\_66 Start: 34368, Stop: 33547, Start Num: 100

Candidate Starts for Olicious\_66:

(Start: 100 @34368 has 14 MA's), (Start: 105 @34353 has 2 MA's), (120, 34230), (134, 34185), (137, 34173), (140, 34158), (144, 34137), (161, 34026), (165, 33996), (194, 33918), (228, 33786), (240, 33744), (244, 33735), (252, 33687), (262, 33633),

Gene: Ollie\_77 Start: 43920, Stop: 43105, Start Num: 95

Candidate Starts for Ollie\_77:

(23, 44100), (Start: 95 @43920 has 215 MA's), (Start: 106 @43893 has 6 MA's), (Start: 132 @43737 has 1 MA's), (141, 43713), (146, 43686), (150, 43668), (200, 43467), (207, 43443), (216, 43419), (241, 43299), (245, 43281), (251, 43251), (266, 43137), (269, 43113),

Gene: Onglai\_73 Start: 42000, Stop: 41158, Start Num: 84

Candidate Starts for Onglai\_73:

(Start: 84 @42000 has 189 MA's), (Start: 91 @41994 has 39 MA's), (Start: 109 @41931 has 14 MA's), (Start: 112 @41901 has 1 MA's), (124, 41838), (167, 41622), (207, 41490), (208, 41487), (209, 41484), (227, 41397), (241, 41349), (266, 41187),

Gene: Oofda\_81 Start: 44599, Stop: 43748, Start Num: 81

Candidate Starts for Oofda\_81:

(Start: 81 @44599 has 18 MA's), (Start: 85 @44593 has 1 MA's), (Start: 106 @44551 has 6 MA's), (Start: 109 @44518 has 14 MA's), (Start: 112 @44488 has 1 MA's), (136, 44395), (192, 44131), (230, 43984), (231, 43981), (241, 43942), (266, 43780),

Gene: Oogway\_67 Start: 44664, Stop: 43864, Start Num: 92

Candidate Starts for Oogway\_67:

(29, 44826), (Start: 89 @44667 has 3 MA's), (Start: 92 @44664 has 8 MA's), (110, 44586), (Start: 112 @44568 has 1 MA's), (Start: 119 @44517 has 1 MA's), (125, 44502), (162, 44316), (173, 44271), (207, 44181), (209, 44175), (216, 44160), (219, 44154), (224, 44103), (228, 44088), (239, 44052), (241, 44043), (259, 43962), (266, 43896), (267, 43890), (269, 43872),

Gene: Orange\_75 Start: 43924, Stop: 43109, Start Num: 84

Candidate Starts for Orange\_75:

(Start: 84 @43924 has 189 MA's), (113, 43819), (Start: 119 @43774 has 1 MA's), (136, 43732), (139, 43714), (158, 43606), (209, 43435), (224, 43363), (230, 43342), (241, 43303), (266, 43141),

Gene: P28Green\_77 Start: 44052, Stop: 43237, Start Num: 95

Candidate Starts for P28Green\_77:

(23, 44232), (Start: 95 @44052 has 215 MA's), (Start: 106 @44025 has 6 MA's), (Start: 132 @43869 has 1 MA's), (141, 43845), (146, 43818), (150, 43800), (200, 43599), (207, 43575), (216, 43551), (241, 43431), (245, 43413), (251, 43383), (266, 43269), (269, 43245),

Gene: PGHhamlin\_79 Start: 44041, Stop: 43226, Start Num: 95

Candidate Starts for PGHhamlin\_79:

(23, 44221), (Start: 95 @44041 has 215 MA's), (Start: 106 @44014 has 6 MA's), (Start: 132 @43858 has 1 MA's), (141, 43834), (146, 43807), (150, 43789), (200, 43588), (207, 43564), (216, 43540), (241, 43420), (245, 43402), (251, 43372), (266, 43258), (269, 43234),

Gene: PP\_70 Start: 47737, Stop: 46928, Start Num: 95

Candidate Starts for PP\_70:

(Start: 95 @47737 has 215 MA's), (Start: 112 @47641 has 1 MA's), (Start: 132 @47557 has 1 MA's), (138, 47542), (159, 47419), (174, 47347), (199, 47290), (201, 47284), (207, 47263), (211, 47254), (219, 47221), (226, 47161), (228, 47155), (230, 47149), (243, 47110), (256, 47050), (261, 47017), (269, 46936),

Gene: PSullivan\_68 Start: 43301, Stop: 42483, Start Num: 76

Candidate Starts for PSullivan\_68:

(Start: 65 @43319 has 2 MA's), (Start: 76 @43301 has 49 MA's), (Start: 82 @43289 has 2 MA's), (110, 43205), (Start: 112 @43187 has 1 MA's), (117, 43145), (Start: 119 @43136 has 1 MA's), (125, 43121), (162, 42935), (173, 42890), (207, 42800), (209, 42794), (216, 42779), (219, 42773), (224, 42722), (228, 42707), (239, 42671), (241, 42662), (259, 42581), (266, 42515), (267, 42509), (269, 42491),

Gene: PacerPaul\_69 Start: 44505, Stop: 43693, Start Num: 91

Candidate Starts for PacerPaul\_69:

(53, 44562), (Start: 91 @44505 has 39 MA's), (Start: 109 @44436 has 14 MA's), (Start: 119 @44355 has 1 MA's), (125, 44340), (136, 44304), (141, 44280), (158, 44178), (162, 44145), (194, 44049), (207, 44010), (218, 43986), (224, 43932), (241, 43872), (259, 43791), (266, 43725), (267, 43719), (269, 43701),

Gene: PackMan\_74 Start: 43671, Stop: 42829, Start Num: 84

Candidate Starts for PackMan\_74:

(Start: 84 @43671 has 189 MA's), (Start: 91 @43665 has 39 MA's), (Start: 109 @43602 has 14 MA's), (Start: 112 @43572 has 1 MA's), (124, 43509), (167, 43293), (207, 43161), (208, 43158), (209, 43155), (227, 43068), (241, 43020), (266, 42858),

Gene: PainterBoy\_77 Start: 44857, Stop: 43937, Start Num: 84

Candidate Starts for PainterBoy\_77:

(Start: 84 @44857 has 189 MA's), (Start: 112 @44764 has 1 MA's), (135, 44674), (164, 44500), (207, 44266), (208, 44263), (226, 44179), (241, 44128), (249, 44092),

Gene: Palestino\_67 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Palestino\_67:

(20, 43371), (Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Panamaxus\_69 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for Panamaxus\_69:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: Papez\_73 Start: 45858, Stop: 45034, Start Num: 72

Candidate Starts for Papez\_73:

(55, 45891), (Start: 72 @45858 has 44 MA's), (Start: 82 @45840 has 2 MA's), (110, 45756), (Start: 112 @45738 has 1 MA's), (Start: 119 @45687 has 1 MA's), (125, 45672), (163, 45477), (173, 45441), (207, 45351), (209, 45345), (216, 45330), (218, 45327), (219, 45324), (224, 45273), (228, 45258),

(239, 45222), (241, 45213), (259, 45132), (266, 45066), (267, 45060), (269, 45042),

Gene: Paphu\_67 Start: 44203, Stop: 43379, Start Num: 72

Candidate Starts for Paphu\_67:

(55, 44236), (Start: 72 @44203 has 44 MA's), (Start: 82 @44185 has 2 MA's), (110, 44101), (Start: 112 @44083 has 1 MA's), (Start: 119 @44032 has 1 MA's), (125, 44017), (162, 43831), (173, 43786), (207, 43696), (209, 43690), (216, 43675), (219, 43669), (224, 43618), (228, 43603), (239, 43567), (241, 43558), (251, 43522), (259, 43477), (266, 43411), (267, 43405), (269, 43387),

Gene: Paraselene\_69 Start: 44699, Stop: 43881, Start Num: 76

Candidate Starts for Paraselene\_69:

(Start: 65 @44717 has 2 MA's), (Start: 76 @44699 has 49 MA's), (Start: 82 @44687 has 2 MA's), (110, 44603), (Start: 112 @44585 has 1 MA's), (Start: 119 @44534 has 1 MA's), (125, 44519), (162, 44333), (173, 44288), (207, 44198), (209, 44192), (216, 44177), (219, 44171), (224, 44120), (228, 44105), (239, 44069), (241, 44060), (259, 43979), (266, 43913), (267, 43907), (269, 43889),

Gene: Pari\_73 Start: 43700, Stop: 42897, Start Num: 91

Candidate Starts for Pari\_73:

(56, 43757), (Start: 91 @43700 has 39 MA's), (110, 43619), (Start: 112 @43601 has 1 MA's), (Start: 119 @43550 has 1 MA's), (162, 43349), (173, 43304), (207, 43214), (209, 43208), (216, 43193), (224, 43136), (228, 43121), (239, 43085), (241, 43076), (259, 42995), (266, 42929), (267, 42923), (269, 42905),

Gene: Parliament\_69 Start: 45989, Stop: 45171, Start Num: 76

Candidate Starts for Parliament\_69:

(48, 46052), (Start: 76 @45989 has 49 MA's), (Start: 82 @45977 has 2 MA's), (110, 45893), (Start: 112 @45875 has 1 MA's), (Start: 119 @45824 has 1 MA's), (125, 45809), (162, 45623), (173, 45578), (207, 45488), (209, 45482), (216, 45467), (219, 45461), (224, 45410), (228, 45395), (239, 45359), (241, 45350), (259, 45269), (266, 45203), (267, 45197), (269, 45179),

Gene: Partridge\_55 Start: 39644, Stop: 38835, Start Num: 98

Candidate Starts for Partridge\_55:

(Start: 98 @39644 has 36 MA's), (102, 39632), (108, 39596), (114, 39530), (Start: 116 @39524 has 1 MA's), (Start: 132 @39470 has 1 MA's), (138, 39455), (158, 39344), (221, 39119), (237, 39047), (238, 39044), (243, 39029), (259, 38948), (267, 38873),

Gene: PascalRango\_67 Start: 43958, Stop: 43305, Start Num: 119

Candidate Starts for PascalRango\_67:

(57, 44153), (59, 44150), (62, 44147), (Start: 109 @44039 has 14 MA's), (Start: 119 @43958 has 1 MA's), (125, 43943), (162, 43757), (207, 43622), (209, 43616), (216, 43601), (224, 43544), (228, 43529), (239, 43493), (241, 43484), (259, 43403), (266, 43337), (267, 43331), (269, 43313),

Gene: PattyP\_71 Start: 45236, Stop: 44418, Start Num: 76

Candidate Starts for PattyP\_71:

(Start: 65 @45254 has 2 MA's), (Start: 76 @45236 has 49 MA's), (Start: 82 @45224 has 2 MA's), (110, 45140), (Start: 112 @45122 has 1 MA's), (Start: 119 @45071 has 1 MA's), (125, 45056), (162, 44870), (173, 44825), (207, 44735), (209, 44729), (216, 44714), (219, 44708), (224, 44657), (228, 44642), (239, 44606), (241, 44597), (259, 44516), (266, 44450), (267, 44444), (269, 44426),

Gene: Pawn\_75 Start: 43870, Stop: 43055, Start Num: 95

Candidate Starts for Pawn\_75:

(23, 44047), (Start: 95 @43870 has 215 MA's), (Start: 112 @43780 has 1 MA's), (Start: 132 @43687 has 1 MA's), (141, 43663), (150, 43618), (200, 43417), (207, 43393), (223, 43318), (241, 43249), (266,

43087), (269, 43063),

Gene: Payneful\_68 Start: 44244, Stop: 43420, Start Num: 72

Candidate Starts for Payneful\_68:

(Start: 72 @44244 has 44 MA's), (Start: 82 @44226 has 2 MA's), (110, 44142), (Start: 112 @44124 has 1 MA's), (117, 44082), (Start: 119 @44073 has 1 MA's), (125, 44058), (162, 43872), (207, 43737), (209, 43731), (216, 43716), (224, 43659), (228, 43644), (239, 43608), (241, 43599), (251, 43563), (259, 43518), (266, 43452), (267, 43446), (269, 43428),

Gene: PeaceMeal1\_66 Start: 42091, Stop: 41249, Start Num: 73

Candidate Starts for PeaceMeal1\_66:

(24, 42250), (Start: 73 @42091 has 16 MA's), (79, 42079), (Start: 106 @42028 has 6 MA's), (Start: 132 @41881 has 1 MA's), (138, 41866), (208, 41584), (228, 41479), (231, 41470), (243, 41431), (256, 41371), (266, 41281), (269, 41257),

Gene: Peaches\_66 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for Peaches\_66:

(Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: Pelly\_71 Start: 46158, Stop: 45355, Start Num: 91

Candidate Starts for Pelly\_71:

(56, 46215), (Start: 91 @46158 has 39 MA's), (110, 46077), (Start: 112 @46059 has 1 MA's), (Start: 119 @46008 has 1 MA's), (125, 45993), (162, 45807), (173, 45762), (207, 45672), (209, 45666), (216, 45651), (219, 45645), (224, 45594), (228, 45579), (239, 45543), (241, 45534), (259, 45453), (266, 45387), (267, 45381), (269, 45363),

Gene: Pembroke\_77 Start: 44050, Stop: 43235, Start Num: 95

Candidate Starts for Pembroke\_77:

(23, 44230), (Start: 95 @44050 has 215 MA's), (Start: 106 @44023 has 6 MA's), (Start: 132 @43867 has 1 MA's), (141, 43843), (146, 43816), (150, 43798), (200, 43597), (207, 43573), (216, 43549), (241, 43429), (245, 43411), (251, 43381), (266, 43267), (269, 43243),

Gene: Penny1\_77 Start: 44053, Stop: 43238, Start Num: 95

Candidate Starts for Penny1\_77:

(23, 44233), (Start: 95 @44053 has 215 MA's), (Start: 106 @44026 has 6 MA's), (Start: 132 @43870 has 1 MA's), (141, 43846), (146, 43819), (150, 43801), (200, 43600), (207, 43576), (216, 43552), (241, 43432), (245, 43414), (251, 43384), (266, 43270), (269, 43246),

Gene: Pepe\_66 Start: 42697, Stop: 41867, Start Num: 76

Candidate Starts for Pepe\_66:

(Start: 40 @42781 has 1 MA's), (Start: 76 @42697 has 49 MA's), (Start: 82 @42685 has 2 MA's), (Start: 109 @42610 has 14 MA's), (Start: 119 @42529 has 1 MA's), (125, 42514), (136, 42478), (141, 42454), (162, 42319), (194, 42223), (218, 42160), (224, 42106), (241, 42046), (259, 41965), (266, 41899), (267, 41893), (269, 41875),

Gene: Percastrophe\_66 Start: 34302, Stop: 33481, Start Num: 100

Candidate Starts for Percastrophe\_66:

(Start: 100 @34302 has 14 MA's), (Start: 105 @34287 has 2 MA's), (120, 34164), (134, 34119), (137, 34107), (140, 34092), (144, 34071), (161, 33960), (165, 33930), (194, 33852), (207, 33792), (228, 33720), (240, 33678), (244, 33669), (252, 33621), (262, 33567),

Gene: Perplexer\_67 Start: 43431, Stop: 42640, Start Num: 95

Candidate Starts for Perplexer\_67:

(Start: 95 @43431 has 215 MA's), (Start: 106 @43404 has 6 MA's), (Start: 132 @43257 has 1 MA's), (141, 43233), (200, 42987), (207, 42963), (224, 42885), (243, 42822), (266, 42672),

Gene: Perseus\_66 Start: 45117, Stop: 44317, Start Num: 92

Candidate Starts for Perseus\_66:

(29, 45279), (Start: 89 @45120 has 3 MA's), (Start: 92 @45117 has 8 MA's), (110, 45039), (Start: 112 @45021 has 1 MA's), (Start: 119 @44970 has 1 MA's), (125, 44955), (162, 44769), (173, 44724), (207, 44634), (209, 44628), (216, 44613), (219, 44607), (224, 44556), (228, 44541), (239, 44505), (241, 44496), (259, 44415), (266, 44349), (267, 44343), (269, 44325),

Gene: PeterPeter\_68 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for PeterPeter\_68:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Petersenfast\_70 Start: 42806, Stop: 41991, Start Num: 84

Candidate Starts for Petersenfast\_70:

(Start: 84 @42806 has 189 MA's), (113, 42701), (Start: 119 @42656 has 1 MA's), (136, 42614), (139, 42596), (146, 42563), (148, 42554), (158, 42488), (209, 42317), (224, 42245), (230, 42224), (241, 42185), (266, 42023),

Gene: Peterson\_71 Start: 46001, Stop: 45183, Start Num: 72

Candidate Starts for Peterson\_71:

(55, 46034), (Start: 72 @46001 has 44 MA's), (Start: 82 @45989 has 2 MA's), (110, 45905), (Start: 112 @45887 has 1 MA's), (Start: 119 @45836 has 1 MA's), (125, 45821), (162, 45635), (173, 45590), (207, 45500), (209, 45494), (216, 45479), (219, 45473), (224, 45422), (228, 45407), (239, 45371), (241, 45362), (259, 45281), (266, 45215), (267, 45209), (269, 45191),

Gene: PetiteSangsue\_67 Start: 43434, Stop: 42643, Start Num: 95

Candidate Starts for PetiteSangsue\_67:

(Start: 95 @43434 has 215 MA's), (Start: 106 @43407 has 6 MA's), (Start: 132 @43260 has 1 MA's), (141, 43236), (200, 42990), (207, 42966), (224, 42888), (226, 42879), (243, 42825), (266, 42675),

Gene: Petp2012\_72 Start: 46035, Stop: 45199, Start Num: 65

Candidate Starts for Petp2012\_72:

(Start: 65 @46035 has 2 MA's), (Start: 76 @46017 has 49 MA's), (Start: 82 @46005 has 2 MA's), (110, 45921), (Start: 112 @45903 has 1 MA's), (Start: 119 @45852 has 1 MA's), (125, 45837), (162, 45651), (173, 45606), (207, 45516), (209, 45510), (216, 45495), (219, 45489), (224, 45438), (228, 45423), (239, 45387), (241, 45378), (259, 45297), (266, 45231), (267, 45225), (269, 45207),

Gene: Petruccio\_71 Start: 44066, Stop: 43230, Start Num: 63

Candidate Starts for Petruccio\_71:

(Start: 63 @44066 has 7 MA's), (68, 44057), (Start: 74 @44048 has 6 MA's), (Start: 82 @44036 has 2 MA's), (110, 43952), (Start: 112 @43934 has 1 MA's), (Start: 119 @43883 has 1 MA's), (125, 43868), (162, 43682), (173, 43637), (207, 43547), (209, 43541), (216, 43526), (219, 43520), (224, 43469), (228, 43454), (239, 43418), (241, 43409), (259, 43328), (266, 43262), (267, 43256), (269, 43238),

Gene: PetterN\_75 Start: 43812, Stop: 42997, Start Num: 71

Candidate Starts for PetterN\_75:

(37, 43899), (Start: 71 @43812 has 48 MA's), (Start: 132 @43638 has 1 MA's), (148, 43578), (152, 43557), (161, 43488), (201, 43365), (210, 43335), (214, 43299), (219, 43290), (224, 43239), (226, 43230), (231, 43215), (235, 43200), (251, 43143), (256, 43119), (257, 43110), (266, 43029), (269, 43005),

Gene: Ph8s\_78 Start: 44380, Stop: 43490, Start Num: 84

Candidate Starts for Ph8s\_78:

(Start: 84 @44380 has 189 MA's), (102, 44359), (Start: 106 @44344 has 6 MA's), (107, 44335), (Start: 109 @44311 has 14 MA's), (Start: 112 @44281 has 1 MA's), (114, 44257), (136, 44188), (174, 43981), (190, 43873), (233, 43708), (235, 43702), (241, 43681), (266, 43519),

Gene: Phacado\_68 Start: 43157, Stop: 42366, Start Num: 95

Candidate Starts for Phacado\_68:

(20, 43370), (Start: 95 @43157 has 215 MA's), (Start: 106 @43130 has 6 MA's), (Start: 132 @42983 has 1 MA's), (141, 42959), (172, 42782), (199, 42716), (207, 42689), (216, 42668), (224, 42611), (226, 42602), (243, 42548), (266, 42398),

Gene: Phaded\_69 Start: 45573, Stop: 44761, Start Num: 91

Candidate Starts for Phaded\_69:

(52, 45636), (Start: 91 @45573 has 39 MA's), (96, 45567), (Start: 106 @45537 has 6 MA's), (Start: 109 @45504 has 14 MA's), (Start: 112 @45474 has 1 MA's), (136, 45381), (209, 45084), (241, 44952), (266, 44790),

Gene: Phaeder\_75 Start: 43671, Stop: 42829, Start Num: 84

Candidate Starts for Phaeder\_75:

(Start: 84 @43671 has 189 MA's), (Start: 91 @43665 has 39 MA's), (Start: 109 @43602 has 14 MA's), (Start: 112 @43572 has 1 MA's), (124, 43509), (167, 43293), (207, 43161), (208, 43158), (209, 43155), (227, 43068), (241, 43020), (266, 42858),

Gene: PhailMary\_55 Start: 39667, Stop: 38858, Start Num: 98

Candidate Starts for PhailMary\_55:

(Start: 98 @39667 has 36 MA's), (102, 39655), (108, 39619), (114, 39553), (Start: 116 @39547 has 1 MA's), (Start: 132 @39493 has 1 MA's), (138, 39478), (158, 39367), (221, 39142), (237, 39070), (238, 39067), (243, 39052), (259, 38971), (266, 38902),

Gene: Phantastic\_73 Start: 43321, Stop: 42527, Start Num: 93

Candidate Starts for Phantastic\_73:

(42, 43393), (Start: 93 @43321 has 32 MA's), (200, 42877), (207, 42853), (243, 42709), (266, 42559), (269, 42535),

Gene: Pharaoh\_69 Start: 43775, Stop: 42885, Start Num: 84

Candidate Starts for Pharaoh\_69:

(3, 44102), (5, 44084), (Start: 84 @43775 has 189 MA's), (Start: 106 @43745 has 6 MA's), (Start: 109 @43712 has 14 MA's), (Start: 112 @43682 has 1 MA's), (136, 43589), (180, 43352), (209, 43211), (226, 43130), (233, 43106), (241, 43076), (247, 43049), (266, 42914), (269, 42890),

Gene: Phelipe\_69 Start: 43197, Stop: 42406, Start Num: 95

Candidate Starts for Phelipe\_69:

(Start: 95 @43197 has 215 MA's), (Start: 106 @43170 has 6 MA's), (Start: 132 @43023 has 1 MA's), (172, 42822), (199, 42756), (207, 42729), (216, 42708), (224, 42651), (226, 42642), (243, 42588), (266, 42438),

Gene: PherrisBueller\_71 Start: 43120, Stop: 42296, Start Num: 72

Candidate Starts for PherrisBueller\_71:

(55, 43153), (Start: 72 @43120 has 44 MA's), (Start: 82 @43102 has 2 MA's), (110, 43018), (Start: 112 @43000 has 1 MA's), (Start: 119 @42949 has 1 MA's), (125, 42934), (162, 42748), (173, 42703), (207, 42613), (209, 42607), (216, 42592), (224, 42535), (228, 42520), (239, 42484), (241, 42475), (259, 42394), (266, 42328), (267, 42322), (269, 42304),

Gene: Phighter1804\_68 Start: 43222, Stop: 42431, Start Num: 95

Candidate Starts for Phighter1804\_68:

(Start: 95 @43222 has 215 MA's), (Start: 106 @43195 has 6 MA's), (Start: 132 @43048 has 1 MA's), (141, 43024), (172, 42847), (199, 42781), (207, 42754), (216, 42733), (224, 42676), (226, 42667), (243, 42613), (266, 42463),

Gene: Phillis\_79 Start: 44113, Stop: 43196, Start Num: 71

Candidate Starts for Phillis\_79:

(Start: 71 @44113 has 48 MA's), (110, 44038), (114, 43996), (115, 43993), (120, 43966), (122, 43957), (127, 43945), (156, 43783), (165, 43714), (175, 43681), (197, 43630), (208, 43531), (216, 43510), (224, 43453), (231, 43429), (233, 43420), (241, 43393), (269, 43204),

Gene: PhishRPhriends\_73 Start: 43047, Stop: 42232, Start Num: 95

Candidate Starts for PhishRPhriends\_73:

(Start: 95 @43047 has 215 MA's), (120, 42903), (Start: 132 @42864 has 1 MA's), (146, 42813), (150, 42795), (200, 42594), (207, 42570), (223, 42495), (241, 42426), (245, 42408), (266, 42264), (269, 42240),

Gene: Phlei\_60 Start: 42868, Stop: 42056, Start Num: 82

Candidate Starts for Phlei\_60:

(Start: 82 @42868 has 2 MA's), (107, 42826), (Start: 109 @42802 has 14 MA's), (Start: 112 @42772 has 1 MA's), (Start: 119 @42721 has 1 MA's), (128, 42697), (133, 42685), (141, 42655), (161, 42529), (208, 42385), (209, 42382), (224, 42310), (233, 42277), (235, 42271), (251, 42202), (255, 42187), (259, 42157), (266, 42088),

Gene: Phlorence\_66 Start: 42617, Stop: 41802, Start Num: 71

Candidate Starts for Phlorence\_66:

(Start: 71 @42617 has 48 MA's), (122, 42464), (Start: 132 @42443 has 1 MA's), (148, 42383), (152, 42362), (210, 42140), (224, 42044), (231, 42020), (236, 42002), (251, 41948), (256, 41924), (257, 41915), (266, 41834), (269, 41810),

Gene: Phoebe\_78 Start: 44042, Stop: 43227, Start Num: 95

Candidate Starts for Phoebe\_78:

(23, 44222), (Start: 95 @44042 has 215 MA's), (Start: 106 @44015 has 6 MA's), (Start: 132 @43859 has 1 MA's), (141, 43835), (146, 43808), (150, 43790), (200, 43589), (207, 43565), (216, 43541), (241, 43421), (245, 43403), (251, 43373), (266, 43259), (269, 43235),

Gene: Phonnegut\_75 Start: 43741, Stop: 42899, Start Num: 84

Candidate Starts for Phonnegut\_75:

(Start: 84 @43741 has 189 MA's), (Start: 91 @43735 has 39 MA's), (Start: 109 @43672 has 14 MA's), (Start: 112 @43642 has 1 MA's), (124, 43579), (167, 43363), (207, 43231), (208, 43228), (209, 43225), (227, 43138), (241, 43090), (266, 42928),

Gene: Phontbonne\_68 Start: 43064, Stop: 42273, Start Num: 95

Candidate Starts for Phontbonne\_68:

(Start: 95 @43064 has 215 MA's), (Start: 106 @43037 has 6 MA's), (Start: 132 @42890 has 1 MA's), (172, 42689), (199, 42623), (207, 42596), (216, 42575), (224, 42518), (226, 42509), (243, 42455),

(266, 42305),

Gene: Phoxy\_77 Start: 44074, Stop: 43259, Start Num: 95

Candidate Starts for Phoxy\_77:

(23, 44254), (Start: 95 @44074 has 215 MA's), (Start: 106 @44047 has 6 MA's), (Start: 132 @43891 has 1 MA's), (141, 43867), (146, 43840), (150, 43822), (200, 43621), (207, 43597), (216, 43573), (241, 43453), (245, 43435), (251, 43405), (266, 43291), (269, 43267),

Gene: Phrankenstein\_56 Start: 39291, Stop: 38482, Start Num: 98

Candidate Starts for Phrankenstein\_56:

(Start: 98 @39291 has 36 MA's), (102, 39279), (114, 39177), (Start: 116 @39171 has 1 MA's), (Start: 132 @39117 has 1 MA's), (138, 39102), (158, 38991), (160, 38973), (221, 38766), (237, 38694), (238, 38691), (243, 38676), (259, 38595), (266, 38526), (267, 38520),

Gene: Phranny\_73 Start: 43030, Stop: 42215, Start Num: 95

Candidate Starts for Phranny\_73:

(Start: 95 @43030 has 215 MA's), (120, 42886), (Start: 132 @42847 has 1 MA's), (146, 42796), (150, 42778), (200, 42577), (207, 42553), (223, 42478), (241, 42409), (245, 42391), (266, 42247), (269, 42223),

Gene: PhrostyMug\_68 Start: 45134, Stop: 44331, Start Num: 89

Candidate Starts for PhrostyMug\_68:

(29, 45293), (Start: 89 @45134 has 3 MA's), (Start: 92 @45131 has 8 MA's), (110, 45053), (Start: 112 @45035 has 1 MA's), (Start: 119 @44984 has 1 MA's), (125, 44969), (162, 44783), (173, 44738), (207, 44648), (209, 44642), (216, 44627), (219, 44621), (224, 44570), (228, 44555), (239, 44519), (241, 44510), (259, 44429), (266, 44363), (267, 44357), (269, 44339),

Gene: PickleBack\_68 Start: 42794, Stop: 41979, Start Num: 71

Candidate Starts for PickleBack\_68:

(Start: 71 @42794 has 48 MA's), (122, 42641), (Start: 132 @42620 has 1 MA's), (148, 42560), (152, 42539), (210, 42317), (224, 42221), (231, 42197), (236, 42179), (251, 42125), (256, 42101), (257, 42092), (266, 42011), (269, 41987),

Gene: PinkPlastic\_68 Start: 43780, Stop: 42956, Start Num: 72

Candidate Starts for PinkPlastic\_68:

(55, 43813), (Start: 72 @43780 has 44 MA's), (Start: 82 @43762 has 2 MA's), (110, 43678), (Start: 112 @43660 has 1 MA's), (Start: 119 @43609 has 1 MA's), (125, 43594), (162, 43408), (173, 43363), (207, 43273), (209, 43267), (216, 43252), (224, 43195), (228, 43180), (239, 43144), (241, 43135), (259, 43054), (266, 42988), (267, 42982), (269, 42964),

Gene: Pinto\_69 Start: 43922, Stop: 43119, Start Num: 91

Candidate Starts for Pinto\_69:

(56, 43979), (Start: 91 @43922 has 39 MA's), (Start: 112 @43823 has 1 MA's), (Start: 119 @43772 has 1 MA's), (125, 43757), (162, 43571), (173, 43526), (207, 43436), (209, 43430), (216, 43415), (219, 43409), (224, 43358), (228, 43343), (239, 43307), (241, 43298), (259, 43217), (266, 43151), (267, 43145), (269, 43127),

Gene: Pioneer\_75 Start: 43735, Stop: 42899, Start Num: 91

Candidate Starts for Pioneer\_75:

(Start: 84 @43741 has 189 MA's), (Start: 91 @43735 has 39 MA's), (Start: 109 @43672 has 14 MA's), (Start: 112 @43642 has 1 MA's), (124, 43579), (167, 43363), (207, 43231), (208, 43228), (209, 43225), (227, 43138), (241, 43090), (266, 42928),



Gene: Pipcraft\_65 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for Pipcraft\_65:

(Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: Pippin\_69 Start: 43295, Stop: 42492, Start Num: 91

Candidate Starts for Pippin\_69:

(56, 43352), (Start: 91 @43295 has 39 MA's), (110, 43214), (Start: 112 @43196 has 1 MA's), (Start: 119 @43145 has 1 MA's), (125, 43130), (162, 42944), (173, 42899), (207, 42809), (209, 42803), (216, 42788), (224, 42731), (228, 42716), (239, 42680), (241, 42671), (259, 42590), (266, 42524), (267, 42518), (269, 42500),

Gene: Piro94\_73 Start: 44329, Stop: 43514, Start Num: 84

Candidate Starts for Piro94\_73:

(Start: 84 @44329 has 189 MA's), (Start: 109 @44260 has 14 MA's), (Start: 112 @44230 has 1 MA's), (128, 44155), (136, 44137), (208, 43843), (209, 43840), (241, 43705), (266, 43543),

Gene: Pistachio\_71 Start: 43228, Stop: 42434, Start Num: 93

Candidate Starts for Pistachio\_71:

(Start: 93 @43228 has 32 MA's), (136, 43048), (200, 42784), (228, 42661), (243, 42616), (266, 42466), (269, 42442),

Gene: Pita2\_71 Start: 44816, Stop: 43980, Start Num: 65

Candidate Starts for Pita2\_71:

(Start: 65 @44816 has 2 MA's), (Start: 76 @44798 has 49 MA's), (Start: 82 @44786 has 2 MA's), (110, 44702), (Start: 112 @44684 has 1 MA's), (117, 44642), (Start: 119 @44633 has 1 MA's), (125, 44618), (162, 44432), (173, 44387), (207, 44297), (209, 44291), (216, 44276), (219, 44270), (224, 44219), (228, 44204), (239, 44168), (241, 44159), (259, 44078), (266, 44012), (267, 44006), (269, 43988),

Gene: Pmask\_75 Start: 43869, Stop: 43042, Start Num: 84

Candidate Starts for Pmask\_75:

(Start: 84 @43869 has 189 MA's), (104, 43839), (Start: 109 @43797 has 14 MA's), (Start: 112 @43767 has 1 MA's), (Start: 119 @43716 has 1 MA's), (133, 43680), (141, 43650), (148, 43614), (160, 43530), (194, 43422), (208, 43368), (209, 43365), (224, 43293), (230, 43272), (231, 43269), (241, 43233), (266, 43071),

Gene: Pocahontas\_70 Start: 43635, Stop: 42841, Start Num: 93

Candidate Starts for Pocahontas\_70:

(Start: 93 @43635 has 32 MA's), (Start: 132 @43461 has 1 MA's), (200, 43191), (207, 43167), (243, 43023), (256, 42963), (266, 42873), (269, 42849),

Gene: Polymorphads\_68 Start: 43178, Stop: 42387, Start Num: 95

Candidate Starts for Polymorphads\_68:

(Start: 95 @43178 has 215 MA's), (Start: 106 @43151 has 6 MA's), (Start: 132 @43004 has 1 MA's), (172, 42803), (199, 42737), (207, 42710), (216, 42689), (224, 42632), (226, 42623), (243, 42569), (266, 42419),

Gene: Pomar16\_76 Start: 44901, Stop: 44092, Start Num: 97

Candidate Starts for Pomar16\_76:

(Start: 97 @44901 has 16 MA's), (Start: 106 @44871 has 6 MA's), (Start: 109 @44838 has 14 MA's), (Start: 112 @44808 has 1 MA's), (133, 44721), (141, 44691), (174, 44508), (209, 44418), (224,

44346), (230, 44325), (241, 44283), (242, 44280), (263, 44166), (264, 44154), (266, 44121),

Gene: Ponzi\_36 Start: 20039, Stop: 19434, Start Num: 136

Candidate Starts for Ponzi\_36:

(Start: 98 @20213 has 36 MA's), (136, 20039), (146, 19988), (192, 19793), (203, 19769), (250, 19580), (251, 19574), (254, 19565), (259, 19529), (261, 19517), (266, 19463),

Gene: Poompha\_65 Start: 42089, Stop: 41247, Start Num: 73

Candidate Starts for Poompha\_65:

(24, 42248), (Start: 73 @42089 has 16 MA's), (79, 42077), (Start: 106 @42026 has 6 MA's), (Start: 132 @41879 has 1 MA's), (138, 41864), (208, 41582), (228, 41477), (231, 41468), (243, 41429), (256, 41369), (266, 41279), (269, 41255),

Gene: Popcicle\_71 Start: 43635, Stop: 42841, Start Num: 93

Candidate Starts for Popcicle\_71:

(Start: 93 @43635 has 32 MA's), (Start: 132 @43461 has 1 MA's), (200, 43191), (207, 43167), (243, 43023), (256, 42963), (266, 42873), (269, 42849),

Gene: PotatoSplit\_78 Start: 44053, Stop: 43238, Start Num: 95

Candidate Starts for PotatoSplit\_78:

(23, 44233), (Start: 95 @44053 has 215 MA's), (Start: 106 @44026 has 6 MA's), (Start: 132 @43870 has 1 MA's), (141, 43846), (146, 43819), (150, 43801), (200, 43600), (207, 43576), (216, 43552), (241, 43432), (245, 43414), (251, 43384), (266, 43270), (269, 43246),

Gene: Power\_73 Start: 44703, Stop: 43885, Start Num: 84

Candidate Starts for Power\_73:

(Start: 84 @44703 has 189 MA's), (Start: 109 @44631 has 14 MA's), (Start: 112 @44601 has 1 MA's), (136, 44508), (148, 44448), (207, 44217), (228, 44124), (230, 44118), (241, 44076), (248, 44046), (264, 43947), (266, 43914),

Gene: Priamo\_77 Start: 43524, Stop: 42703, Start Num: 84

Candidate Starts for Priamo\_77:

(Start: 84 @43524 has 189 MA's), (Start: 109 @43461 has 14 MA's), (Start: 119 @43380 has 1 MA's), (133, 43344), (136, 43338), (141, 43314), (160, 43194), (208, 43032), (209, 43029), (224, 42957), (228, 42942), (230, 42936), (233, 42924), (241, 42897), (251, 42849), (253, 42843), (266, 42735),

Gene: Priya\_73 Start: 43468, Stop: 42626, Start Num: 84

Candidate Starts for Priya\_73:

(Start: 84 @43468 has 189 MA's), (Start: 91 @43462 has 39 MA's), (Start: 109 @43399 has 14 MA's), (Start: 112 @43369 has 1 MA's), (124, 43306), (167, 43090), (207, 42958), (208, 42955), (209, 42952), (227, 42865), (241, 42817), (266, 42655),

Gene: ProMouse\_71 Start: 44610, Stop: 43783, Start Num: 76

Candidate Starts for ProMouse\_71:

(Start: 65 @44628 has 2 MA's), (Start: 76 @44610 has 49 MA's), (Start: 82 @44598 has 2 MA's), (Start: 109 @44526 has 14 MA's), (117, 44454), (Start: 119 @44445 has 1 MA's), (125, 44430), (136, 44394), (141, 44370), (158, 44268), (162, 44235), (194, 44139), (207, 44100), (218, 44076), (224, 44022), (241, 43962), (259, 43881), (266, 43815), (267, 43809), (269, 43791),

Gene: Pukovnik\_70 Start: 45209, Stop: 44409, Start Num: 97

Candidate Starts for Pukovnik\_70:

(Start: 97 @45209 has 16 MA's), (102, 45200), (104, 45194), (Start: 106 @45185 has 6 MA's), (107, 45176), (Start: 109 @45152 has 14 MA's), (Start: 112 @45122 has 1 MA's), (136, 45029), (209,

44732), (241, 44600), (266, 44438),

Gene: Pumbaa\_68 Start: 43103, Stop: 42312, Start Num: 95

Candidate Starts for Pumbaa\_68:

(20, 43316), (Start: 95 @43103 has 215 MA's), (Start: 106 @43076 has 6 MA's), (Start: 132 @42929 has 1 MA's), (141, 42905), (172, 42728), (199, 42662), (207, 42635), (216, 42614), (224, 42557), (226, 42548), (243, 42494), (266, 42344),

Gene: Puppy\_72 Start: 43300, Stop: 42506, Start Num: 93

Candidate Starts for Puppy\_72:

(Start: 93 @43300 has 32 MA's), (136, 43120), (200, 42856), (228, 42733), (243, 42688), (266, 42538), (269, 42514),

Gene: PurpleHaze\_76 Start: 43865, Stop: 43050, Start Num: 95

Candidate Starts for PurpleHaze\_76:

(23, 44042), (Start: 95 @43865 has 215 MA's), (Start: 112 @43775 has 1 MA's), (Start: 132 @43682 has 1 MA's), (141, 43658), (150, 43613), (200, 43412), (207, 43388), (223, 43313), (241, 43244), (245, 43226), (266, 43082), (269, 43058),

Gene: QTRlifeCrisis\_70 Start: 44454, Stop: 43636, Start Num: 76

Candidate Starts for QTRlifeCrisis\_70:

(Start: 65 @44472 has 2 MA's), (Start: 76 @44454 has 49 MA's), (Start: 82 @44442 has 2 MA's), (110, 44358), (Start: 112 @44340 has 1 MA's), (Start: 119 @44289 has 1 MA's), (125, 44274), (162, 44088), (207, 43953), (209, 43947), (216, 43932), (219, 43926), (224, 43875), (228, 43860), (239, 43824), (241, 43815), (259, 43734), (266, 43668), (267, 43662), (269, 43644),

Gene: Qobbit\_73 Start: 43430, Stop: 42588, Start Num: 84

Candidate Starts for Qobbit\_73:

(Start: 84 @43430 has 189 MA's), (Start: 91 @43424 has 39 MA's), (Start: 109 @43361 has 14 MA's), (Start: 112 @43331 has 1 MA's), (124, 43268), (167, 43052), (207, 42920), (208, 42917), (209, 42914), (227, 42827), (241, 42779), (266, 42617),

Gene: QueenB2\_71 Start: 43986, Stop: 43168, Start Num: 84

Candidate Starts for QueenB2\_71:

(Start: 84 @43986 has 189 MA's), (Start: 109 @43914 has 14 MA's), (Start: 112 @43884 has 1 MA's), (136, 43791), (190, 43554), (207, 43500), (228, 43407), (230, 43401), (241, 43359), (248, 43329), (264, 43230), (266, 43197),

Gene: QueenBeesly\_74 Start: 44660, Stop: 43842, Start Num: 84

Candidate Starts for QueenBeesly\_74:

(Start: 84 @44660 has 189 MA's), (Start: 109 @44588 has 14 MA's), (Start: 112 @44558 has 1 MA's), (136, 44465), (148, 44405), (207, 44174), (228, 44081), (230, 44075), (241, 44033), (248, 44003), (264, 43904), (266, 43871),

Gene: QuinnKiro\_70 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for QuinnKiro\_70:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: Quokka\_75 Start: 43779, Stop: 42910, Start Num: 84

Candidate Starts for Quokka\_75:

(Start: 84 @43779 has 189 MA's), (107, 43734), (114, 43656), (120, 43626), (136, 43587), (224, 43161), (230, 43140), (241, 43101), (266, 42939),

Gene: RER2\_49 Start: 36217, Stop: 35408, Start Num: 98

Candidate Starts for RER2\_49:

(Start: 98 @36217 has 36 MA's), (102, 36205), (114, 36103), (Start: 116 @36097 has 1 MA's), (Start: 132 @36043 has 1 MA's), (138, 36028), (158, 35917), (160, 35899), (221, 35692), (237, 35620), (238, 35617), (243, 35602), (259, 35521), (266, 35452), (267, 35446),

Gene: RGL3\_49 Start: 36886, Stop: 36197, Start Num: 116

Candidate Starts for RGL3\_49:

(Start: 98 @37006 has 36 MA's), (Start: 106 @36979 has 6 MA's), (111, 36925), (Start: 116 @36886 has 1 MA's), (Start: 132 @36832 has 1 MA's), (138, 36817), (160, 36688), (174, 36622), (201, 36559), (207, 36538), (219, 36505), (221, 36481), (224, 36454), (243, 36391), (259, 36310), (268, 36220),

Gene: Rachaly\_69 Start: 43790, Stop: 42975, Start Num: 84

Candidate Starts for Rachaly\_69:

(Start: 84 @43790 has 189 MA's), (Start: 109 @43721 has 14 MA's), (Start: 112 @43691 has 1 MA's), (136, 43598), (208, 43304), (209, 43301), (228, 43214), (241, 43166), (266, 43004),

Gene: Rahalelujah\_75 Start: 43604, Stop: 42768, Start Num: 84

Candidate Starts for Rahalelujah\_75:

(Start: 84 @43604 has 189 MA's), (Start: 106 @43574 has 6 MA's), (Start: 109 @43541 has 14 MA's), (Start: 112 @43511 has 1 MA's), (Start: 119 @43460 has 1 MA's), (124, 43448), (136, 43418), (160, 43274), (161, 43268), (167, 43232), (194, 43151), (208, 43097), (209, 43094), (227, 43007), (241, 42959), (256, 42887),

Gene: Rajelicia\_70 Start: 45698, Stop: 44895, Start Num: 91

Candidate Starts for Rajelicia\_70:

(56, 45755), (Start: 91 @45698 has 39 MA's), (110, 45617), (Start: 112 @45599 has 1 MA's), (Start: 119 @45548 has 1 MA's), (125, 45533), (163, 45338), (173, 45302), (207, 45212), (209, 45206), (216, 45191), (219, 45185), (224, 45134), (228, 45119), (239, 45083), (241, 45074), (259, 44993), (266, 44927), (267, 44921), (269, 44903),

Gene: Rasputin\_56 Start: 39315, Stop: 38506, Start Num: 98

Candidate Starts for Rasputin\_56:

(Start: 98 @39315 has 36 MA's), (102, 39303), (114, 39201), (Start: 116 @39195 has 1 MA's), (Start: 132 @39141 has 1 MA's), (138, 39126), (158, 39015), (160, 38997), (221, 38790), (237, 38718), (238, 38715), (243, 38700), (259, 38619), (266, 38550), (267, 38544),

Gene: ReMo\_80 Start: 44748, Stop: 43900, Start Num: 81

Candidate Starts for ReMo\_80:

(Start: 81 @44748 has 18 MA's), (Start: 85 @44742 has 1 MA's), (Start: 106 @44700 has 6 MA's), (Start: 109 @44667 has 14 MA's), (Start: 112 @44637 has 1 MA's), (136, 44544), (192, 44280), (208, 44232), (230, 44133), (231, 44130), (241, 44091),

Gene: Reba\_72 Start: 42703, Stop: 41888, Start Num: 95

Candidate Starts for Reba\_72:

(Start: 95 @42703 has 215 MA's), (120, 42559), (Start: 132 @42520 has 1 MA's), (146, 42469), (150, 42451), (200, 42250), (207, 42226), (223, 42151), (241, 42082), (245, 42064), (266, 41920), (269, 41896),

Gene: Rebeuca\_69 Start: 43393, Stop: 42566, Start Num: 73

Candidate Starts for Rebeuca\_69:

(24, 43552), (Start: 73 @43393 has 16 MA's), (Start: 132 @43183 has 1 MA's), (138, 43168), (207, 42889), (224, 42811), (243, 42748), (256, 42688), (269, 42574),

Gene: RedRock\_72 Start: 44719, Stop: 43811, Start Num: 84

Candidate Starts for RedRock\_72:

(28, 44854), (Start: 84 @44719 has 189 MA's), (Start: 109 @44650 has 14 MA's), (Start: 112 @44620 has 1 MA's), (136, 44527), (176, 44308), (186, 44266), (194, 44194), (208, 44140), (209, 44137), (230, 44044), (233, 44032), (241, 44002),

Gene: Refuge\_71 Start: 44923, Stop: 44108, Start Num: 84

Candidate Starts for Refuge\_71:

(Start: 84 @44923 has 189 MA's), (Start: 109 @44854 has 14 MA's), (Start: 112 @44824 has 1 MA's), (124, 44761), (128, 44749), (133, 44737), (141, 44707), (165, 44551), (203, 44461), (209, 44434), (219, 44413), (230, 44341), (241, 44299), (266, 44137), (269, 44113),

Gene: Relief\_67 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Relief\_67:

(Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Remus\_82 Start: 44678, Stop: 43827, Start Num: 81

Candidate Starts for Remus\_82:

(Start: 81 @44678 has 18 MA's), (Start: 85 @44672 has 1 MA's), (Start: 106 @44630 has 6 MA's), (Start: 109 @44597 has 14 MA's), (Start: 112 @44567 has 1 MA's), (136, 44474), (230, 44063), (231, 44060), (241, 44021), (266, 43859),

Gene: ResDef\_69 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for ResDef\_69:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: RetrieverFever\_62 Start: 33698, Stop: 32811, Start Num: 64

Candidate Starts for RetrieverFever\_62:

(Start: 60 @33704 has 3 MA's), (Start: 64 @33698 has 2 MA's), (80, 33671), (Start: 100 @33638 has 14 MA's), (Start: 105 @33623 has 2 MA's), (143, 33413), (162, 33287), (194, 33188), (204, 33143), (222, 33068), (228, 33044), (229, 33041), (262, 32897),

Gene: Retro23\_74 Start: 44390, Stop: 43572, Start Num: 84

Candidate Starts for Retro23\_74:

(2, 44729), (7, 44702), (8, 44699), (11, 44690), (Start: 84 @44390 has 189 MA's), (Start: 109 @44318 has 14 MA's), (Start: 112 @44288 has 1 MA's), (136, 44195), (228, 43811), (230, 43805), (241, 43763), (248, 43733),

Gene: RexFury\_55 Start: 39373, Stop: 38567, Start Num: 98

Candidate Starts for RexFury\_55:

(Start: 98 @39373 has 36 MA's), (102, 39364), (108, 39328), (Start: 112 @39286 has 1 MA's), (114, 39262), (Start: 116 @39256 has 1 MA's), (Start: 132 @39202 has 1 MA's), (138, 39187), (158, 39076), (189, 38968), (221, 38851), (224, 38824), (237, 38779), (238, 38776), (243, 38761), (259, 38680), (267, 38605),

Gene: Rhodalysa\_56 Start: 39345, Stop: 38536, Start Num: 98

Candidate Starts for Rhodalysa\_56:

(Start: 98 @39345 has 36 MA's), (102, 39333), (114, 39231), (Start: 116 @39225 has 1 MA's), (Start: 132 @39171 has 1 MA's), (138, 39156), (158, 39045), (160, 39027), (221, 38820), (237, 38748), (238, 38745), (243, 38730), (259, 38649), (266, 38580), (267, 38574),

Gene: RhynO\_67 Start: 42808, Stop: 41864, Start Num: 33

Candidate Starts for RhynO\_67:

(22, 42862), (Start: 33 @42808 has 1 MA's), (Start: 40 @42763 has 1 MA's), (Start: 73 @42694 has 16 MA's), (Start: 132 @42481 has 1 MA's), (138, 42466), (207, 42187), (243, 42046), (256, 41986), (266, 41896), (269, 41872),

Gene: Rhynn\_65 Start: 43283, Stop: 42480, Start Num: 91

Candidate Starts for Rhynn\_65:

(56, 43340), (Start: 91 @43283 has 39 MA's), (110, 43202), (Start: 112 @43184 has 1 MA's), (Start: 119 @43133 has 1 MA's), (125, 43118), (162, 42932), (173, 42887), (207, 42797), (209, 42791), (216, 42776), (224, 42719), (228, 42704), (239, 42668), (241, 42659), (259, 42578), (266, 42512), (267, 42506), (269, 42488),

Gene: Rideau\_67 Start: 34298, Stop: 33459, Start Num: 100

Candidate Starts for Rideau\_67:

(Start: 100 @34298 has 14 MA's), (Start: 105 @34283 has 2 MA's), (120, 34160), (140, 34088), (144, 34067), (151, 34028), (165, 33926), (192, 33854), (194, 33848), (228, 33698), (244, 33647),

Gene: RidgeCB\_69 Start: 43874, Stop: 43056, Start Num: 76

Candidate Starts for RidgeCB\_69:

(Start: 65 @43892 has 2 MA's), (Start: 76 @43874 has 49 MA's), (Start: 82 @43862 has 2 MA's), (110, 43778), (Start: 112 @43760 has 1 MA's), (Start: 119 @43709 has 1 MA's), (125, 43694), (163, 43499), (173, 43463), (207, 43373), (209, 43367), (216, 43352), (219, 43346), (224, 43295), (228, 43280), (239, 43244), (241, 43235), (259, 43154), (266, 43088), (267, 43082), (269, 43064),

Gene: Rifter\_76 Start: 42555, Stop: 41734, Start Num: 84

Candidate Starts for Rifter\_76:

(21, 42768), (Start: 84 @42555 has 189 MA's), (Start: 109 @42492 has 14 MA's), (Start: 112 @42462 has 1 MA's), (133, 42375), (136, 42369), (141, 42345), (194, 42117), (224, 41988), (230, 41967), (231, 41964), (233, 41955), (241, 41928), (266, 41766),

Gene: Ringer\_72 Start: 45986, Stop: 45162, Start Num: 72

Candidate Starts for Ringer\_72:

(Start: 72 @45986 has 44 MA's), (Start: 82 @45968 has 2 MA's), (110, 45884), (Start: 112 @45866 has 1 MA's), (Start: 119 @45815 has 1 MA's), (125, 45800), (162, 45614), (173, 45569), (207, 45479), (209, 45473), (216, 45458), (219, 45452), (224, 45401), (228, 45386), (239, 45350), (241, 45341), (259, 45260), (266, 45194), (267, 45188), (269, 45170),

Gene: Roary\_84 Start: 45220, Stop: 44480, Start Num: 109

Candidate Starts for Roary\_84:

(Start: 71 @45283 has 48 MA's), (Start: 109 @45220 has 14 MA's), (120, 45136), (129, 45109), (148, 45049), (162, 44950), (190, 44869), (195, 44851), (209, 44809), (215, 44791), (217, 44788), (230, 44716), (231, 44713), (241, 44674), (256, 44602), (259, 44581), (269, 44488),

Gene: Rockstar\_70 Start: 43147, Stop: 42350, Start Num: 93

Candidate Starts for Rockstar\_70:

(42, 43219), (Start: 93 @43147 has 32 MA's), (110, 43072), (207, 42676), (224, 42592), (243, 42532), (266, 42382), (269, 42358),

Gene: Rohr\_70 Start: 45174, Stop: 44374, Start Num: 94

Candidate Starts for Rohr\_70:

(Start: 94 @45174 has 25 MA's), (110, 45096), (Start: 112 @45078 has 1 MA's), (Start: 119 @45027 has 1 MA's), (125, 45012), (162, 44826), (173, 44781), (207, 44691), (209, 44685), (216, 44670), (219, 44664), (224, 44613), (228, 44598), (239, 44562), (241, 44553), (259, 44472), (266, 44406), (267, 44400), (269, 44382),

Gene: Roksolana\_76 Start: 43289, Stop: 42468, Start Num: 84

Candidate Starts for Roksolana\_76:

(21, 43502), (Start: 84 @43289 has 189 MA's), (Start: 109 @43226 has 14 MA's), (Start: 112 @43196 has 1 MA's), (133, 43109), (136, 43103), (141, 43079), (194, 42851), (224, 42722), (230, 42701), (231, 42698), (233, 42689), (241, 42662), (266, 42500),

Gene: Romero\_66 Start: 34361, Stop: 33540, Start Num: 100

Candidate Starts for Romero\_66:

(Start: 100 @34361 has 14 MA's), (Start: 105 @34346 has 2 MA's), (120, 34223), (134, 34178), (137, 34166), (140, 34151), (144, 34130), (161, 34019), (165, 33989), (194, 33911), (228, 33779), (240, 33737), (244, 33728), (252, 33680), (262, 33626),

Gene: Romney\_67 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Romney\_67:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Roosevelt\_66 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Roosevelt\_66:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Rosa24\_65 Start: 43189, Stop: 42398, Start Num: 95

Candidate Starts for Rosa24\_65:

(Start: 95 @43189 has 215 MA's), (Start: 106 @43162 has 6 MA's), (Start: 132 @43015 has 1 MA's), (141, 42991), (172, 42814), (199, 42748), (207, 42721), (216, 42700), (224, 42643), (226, 42634), (243, 42580), (266, 42430),

Gene: Rosalind\_80 Start: 44572, Stop: 43724, Start Num: 81

Candidate Starts for Rosalind\_80:

(Start: 81 @44572 has 18 MA's), (Start: 85 @44566 has 1 MA's), (Start: 106 @44524 has 6 MA's), (Start: 109 @44491 has 14 MA's), (Start: 112 @44461 has 1 MA's), (136, 44368), (192, 44104), (208, 44056), (230, 43957), (231, 43954), (241, 43915),

Gene: RosePharie\_65 Start: 33971, Stop: 33150, Start Num: 100

Candidate Starts for RosePharie\_65:

(Start: 60 @34040 has 3 MA's), (Start: 100 @33971 has 14 MA's), (140, 33761), (143, 33746), (165, 33599), (192, 33527), (207, 33461), (224, 33404), (228, 33389), (244, 33338), (246, 33323), (261, 33239), (262, 33236),

Gene: Rowdy\_70 Start: 43100, Stop: 42276, Start Num: 73

Candidate Starts for Rowdy\_70:

(24, 43259), (Start: 73 @43100 has 16 MA's), (Start: 132 @42893 has 1 MA's), (138, 42878), (201, 42620), (207, 42599), (214, 42581), (224, 42521), (243, 42458), (256, 42398), (264, 42341), (266,

42308), (269, 42284),

Gene: Rubeus\_68 Start: 41676, Stop: 40876, Start Num: 94

Candidate Starts for Rubeus\_68:

(Start: 94 @41676 has 25 MA's), (110, 41598), (Start: 112 @41580 has 1 MA's), (Start: 119 @41529 has 1 MA's), (125, 41514), (162, 41328), (173, 41283), (207, 41193), (209, 41187), (216, 41172), (224, 41115), (228, 41100), (239, 41064), (241, 41055), (259, 40974), (266, 40908), (267, 40902), (269, 40884),

Gene: Rufus\_71 Start: 44360, Stop: 43560, Start Num: 94

Candidate Starts for Rufus\_71:

(Start: 94 @44360 has 25 MA's), (110, 44282), (Start: 112 @44264 has 1 MA's), (Start: 119 @44213 has 1 MA's), (125, 44198), (162, 44012), (173, 43967), (207, 43877), (209, 43871), (216, 43856), (224, 43799), (228, 43784), (239, 43748), (241, 43739), (259, 43658), (266, 43592), (267, 43586), (269, 43568),

Gene: Ruin\_68 Start: 43151, Stop: 42360, Start Num: 95

Candidate Starts for Ruin\_68:

(20, 43364), (Start: 95 @43151 has 215 MA's), (Start: 106 @43124 has 6 MA's), (Start: 132 @42977 has 1 MA's), (141, 42953), (172, 42776), (199, 42710), (207, 42683), (216, 42662), (224, 42605), (226, 42596), (243, 42542), (266, 42392),

Gene: Rummer\_76 Start: 44050, Stop: 43262, Start Num: 106

Candidate Starts for Rummer\_76:

(23, 44257), (Start: 95 @44077 has 215 MA's), (Start: 106 @44050 has 6 MA's), (Start: 132 @43894 has 1 MA's), (141, 43870), (146, 43843), (150, 43825), (200, 43624), (207, 43600), (216, 43576), (241, 43456), (245, 43438), (251, 43408), (266, 43294), (269, 43270),

Gene: Ruotula\_75 Start: 46644, Stop: 45796, Start Num: 63

Candidate Starts for Ruotula\_75:

(Start: 63 @46644 has 7 MA's), (68, 46635), (Start: 74 @46626 has 6 MA's), (Start: 82 @46614 has 2 MA's), (110, 46530), (Start: 112 @46512 has 1 MA's), (Start: 119 @46461 has 1 MA's), (136, 46419), (141, 46395), (145, 46371), (163, 46239), (173, 46203), (207, 46113), (209, 46107), (216, 46092), (219, 46086), (224, 46035), (228, 46020), (239, 45984), (241, 45975), (259, 45894), (266, 45828), (267, 45822), (269, 45804),

Gene: Rutherferd\_70 Start: 45096, Stop: 44296, Start Num: 92

Candidate Starts for Rutherferd\_70:

(29, 45258), (Start: 89 @45099 has 3 MA's), (Start: 92 @45096 has 8 MA's), (110, 45018), (Start: 112 @45000 has 1 MA's), (Start: 119 @44949 has 1 MA's), (125, 44934), (163, 44739), (173, 44703), (207, 44613), (209, 44607), (216, 44592), (224, 44535), (228, 44520), (239, 44484), (241, 44475), (259, 44394), (266, 44328), (267, 44322), (269, 44304),

Gene: RyeScarlet\_76 Start: 43716, Stop: 42874, Start Num: 84

Candidate Starts for RyeScarlet\_76:

(Start: 84 @43716 has 189 MA's), (Start: 91 @43710 has 39 MA's), (Start: 109 @43647 has 14 MA's), (Start: 112 @43617 has 1 MA's), (124, 43554), (167, 43338), (207, 43206), (208, 43203), (209, 43200), (227, 43113), (241, 43065), (266, 42903),

Gene: STLscum\_77 Start: 45890, Stop: 45060, Start Num: 76

Candidate Starts for STLscum\_77:

(Start: 40 @45974 has 1 MA's), (Start: 76 @45890 has 49 MA's), (Start: 82 @45878 has 2 MA's), (Start: 109 @45803 has 14 MA's), (Start: 119 @45722 has 1 MA's), (125, 45707), (136, 45671), (141,



45647), (162, 45512), (194, 45416), (218, 45353), (224, 45299), (241, 45239), (259, 45158), (266, 45092), (267, 45086), (269, 45068),

Gene: Sabertooth\_68 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Sabertooth\_68:

(Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Sabia\_75 Start: 44057, Stop: 43242, Start Num: 95

Candidate Starts for Sabia\_75:

(23, 44237), (Start: 95 @44057 has 215 MA's), (Start: 106 @44030 has 6 MA's), (Start: 132 @43874 has 1 MA's), (141, 43850), (146, 43823), (150, 43805), (200, 43604), (207, 43580), (216, 43556), (241, 43436), (245, 43418), (251, 43388), (266, 43274), (269, 43250),

Gene: Sabinator\_75 Start: 44048, Stop: 43233, Start Num: 95

Candidate Starts for Sabinator\_75:

(23, 44228), (Start: 95 @44048 has 215 MA's), (Start: 106 @44021 has 6 MA's), (Start: 132 @43865 has 1 MA's), (141, 43841), (146, 43814), (150, 43796), (200, 43595), (207, 43571), (216, 43547), (241, 43427), (245, 43409), (251, 43379), (266, 43265), (269, 43241),

Gene: Sachima\_71 Start: 43697, Stop: 42855, Start Num: 84

Candidate Starts for Sachima\_71:

(Start: 84 @43697 has 189 MA's), (Start: 91 @43691 has 39 MA's), (Start: 109 @43628 has 14 MA's), (Start: 112 @43598 has 1 MA's), (124, 43535), (167, 43319), (207, 43187), (208, 43184), (209, 43181), (227, 43094), (241, 43046), (266, 42884),

Gene: Sagefire\_69 Start: 45096, Stop: 44272, Start Num: 72

Candidate Starts for Sagefire\_69:

(55, 45129), (Start: 72 @45096 has 44 MA's), (Start: 82 @45078 has 2 MA's), (110, 44994), (Start: 112 @44976 has 1 MA's), (Start: 119 @44925 has 1 MA's), (125, 44910), (162, 44724), (173, 44679), (207, 44589), (209, 44583), (216, 44568), (219, 44562), (224, 44511), (228, 44496), (239, 44460), (241, 44451), (259, 44370), (266, 44304), (267, 44298), (269, 44280),

Gene: Saintus\_78 Start: 41931, Stop: 41128, Start Num: 71

Candidate Starts for Saintus\_78:

(Start: 71 @41931 has 48 MA's), (Start: 109 @41868 has 14 MA's), (120, 41784), (129, 41757), (148, 41697), (162, 41598), (195, 41499), (209, 41457), (215, 41439), (217, 41436), (230, 41364), (231, 41361), (241, 41322), (256, 41250), (259, 41229), (269, 41136),

Gene: Salz\_71 Start: 42721, Stop: 41906, Start Num: 84

Candidate Starts for Salz\_71:

(Start: 84 @42721 has 189 MA's), (113, 42616), (Start: 119 @42571 has 1 MA's), (136, 42529), (139, 42511), (146, 42478), (158, 42403), (209, 42232), (224, 42160), (230, 42139), (241, 42100), (266, 41938),

Gene: Sandaddy\_66 Start: 43660, Stop: 42857, Start Num: 91

Candidate Starts for Sandaddy\_66:

(56, 43717), (Start: 91 @43660 has 39 MA's), (110, 43579), (Start: 112 @43561 has 1 MA's), (Start: 119 @43510 has 1 MA's), (125, 43495), (162, 43309), (207, 43174), (209, 43168), (216, 43153), (219, 43147), (224, 43096), (228, 43081), (239, 43045), (241, 43036), (259, 42955), (266, 42889), (267, 42883), (269, 42865),

Gene: Sanya\_66 Start: 44883, Stop: 44149, Start Num: 109

Candidate Starts for Sanya\_66:

(57, 44997), (59, 44994), (62, 44991), (Start: 109 @44883 has 14 MA's), (Start: 119 @44802 has 1 MA's), (125, 44787), (162, 44601), (207, 44466), (209, 44460), (219, 44439), (224, 44388), (228, 44373), (239, 44337), (241, 44328), (259, 44247), (266, 44181), (267, 44175), (269, 44157),

Gene: SarFire\_69 Start: 43965, Stop: 43231, Start Num: 109

Candidate Starts for SarFire\_69:

(57, 44079), (59, 44076), (62, 44073), (Start: 109 @43965 has 14 MA's), (Start: 119 @43884 has 1 MA's), (125, 43869), (162, 43683), (207, 43548), (209, 43542), (216, 43527), (219, 43521), (224, 43470), (228, 43455), (239, 43419), (241, 43410), (259, 43329), (266, 43263), (267, 43257), (269, 43239),

Gene: SaturnRing\_71 Start: 43681, Stop: 42887, Start Num: 93

Candidate Starts for SaturnRing\_71:

(Start: 93 @43681 has 32 MA's), (136, 43501), (200, 43237), (228, 43114), (243, 43069), (266, 42919), (269, 42895),

Gene: Scamp\_68 Start: 43160, Stop: 42369, Start Num: 95

Candidate Starts for Scamp\_68:

(20, 43373), (Start: 95 @43160 has 215 MA's), (Start: 106 @43133 has 6 MA's), (Start: 132 @42986 has 1 MA's), (141, 42962), (172, 42785), (199, 42719), (207, 42692), (216, 42671), (224, 42614), (226, 42605), (243, 42551), (266, 42401),

Gene: Scherzo\_74 Start: 43960, Stop: 43118, Start Num: 84

Candidate Starts for Scherzo\_74:

(Start: 78 @43969 has 1 MA's), (Start: 84 @43960 has 189 MA's), (Start: 109 @43891 has 14 MA's), (Start: 112 @43861 has 1 MA's), (124, 43798), (167, 43582), (207, 43450), (208, 43447), (209, 43444), (227, 43357), (241, 43309), (256, 43237), (266, 43147),

Gene: Scorpio\_71 Start: 43383, Stop: 42568, Start Num: 71

Candidate Starts for Scorpio\_71:

(37, 43470), (Start: 71 @43383 has 48 MA's), (Start: 112 @43293 has 1 MA's), (122, 43230), (130, 43212), (Start: 132 @43209 has 1 MA's), (148, 43149), (152, 43128), (161, 43059), (163, 43041), (201, 42936), (210, 42906), (219, 42861), (224, 42810), (226, 42801), (231, 42786), (235, 42771), (251, 42714), (256, 42690), (257, 42681), (266, 42600), (269, 42576),

Gene: Scout\_70 Start: 42851, Stop: 42057, Start Num: 93

Candidate Starts for Scout\_70:

(Start: 93 @42851 has 32 MA's), (207, 42383), (224, 42299), (243, 42239), (266, 42089), (269, 42065),

Gene: Scowl\_69 Start: 43515, Stop: 42712, Start Num: 91

Candidate Starts for Scowl\_69:

(56, 43572), (Start: 91 @43515 has 39 MA's), (110, 43434), (Start: 112 @43416 has 1 MA's), (Start: 119 @43365 has 1 MA's), (125, 43350), (162, 43164), (173, 43119), (207, 43029), (209, 43023), (216, 43008), (224, 42951), (228, 42936), (239, 42900), (241, 42891), (259, 42810), (266, 42744), (267, 42738), (269, 42720),

Gene: Seabiscuit\_70 Start: 43283, Stop: 42483, Start Num: 94

Candidate Starts for Seabiscuit\_70:

(77, 43301), (Start: 94 @43283 has 25 MA's), (110, 43205), (Start: 112 @43187 has 1 MA's), (Start: 119 @43136 has 1 MA's), (125, 43121), (162, 42935), (173, 42890), (207, 42800), (209, 42794), (216,

42779), (219, 42773), (224, 42722), (228, 42707), (239, 42671), (241, 42662), (259, 42581), (266, 42515), (267, 42509), (269, 42491),

Gene: Seanderson\_71 Start: 46584, Stop: 45778, Start Num: 82

Candidate Starts for Seanderson\_71:

(Start: 63 @46614 has 7 MA's), (68, 46605), (Start: 74 @46596 has 6 MA's), (Start: 82 @46584 has 2 MA's), (110, 46500), (Start: 112 @46482 has 1 MA's), (Start: 119 @46431 has 1 MA's), (125, 46416), (163, 46221), (173, 46185), (207, 46095), (209, 46089), (216, 46074), (219, 46068), (224, 46017), (228, 46002), (239, 45966), (241, 45957), (259, 45876), (266, 45810), (267, 45804), (269, 45786),

Gene: SemperFi\_74 Start: 44548, Stop: 43730, Start Num: 84

Candidate Starts for SemperFi\_74:

(Start: 84 @44548 has 189 MA's), (Start: 109 @44476 has 14 MA's), (Start: 112 @44446 has 1 MA's), (136, 44353), (207, 44062), (228, 43969), (230, 43963), (241, 43921), (248, 43891), (264, 43792), (266, 43759),

Gene: Serenity\_77 Start: 43976, Stop: 43110, Start Num: 84

Candidate Starts for Serenity\_77:

(Start: 84 @43976 has 189 MA's), (114, 43853), (136, 43784), (209, 43436), (224, 43364), (230, 43343), (233, 43331), (241, 43301), (266, 43139),

Gene: Severus\_66 Start: 42089, Stop: 41247, Start Num: 73

Candidate Starts for Severus\_66:

(24, 42248), (Start: 73 @42089 has 16 MA's), (79, 42077), (Start: 106 @42026 has 6 MA's), (Start: 132 @41879 has 1 MA's), (138, 41864), (208, 41582), (228, 41477), (231, 41468), (243, 41429), (256, 41369), (266, 41279), (269, 41255),

Gene: Shaka\_66 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Shaka\_66:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Sham4\_72 Start: 42805, Stop: 41990, Start Num: 84

Candidate Starts for Sham4\_72:

(Start: 84 @42805 has 189 MA's), (113, 42700), (Start: 119 @42655 has 1 MA's), (136, 42613), (139, 42595), (146, 42562), (148, 42553), (158, 42487), (209, 42316), (224, 42244), (230, 42223), (241, 42184), (266, 42022),

Gene: Shapes\_70 Start: 43100, Stop: 42276, Start Num: 73

Candidate Starts for Shapes\_70:

(24, 43259), (Start: 73 @43100 has 16 MA's), (Start: 132 @42893 has 1 MA's), (138, 42878), (201, 42620), (207, 42599), (214, 42581), (224, 42521), (243, 42458), (256, 42398), (264, 42341), (266, 42308), (269, 42284),

Gene: ShayRa\_82 Start: 44601, Stop: 43753, Start Num: 81

Candidate Starts for ShayRa\_82:

(Start: 81 @44601 has 18 MA's), (Start: 85 @44595 has 1 MA's), (Start: 106 @44553 has 6 MA's), (Start: 109 @44520 has 14 MA's), (Start: 112 @44490 has 1 MA's), (136, 44397), (230, 43986), (231, 43983), (241, 43944),

Gene: SheaKeira\_69 Start: 42786, Stop: 41878, Start Num: 84

Candidate Starts for SheaKeira\_69:

(7, 43095), (34, 42912), (Start: 84 @42786 has 189 MA's), (Start: 91 @42780 has 39 MA's), (Start: 106 @42750 has 6 MA's), (107, 42741), (Start: 109 @42717 has 14 MA's), (Start: 112 @42687 has 1 MA's), (114, 42663), (124, 42624), (148, 42534), (167, 42408), (178, 42372), (190, 42276), (208, 42207), (209, 42204), (227, 42117), (230, 42108), (247, 42042), (255, 42006), (266, 41907),

Gene: Sheen\_72 Start: 47073, Stop: 46276, Start Num: 87

Candidate Starts for Sheen\_72:

(Start: 87 @47073 has 3 MA's), (Start: 106 @47037 has 6 MA's), (Start: 132 @46890 has 1 MA's), (142, 46860), (161, 46740), (224, 46518), (231, 46497), (232, 46494), (234, 46485), (243, 46458), (253, 46416), (256, 46398), (266, 46308),

Gene: SheldonCooper\_68 Start: 43598, Stop: 42807, Start Num: 95

Candidate Starts for SheldonCooper\_68:

(39, 43673), (Start: 95 @43598 has 215 MA's), (Start: 106 @43571 has 6 MA's), (Start: 132 @43424 has 1 MA's), (141, 43400), (172, 43223), (199, 43157), (207, 43130), (216, 43109), (224, 43052), (226, 43043), (243, 42989), (266, 42839),

Gene: ShortQueendom\_61 Start: 41404, Stop: 40601, Start Num: 91

Candidate Starts for ShortQueendom\_61:

(56, 41461), (Start: 91 @41404 has 39 MA's), (110, 41323), (Start: 112 @41305 has 1 MA's), (Start: 119 @41254 has 1 MA's), (125, 41239), (162, 41053), (207, 40918), (209, 40912), (219, 40891), (224, 40840), (228, 40825), (239, 40789), (241, 40780), (259, 40699), (266, 40633), (267, 40627), (269, 40609),

Gene: Shuman\_57 Start: 39296, Stop: 38490, Start Num: 98

Candidate Starts for Shuman\_57:

(Start: 98 @39296 has 36 MA's), (102, 39287), (108, 39251), (Start: 112 @39209 has 1 MA's), (114, 39185), (Start: 116 @39179 has 1 MA's), (Start: 132 @39125 has 1 MA's), (138, 39110), (158, 38999), (189, 38891), (221, 38774), (224, 38747), (237, 38702), (238, 38699), (243, 38684), (259, 38603), (267, 38528),

Gene: Shygu2\_67 Start: 43485, Stop: 42694, Start Num: 95

Candidate Starts for Shygu2\_67:

(Start: 95 @43485 has 215 MA's), (Start: 106 @43458 has 6 MA's), (Start: 132 @43311 has 1 MA's), (141, 43287), (200, 43041), (207, 43017), (224, 42939), (243, 42876), (266, 42726),

Gene: Sibs6\_71 Start: 42577, Stop: 41759, Start Num: 76

Candidate Starts for Sibs6\_71:

(Start: 65 @42595 has 2 MA's), (Start: 76 @42577 has 49 MA's), (Start: 82 @42565 has 2 MA's), (110, 42481), (Start: 112 @42463 has 1 MA's), (Start: 119 @42412 has 1 MA's), (125, 42397), (162, 42211), (173, 42166), (207, 42076), (209, 42070), (216, 42055), (219, 42049), (224, 41998), (228, 41983), (239, 41947), (241, 41938), (259, 41857), (266, 41791), (267, 41785), (269, 41767),

Gene: SkiPole\_76 Start: 45136, Stop: 44333, Start Num: 83

Candidate Starts for SkiPole\_76:

(Start: 83 @45136 has 6 MA's), (110, 45055), (Start: 112 @45037 has 1 MA's), (Start: 119 @44986 has 1 MA's), (125, 44971), (162, 44785), (173, 44740), (207, 44650), (209, 44644), (216, 44629), (219, 44623), (224, 44572), (228, 44557), (239, 44521), (241, 44512), (259, 44431), (261, 44419), (266, 44365), (267, 44359), (269, 44341),

Gene: Skipitt\_67 Start: 43152, Stop: 42361, Start Num: 95

Candidate Starts for Skipitt\_67:

(20, 43365), (Start: 95 @43152 has 215 MA's), (Start: 106 @43125 has 6 MA's), (Start: 132 @42978 has 1 MA's), (172, 42777), (199, 42711), (207, 42684), (216, 42663), (224, 42606), (226, 42597), (243, 42543), (266, 42393),

Gene: Slagathor\_72 Start: 46101, Stop: 45283, Start Num: 76

Candidate Starts for Slagathor\_72:

(Start: 65 @46119 has 2 MA's), (Start: 76 @46101 has 49 MA's), (Start: 82 @46089 has 2 MA's), (110, 46005), (Start: 112 @45987 has 1 MA's), (117, 45945), (Start: 119 @45936 has 1 MA's), (125, 45921), (162, 45735), (173, 45690), (207, 45600), (209, 45594), (216, 45579), (219, 45573), (224, 45522), (228, 45507), (239, 45471), (241, 45462), (259, 45381), (266, 45315), (267, 45309), (269, 45291),

Gene: Smairt\_70 Start: 46125, Stop: 45325, Start Num: 92

Candidate Starts for Smairt\_70:

(29, 46287), (Start: 89 @46128 has 3 MA's), (Start: 92 @46125 has 8 MA's), (110, 46047), (Start: 112 @46029 has 1 MA's), (Start: 119 @45978 has 1 MA's), (125, 45963), (162, 45777), (173, 45732), (207, 45642), (209, 45636), (216, 45621), (219, 45615), (224, 45564), (228, 45549), (239, 45513), (241, 45504), (259, 45423), (266, 45357), (267, 45351), (269, 45333),

Gene: Smeadley\_82 Start: 45147, Stop: 44344, Start Num: 71

Candidate Starts for Smeadley\_82:

(Start: 71 @45147 has 48 MA's), (Start: 109 @45084 has 14 MA's), (120, 45000), (129, 44973), (148, 44913), (162, 44814), (190, 44733), (195, 44715), (209, 44673), (215, 44655), (217, 44652), (230, 44580), (231, 44577), (241, 44538), (256, 44466), (259, 44445), (269, 44352),

Gene: Smeagan\_76 Start: 44940, Stop: 44041, Start Num: 84

Candidate Starts for Smeagan\_76:

(Start: 84 @44940 has 189 MA's), (Start: 98 @44928 has 36 MA's), (Start: 109 @44871 has 14 MA's), (Start: 112 @44841 has 1 MA's), (136, 44748), (148, 44688), (174, 44541), (177, 44526), (182, 44493), (187, 44484), (207, 44373), (230, 44274), (241, 44232), (266, 44070),

Gene: Smeagol\_70 Start: 45369, Stop: 44566, Start Num: 91

Candidate Starts for Smeagol\_70:

(56, 45426), (Start: 91 @45369 has 39 MA's), (110, 45288), (Start: 112 @45270 has 1 MA's), (Start: 119 @45219 has 1 MA's), (125, 45204), (162, 45018), (173, 44973), (207, 44883), (209, 44877), (216, 44862), (219, 44856), (224, 44805), (239, 44754), (241, 44745), (259, 44664), (266, 44598), (267, 44592), (269, 44574),

Gene: SmellyB\_76 Start: 43230, Stop: 42403, Start Num: 84

Candidate Starts for SmellyB\_76:

(Start: 84 @43230 has 189 MA's), (104, 43200), (Start: 109 @43158 has 14 MA's), (Start: 112 @43128 has 1 MA's), (Start: 119 @43077 has 1 MA's), (133, 43041), (141, 43011), (148, 42975), (160, 42891), (194, 42783), (208, 42729), (209, 42726), (224, 42654), (230, 42633), (231, 42630), (241, 42594), (266, 42432),

Gene: SnapTap\_73 Start: 44359, Stop: 43541, Start Num: 84

Candidate Starts for SnapTap\_73:

(Start: 84 @44359 has 189 MA's), (Start: 109 @44287 has 14 MA's), (Start: 112 @44257 has 1 MA's), (136, 44164), (148, 44104), (207, 43873), (228, 43780), (230, 43774), (241, 43732), (248, 43702), (264, 43603), (266, 43570),

Gene: Snape\_76 Start: 43914, Stop: 43099, Start Num: 84

Candidate Starts for Snape\_76:

(Start: 84 @43914 has 189 MA's), (113, 43809), (Start: 119 @43764 has 1 MA's), (136, 43722), (139, 43704), (146, 43671), (158, 43596), (209, 43425), (224, 43353), (230, 43332), (241, 43293), (266, 43131),

Gene: Snazzy\_67 Start: 43257, Stop: 42523, Start Num: 109

Candidate Starts for Snazzy\_67:

(57, 43371), (59, 43368), (62, 43365), (Start: 109 @43257 has 14 MA's), (Start: 119 @43176 has 1 MA's), (125, 43161), (162, 42975), (207, 42840), (209, 42834), (219, 42813), (224, 42762), (228, 42747), (239, 42711), (241, 42702), (259, 42621), (266, 42555), (267, 42549), (269, 42531),

Gene: Snickers\_73 Start: 43995, Stop: 43207, Start Num: 106

Candidate Starts for Snickers\_73:

(23, 44202), (Start: 95 @44022 has 215 MA's), (Start: 106 @43995 has 6 MA's), (Start: 132 @43839 has 1 MA's), (141, 43815), (146, 43788), (150, 43770), (200, 43569), (207, 43545), (216, 43521), (241, 43401), (245, 43383), (251, 43353), (266, 43239), (269, 43215),

Gene: SoYo\_74 Start: 43961, Stop: 43146, Start Num: 95

Candidate Starts for SoYo\_74:

(23, 44141), (Start: 95 @43961 has 215 MA's), (Start: 106 @43934 has 6 MA's), (Start: 132 @43778 has 1 MA's), (141, 43754), (146, 43727), (150, 43709), (200, 43508), (207, 43484), (216, 43460), (241, 43340), (245, 43322), (251, 43292), (266, 43178), (269, 43154),

Gene: SoilDragon\_76 Start: 43496, Stop: 42681, Start Num: 95

Candidate Starts for SoilDragon\_76:

(23, 43676), (Start: 95 @43496 has 215 MA's), (Start: 106 @43469 has 6 MA's), (120, 43352), (Start: 132 @43313 has 1 MA's), (141, 43289), (146, 43262), (150, 43244), (200, 43043), (207, 43019), (216, 42995), (241, 42875), (245, 42857), (251, 42827), (266, 42713), (269, 42689),

Gene: Solon\_68 Start: 43540, Stop: 42716, Start Num: 72

Candidate Starts for Solon\_68:

(55, 43573), (Start: 72 @43540 has 44 MA's), (Start: 82 @43522 has 2 MA's), (110, 43438), (Start: 112 @43420 has 1 MA's), (Start: 119 @43369 has 1 MA's), (125, 43354), (162, 43168), (173, 43123), (207, 43033), (209, 43027), (216, 43012), (219, 43006), (224, 42955), (228, 42940), (239, 42904), (241, 42895), (259, 42814), (266, 42748), (267, 42742), (269, 42724),

Gene: SororFago\_75 Start: 44880, Stop: 44074, Start Num: 84

Candidate Starts for SororFago\_75:

(26, 45051), (50, 44949), (Start: 84 @44880 has 189 MA's), (Start: 106 @44850 has 6 MA's), (Start: 109 @44817 has 14 MA's), (Start: 112 @44787 has 1 MA's), (136, 44694), (174, 44487), (195, 44439), (203, 44424), (233, 44292), (235, 44286), (241, 44265), (247, 44238),

Gene: Sorpresa\_67 Start: 43662, Stop: 42859, Start Num: 91

Candidate Starts for Sorpresa\_67:

(56, 43719), (Start: 91 @43662 has 39 MA's), (110, 43581), (Start: 112 @43563 has 1 MA's), (Start: 119 @43512 has 1 MA's), (125, 43497), (162, 43311), (207, 43176), (209, 43170), (216, 43155), (219, 43149), (224, 43098), (228, 43083), (239, 43047), (241, 43038), (259, 42957), (266, 42891), (267, 42885), (269, 42867),

Gene: Soshari\_79 Start: 44073, Stop: 43258, Start Num: 95

Candidate Starts for Soshari\_79:

(23, 44253), (Start: 95 @44073 has 215 MA's), (Start: 106 @44046 has 6 MA's), (Start: 132 @43890 has 1 MA's), (141, 43866), (146, 43839), (150, 43821), (200, 43620), (207, 43596), (216, 43572), (241, 43452), (245, 43434), (251, 43404), (266, 43290), (269, 43266),

Gene: Soups\_81 Start: 44467, Stop: 43616, Start Num: 81

Candidate Starts for Soups\_81:

(Start: 81 @44467 has 18 MA's), (Start: 85 @44461 has 1 MA's), (Start: 106 @44419 has 6 MA's), (Start: 109 @44386 has 14 MA's), (Start: 112 @44356 has 1 MA's), (136, 44263), (192, 43999), (208, 43951), (230, 43852), (231, 43849), (241, 43810), (266, 43648),

Gene: Sparxx\_69 Start: 43153, Stop: 42362, Start Num: 95

Candidate Starts for Sparxx\_69:

(Start: 95 @43153 has 215 MA's), (Start: 106 @43126 has 6 MA's), (Start: 132 @42979 has 1 MA's), (141, 42955), (172, 42778), (199, 42712), (207, 42685), (216, 42664), (224, 42607), (226, 42598), (243, 42544), (266, 42394),

Gene: Spike509\_77 Start: 44074, Stop: 43259, Start Num: 95

Candidate Starts for Spike509\_77:

(23, 44254), (Start: 95 @44074 has 215 MA's), (Start: 106 @44047 has 6 MA's), (Start: 132 @43891 has 1 MA's), (141, 43867), (146, 43840), (150, 43822), (200, 43621), (207, 43597), (216, 43573), (241, 43453), (245, 43435), (251, 43405), (266, 43291), (269, 43267),

Gene: SpikeBT\_68 Start: 44197, Stop: 43379, Start Num: 76

Candidate Starts for SpikeBT\_68:

(Start: 65 @44215 has 2 MA's), (Start: 76 @44197 has 49 MA's), (Start: 82 @44185 has 2 MA's), (110, 44101), (Start: 112 @44083 has 1 MA's), (Start: 119 @44032 has 1 MA's), (125, 44017), (162, 43831), (173, 43786), (207, 43696), (209, 43690), (216, 43675), (219, 43669), (224, 43618), (228, 43603), (239, 43567), (241, 43558), (259, 43477), (266, 43411), (267, 43405), (269, 43387),

Gene: Spino\_67 Start: 43161, Stop: 42370, Start Num: 95

Candidate Starts for Spino\_67:

(20, 43374), (Start: 95 @43161 has 215 MA's), (Start: 106 @43134 has 6 MA's), (Start: 132 @42987 has 1 MA's), (141, 42963), (172, 42786), (199, 42720), (207, 42693), (216, 42672), (224, 42615), (226, 42606), (243, 42552), (266, 42402),

Gene: Spouty\_73 Start: 43467, Stop: 42625, Start Num: 84

Candidate Starts for Spouty\_73:

(Start: 84 @43467 has 189 MA's), (Start: 91 @43461 has 39 MA's), (Start: 109 @43398 has 14 MA's), (Start: 112 @43368 has 1 MA's), (124, 43305), (167, 43089), (207, 42957), (208, 42954), (209, 42951), (227, 42864), (241, 42816), (266, 42654),

Gene: Squee\_72 Start: 44295, Stop: 43561, Start Num: 109

Candidate Starts for Squee\_72:

(57, 44409), (59, 44406), (62, 44403), (Start: 109 @44295 has 14 MA's), (Start: 119 @44214 has 1 MA's), (125, 44199), (162, 44013), (173, 43968), (207, 43878), (209, 43872), (224, 43800), (228, 43785), (239, 43749), (241, 43740), (259, 43659), (266, 43593), (267, 43587), (269, 43569),

Gene: StCroix\_55 Start: 39367, Stop: 38558, Start Num: 98

Candidate Starts for StCroix\_55:

(Start: 98 @39367 has 36 MA's), (102, 39355), (114, 39253), (Start: 116 @39247 has 1 MA's), (Start: 132 @39193 has 1 MA's), (138, 39178), (158, 39067), (160, 39049), (221, 38842), (237, 38770), (238, 38767), (243, 38752), (259, 38671), (266, 38602), (267, 38596),

Gene: Stagni\_74 Start: 44025, Stop: 43237, Start Num: 106

Candidate Starts for Stagni\_74:

(23, 44232), (Start: 95 @44052 has 215 MA's), (Start: 106 @44025 has 6 MA's), (Start: 132 @43869 has 1 MA's), (141, 43845), (146, 43818), (150, 43800), (200, 43599), (207, 43575), (216, 43551), (241, 43431), (245, 43413), (251, 43383), (266, 43269), (269, 43245),

Gene: StarStuff\_76 Start: 44863, Stop: 44054, Start Num: 97

Candidate Starts for StarStuff\_76:

(Start: 97 @44863 has 16 MA's), (Start: 106 @44833 has 6 MA's), (Start: 109 @44800 has 14 MA's), (Start: 112 @44770 has 1 MA's), (133, 44683), (141, 44653), (174, 44470), (209, 44380), (224, 44308), (230, 44287), (241, 44245), (242, 44242), (263, 44128), (264, 44116), (266, 44083),

Gene: Stasia\_67 Start: 43367, Stop: 42576, Start Num: 95

Candidate Starts for Stasia\_67:

(24, 43532), (Start: 95 @43367 has 215 MA's), (Start: 132 @43193 has 1 MA's), (141, 43169), (172, 42992), (199, 42926), (207, 42899), (224, 42821), (226, 42812), (243, 42758), (266, 42608),

Gene: Steamy\_68 Start: 43229, Stop: 42336, Start Num: 82

Candidate Starts for Steamy\_68:

(14, 43496), (34, 43343), (46, 43295), (Start: 82 @43229 has 2 MA's), (Start: 106 @43196 has 6 MA's), (Start: 109 @43163 has 14 MA's), (Start: 112 @43133 has 1 MA's), (136, 43040), (148, 42980), (209, 42662), (241, 42527), (269, 42341),

Gene: Stella\_67 Start: 34766, Stop: 33927, Start Num: 100

Candidate Starts for Stella\_67:

(Start: 100 @34766 has 14 MA's), (Start: 105 @34751 has 2 MA's), (120, 34628), (140, 34556), (143, 34541), (155, 34475), (162, 34415), (165, 34394), (194, 34316), (228, 34166), (240, 34124), (244, 34115),

Gene: StepMih\_76 Start: 44043, Stop: 43228, Start Num: 95

Candidate Starts for StepMih\_76:

(23, 44223), (Start: 95 @44043 has 215 MA's), (Start: 106 @44016 has 6 MA's), (Start: 132 @43860 has 1 MA's), (141, 43836), (146, 43809), (150, 43791), (200, 43590), (207, 43566), (216, 43542), (241, 43422), (245, 43404), (251, 43374), (266, 43260), (269, 43236),

Gene: Stephig9\_81 Start: 45086, Stop: 44283, Start Num: 71

Candidate Starts for Stephig9\_81:

(Start: 71 @45086 has 48 MA's), (Start: 109 @45023 has 14 MA's), (120, 44939), (129, 44912), (148, 44852), (162, 44753), (195, 44654), (209, 44612), (215, 44594), (217, 44591), (230, 44519), (231, 44516), (241, 44477), (256, 44405), (259, 44384), (269, 44291),

Gene: StewieG\_63 Start: 40420, Stop: 39617, Start Num: 91

Candidate Starts for StewieG\_63:

(56, 40477), (Start: 91 @40420 has 39 MA's), (110, 40339), (Start: 112 @40321 has 1 MA's), (Start: 119 @40270 has 1 MA's), (125, 40255), (162, 40069), (173, 40024), (207, 39934), (209, 39928), (216, 39913), (219, 39907), (224, 39856), (228, 39841), (239, 39805), (241, 39796), (259, 39715), (266, 39649), (267, 39643), (269, 39625),

Gene: Stink\_67 Start: 43259, Stop: 42468, Start Num: 95

Candidate Starts for Stink\_67:

(Start: 95 @43259 has 215 MA's), (Start: 106 @43232 has 6 MA's), (Start: 132 @43085 has 1 MA's), (200, 42815), (207, 42791), (224, 42713), (226, 42704), (243, 42650), (266, 42500),

Gene: StrongArm\_67 Start: 44791, Stop: 43973, Start Num: 76

Candidate Starts for StrongArm\_67:



(69, 44800), (Start: 76 @44791 has 49 MA's), (Start: 82 @44779 has 2 MA's), (110, 44695), (Start: 112 @44677 has 1 MA's), (Start: 119 @44626 has 1 MA's), (125, 44611), (162, 44425), (173, 44380), (207, 44290), (209, 44284), (216, 44269), (219, 44263), (224, 44212), (228, 44197), (239, 44161), (241, 44152), (259, 44071), (266, 44005), (267, 43999), (269, 43981),

Gene: Strosahl\_82 Start: 44678, Stop: 43827, Start Num: 81

Candidate Starts for Strosahl\_82:

(Start: 81 @44678 has 18 MA's), (Start: 85 @44672 has 1 MA's), (Start: 106 @44630 has 6 MA's), (Start: 109 @44597 has 14 MA's), (Start: 112 @44567 has 1 MA's), (136, 44474), (230, 44063), (231, 44060), (241, 44021), (266, 43859),

Gene: Success\_36 Start: 22194, Stop: 21400, Start Num: 88

Candidate Starts for Success\_36:

(43, 22299), (Start: 88 @22194 has 4 MA's), (99, 22176), (103, 22164), (Start: 112 @22089 has 1 MA's), (153, 21912), (161, 21858), (164, 21837), (191, 21765), (205, 21726), (219, 21687), (233, 21606), (240, 21579), (258, 21504), (259, 21498), (261, 21486),

Gene: Sumter\_65 Start: 44026, Stop: 43223, Start Num: 91

Candidate Starts for Sumter\_65:

(56, 44083), (Start: 91 @44026 has 39 MA's), (110, 43945), (Start: 112 @43927 has 1 MA's), (Start: 119 @43876 has 1 MA's), (125, 43861), (163, 43666), (173, 43630), (207, 43540), (209, 43534), (216, 43519), (224, 43462), (228, 43447), (239, 43411), (241, 43402), (259, 43321), (266, 43255), (267, 43249), (269, 43231),

Gene: Sunhee\_75 Start: 42962, Stop: 42126, Start Num: 84

Candidate Starts for Sunhee\_75:

(26, 43133), (Start: 84 @42962 has 189 MA's), (Start: 109 @42899 has 14 MA's), (Start: 112 @42869 has 1 MA's), (136, 42776), (174, 42569), (208, 42452), (241, 42317), (247, 42290), (266, 42155),

Gene: Sunshine924\_73 Start: 44425, Stop: 43601, Start Num: 72

Candidate Starts for Sunshine924\_73:

(Start: 72 @44425 has 44 MA's), (Start: 82 @44407 has 2 MA's), (110, 44323), (Start: 112 @44305 has 1 MA's), (Start: 119 @44254 has 1 MA's), (125, 44239), (162, 44053), (173, 44008), (207, 43918), (209, 43912), (216, 43897), (219, 43891), (224, 43840), (228, 43825), (239, 43789), (241, 43780), (259, 43699), (266, 43633), (267, 43627), (269, 43609),

Gene: SuperAwesome\_76 Start: 43908, Stop: 43081, Start Num: 84

Candidate Starts for SuperAwesome\_76:

(Start: 84 @43908 has 189 MA's), (104, 43878), (Start: 109 @43836 has 14 MA's), (Start: 112 @43806 has 1 MA's), (Start: 119 @43755 has 1 MA's), (133, 43719), (141, 43689), (148, 43653), (160, 43569), (194, 43461), (208, 43407), (209, 43404), (224, 43332), (230, 43311), (231, 43308), (241, 43272), (266, 43110),

Gene: SuperCallie99\_73 Start: 43752, Stop: 42925, Start Num: 84

Candidate Starts for SuperCallie99\_73:

(Start: 84 @43752 has 189 MA's), (104, 43722), (Start: 109 @43680 has 14 MA's), (Start: 112 @43650 has 1 MA's), (Start: 119 @43599 has 1 MA's), (133, 43563), (141, 43533), (148, 43497), (160, 43413), (194, 43305), (208, 43251), (209, 43248), (224, 43176), (230, 43155), (231, 43152), (241, 43116), (266, 42954),

Gene: Superchunk\_76 Start: 44020, Stop: 43061, Start Num: 84

Candidate Starts for Superchunk\_76:

(Start: 84 @44020 has 189 MA's), (102, 43999), (Start: 106 @43984 has 6 MA's), (107, 43975), (Start: 109 @43951 has 14 MA's), (Start: 112 @43921 has 1 MA's), (121, 43861), (136, 43828), (174, 43621), (194, 43498), (196, 43489), (207, 43393), (209, 43387), (230, 43294), (241, 43252), (266, 43090),

Gene: Swann\_56 Start: 39343, Stop: 38534, Start Num: 98

Candidate Starts for Swann\_56:

(Start: 98 @39343 has 36 MA's), (102, 39331), (114, 39229), (Start: 116 @39223 has 1 MA's), (Start: 132 @39169 has 1 MA's), (138, 39154), (158, 39043), (160, 39025), (221, 38818), (237, 38746), (238, 38743), (243, 38728), (259, 38647), (266, 38578), (267, 38572),

Gene: SweetiePie\_73 Start: 44491, Stop: 43673, Start Num: 84

Candidate Starts for SweetiePie\_73:

(Start: 84 @44491 has 189 MA's), (Start: 109 @44419 has 14 MA's), (Start: 112 @44389 has 1 MA's), (136, 44296), (148, 44236), (207, 44005), (228, 43912), (230, 43906), (241, 43864), (248, 43834), (264, 43735), (266, 43702),

Gene: SwirlSquare\_80 Start: 43809, Stop: 42898, Start Num: 84

Candidate Starts for SwirlSquare\_80:

(Start: 84 @43809 has 189 MA's), (102, 43788), (Start: 106 @43773 has 6 MA's), (Start: 109 @43740 has 14 MA's), (Start: 112 @43710 has 1 MA's), (184, 43356), (186, 43344), (208, 43227), (209, 43224), (228, 43137), (230, 43131), (241, 43089), (264, 42960), (266, 42927),

Gene: Swirley\_67 Start: 42771, Stop: 41959, Start Num: 71

Candidate Starts for Swirley\_67:

(Start: 71 @42771 has 48 MA's), (122, 42618), (Start: 132 @42597 has 1 MA's), (148, 42537), (152, 42516), (210, 42294), (224, 42201), (231, 42177), (236, 42159), (251, 42105), (256, 42081), (257, 42072), (269, 41967),

Gene: SwissCheese\_72 Start: 44242, Stop: 43442, Start Num: 94

Candidate Starts for SwissCheese\_72:

(77, 44260), (Start: 94 @44242 has 25 MA's), (Start: 112 @44146 has 1 MA's), (Start: 119 @44095 has 1 MA's), (125, 44080), (162, 43894), (173, 43849), (207, 43759), (209, 43753), (216, 43738), (224, 43681), (228, 43666), (239, 43630), (241, 43621), (259, 43540), (266, 43474), (267, 43468), (269, 43450),

Gene: Switzer\_69 Start: 45249, Stop: 44431, Start Num: 76

Candidate Starts for Switzer\_69:

(69, 45258), (Start: 76 @45249 has 49 MA's), (Start: 82 @45237 has 2 MA's), (110, 45153), (Start: 112 @45135 has 1 MA's), (Start: 119 @45084 has 1 MA's), (125, 45069), (162, 44883), (173, 44838), (207, 44748), (209, 44742), (216, 44727), (219, 44721), (224, 44670), (228, 44655), (231, 44646), (239, 44619), (241, 44610), (259, 44529), (266, 44463), (267, 44457), (269, 44439),

Gene: Switzerland\_81 Start: 44740, Stop: 43892, Start Num: 81

Candidate Starts for Switzerland\_81:

(Start: 81 @44740 has 18 MA's), (Start: 85 @44734 has 1 MA's), (Start: 106 @44692 has 6 MA's), (Start: 109 @44659 has 14 MA's), (Start: 112 @44629 has 1 MA's), (136, 44536), (230, 44125), (231, 44122), (241, 44083),

Gene: Swole\_69 Start: 44708, Stop: 43890, Start Num: 76

Candidate Starts for Swole\_69:

(Start: 65 @44726 has 2 MA's), (Start: 76 @44708 has 49 MA's), (Start: 82 @44696 has 2 MA's), (110, 44612), (Start: 112 @44594 has 1 MA's), (117, 44552), (Start: 119 @44543 has 1 MA's), (125,

44528), (162, 44342), (173, 44297), (207, 44207), (209, 44201), (216, 44186), (219, 44180), (224, 44129), (228, 44114), (239, 44078), (241, 44069), (259, 43988), (266, 43922), (267, 43916), (269, 43898),

Gene: SydNat\_67 Start: 42966, Stop: 42151, Start Num: 71

Candidate Starts for SydNat\_67:

(Start: 71 @42966 has 48 MA's), (Start: 112 @42876 has 1 MA's), (Start: 119 @42825 has 1 MA's), (120, 42822), (Start: 132 @42792 has 1 MA's), (148, 42732), (152, 42711), (201, 42519), (210, 42489), (214, 42453), (224, 42393), (226, 42384), (231, 42369), (235, 42354), (251, 42297), (256, 42273), (257, 42264), (269, 42159),

Gene: TNguyen7\_72 Start: 43641, Stop: 42847, Start Num: 93

Candidate Starts for TNguyen7\_72:

(Start: 93 @43641 has 32 MA's), (136, 43461), (200, 43197), (228, 43074), (243, 43029), (266, 42879), (269, 42855),

Gene: TWAMP\_56 Start: 39345, Stop: 38536, Start Num: 98

Candidate Starts for TWAMP\_56:

(Start: 98 @39345 has 36 MA's), (102, 39333), (114, 39231), (Start: 116 @39225 has 1 MA's), (Start: 132 @39171 has 1 MA's), (138, 39156), (158, 39045), (160, 39027), (221, 38820), (237, 38748), (238, 38745), (243, 38730), (259, 38649), (266, 38580), (267, 38574),

Gene: Takoda\_56 Start: 39528, Stop: 38719, Start Num: 98

Candidate Starts for Takoda\_56:

(Start: 98 @39528 has 36 MA's), (102, 39516), (108, 39480), (114, 39414), (Start: 116 @39408 has 1 MA's), (Start: 132 @39354 has 1 MA's), (138, 39339), (158, 39228), (221, 39003), (237, 38931), (238, 38928), (243, 38913), (259, 38832), (266, 38763), (267, 38757),

Gene: Taquarus\_67 Start: 43161, Stop: 42370, Start Num: 95

Candidate Starts for Taquarus\_67:

(20, 43374), (Start: 95 @43161 has 215 MA's), (Start: 106 @43134 has 6 MA's), (Start: 132 @42987 has 1 MA's), (141, 42963), (172, 42786), (199, 42720), (207, 42693), (216, 42672), (224, 42615), (226, 42606), (243, 42552), (266, 42402),

Gene: Target\_71 Start: 43837, Stop: 43019, Start Num: 76

Candidate Starts for Target\_71:

(Start: 65 @43855 has 2 MA's), (Start: 76 @43837 has 49 MA's), (Start: 82 @43825 has 2 MA's), (110, 43741), (Start: 112 @43723 has 1 MA's), (Start: 119 @43672 has 1 MA's), (125, 43657), (162, 43471), (173, 43426), (207, 43336), (209, 43330), (216, 43315), (224, 43258), (228, 43243), (239, 43207), (241, 43198), (259, 43117), (266, 43051), (267, 43045), (269, 43027),

Gene: TarsusIV\_71 Start: 44411, Stop: 43512, Start Num: 84

Candidate Starts for TarsusIV\_71:

(Start: 84 @44411 has 189 MA's), (Start: 109 @44339 has 14 MA's), (Start: 112 @44309 has 1 MA's), (136, 44216), (148, 44156), (228, 43751), (230, 43745), (241, 43703), (266, 43541),

Gene: Tarynearal\_66 Start: 42607, Stop: 41795, Start Num: 71

Candidate Starts for Tarynearal\_66:

(Start: 71 @42607 has 48 MA's), (122, 42454), (Start: 132 @42433 has 1 MA's), (148, 42373), (152, 42352), (210, 42130), (224, 42037), (231, 42013), (236, 41995), (251, 41941), (256, 41917), (257, 41908), (269, 41803),

Gene: Tasp14\_71 Start: 45484, Stop: 44660, Start Num: 72

Candidate Starts for Tasp14\_71:

(55, 45517), (Start: 72 @45484 has 44 MA's), (Start: 82 @45466 has 2 MA's), (110, 45382), (Start: 112 @45364 has 1 MA's), (Start: 119 @45313 has 1 MA's), (162, 45112), (207, 44977), (209, 44971), (216, 44956), (219, 44950), (224, 44899), (228, 44884), (239, 44848), (241, 44839), (259, 44758), (266, 44692), (267, 44686), (269, 44668),

Gene: Taurus\_78 Start: 44049, Stop: 43234, Start Num: 95

Candidate Starts for Taurus\_78:

(23, 44229), (Start: 95 @44049 has 215 MA's), (Start: 106 @44022 has 6 MA's), (Start: 132 @43866 has 1 MA's), (141, 43842), (146, 43815), (150, 43797), (200, 43596), (207, 43572), (216, 43548), (241, 43428), (245, 43410), (251, 43380), (266, 43266), (269, 43242),

Gene: Teodoridan\_68 Start: 43151, Stop: 42330, Start Num: 76

Candidate Starts for Teodoridan\_68:

(41, 43235), (Start: 76 @43151 has 49 MA's), (Start: 82 @43139 has 2 MA's), (110, 43052), (Start: 112 @43034 has 1 MA's), (117, 42992), (Start: 119 @42983 has 1 MA's), (125, 42968), (162, 42782), (173, 42737), (207, 42647), (209, 42641), (216, 42626), (219, 42620), (224, 42569), (228, 42554), (239, 42518), (241, 42509), (259, 42428), (266, 42362), (267, 42356), (269, 42338),

Gene: Texage\_69 Start: 43639, Stop: 42845, Start Num: 93

Candidate Starts for Texage\_69:

(Start: 93 @43639 has 32 MA's), (Start: 132 @43465 has 1 MA's), (200, 43195), (207, 43171), (243, 43027), (256, 42967), (266, 42877), (269, 42853),

Gene: Thanksgivukkah\_67 Start: 43156, Stop: 42365, Start Num: 95

Candidate Starts for Thanksgivukkah\_67:

(20, 43369), (Start: 95 @43156 has 215 MA's), (Start: 106 @43129 has 6 MA's), (Start: 132 @42982 has 1 MA's), (141, 42958), (172, 42781), (199, 42715), (207, 42688), (216, 42667), (224, 42610), (226, 42601), (243, 42547), (266, 42397),

Gene: Theia\_66 Start: 43096, Stop: 42281, Start Num: 71

Candidate Starts for Theia\_66:

(Start: 71 @43096 has 48 MA's), (122, 42943), (Start: 132 @42922 has 1 MA's), (148, 42862), (152, 42841), (210, 42619), (224, 42523), (231, 42499), (236, 42481), (251, 42427), (256, 42403), (257, 42394), (266, 42313), (269, 42289),

Gene: TheloniousMonk\_73 Start: 46529, Stop: 45711, Start Num: 76

Candidate Starts for TheloniousMonk\_73:

(Start: 65 @46547 has 2 MA's), (Start: 76 @46529 has 49 MA's), (Start: 82 @46517 has 2 MA's), (110, 46433), (Start: 112 @46415 has 1 MA's), (Start: 119 @46364 has 1 MA's), (125, 46349), (162, 46163), (173, 46118), (207, 46028), (209, 46022), (216, 46007), (224, 45950), (228, 45935), (239, 45899), (241, 45890), (259, 45809), (266, 45743), (267, 45737), (269, 45719),

Gene: Thor\_69 Start: 43323, Stop: 42589, Start Num: 109

Candidate Starts for Thor\_69:

(57, 43437), (59, 43434), (62, 43431), (Start: 109 @43323 has 14 MA's), (Start: 119 @43242 has 1 MA's), (125, 43227), (162, 43041), (207, 42906), (209, 42900), (216, 42885), (219, 42879), (224, 42828), (228, 42813), (239, 42777), (241, 42768), (259, 42687), (266, 42621), (267, 42615), (269, 42597),

Gene: Tiffany\_76 Start: 43934, Stop: 43119, Start Num: 95

Candidate Starts for Tiffany\_76:

(23, 44114), (Start: 95 @43934 has 215 MA's), (Start: 106 @43907 has 6 MA's), (Start: 132 @43751 has 1 MA's), (141, 43727), (146, 43700), (150, 43682), (200, 43481), (207, 43457), (216, 43433), (241, 43313), (245, 43295), (251, 43265), (266, 43151), (269, 43127),

Gene: Tiger\_67 Start: 42538, Stop: 41723, Start Num: 71

Candidate Starts for Tiger\_67:

(Start: 71 @42538 has 48 MA's), (122, 42385), (Start: 132 @42364 has 1 MA's), (148, 42304), (152, 42283), (210, 42061), (224, 41965), (231, 41941), (236, 41923), (251, 41869), (256, 41845), (257, 41836), (266, 41755), (269, 41731),

Gene: Timothy\_76 Start: 43891, Stop: 43076, Start Num: 84

Candidate Starts for Timothy\_76:

(Start: 84 @43891 has 189 MA's), (113, 43786), (Start: 119 @43741 has 1 MA's), (136, 43699), (139, 43681), (158, 43573), (209, 43402), (224, 43330), (230, 43309), (241, 43270), (266, 43108),

Gene: Timshel\_69 Start: 46410, Stop: 45610, Start Num: 87

Candidate Starts for Timshel\_69:

(Start: 87 @46410 has 3 MA's), (Start: 132 @46227 has 1 MA's), (138, 46212), (142, 46197), (199, 45960), (201, 45954), (211, 45924), (218, 45909), (224, 45855), (228, 45840), (243, 45792), (266, 45642),

Gene: TinaFeyge\_66 Start: 43153, Stop: 42362, Start Num: 95

Candidate Starts for TinaFeyge\_66:

(Start: 95 @43153 has 215 MA's), (Start: 106 @43126 has 6 MA's), (Start: 132 @42979 has 1 MA's), (141, 42955), (172, 42778), (199, 42712), (207, 42685), (216, 42664), (224, 42607), (226, 42598), (243, 42544), (266, 42394),

Gene: TinyTimmy\_74 Start: 43620, Stop: 42805, Start Num: 84

Candidate Starts for TinyTimmy\_74:

(Start: 84 @43620 has 189 MA's), (113, 43515), (Start: 119 @43470 has 1 MA's), (136, 43428), (139, 43410), (146, 43377), (158, 43302), (209, 43131), (224, 43059), (230, 43038), (241, 42999), (266, 42837),

Gene: Tinybot\_67 Start: 43188, Stop: 42397, Start Num: 95

Candidate Starts for Tinybot\_67:

(Start: 95 @43188 has 215 MA's), (Start: 106 @43161 has 6 MA's), (Start: 132 @43014 has 1 MA's), (141, 42990), (172, 42813), (199, 42747), (207, 42720), (216, 42699), (224, 42642), (226, 42633), (243, 42579), (266, 42429),

Gene: TopsytheTRex\_73 Start: 43978, Stop: 43109, Start Num: 84

Candidate Starts for TopsytheTRex\_73:

(Start: 84 @43978 has 189 MA's), (107, 43933), (114, 43855), (120, 43825), (136, 43786), (224, 43360), (230, 43339), (241, 43300), (266, 43138),

Gene: TiroTheta9\_67 Start: 43152, Stop: 42361, Start Num: 95

Candidate Starts for TiroTheta9\_67:

(Start: 95 @43152 has 215 MA's), (Start: 106 @43125 has 6 MA's), (Start: 132 @42978 has 1 MA's), (141, 42954), (172, 42777), (199, 42711), (207, 42684), (216, 42663), (224, 42606), (226, 42597), (243, 42543), (266, 42393),

Gene: Toaka\_75 Start: 43993, Stop: 43154, Start Num: 84

Candidate Starts for Toaka\_75:

(Start: 84 @43993 has 189 MA's), (Start: 106 @43963 has 6 MA's), (Start: 112 @43900 has 1 MA's), (Start: 119 @43849 has 1 MA's), (124, 43837), (136, 43807), (148, 43747), (194, 43540), (208, 43486), (209, 43483), (211, 43480), (228, 43393), (230, 43387), (241, 43348), (247, 43321), (259, 43255), (266, 43186),

Gene: Todacoro\_71 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for Todacoro\_71:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: Tomathan\_76 Start: 44974, Stop: 44165, Start Num: 97

Candidate Starts for Tomathan\_76:

(Start: 97 @44974 has 16 MA's), (Start: 106 @44944 has 6 MA's), (Start: 109 @44911 has 14 MA's), (Start: 112 @44881 has 1 MA's), (133, 44794), (141, 44764), (174, 44581), (209, 44491), (224, 44419), (230, 44398), (241, 44356), (242, 44353), (263, 44239), (264, 44227), (266, 44194),

Gene: ToneTone\_73 Start: 42954, Stop: 42133, Start Num: 84

Candidate Starts for ToneTone\_73:

(21, 43167), (Start: 84 @42954 has 189 MA's), (Start: 109 @42891 has 14 MA's), (Start: 112 @42861 has 1 MA's), (133, 42774), (136, 42768), (141, 42744), (194, 42516), (224, 42387), (230, 42366), (231, 42363), (233, 42354), (241, 42327), (266, 42165),

Gene: Topanga\_65 Start: 42818, Stop: 41994, Start Num: 73

Candidate Starts for Topanga\_65:

(24, 42977), (Start: 73 @42818 has 16 MA's), (Start: 132 @42611 has 1 MA's), (138, 42596), (207, 42317), (214, 42299), (243, 42176), (256, 42116), (269, 42002),

Gene: Topgun\_68 Start: 43658, Stop: 42834, Start Num: 72

Candidate Starts for Topgun\_68:

(Start: 72 @43658 has 44 MA's), (Start: 82 @43640 has 2 MA's), (110, 43556), (Start: 112 @43538 has 1 MA's), (Start: 119 @43487 has 1 MA's), (125, 43472), (162, 43286), (173, 43241), (207, 43151), (209, 43145), (216, 43130), (219, 43124), (224, 43073), (228, 43058), (239, 43022), (241, 43013), (259, 42932), (266, 42866), (267, 42860), (269, 42842),

Gene: ToriToki\_66 Start: 34349, Stop: 33543, Start Num: 105

Candidate Starts for ToriToki\_66:

(Start: 100 @34364 has 14 MA's), (Start: 105 @34349 has 2 MA's), (120, 34226), (134, 34181), (137, 34169), (140, 34154), (144, 34133), (161, 34022), (165, 33992), (194, 33914), (228, 33782), (240, 33740), (244, 33731), (252, 33683), (262, 33629),

Gene: Toro\_71 Start: 47184, Stop: 46387, Start Num: 87

Candidate Starts for Toro\_71:

(Start: 87 @47184 has 3 MA's), (Start: 106 @47148 has 6 MA's), (Start: 132 @47001 has 1 MA's), (142, 46971), (161, 46851), (224, 46629), (231, 46608), (232, 46605), (234, 46596), (243, 46569), (253, 46527), (256, 46509), (266, 46419),

Gene: Tote\_66 Start: 41975, Stop: 41157, Start Num: 76

Candidate Starts for Tote\_66:

(Start: 65 @41993 has 2 MA's), (Start: 76 @41975 has 49 MA's), (Start: 82 @41963 has 2 MA's), (110, 41879), (Start: 112 @41861 has 1 MA's), (117, 41819), (Start: 119 @41810 has 1 MA's), (125, 41795), (162, 41609), (173, 41564), (207, 41474), (209, 41468), (216, 41453), (219, 41447), (224, 41396), (228, 41381), (239, 41345), (241, 41336), (259, 41255), (266, 41189), (267, 41183), (269, 41165),

Gene: Travvers\_75 Start: 44860, Stop: 44051, Start Num: 97

Candidate Starts for Travvers\_75:

(Start: 97 @44860 has 16 MA's), (Start: 106 @44830 has 6 MA's), (Start: 109 @44797 has 14 MA's), (Start: 112 @44767 has 1 MA's), (133, 44680), (141, 44650), (174, 44467), (209, 44377), (224, 44305), (230, 44284), (241, 44242), (242, 44239), (263, 44125), (264, 44113), (266, 44080),

Gene: Treat\_66 Start: 34302, Stop: 33481, Start Num: 100

Candidate Starts for Treat\_66:

(Start: 100 @34302 has 14 MA's), (Start: 105 @34287 has 2 MA's), (120, 34164), (134, 34119), (137, 34107), (140, 34092), (144, 34071), (161, 33960), (165, 33930), (194, 33852), (207, 33792), (228, 33720), (240, 33678), (244, 33669), (252, 33621), (262, 33567),

Gene: Treddle\_69 Start: 45255, Stop: 44452, Start Num: 83

Candidate Starts for Treddle\_69:

(Start: 83 @45255 has 6 MA's), (110, 45174), (Start: 112 @45156 has 1 MA's), (Start: 119 @45105 has 1 MA's), (125, 45090), (162, 44904), (173, 44859), (207, 44769), (209, 44763), (216, 44748), (219, 44742), (224, 44691), (228, 44676), (239, 44640), (241, 44631), (259, 44550), (266, 44484), (267, 44478), (269, 44460),

Gene: Trike\_65 Start: 42093, Stop: 41251, Start Num: 73

Candidate Starts for Trike\_65:

(1, 42438), (24, 42252), (39, 42168), (Start: 73 @42093 has 16 MA's), (79, 42081), (Start: 106 @42030 has 6 MA's), (Start: 132 @41883 has 1 MA's), (138, 41868), (208, 41586), (231, 41472), (243, 41433), (256, 41373), (266, 41283), (269, 41259),

Gene: Tripl3t\_72 Start: 46295, Stop: 45492, Start Num: 91

Candidate Starts for Tripl3t\_72:

(56, 46352), (Start: 91 @46295 has 39 MA's), (110, 46214), (Start: 112 @46196 has 1 MA's), (125, 46130), (162, 45944), (173, 45899), (207, 45809), (209, 45803), (216, 45788), (224, 45731), (228, 45716), (239, 45680), (241, 45671), (259, 45590), (266, 45524), (267, 45518), (269, 45500),

Gene: Trixie\_73 Start: 45128, Stop: 44301, Start Num: 84

Candidate Starts for Trixie\_73:

(27, 45269), (Start: 84 @45128 has 189 MA's), (Start: 109 @45050 has 14 MA's), (Start: 112 @45020 has 1 MA's), (136, 44927), (209, 44630), (241, 44495),

Gene: Trooper\_73 Start: 44377, Stop: 43478, Start Num: 84

Candidate Starts for Trooper\_73:

(Start: 84 @44377 has 189 MA's), (Start: 109 @44305 has 14 MA's), (Start: 112 @44275 has 1 MA's), (136, 44182), (148, 44122), (174, 43975), (207, 43810), (228, 43717), (241, 43669), (266, 43507),

Gene: Trouble\_70 Start: 45030, Stop: 44194, Start Num: 63

Candidate Starts for Trouble\_70:

(Start: 63 @45030 has 7 MA's), (68, 45021), (Start: 74 @45012 has 6 MA's), (Start: 82 @45000 has 2 MA's), (110, 44916), (Start: 112 @44898 has 1 MA's), (Start: 119 @44847 has 1 MA's), (125, 44832), (162, 44646), (173, 44601), (207, 44511), (209, 44505), (216, 44490), (219, 44484), (224, 44433), (228, 44418), (239, 44382), (241, 44373), (259, 44292), (266, 44226), (267, 44220), (269, 44202),

Gene: TroyPia\_69 Start: 43192, Stop: 42401, Start Num: 95

Candidate Starts for TroyPia\_69:

(Start: 95 @43192 has 215 MA's), (Start: 106 @43165 has 6 MA's), (Start: 132 @43018 has 1 MA's), (172, 42817), (199, 42751), (207, 42724), (216, 42703), (224, 42646), (226, 42637), (243, 42583),

(266, 42433),

Gene: Tubs\_75 Start: 43671, Stop: 42829, Start Num: 84

Candidate Starts for Tubs\_75:

(Start: 84 @43671 has 189 MA's), (Start: 91 @43665 has 39 MA's), (Start: 109 @43602 has 14 MA's), (Start: 112 @43572 has 1 MA's), (124, 43509), (167, 43293), (207, 43161), (208, 43158), (209, 43155), (227, 43068), (241, 43020), (266, 42858),

Gene: Tucker\_76 Start: 43157, Stop: 42336, Start Num: 84

Candidate Starts for Tucker\_76:

(21, 43370), (Start: 84 @43157 has 189 MA's), (Start: 109 @43094 has 14 MA's), (Start: 112 @43064 has 1 MA's), (133, 42977), (136, 42971), (141, 42947), (194, 42719), (224, 42590), (230, 42569), (231, 42566), (233, 42557), (241, 42530), (266, 42368),

Gene: Turbido\_74 Start: 44659, Stop: 43760, Start Num: 84

Candidate Starts for Turbido\_74:

(Start: 84 @44659 has 189 MA's), (Start: 98 @44647 has 36 MA's), (Start: 109 @44590 has 14 MA's), (Start: 112 @44560 has 1 MA's), (136, 44467), (148, 44407), (174, 44260), (177, 44245), (182, 44212), (187, 44203), (207, 44092), (241, 43951), (266, 43789),

Gene: Turj99\_67 Start: 44832, Stop: 43996, Start Num: 63

Candidate Starts for Turj99\_67:

(Start: 63 @44832 has 7 MA's), (68, 44823), (Start: 74 @44814 has 6 MA's), (Start: 82 @44802 has 2 MA's), (110, 44718), (Start: 112 @44700 has 1 MA's), (Start: 119 @44649 has 1 MA's), (125, 44634), (162, 44448), (173, 44403), (207, 44313), (209, 44307), (216, 44292), (219, 44286), (224, 44235), (228, 44220), (239, 44184), (241, 44175), (259, 44094), (266, 44028), (267, 44022), (269, 44004),

Gene: Twister\_67 Start: 42939, Stop: 42115, Start Num: 73

Candidate Starts for Twister\_67:

(24, 43098), (Start: 73 @42939 has 16 MA's), (Start: 132 @42732 has 1 MA's), (138, 42717), (207, 42438), (214, 42420), (243, 42297), (256, 42237), (269, 42123),

Gene: TwoPeat\_71 Start: 44824, Stop: 44006, Start Num: 76

Candidate Starts for TwoPeat\_71:

(Start: 65 @44842 has 2 MA's), (Start: 76 @44824 has 49 MA's), (Start: 82 @44812 has 2 MA's), (110, 44728), (Start: 112 @44710 has 1 MA's), (Start: 119 @44659 has 1 MA's), (125, 44644), (163, 44449), (173, 44413), (207, 44323), (209, 44317), (216, 44302), (219, 44296), (224, 44245), (228, 44230), (239, 44194), (241, 44185), (259, 44104), (266, 44038), (267, 44032), (269, 44014),

Gene: TygerBlood\_68 Start: 43158, Stop: 42367, Start Num: 95

Candidate Starts for TygerBlood\_68:

(Start: 95 @43158 has 215 MA's), (Start: 106 @43131 has 6 MA's), (Start: 132 @42984 has 1 MA's), (141, 42960), (172, 42783), (199, 42717), (207, 42690), (216, 42669), (224, 42612), (226, 42603), (243, 42549), (266, 42399),

Gene: U2\_64 Start: 44522, Stop: 43818, Start Num: 112

Candidate Starts for U2\_64:

(77, 44636), (Start: 94 @44618 has 25 MA's), (110, 44540), (Start: 112 @44522 has 1 MA's), (Start: 119 @44471 has 1 MA's), (125, 44456), (162, 44270), (173, 44225), (207, 44135), (209, 44129), (216, 44114), (219, 44108), (224, 44057), (228, 44042), (239, 44006), (241, 43997), (259, 43916), (266, 43850), (267, 43844), (269, 43826),

Gene: Ugenie5\_70 Start: 43959, Stop: 43117, Start Num: 84



Candidate Starts for Ugenie5\_70:

(Start: 78 @43968 has 1 MA's), (Start: 84 @43959 has 189 MA's), (Start: 109 @43890 has 14 MA's), (Start: 112 @43860 has 1 MA's), (124, 43797), (167, 43581), (207, 43449), (208, 43446), (209, 43443), (227, 43356), (241, 43308), (256, 43236), (266, 43146),

Gene: UhSalsa\_56 Start: 39284, Stop: 38478, Start Num: 98

Candidate Starts for UhSalsa\_56:

(Start: 98 @39284 has 36 MA's), (102, 39275), (108, 39239), (Start: 112 @39197 has 1 MA's), (114, 39173), (Start: 116 @39167 has 1 MA's), (Start: 132 @39113 has 1 MA's), (138, 39098), (158, 38987), (189, 38879), (221, 38762), (224, 38735), (237, 38690), (238, 38687), (243, 38672), (259, 38591), (267, 38516),

Gene: Ulysses\_67 Start: 42844, Stop: 42053, Start Num: 95

Candidate Starts for Ulysses\_67:

(Start: 95 @42844 has 215 MA's), (Start: 106 @42817 has 6 MA's), (Start: 132 @42670 has 1 MA's), (141, 42646), (172, 42469), (199, 42403), (207, 42376), (216, 42355), (224, 42298), (226, 42289), (243, 42235), (266, 42085),

Gene: UnionJack\_71 Start: 43047, Stop: 42232, Start Num: 71

Candidate Starts for UnionJack\_71:

(37, 43134), (Start: 71 @43047 has 48 MA's), (Start: 112 @42957 has 1 MA's), (Start: 132 @42873 has 1 MA's), (148, 42813), (152, 42792), (201, 42600), (207, 42579), (210, 42570), (214, 42534), (219, 42525), (224, 42474), (226, 42465), (231, 42450), (235, 42435), (251, 42378), (256, 42354), (257, 42345), (266, 42264), (269, 42240),

Gene: Updawg\_74 Start: 44225, Stop: 43410, Start Num: 84

Candidate Starts for Updawg\_74:

(Start: 84 @44225 has 189 MA's), (Start: 109 @44156 has 14 MA's), (Start: 112 @44126 has 1 MA's), (128, 44051), (136, 44033), (209, 43736), (241, 43601), (266, 43439),

Gene: VA6\_73 Start: 44421, Stop: 43510, Start Num: 84

Candidate Starts for VA6\_73:

(Start: 84 @44421 has 189 MA's), (Start: 109 @44343 has 14 MA's), (Start: 112 @44313 has 1 MA's), (136, 44220), (174, 44013), (177, 43998), (187, 43956), (203, 43866), (241, 43704),

Gene: VC3\_75 Start: 44381, Stop: 43506, Start Num: 97

Candidate Starts for VC3\_75:

(Start: 97 @44381 has 16 MA's), (Start: 106 @44351 has 6 MA's), (Start: 112 @44288 has 1 MA's), (126, 44219), (133, 44201), (141, 44171), (146, 44144), (174, 43988), (181, 43943), (207, 43838), (209, 43832), (224, 43760), (230, 43739), (241, 43697), (263, 43580), (266, 43535),

Gene: Vanisoa\_72 Start: 44336, Stop: 43500, Start Num: 84

Candidate Starts for Vanisoa\_72:

(34, 44462), (Start: 84 @44336 has 189 MA's), (Start: 106 @44306 has 6 MA's), (Start: 109 @44273 has 14 MA's), (Start: 112 @44243 has 1 MA's), (Start: 119 @44192 has 1 MA's), (124, 44180), (136, 44150), (148, 44090), (194, 43883), (208, 43829), (209, 43826), (211, 43823), (227, 43739), (230, 43730), (241, 43691), (256, 43619),

Gene: Veracruz\_68 Start: 43638, Stop: 42844, Start Num: 93

Candidate Starts for Veracruz\_68:

(Start: 93 @43638 has 32 MA's), (Start: 132 @43464 has 1 MA's), (200, 43194), (207, 43170), (243, 43026), (256, 42966), (266, 42876), (269, 42852),

Gene: Violet\_66 Start: 45502, Stop: 44684, Start Num: 76

Candidate Starts for Violet\_66:

(69, 45511), (Start: 76 @45502 has 49 MA's), (Start: 82 @45490 has 2 MA's), (110, 45406), (Start: 112 @45388 has 1 MA's), (Start: 119 @45337 has 1 MA's), (125, 45322), (162, 45136), (173, 45091), (207, 45001), (209, 44995), (216, 44980), (219, 44974), (224, 44923), (228, 44908), (239, 44872), (241, 44863), (251, 44827), (259, 44782), (261, 44770), (266, 44716), (267, 44710), (269, 44692),

Gene: Vix\_73 Start: 44132, Stop: 43317, Start Num: 95

Candidate Starts for Vix\_73:

(23, 44312), (Start: 95 @44132 has 215 MA's), (Start: 106 @44105 has 6 MA's), (Start: 132 @43949 has 1 MA's), (141, 43925), (146, 43898), (150, 43880), (200, 43679), (207, 43655), (216, 43631), (241, 43511), (245, 43493), (251, 43463), (266, 43349), (269, 43325),

Gene: VohminGhazi\_76 Start: 43231, Stop: 42404, Start Num: 84

Candidate Starts for VohminGhazi\_76:

(Start: 84 @43231 has 189 MA's), (104, 43201), (Start: 109 @43159 has 14 MA's), (Start: 112 @43129 has 1 MA's), (Start: 119 @43078 has 1 MA's), (133, 43042), (141, 43012), (148, 42976), (160, 42892), (194, 42784), (208, 42730), (209, 42727), (224, 42655), (230, 42634), (231, 42631), (241, 42595), (266, 42433),

Gene: Vorvolakos\_63 Start: 33703, Stop: 32810, Start Num: 60

Candidate Starts for Vorvolakos\_63:

(Start: 60 @33703 has 3 MA's), (Start: 64 @33697 has 2 MA's), (80, 33670), (Start: 100 @33637 has 14 MA's), (Start: 105 @33622 has 2 MA's), (143, 33412), (162, 33286), (194, 33187), (204, 33142), (222, 33067), (228, 33043), (229, 33040), (262, 32896),

Gene: WRightOn\_67 Start: 33779, Stop: 32940, Start Num: 100

Candidate Starts for WRightOn\_67:

(80, 33815), (Start: 100 @33779 has 14 MA's), (Start: 105 @33764 has 2 MA's), (120, 33641), (140, 33569), (165, 33407), (192, 33335), (194, 33329), (228, 33179), (240, 33137), (244, 33128), (262, 33026),

Gene: Waits\_81 Start: 44530, Stop: 43727, Start Num: 106

Candidate Starts for Waits\_81:

(Start: 81 @44578 has 18 MA's), (Start: 85 @44572 has 1 MA's), (Start: 106 @44530 has 6 MA's), (Start: 109 @44497 has 14 MA's), (Start: 112 @44467 has 1 MA's), (136, 44374), (230, 43963), (231, 43960), (241, 43921), (266, 43759),

Gene: WalterMcMickey\_67 Start: 42939, Stop: 42115, Start Num: 73

Candidate Starts for WalterMcMickey\_67:

(24, 43098), (Start: 73 @42939 has 16 MA's), (Start: 132 @42732 has 1 MA's), (138, 42717), (207, 42438), (214, 42420), (243, 42297), (256, 42237), (269, 42123),

Gene: Wander\_68 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Wander\_68:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Watermelon\_70 Start: 44298, Stop: 43498, Start Num: 84

Candidate Starts for Watermelon\_70:

(Start: 84 @44298 has 189 MA's), (110, 44220), (Start: 112 @44202 has 1 MA's), (117, 44160), (Start: 119 @44151 has 1 MA's), (125, 44136), (162, 43950), (173, 43905), (207, 43815), (209, 43809), (216,

43794), (219, 43788), (224, 43737), (228, 43722), (239, 43686), (241, 43677), (259, 43596), (266, 43530), (267, 43524), (269, 43506),

Gene: Watson\_76 Start: 44041, Stop: 43226, Start Num: 95

Candidate Starts for Watson\_76:

(23, 44221), (Start: 95 @44041 has 215 MA's), (Start: 106 @44014 has 6 MA's), (Start: 132 @43858 has 1 MA's), (141, 43834), (146, 43807), (150, 43789), (200, 43588), (207, 43564), (216, 43540), (241, 43420), (245, 43402), (251, 43372), (266, 43258), (269, 43234),

Gene: WeiHuaDA\_74 Start: 45165, Stop: 44347, Start Num: 84

Candidate Starts for WeiHuaDA\_74:

(Start: 84 @45165 has 189 MA's), (Start: 109 @45096 has 14 MA's), (Start: 112 @45066 has 1 MA's), (136, 44973), (207, 44682), (230, 44583), (241, 44541),

Gene: Whabigail7\_74 Start: 44659, Stop: 43760, Start Num: 84

Candidate Starts for Whabigail7\_74:

(Start: 84 @44659 has 189 MA's), (Start: 98 @44647 has 36 MA's), (Start: 109 @44590 has 14 MA's), (Start: 112 @44560 has 1 MA's), (136, 44467), (148, 44407), (174, 44260), (177, 44245), (182, 44212), (187, 44203), (207, 44092), (230, 43993), (241, 43951), (266, 43789),

Gene: Wheeler\_73 Start: 45583, Stop: 44765, Start Num: 75

Candidate Starts for Wheeler\_73:

(Start: 75 @45583 has 1 MA's), (107, 45523), (110, 45487), (Start: 119 @45418 has 1 MA's), (125, 45403), (162, 45217), (173, 45172), (207, 45082), (209, 45076), (216, 45061), (219, 45055), (224, 45004), (228, 44989), (239, 44953), (241, 44944), (259, 44863), (261, 44851), (266, 44797), (267, 44791), (269, 44773),

Gene: WideWale\_74 Start: 44225, Stop: 43410, Start Num: 84

Candidate Starts for WideWale\_74:

(Start: 84 @44225 has 189 MA's), (Start: 109 @44156 has 14 MA's), (Start: 112 @44126 has 1 MA's), (128, 44051), (136, 44033), (209, 43736), (241, 43601), (266, 43439),

Gene: Wiks\_75 Start: 43025, Stop: 42204, Start Num: 84

Candidate Starts for Wiks\_75:

(21, 43238), (Start: 84 @43025 has 189 MA's), (Start: 109 @42962 has 14 MA's), (Start: 112 @42932 has 1 MA's), (133, 42845), (136, 42839), (141, 42815), (194, 42587), (224, 42458), (230, 42437), (231, 42434), (233, 42425), (241, 42398), (266, 42236),

Gene: Wilbur\_68 Start: 43155, Stop: 42364, Start Num: 95

Candidate Starts for Wilbur\_68:

(20, 43368), (Start: 95 @43155 has 215 MA's), (Start: 106 @43128 has 6 MA's), (Start: 132 @42981 has 1 MA's), (141, 42957), (172, 42780), (199, 42714), (207, 42687), (216, 42666), (224, 42609), (226, 42600), (243, 42546), (266, 42396),

Gene: Wile\_66 Start: 43464, Stop: 42673, Start Num: 95

Candidate Starts for Wile\_66:

(Start: 95 @43464 has 215 MA's), (Start: 106 @43437 has 6 MA's), (Start: 132 @43290 has 1 MA's), (141, 43266), (200, 43020), (207, 42996), (224, 42918), (226, 42909), (243, 42855), (266, 42705),

Gene: Wilkins\_69 Start: 43588, Stop: 42764, Start Num: 72

Candidate Starts for Wilkins\_69:

(Start: 72 @43588 has 44 MA's), (Start: 82 @43570 has 2 MA's), (110, 43486), (Start: 112 @43468 has 1 MA's), (Start: 119 @43417 has 1 MA's), (125, 43402), (162, 43216), (173, 43171), (207, 43081),

(209, 43075), (216, 43060), (219, 43054), (224, 43003), (228, 42988), (239, 42952), (241, 42943), (259, 42862), (266, 42796), (267, 42790), (269, 42772),

Gene: Wizard007\_67 Start: 43190, Stop: 42399, Start Num: 95

Candidate Starts for Wizard007\_67:

(Start: 95 @43190 has 215 MA's), (Start: 106 @43163 has 6 MA's), (Start: 132 @43016 has 1 MA's), (141, 42992), (200, 42746), (207, 42722), (224, 42644), (226, 42635), (243, 42581), (266, 42431),

Gene: Wooldri\_79 Start: 43961, Stop: 43146, Start Num: 95

Candidate Starts for Wooldri\_79:

(23, 44141), (44, 44036), (Start: 95 @43961 has 215 MA's), (Start: 132 @43778 has 1 MA's), (141, 43754), (146, 43727), (150, 43709), (200, 43508), (207, 43484), (216, 43460), (241, 43340), (245, 43322), (251, 43292), (266, 43178), (269, 43154),

Gene: WunderPhul\_76 Start: 43023, Stop: 42202, Start Num: 84

Candidate Starts for WunderPhul\_76:

(21, 43236), (Start: 84 @43023 has 189 MA's), (Start: 109 @42960 has 14 MA's), (Start: 112 @42930 has 1 MA's), (133, 42843), (136, 42837), (141, 42813), (194, 42585), (224, 42456), (230, 42435), (231, 42432), (233, 42423), (241, 42396), (266, 42234),

Gene: Xena\_66 Start: 43431, Stop: 42640, Start Num: 95

Candidate Starts for Xena\_66:

(Start: 95 @43431 has 215 MA's), (Start: 106 @43404 has 6 MA's), (Start: 132 @43257 has 1 MA's), (141, 43233), (200, 42987), (207, 42963), (224, 42885), (226, 42876), (243, 42822), (266, 42672),

Gene: XianYue\_69 Start: 44159, Stop: 43344, Start Num: 84

Candidate Starts for XianYue\_69:

(Start: 84 @44159 has 189 MA's), (Start: 109 @44090 has 14 MA's), (Start: 112 @44060 has 1 MA's), (136, 43967), (203, 43697), (208, 43673), (209, 43670), (228, 43583), (241, 43535), (266, 43373),

Gene: Yecey3\_77 Start: 43793, Stop: 42888, Start Num: 84

Candidate Starts for Yecey3\_77:

(Start: 84 @43793 has 189 MA's), (Start: 106 @43760 has 6 MA's), (Start: 109 @43727 has 14 MA's), (Start: 112 @43697 has 1 MA's), (124, 43634), (136, 43604), (167, 43418), (168, 43415), (178, 43382), (190, 43286), (208, 43217), (209, 43214), (211, 43211), (223, 43145), (230, 43118), (235, 43100), (241, 43079), (263, 42962), (266, 42917),

Gene: YoSam321\_68 Start: 43152, Stop: 42361, Start Num: 95

Candidate Starts for YoSam321\_68:

(Start: 95 @43152 has 215 MA's), (Start: 106 @43125 has 6 MA's), (Start: 132 @42978 has 1 MA's), (141, 42954), (172, 42777), (199, 42711), (207, 42684), (216, 42663), (224, 42606), (226, 42597), (243, 42543), (266, 42393),

Gene: Yogi\_56 Start: 39696, Stop: 38887, Start Num: 98

Candidate Starts for Yogi\_56:

(Start: 98 @39696 has 36 MA's), (102, 39684), (108, 39648), (114, 39582), (Start: 116 @39576 has 1 MA's), (Start: 132 @39522 has 1 MA's), (138, 39507), (141, 39498), (158, 39396), (221, 39171), (224, 39144), (237, 39099), (238, 39096), (243, 39081), (259, 39000), (266, 38931),

Gene: Yokurt\_75 Start: 43025, Stop: 42204, Start Num: 84

Candidate Starts for Yokurt\_75:

(21, 43238), (Start: 84 @43025 has 189 MA's), (Start: 109 @42962 has 14 MA's), (Start: 112 @42932 has 1 MA's), (133, 42845), (136, 42839), (141, 42815), (194, 42587), (224, 42458), (230, 42437), (231,

42434), (233, 42425), (241, 42398), (266, 42236),

Gene: Yoncess\_55 Start: 39099, Stop: 38290, Start Num: 98

Candidate Starts for Yoncess\_55:

(Start: 98 @39099 has 36 MA's), (102, 39087), (108, 39051), (114, 38985), (Start: 116 @38979 has 1 MA's), (Start: 132 @38925 has 1 MA's), (138, 38910), (158, 38799), (221, 38574), (237, 38502), (238, 38499), (243, 38484), (259, 38403), (266, 38334), (267, 38328),

Gene: Zaka\_76 Start: 43025, Stop: 42204, Start Num: 84

Candidate Starts for Zaka\_76:

(21, 43238), (Start: 84 @43025 has 189 MA's), (Start: 109 @42962 has 14 MA's), (Start: 112 @42932 has 1 MA's), (133, 42845), (136, 42839), (141, 42815), (194, 42587), (224, 42458), (230, 42437), (231, 42434), (233, 42425), (241, 42398), (266, 42236),

Gene: Zeigle\_63 Start: 33623, Stop: 32784, Start Num: 100

Candidate Starts for Zeigle\_63:

(80, 33659), (Start: 100 @33623 has 14 MA's), (Start: 105 @33608 has 2 MA's), (120, 33485), (140, 33413), (165, 33251), (192, 33179), (194, 33173), (228, 33023), (240, 32981), (244, 32972), (262, 32870),

Gene: Zephyr\_70 Start: 43558, Stop: 42758, Start Num: 91

Candidate Starts for Zephyr\_70:

(Start: 91 @43558 has 39 MA's), (110, 43480), (Start: 112 @43462 has 1 MA's), (Start: 119 @43411 has 1 MA's), (125, 43396), (162, 43210), (173, 43165), (207, 43075), (209, 43069), (216, 43054), (219, 43048), (224, 42997), (228, 42982), (239, 42946), (241, 42937), (259, 42856), (266, 42790), (267, 42784), (269, 42766),

Gene: Zetzy\_74 Start: 43429, Stop: 42797, Start Num: 132

Candidate Starts for Zetzy\_74:

(23, 43801), (Start: 132 @43429 has 1 MA's), (141, 43405), (146, 43378), (150, 43360), (200, 43159), (207, 43135), (216, 43111), (241, 42991), (245, 42973), (251, 42943), (266, 42829), (269, 42805),

Gene: Zeuska\_74 Start: 46586, Stop: 45762, Start Num: 72

Candidate Starts for Zeuska\_74:

(55, 46619), (Start: 72 @46586 has 44 MA's), (Start: 82 @46568 has 2 MA's), (110, 46484), (Start: 112 @46466 has 1 MA's), (117, 46424), (Start: 119 @46415 has 1 MA's), (125, 46400), (162, 46214), (173, 46169), (207, 46079), (209, 46073), (216, 46058), (224, 46001), (228, 45986), (239, 45950), (241, 45941), (259, 45860), (266, 45794), (267, 45788), (269, 45770),

Gene: Zimmer\_72 Start: 44797, Stop: 43982, Start Num: 85

Candidate Starts for Zimmer\_72:

(51, 44860), (Start: 85 @44797 has 1 MA's), (Start: 91 @44791 has 39 MA's), (Start: 109 @44728 has 14 MA's), (Start: 112 @44698 has 1 MA's), (124, 44635), (126, 44629), (133, 44611), (141, 44581), (165, 44425), (209, 44308), (230, 44215), (241, 44173), (266, 44011),

Gene: Zolita\_66 Start: 42970, Stop: 42155, Start Num: 71

Candidate Starts for Zolita\_66:

(Start: 71 @42970 has 48 MA's), (Start: 112 @42880 has 1 MA's), (Start: 119 @42829 has 1 MA's), (120, 42826), (Start: 132 @42796 has 1 MA's), (148, 42736), (152, 42715), (201, 42523), (210, 42493), (214, 42457), (224, 42397), (226, 42388), (231, 42373), (235, 42358), (251, 42301), (256, 42277), (257, 42268), (269, 42163),

Gene: ZooBear\_66 Start: 34368, Stop: 33547, Start Num: 100

Candidate Starts for ZooBear\_66:

(Start: 100 @34368 has 14 MA's), (Start: 105 @34353 has 2 MA's), (120, 34230), (134, 34185), (137, 34173), (140, 34158), (144, 34137), (161, 34026), (165, 33996), (194, 33918), (228, 33786), (240, 33744), (244, 33735), (252, 33687), (262, 33633),

Gene: Zulu\_77 Start: 43403, Stop: 42582, Start Num: 84

Candidate Starts for Zulu\_77:

(21, 43616), (Start: 84 @43403 has 189 MA's), (Start: 109 @43340 has 14 MA's), (Start: 112 @43310 has 1 MA's), (133, 43223), (136, 43217), (141, 43193), (194, 42965), (224, 42836), (230, 42815), (231, 42812), (233, 42803), (241, 42776), (266, 42614),