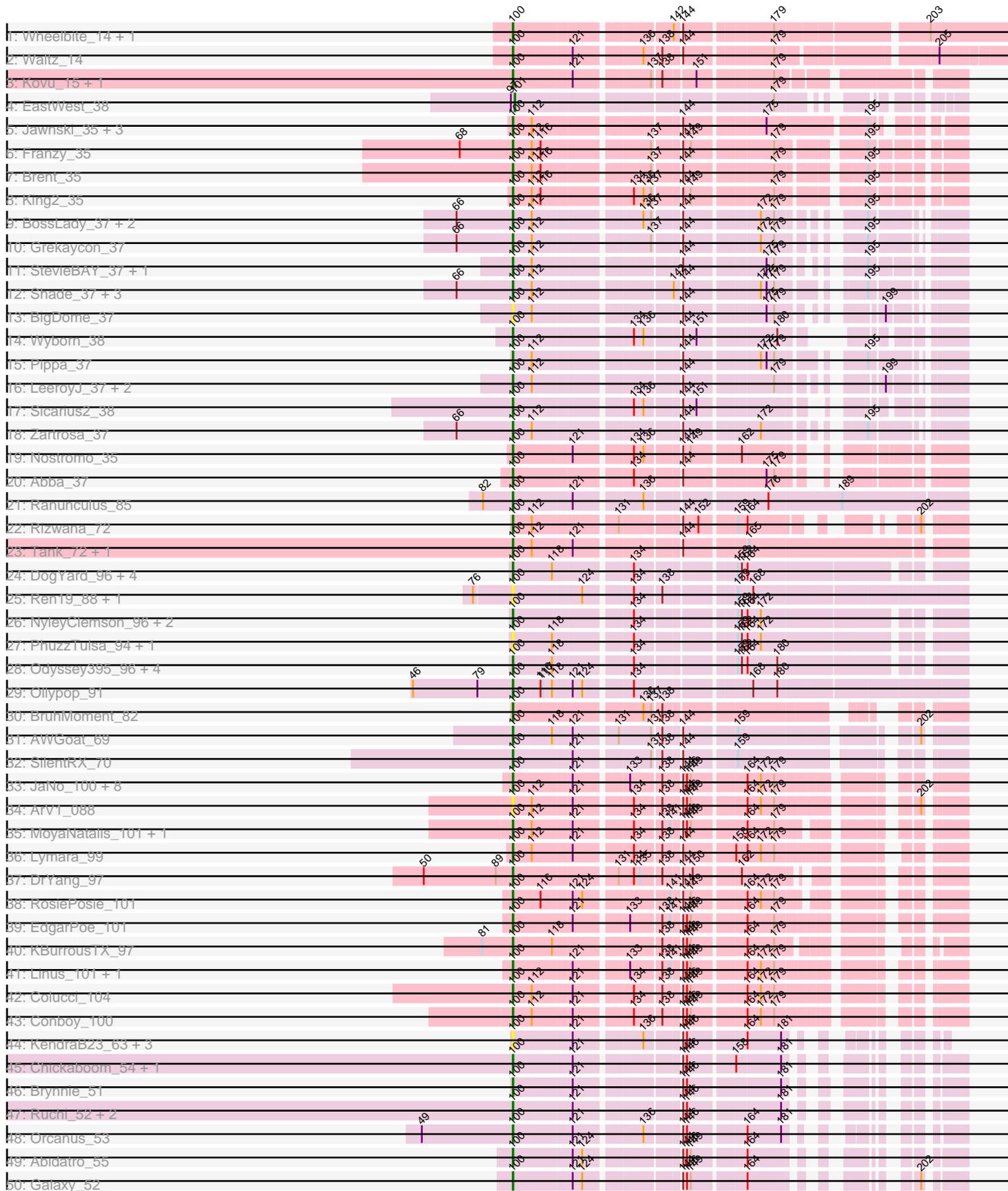
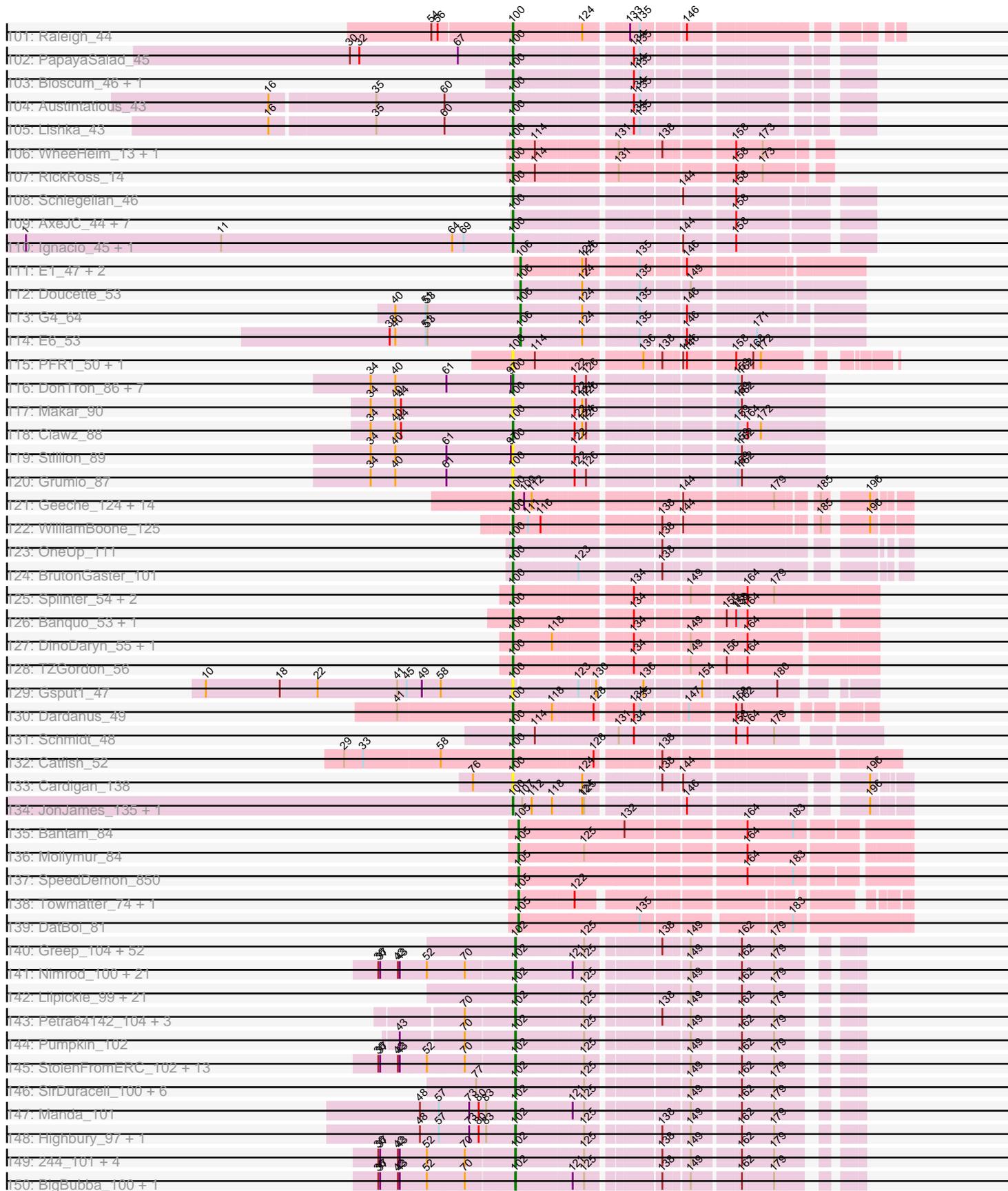


Pham 290675



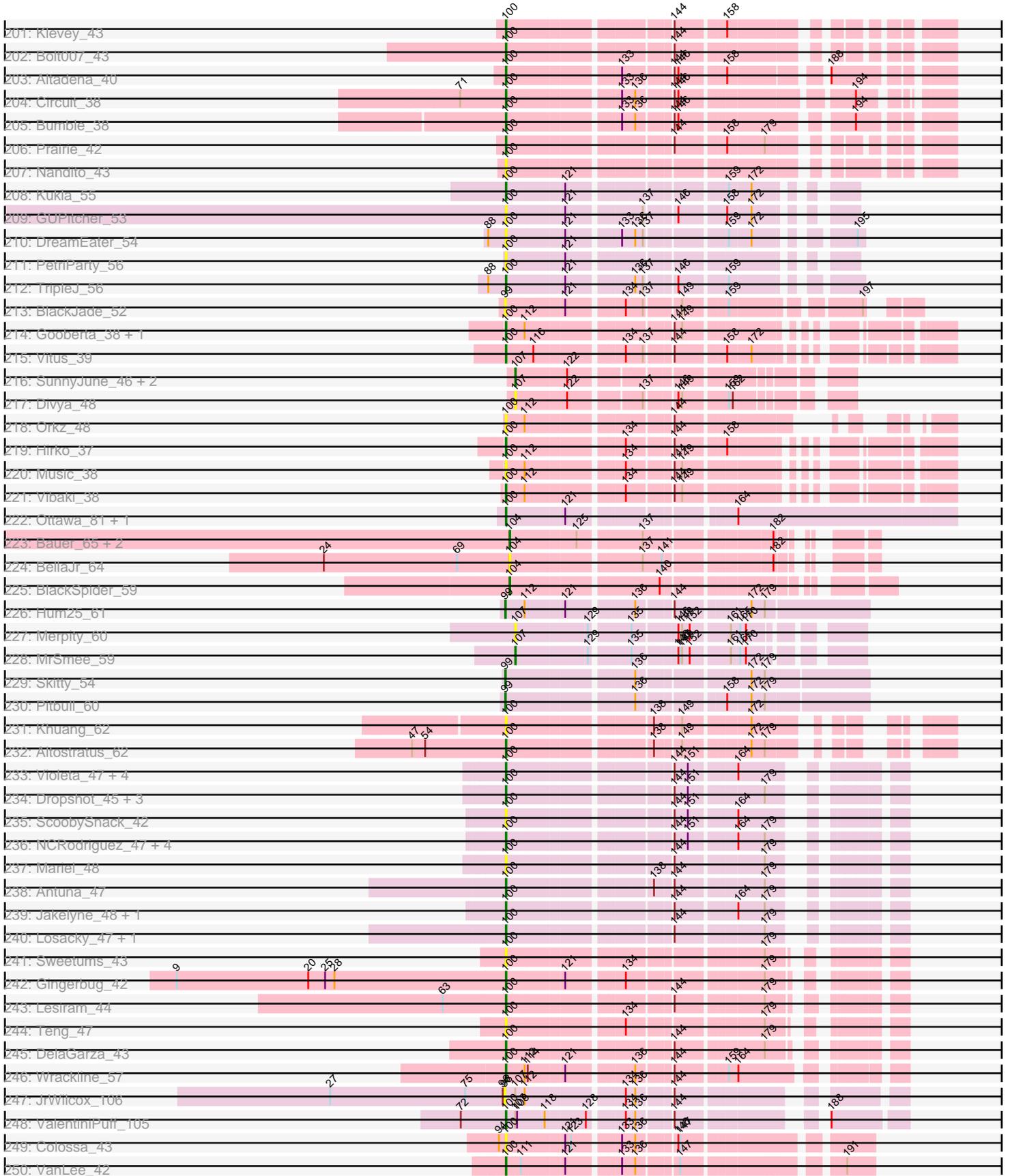


Pham 290675

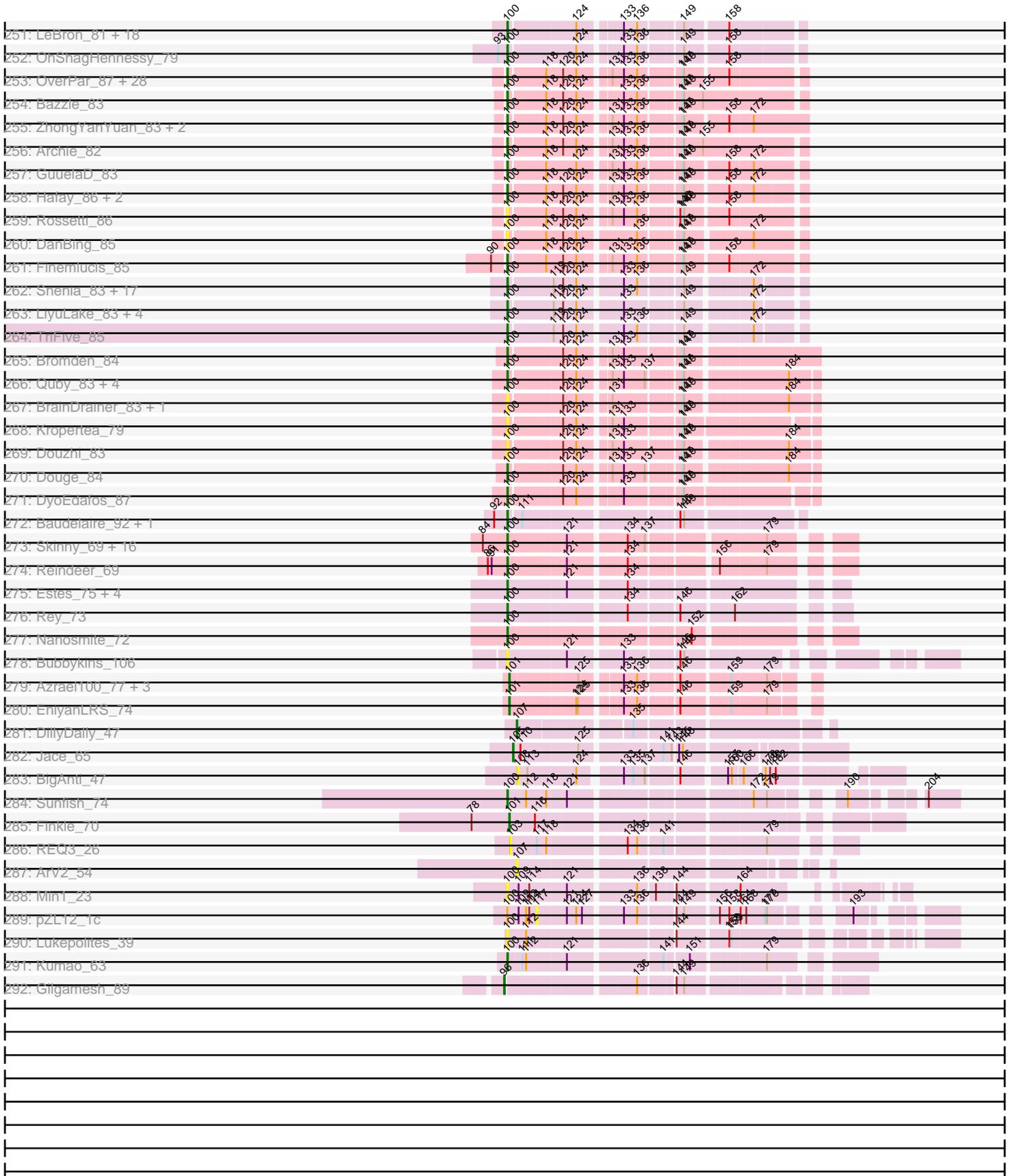




Pham 290675



Pham 290675



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 290675 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 290675 has 712 members, 159 are drafts.

Phages represented in each track:

- Track 1 : Wheelbite\_14, Edmundo\_14
- Track 2 : Waltz\_14
- Track 3 : Kovu\_15, ApoKipo\_15
- Track 4 : EastWest\_38
- Track 5 : Jawnski\_35, Piccoletto\_35, Beans\_35, NathanVaag\_35
- Track 6 : Franzy\_35
- Track 7 : Brent\_35
- Track 8 : King2\_35
- Track 9 : BossLady\_37, TaeYoung\_37, Martha\_37
- Track 10 : Grekaycon\_37
- Track 11 : StevieBAY\_37, GravityBall\_37
- Track 12 : Shade\_37, Jordan\_37, JKerns\_37, Sonny\_37
- Track 13 : BigDome\_37
- Track 14 : Wyborn\_38
- Track 15 : Pippa\_37
- Track 16 : LeeroyJ\_37, BarretLemon\_37, Timinator\_37
- Track 17 : Sicarius2\_38
- Track 18 : Zartrosa\_37
- Track 19 : Nostromo\_35
- Track 20 : Abba\_37
- Track 21 : Ranunculus\_85
- Track 22 : Rizwana\_72
- Track 23 : Tank\_72, Wilde\_74
- Track 24 : DogYard\_96, Kubulix\_96, MellowYellow\_97, Beagle\_98, Popstraw\_92
- Track 25 : Ren19\_88, Nikan\_93
- Track 26 : NyleyClemson\_96, RazzB\_95, Forrestell\_95
- Track 27 : PhuzzTulsa\_94, RIPWilbur\_95
- Track 28 : Odyssey395\_96, Hive\_93, Pureglobe5\_96, Pointis\_93, BetaFish\_96
- Track 29 : Ollypop\_91
- Track 30 : BruhMoment\_82
- Track 31 : AWGoat\_69
- Track 32 : SilentRX\_70

- Track 33 : JaNo\_100, Mordred\_101, Tophat\_102, Chipper1996\_1020, HumptyDumpty\_101, Chubster\_101, PrincessTrina\_102, Kabreeze\_101, Scavito\_102
- Track 34 : ArV1\_088
- Track 35 : MoyaNatalis\_101, JayCookie\_102
- Track 36 : Lymara\_99
- Track 37 : DrYang\_97
- Track 38 : RosiePosie\_101
- Track 39 : EdgarPoe\_101
- Track 40 : KBurrousTX\_97
- Track 41 : Linus\_101, Chocolat\_101
- Track 42 : Colucci\_104
- Track 43 : Conboy\_100
- Track 44 : KendraB23\_63, Westrich\_63, Pelletreau\_64, Gravel\_64
- Track 45 : Chickaboom\_54, WileyE\_54
- Track 46 : Brynnie\_51
- Track 47 : Ruchi\_52, Vulpecula\_52, Basilisk\_53
- Track 48 : Orcanus\_53
- Track 49 : Abidatro\_55
- Track 50 : Galaxy\_52
- Track 51 : Niblet\_57
- Track 52 : Eesa\_52, Zixiang\_56, Shen\_52, Amanises\_62, Toad24\_55
- Track 53 : TaylorSipht\_54
- Track 54 : Chicken\_53
- Track 55 : Jamun\_52
- Track 56 : Kuleana\_55
- Track 57 : Zhuangyuan\_57
- Track 58 : LittleTokyo\_52
- Track 59 : Antrice\_55
- Track 60 : Cygnet\_54
- Track 61 : Leona\_54, Rattail\_55, Renna12\_54, RedFox\_55, Azaz\_56
- Track 62 : Babushka\_52
- Track 63 : AmiCi24\_54, Fingolfin\_55, Juno112\_54, Oppalora\_54, HamCheese\_55, Glotell\_56, DanHam62\_55, KHumphrey\_55, Atlantica\_55, PhluffyCoco\_55, AdoptaAdorbs\_54, Camara\_55, Amphitrite\_55, Laphuphu24k\_54
- Track 64 : StuartMinion\_46, AlexMinion\_56
- Track 65 : Andrew\_57
- Track 66 : Raphaella\_71, Kabloowy\_71, Mapleville\_67, MurphyJoseph\_68, Richie\_74, Lawnathon\_73, Windest\_74
- Track 67 : MidnightRain\_74, GumGum\_75, Auxilium\_68, RadFad\_76, Hillester\_76, Vopal\_73
- Track 68 : Isolde\_70, Shukran\_69
- Track 69 : AdaS\_69, Faja\_73, BillyTP\_73, Hestia\_64, YoungHarleezy\_71
- Track 70 : Globfish\_72, Cassini\_67, SpicyFrank\_74
- Track 71 : JellyBread\_68, MaterMagnus\_71, Gorpy\_70, Sakai\_69, Aikyam\_70
- Track 72 : Seahorse\_76
- Track 73 : Bhageatrice\_76
- Track 74 : SonDevVon\_78
- Track 75 : Lasker\_73
- Track 76 : Satrap\_72, LeBruni\_73
- Track 77 : Ding\_69
- Track 78 : DarwinJr\_76, Crescenzo\_75
- Track 79 : Raqqa\_67, BenchScraper\_72
- Track 80 : Persistence\_65

- Track 81 : Tiff81\_67
- Track 82 : CookieBear\_71
- Track 83 : MUWow\_71
- Track 84 : NewKitty\_74
- Track 85 : EvePickles\_69
- Track 86 : Nyilah\_73
- Track 87 : BlueShadow\_70, Sporco\_74
- Track 88 : Anekin\_74
- Track 89 : JakeTheSnake\_75
- Track 90 : Sashimi\_69
- Track 91 : AbbyDaisy\_73
- Track 92 : CosmicBrownie\_67
- Track 93 : BasketStar\_72
- Track 94 : Phrank15\_74
- Track 95 : SV1\_43
- Track 96 : SoJo\_44, DaRealMyers\_44, Tubberson\_44
- Track 97 : Picard\_46
- Track 98 : ToastyFinz\_43
- Track 99 : Mojorita\_46
- Track 100 : Darolandstone\_44
- Track 101 : Raleigh\_44
- Track 102 : PapayaSalad\_45
- Track 103 : Bioscum\_46, Ididsumtinwong\_47
- Track 104 : Austintatious\_43
- Track 105 : Lishka\_43
- Track 106 : WheeHeim\_13, Forthebois\_13
- Track 107 : RickRoss\_14
- Track 108 : Schlegelian\_46
- Track 109 : AxeJC\_44, Cumberbatch\_46, ArizonaGT\_46, FrumpyGal\_46, Eastland\_45, Piccadilly\_45, Eklok\_45, Vondra\_44
- Track 110 : Ignacio\_45, HFrancette\_46
- Track 111 : E1\_47, Anatole\_47, B3\_49
- Track 112 : Doucette\_53
- Track 113 : G4\_64
- Track 114 : E6\_53
- Track 115 : PFR1\_50, PFR2\_52
- Track 116 : DonTron\_86, Soos\_82, KingstonB\_88, ColdSoup\_89, Jollymon\_86, Amo99\_89, Purplicious\_86, Sting\_85
- Track 117 : Makar\_90
- Track 118 : Clawz\_88
- Track 119 : Stillion\_89
- Track 120 : Grumio\_87
- Track 121 : Geeche\_124, Abscondus\_125, Bachita\_129, Miskis\_121, Cucurbita\_127, Norvs\_125, Aphelion\_126, Toniann\_126, Dusty\_123, ClubL\_126, Culver\_126, PhinkBoden\_126, Lozinak\_126, Engineer\_128, Smoothie\_127
- Track 122 : WilliamBoone\_125
- Track 123 : OneUp\_111
- Track 124 : BrutonGaster\_101
- Track 125 : Splinter\_54, Vendetta\_54, Goib\_55
- Track 126 : Banquo\_53, TinaLin\_53
- Track 127 : DinoDaryn\_55, Huffy\_55
- Track 128 : TZGordon\_56
- Track 129 : Gspat1\_47

- Track 130 : Dardanus\_49
- Track 131 : Schmidt\_48
- Track 132 : Catfish\_52
- Track 133 : Cardigan\_138
- Track 134 : JonJames\_135, Yvonnetastic\_132
- Track 135 : Bantam\_84
- Track 136 : Mollymur\_84
- Track 137 : SpeedDemon\_850
- Track 138 : Towmatter\_74, Daredevil\_74
- Track 139 : DatBoi\_81
- Track 140 : Greep\_104, Lilizi\_101, Moldemort\_103, Emmina\_100, ShamWow\_100, RiverMonster\_100, Misfit\_101, CrystalP\_99, Eureka\_99, Hoonter\_103, BilboSwaggins\_98, FireRed\_103, Henry\_97, Simpliphy\_99, Filch\_102, OrionPax\_99, Palpatine\_101, Porky\_99, Tarkin\_99, ShereKhan\_98, Hopey\_101, Nala\_102, Buck\_101, TeamEdward\_100, Policronamos\_102, Elph10\_100, Contagion\_96, Phrux\_97, Bruin\_97, Stark\_101, Ukulele\_95, Teaspoon\_101, HanKaySha\_101, Quallification\_101, Maxxinista\_102, PaddyBaddy\_100, Lilac\_102, Thresher\_102, Bogg\_100, Terminus\_103, Cjw1\_101, Toto\_98, NoSleep\_101, Bench\_103, Goku\_99, BugsBunny\_99, Mosby\_96, PhatBacter\_103, Sassay\_95, Kanye\_97, Phaux\_102, MadamMonkfish\_100, Willez\_95
- Track 141 : Nimrod\_100, Harella\_100, Glexan\_99, Inca\_97, Xandras\_99, Gator\_98, Icee\_101, Marshmallow\_97, FoghornLeghorn\_93, Flypotenuse\_96, Traaww1\_96, DoctorDiddles\_99, YassJohnny\_97, Asriel\_98, Barbarian\_99, Phaja\_98, Bask21\_100, xkcd\_103, Brewer\_94, AmericanBeauty\_104, MollyToe\_94, Myrale\_100
- Track 142 : Lilpickle\_99, Cactus\_104, DrDrey\_100, Tuco\_101, Dusk\_97, Goldilocks\_103, TeardropMSU\_96, MPhalcon\_101, Murica\_103, Murphy\_100, ABCat\_97, FairyPath\_100, BadStone\_97, Pharsalus\_97, StellaBean\_99, ChosenOne\_100, BaboJay\_100, Mindy\_99, Dumbo\_100, Sotrice96\_101, Elite2014\_99, MISSy\_101
- Track 143 : Petra64142\_104, Daikon\_100, NelitzaMV\_97, StormChicken\_101
- Track 144 : Pumpkin\_102
- Track 145 : StolenFromERC\_102, Easy2Say\_100, GooberAzure\_103, Stank\_102, GoldenSpark\_104, Kimchi\_104, Adnama\_104, Gage\_102, Argent26\_104, Holt\_105, Gemini\_105, Kostya\_100, Wiggin\_102, Command613\_102
- Track 146 : SirDuracell\_100, Cookies\_97, Amao\_100, ChotaBhai\_100, Rimmer\_98, HuffyPuff\_102, Pat3\_97
- Track 147 : Manda\_101
- Track 148 : Highbury\_97, Saints25\_97
- Track 149 : 244\_101, Balomoji\_100, TBrady12\_103, Czyszczone1\_101, Thimble\_102
- Track 150 : BigBubba\_100, Youngblood\_103
- Track 151 : Paperbeatsrock\_99, Miniwave\_95
- Track 152 : JeTaime\_99
- Track 153 : Tomaszewski\_95
- Track 154 : Becksu\_98, NonchalantPear\_98, Ptowny\_96
- Track 155 : SophKB\_97
- Track 156 : Budgie\_109
- Track 157 : IHOP\_98
- Track 158 : Rakim\_101
- Track 159 : Savannah\_63, Scumberland\_66, PhedwardCullen\_62, Phorgeous\_64, Kowalski\_63, LittleFortune\_66, Cranjis\_65, KaiHaiDragon\_65, Lucretia\_64, Hermeonysus\_64, PierreOrion\_64, Pulchra\_66, Ganandorf\_63, Jollipop\_65, Glorp\_65, Piperis\_65, Shotgun\_64, Quhwah\_68, Honeyfin\_65, Rockwell\_63, Paschalis\_64, BrazzalePHS\_63, BeagleBug\_63, CrazyRich\_63, PiperSansNom\_65,

Ramiel05\_63, EarickHC\_65, Crisis\_65, Antares\_64, Onika\_63, Busephilis\_63, Jefe\_64, Yeti\_66, Selwyn23\_65, Phrancesco\_64

- Track 160 : Megan\_61
- Track 161 : Gina\_68, Teamocil\_68
- Track 162 : Skugga\_64
- Track 163 : RobsFeet\_68, Metamorphoo\_67
- Track 164 : NoodlelyBoi\_65
- Track 165 : Merry\_, Sunny\_
- Track 166 : Tyrumbra\_63
- Track 167 : Jayden\_65
- Track 168 : Zapato\_64
- Track 169 : Ariadne\_74, Smarties\_74
- Track 170 : SirFrank\_64
- Track 171 : Nicole72\_62
- Track 172 : Fireman\_67
- Track 173 : Shrubaron\_68
- Track 174 : ClearAsMud\_68
- Track 175 : Wilca\_64, BirdInFrench\_64
- Track 176 : Altheas\_60
- Track 177 : Terij\_60
- Track 178 : Cressida\_63
- Track 179 : Kozie\_60
- Track 180 : MementoMori\_61
- Track 181 : Matzah\_62
- Track 182 : Cinna\_60
- Track 183 : Margaery\_59
- Track 184 : Bran\_47
- Track 185 : MicyPS\_75
- Track 186 : Taotie\_93
- Track 187 : PSonyx\_96
- Track 188 : Spartan\_54
- Track 189 : Gallop\_58
- Track 190 : Shoya\_55
- Track 191 : Gibbzilla\_62
- Track 192 : JeanClaude\_53
- Track 193 : Alatato\_54
- Track 194 : Pigu\_55
- Track 195 : Rooter\_57
- Track 196 : BrayBeast\_55, Sarge\_49
- Track 197 : Kumotta\_55, MargaretKali\_51
- Track 198 : Maruru\_48, Sonali\_48, Sunshine23\_50
- Track 199 : Mufasa8\_48
- Track 200 : Lilmac1015\_45, CalWood4100\_45
- Track 201 : Klevey\_43
- Track 202 : Bolt007\_43
- Track 203 : Altadena\_40
- Track 204 : Circuit\_38
- Track 205 : Bumble\_38
- Track 206 : Prairie\_42
- Track 207 : Nandito\_43
- Track 208 : Kukla\_55
- Track 209 : GUPitcher\_53
- Track 210 : DreamEater\_54

- Track 211 : PetriParty\_56
- Track 212 : TripleJ\_56
- Track 213 : BlackJade\_52
- Track 214 : Gooberta\_38, GoldDust\_38
- Track 215 : Vitus\_39
- Track 216 : SunnyJune\_46, AirForce1\_45, Jinkies\_44
- Track 217 : Divya\_48
- Track 218 : Orkz\_48
- Track 219 : Hirko\_37
- Track 220 : Music\_38
- Track 221 : Vibaki\_38
- Track 222 : Ottawa\_81, Kharcho\_81
- Track 223 : Bauer\_65, ThayneTheZag\_76, Zucker\_67
- Track 224 : BellaJr\_64
- Track 225 : BlackSpider\_59
- Track 226 : Hum25\_61
- Track 227 : Merpity\_60
- Track 228 : MrSmee\_59
- Track 229 : Skitty\_54
- Track 230 : Pitbull\_60
- Track 231 : Khuang\_62
- Track 232 : Altostratus\_62
- Track 233 : Violeta\_47, Bush\_46, Guzman\_45, CookieDog\_45, Carrillo\_47
- Track 234 : Dropshot\_45, Appa\_45, Winchester007\_61, PhillyJawn\_46
- Track 235 : ScoobySnack\_42
- Track 236 : NCRodriguez\_47, Warren\_45, Phingu\_48, Blett\_45, Pickles13\_44
- Track 237 : Mariel\_48
- Track 238 : Antuna\_47
- Track 239 : Jakelyne\_48, Phonegingi\_45
- Track 240 : Losacky\_47, MenE\_47
- Track 241 : Sweetums\_43
- Track 242 : Gingerbug\_42
- Track 243 : Lesiram\_44
- Track 244 : Teng\_47
- Track 245 : DelaGarza\_43
- Track 246 : Wrackline\_57
- Track 247 : JrWilcox\_106
- Track 248 : ValentiniPuff\_105
- Track 249 : Colossa\_43
- Track 250 : VanLee\_42
- Track 251 : LeBron\_81, Rose5\_83, Enceladus\_79, AvadaKedavra\_82, Silverleaf\_82, DirkDirk\_79, Acquire49\_82, Halena\_80, MAckerman\_81, Appletree2\_81, Zaria\_83, Tyson\_83, JoeDirt\_83, CicholasNage\_79, Wyatt2\_83, Calm\_84, UPIE\_81, Poochiewood\_80, Wamburggrxpress\_82
- Track 252 : OhShagHennessy\_79
- Track 253 : OverPar\_87, Lewan\_86, Rumpelstiltskin\_82, Itos\_85, Crossroads\_85, Soap141\_85, Gabriela\_85, Underpass\_77, Breezona\_85, Gardann\_85, Loadrie\_83, Nicholasp3\_85, Miley16\_85, Winky\_85, Vetrix\_84, Netyap\_86, Lynnae\_87, BobsGarage\_85, LilDestine\_84, Faith1\_85, DrSeegs\_85, Zakai\_86, MkaliMitinis3\_86, Wigglewiggle\_84, SoJulia\_87, Kahlid\_85, BigCheese\_85, Sarshaun\_86, Wilder\_86
- Track 254 : Bazzle\_83
- Track 255 : ZhongYanYuan\_83, DHan\_89, Baoshan\_85
- Track 256 : Archie\_82

- Track 257 : GuuelaD\_83
- Track 258 : Hafay\_86, Claus\_84, Tourach\_84
- Track 259 : Rossetti\_86
- Track 260 : DanBing\_85
- Track 261 : Finemlucis\_85
- Track 262 : Snenia\_83, Finnry\_83, Lolly9\_82, Red305\_85, MsGreen\_84, Jubie\_83, Clautastrophe\_82, Nicholas\_81, Samty\_82, Krypton555\_84, MiniMac\_87, Jobypre\_84, Kingsolomon\_81, Moostard\_81, Lumos\_84, Whirlwind\_84, Bellis\_84, MiniLon\_87
- Track 263 : LiyuLake\_83, DuncansLeg\_84, BourbonZero\_85, KirDoubleO7\_82, Ellson\_83
- Track 264 : TriFive\_85
- Track 265 : Bromden\_84
- Track 266 : Quby\_83, FarmResident\_84, ChutneyChips\_82, Sheng711\_84, Chaser\_82
- Track 267 : BrainDrainer\_83, PYPDinur\_82
- Track 268 : Kropertea\_79
- Track 269 : Douzhi\_83
- Track 270 : Douge\_84
- Track 271 : DyoEdafos\_87
- Track 272 : Baudelaire\_92, Aegeus\_92
- Track 273 : Skinny\_69, Dulcita\_68, Auspice\_67, Glaske16\_68, Bricole\_66, TpudiCK\_69, FreakyGoo\_68, LilhomieP\_66, Izel\_68, IPhane7\_67, SlimJimmy\_66, TyDawg\_67, RoseMarie\_71, Bongo\_67, PegLeg\_66, KleverKiS\_66, Diminimus\_68
- Track 274 : Reindeer\_69
- Track 275 : Estes\_75, GenevaB15\_75, MrMagoo\_77, Aziz\_74, GardenSalsa\_76
- Track 276 : Rey\_73
- Track 277 : Nanosmite\_72
- Track 278 : Bubbykins\_106
- Track 279 : Azrael100\_77, Wildcat\_78, MaryV\_78, Cosmo\_78
- Track 280 : EniyanLRS\_74
- Track 281 : DillyDally\_47
- Track 282 : Jace\_65
- Track 283 : BigAnti\_47
- Track 284 : Sunfish\_74
- Track 285 : Finkle\_70
- Track 286 : REQ3\_26
- Track 287 : ArV2\_54
- Track 288 : Min1\_23
- Track 289 : pZL12\_1c
- Track 290 : Lukepolites\_39
- Track 291 : Kumao\_63
- Track 292 : Gilgamesh\_89

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

The start number called the most often in the published annotations is 100, it was called in 346 of the 553 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AWGoat\_69, Abba\_37, Abidatro\_55, Abscondus\_125, Acquire49\_82, AdoptaAdorbs\_54, Aegeus\_92, AlexMinion\_56, Altadena\_40, Altheas\_60, Altostratus\_62, Amanises\_62, AmiCi24\_54, Amo99\_89, Amphitrite\_55, Andrew\_57, Antares\_64, Antrice\_55, Antuna\_47, Aphelion\_126, ApoKipo\_15, Appa\_45, Appletree2\_81, ArV1\_088, Archie\_82, Ariadne\_74, ArizonaGT\_46, Atlantica\_55, Auspice\_67, Austintatious\_43, AvadaKedavra\_82, AxeJC\_44, Azaz\_56, Aziz\_74, Babushka\_52, Bachita\_129, Banquo\_53, Baoshan\_85, BarretLemon\_37, Basilisk\_53, Baudelaire\_92, Bazzle\_83, BeagleBug\_63, Beagle\_98, Beans\_35, Bellis\_84, BetaFish\_96, BigCheese\_85, BigDome\_37, Bioscum\_46, BirdInFrench\_64, Blett\_45, BobsGarage\_85, Bolt007\_43, Bongo\_67, BossLady\_37, BourbonZero\_85, BrainDrainer\_83, Bran\_47, BrazzalePHS\_63, Breezona\_85, Brent\_35, Bricole\_66, Bromden\_84, BruhMoment\_82, BrutonGaster\_101, Brynnie\_51, Bubbykins\_106, Bumble\_38, Busephilis\_63, Bush\_46, CalWood4100\_45, Calm\_84, Camara\_55, Cardigan\_138, Carrillo\_47, Catfish\_52, Chaser\_82, Chickaboom\_54, Chicken\_53, Chipper1996\_1020, Chocolat\_101, Chubster\_101, ChutneyChips\_82, CicholasNage\_79, Cinna\_60, Circuit\_38, Claus\_84, Clautastrophe\_82, Clawz\_88, ClubL\_126, ColdSoup\_89, Colossa\_43, Colucci\_104, Conboy\_100, CookieDog\_45, Cranjis\_65, CrazyRich\_63, Cressida\_63, Crisis\_65, Crossroads\_85, Cucurbita\_127, Culver\_126, Cumberbatch\_46, Cygnet\_54, DHan\_89, DaRealMyers\_44, DanBing\_85, DanHam62\_55, Dardanus\_49, Darolandstone\_44, DelaGarza\_43, Diminimus\_68, Ding\_69, DinoDaryn\_55, DirkDirk\_79, DogYard\_96, DonTron\_86, Douge\_84, Douzhi\_83, DrSeegs\_85, DrYang\_97, DreamEater\_54, Dropshot\_45, Dulcita\_68, DuncansLeg\_84, Dusty\_123, DyoEdafos\_87, EarickHC\_65, Eastland\_45, EdgarPoe\_101, Edmundo\_14, Eesa\_52, Eklok\_45, Ellson\_83, Enceladus\_79, Engineer\_128, Estes\_75, Faith1\_85, FarmResident\_84, Finemlucis\_85, Fingolfin\_55, Finnry\_83, Forrestell\_95, Forthebois\_13, Franzy\_35, FreakyGoo\_68, FrumpyGal\_46, GUPitcher\_53, Gabriela\_85, Galaxy\_52, Gallop\_58, Ganandorf\_63, Gardann\_85, GardenSalsa\_76, Geeche\_124, GenevaB15\_75, Gingerbug\_42, Glaske16\_68, Glorp\_65, Glotell\_56, Goib\_55, GoldDust\_38, Gooberta\_38, Gravel\_64, GravityBall\_37, Grekaycon\_37, Grumio\_87, Gsput1\_47, GuuelaD\_83, Guzman\_45, HFrancette\_46, Hafay\_86, Halena\_80, HamCheese\_55, Hermeonysus\_64, Hirko\_37, Hive\_93, Honeyfin\_65, Huffy\_55, HumptyDumpty\_101, IPHane7\_67, Ididsumtinwong\_47, Ignacio\_45, Itos\_85, Izel\_68, JKerns\_37, JaNo\_100, JakeTheSnake\_75, Jakelyne\_48, Jamun\_52, Jawnski\_35, JayCookie\_102, Jayden\_65, Jefe\_64, Jobypre\_84, JoeDirt\_83, Jollipop\_65, Jollymon\_86, JonJames\_135, Jordan\_37, Jubie\_83, Juno112\_54, KBurroustX\_97, KHumphrey\_55, Kabreeze\_101, Kahlid\_85, KaiHaiDragon\_65, KendraB23\_63, Kharcho\_81, Khuang\_62, King2\_35, Kingsolomon\_81, KingstonB\_88, KirDoubleO7\_82, KleverKiS\_66, Klevey\_43, Kovu\_15, Kowalski\_63, Kozie\_60, Kropertea\_79, Krypton555\_84, Kubulix\_96, Kukla\_55, Kuleana\_55, Kumao\_63, Kumotta\_55, Laphuphu24k\_54, LeBron\_81, LeeroyJ\_37, Leona\_54, Lesiram\_44, Lewan\_86, LilDestine\_84, LilhomieP\_66, Lilmac1015\_45, Linus\_101, Lishka\_43, LittleFortune\_66, LittleTokyo\_52, LiyuLake\_83, Loadrie\_83, Lolly9\_82, Losacky\_47, Lozinak\_126, Lucretia\_64, Lukepolites\_39, Lumos\_84, Lymara\_99, Lynnae\_87, MAckerman\_81, Makar\_90, Margaery\_59, MargaretKali\_51, Mariel\_48, Martha\_37, Maruru\_48, Matzah\_62, MellowYellow\_97, MementoMori\_61, MenE\_47, Merry\_, MicyPS\_75, Miley16\_85, Min1\_23, MiniLon\_87, MiniMac\_87, Miskis\_121, MkaliMitinis3\_86, Mojorita\_46, Moostard\_81, Mordred\_101, MoyaNatalis\_101, MrMagoo\_77, MsGreen\_84, Mufasa8\_48, Music\_38, NCRodriguez\_47, Nandito\_43, Nanosmite\_72, NathanVaag\_35, Netyap\_86, Niblet\_57, Nicholas\_81, Nicholasp3\_85, Nicole72\_62, Nikan\_93, Norvs\_125, Nostromo\_35, NyleyClemson\_96, Odyssey395\_96, OhShagHennessy\_79, Ollypop\_91, OneUp\_111, Onika\_63, Oppalora\_54, Orcanus\_53, Orkz\_48, Ottawa\_81, OverPar\_87, PFR1\_50, PFR2\_52,

PSonyx\_96, PYPDinur\_82, PapayaSalad\_45, Paschalis\_64, PegLeg\_66, Pelletreau\_64, PetriParty\_56, PhedwardCullen\_62, PhillyJawn\_46, Phingu\_48, PhinkBoden\_126, PhluffyCoco\_55, Phonegingi\_45, Phorgeous\_64, Phrancesco\_64, PhuzzTulsa\_94, Picard\_46, Piccadilly\_45, Piccoletto\_35, Pickles13\_44, PierreOrion\_64, PiperSansNom\_65, Piperis\_65, Pippa\_37, Pointis\_93, Poochiewood\_80, Popstraw\_92, Prairie\_42, PrincessTrina\_102, Pulchra\_66, Pureglobe5\_96, Purplicious\_86, Quby\_83, Quhwah\_68, RIPWilbur\_95, Raleigh\_44, Ramiel05\_63, Ranunculus\_85, Rattail\_55, RazzB\_95, Red305\_85, RedFox\_55, Reindeer\_69, Ren19\_88, Renna12\_54, Rey\_73, RickRoss\_14, Rizwana\_72, Rockwell\_63, Rose5\_83, RoseMarie\_71, RosiePosie\_101, Rossetti\_86, Ruchi\_52, Rumpelstiltskin\_82, SV1\_43, Samty\_82, Sarshaun\_86, Savannah\_63, Scavito\_102, Schlegelian\_46, Schmidt\_48, ScoobySnack\_42, Scumberland\_66, Selwyn23\_65, Shade\_37, Shen\_52, Sheng711\_84, Shotgun\_64, Sicarius2\_38, SilentRX\_70, Silverleaf\_82, Skinny\_69, Skugga\_64, SlimJimmy\_66, Smarties\_74, Smoothie\_127, Snenia\_83, SoJo\_44, SoJulia\_87, Soap141\_85, Sonali\_48, Sonny\_37, Soos\_82, Splinter\_54, StevieBAY\_37, Stillion\_89, Sting\_85, StuartMinion\_46, Sunfish\_74, Sunny\_, Sunshine23\_50, Sweetums\_43, TZGordon\_56, TaeYoung\_37, Tank\_72, Taotie\_93, TaylorSipht\_54, Teng\_47, Terij\_60, Timinator\_37, TinaLin\_53, Toad24\_55, ToastyFinz\_43, Toniann\_126, Tophat\_102, Tourach\_84, TpudiCK\_69, TriFive\_85, TripleJ\_56, Tubberson\_44, TyDawg\_67, Tyson\_83, UPIE\_81, Underpass\_77, ValentiniPuff\_105, VanLee\_42, Vendetta\_54, Vetrix\_84, Vibaki\_38, Violeta\_47, Vitus\_39, Vondra\_44, Vulpecula\_52, Waltz\_14, Wamburgxpress\_82, Warren\_45, Westrich\_63, WheelHeim\_13, Wheelbite\_14, Whirlwind\_84, Wigglewiggles\_84, Wilca\_64, Wilde\_74, Wilder\_86, WileyE\_54, WilliamBoone\_125, Winchester007\_61, Winky\_85, Wrackline\_57, Wyatt2\_83, Wyborn\_38, Yeti\_66, Yvonnestic\_132, Zakai\_86, Zaria\_83, Zartrosa\_37, ZhongYanYuan\_83, Zhuangyuan\_57, Zixiang\_56,

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

- Megan\_61, pZL12\_1c,

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

- 244\_101, ABCat\_97, AbbyDaisy\_73, AdaS\_69, Adnama\_104, Aikyam\_70, AirForce1\_45, Alatato\_54, Amao\_100, AmericanBeauty\_104, Anatole\_47, Anekin\_74, ArV2\_54, Argent26\_104, Asriel\_98, Auxilium\_68, Azrael100\_77, B3\_49, BaboJay\_100, BadStone\_97, Balomoji\_100, Bantam\_84, Barbarian\_99, Bask21\_100, BasketStar\_72, Bauer\_65, Becksu\_98, BellaJr\_64, BenchScraper\_72, Bench\_103, Bhageatrice\_76, BigAnti\_47, BigBubba\_100, BilboSwaggins\_98, BillyTP\_73, BlackJade\_52, BlackSpider\_59, BlueShadow\_70, Bogg\_100, BrayBeast\_55, Brewer\_94, Bruin\_97, Buck\_101, Budgie\_109, BugsBunny\_99, Cactus\_104, Cassini\_67, ChosenOne\_100, ChotaBhai\_100, Cjw1\_101, ClearAsMud\_68, Command613\_102, Contagion\_96, CookieBear\_71, Cookies\_97, CosmicBrownie\_67, Cosmo\_78, Crescenzo\_75, CrystalP\_99, Czyszczon1\_101, Daikon\_100, Daredevil\_74, DarwinJr\_76, DatBoi\_81, DillyDally\_47, Divya\_48, DoctorDiddles\_99, Doucette\_53, DrDrey\_100, Dumbo\_100, Dusk\_97, E1\_47, E6\_53, EastWest\_38, Easy2Say\_100, Elite2014\_99, Elph10\_100, Emmina\_100, EniyanLRS\_74, Eureka\_99, EvePickles\_69, FairyPath\_100, Faja\_73, Filch\_102, Finkle\_70, FireRed\_103, Fireman\_67, Flypotenuse\_96, FoghornLeghorn\_93, G4\_64, Gage\_102, Gator\_98, Gemini\_105, Gibbzilla\_62, Gilgamesh\_89, Gina\_68, Glexan\_99, Globfish\_72, Goku\_99, GoldenSpark\_104, Goldilocks\_103, GooberAzure\_103, Gorpy\_70, Greep\_104, GumGum\_75, HanKaySha\_101, Harella\_100, Henry\_97, Hestia\_64, Highbury\_97, Hillester\_76, Holt\_105, Hoonter\_103, Hopey\_101, HuffyPuff\_102, Hum25\_61, IHOP\_98, Icee\_101, Inca\_97, Isolde\_70, Jace\_65,

JeTaime\_99, JeanClaude\_53, JellyBread\_68, Jinkies\_44, JrWilcox\_106, Kabloowy\_71, Kanye\_97, Kimchi\_104, Kostya\_100, Lasker\_73, Lawnathon\_73, LeBruni\_73, Lilac\_102, Lilizi\_101, Lilpickle\_99, MISSy\_101, MPhalcon\_101, MUWow\_71, MadamMonkfish\_100, Manda\_101, Mapleville\_67, Marshmallow\_97, MaryV\_78, MaterMagnus\_71, Maxxinista\_102, Merpity\_60, Metamorphoo\_67, MidnightRain\_74, Mindy\_99, Miniwave\_95, Misfit\_101, Moldemort\_103, MollyToe\_94, Mollymur\_84, Mosby\_96, MrSmee\_59, Murica\_103, MurphyJoseph\_68, Murphy\_100, Myrale\_100, Nala\_102, NelitzaMV\_97, NewKitty\_74, Nimrod\_100, NoSleep\_101, NonchalantPear\_98, NoodlelyBoi\_65, Nyilah\_73, OrionPax\_99, PaddyBaddy\_100, Palpatine\_101, Paperbeatsrock\_99, Pat3\_97, Persistence\_65, Petra64142\_104, Phaja\_98, Pharsalus\_97, PhatBacter\_103, Phaux\_102, Phrank15\_74, Phrux\_97, Pigu\_55, Pitbull\_60, Policronamos\_102, Porky\_99, Ptowny\_96, Pumpkin\_102, Quallification\_101, REQ3\_26, RadFad\_76, Rakim\_101, Raphaella\_71, Raqqa\_67, Richie\_74, Rimmer\_98, RiverMonster\_100, RobsFeet\_68, Rooter\_57, Saints25\_97, Sakai\_69, Sarge\_49, Sashimi\_69, Sassay\_95, Satrap\_72, Seahorse\_76, ShamWow\_100, ShereKhan\_98, Shoya\_55, Shrubaron\_68, Shukran\_69, Simpliphy\_99, SirDuracell\_100, SirFrank\_64, Skitty\_54, SonDevVon\_78, SophKB\_97, Sotrice96\_101, Spartan\_54, SpeedDemon\_850, SpicyFrank\_74, Sporco\_74, Stank\_102, Stark\_101, StellaBean\_99, StolenFromERC\_102, StormChicken\_101, SunnyJune\_46, TBrady12\_103, Tarkin\_99, TeamEdward\_100, Teamocil\_68, TeardropMSU\_96, Teaspoon\_101, Terminus\_103, ThayneTheZag\_76, Thimble\_102, Thresher\_102, Tiff81\_67, Tomaszewski\_95, Toto\_98, Towmatter\_74, Traaww1\_96, Tuco\_101, Tyumbra\_63, Ukulele\_95, Vopal\_73, Wiggin\_102, Wildcat\_78, Willez\_95, Windest\_74, Xandras\_99, YassJohnny\_97, YoungHarleezy\_71, Youngblood\_103, Zapato\_64, Zucker\_67, xkcd\_103,

### Summary by start number:

#### Start 42:

- Found in 48 of 712 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 553
- Called 2.1% of time when present
- Phage (with cluster) where this start called: Rakim\_101 (E),

#### Start 95:

- Found in 12 of 712 ( 1.7% ) of genes in pham
- Manual Annotations of this start: 11 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ClearAsMud\_68 (EC), Fireman\_67 (EC), Gina\_68 (EC), Megan\_61 (EC), Metamorphoo\_67 (EC), NoodlelyBoi\_65 (EC), RobsFeet\_68 (EC), Shrubaron\_68 (EC), SirFrank\_64 (EC), Teamocil\_68 (EC), Tyumbra\_63 (EC), Zapato\_64 (EC),

#### Start 96:

- Found in 5 of 712 ( 0.7% ) of genes in pham
- Manual Annotations of this start: 1 of 553
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Gilgamesh\_89 (singleton),

#### Start 98:

- Found in 1 of 712 ( 0.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

- Phage (with cluster) where this start called: JrWilcox\_106 (GL),

Start 99:

- Found in 4 of 712 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlackJade\_52 (FL), Hum25\_61 (FQ), Pitbull\_60 (FQ), Skitty\_54 (FQ),

Start 100:

- Found in 454 of 712 ( 63.8% ) of genes in pham
- Manual Annotations of this start: 346 of 553
- Called 99.6% of time when present
- Phage (with cluster) where this start called: AWGoat\_69 (AP4), Abba\_37 (AO3), Abidatro\_55 (AS1), Abscondus\_125 (CQ1), Acquire49\_82 (L1), AdoptaAdorbs\_54 (AS3), Aegeus\_92 (L5), AlexMinion\_56 (AS3), Altadena\_40 (FH), Altheas\_60 (EG), Altostratus\_62 (FS), Amanises\_62 (AS1), AmiCi24\_54 (AS3), Amo99\_89 (CP), Amphitrite\_55 (AS3), Andrew\_57 (AS3), Antares\_64 (EC), Antrice\_55 (AS2), Antuna\_47 (GA), Aphelion\_126 (CQ1), ApoKipo\_15 (AL), Appa\_45 (GA), Appletree2\_81 (L1), ArV1\_088 (AR), Archie\_82 (L2), Ariadne\_74 (EC), ArizonaGT\_46 (BP), Atlantica\_55 (AS3), Auspice\_67 (M1), Austintatious\_43 (BC3), AvadaKedavra\_82 (L1), AxeJC\_44 (BP), Azaz\_56 (AS3), Aziz\_74 (M2), Babushka\_52 (AS3), Bachita\_129 (CQ1), Banquo\_53 (CU1), Baoshan\_85 (L2), BarretLemon\_37 (AO2), Basilisk\_53 (AS1), Baudelaire\_92 (L5), Bazzle\_83 (L2), BeagleBug\_63 (EC), Beagle\_98 (AP2), Beans\_35 (AO1), Bellis\_84 (L3), BetaFish\_96 (AP2), BigCheese\_85 (L2), BigDome\_37 (AO2), Bioscum\_46 (BC3), BirdInFrench\_64 (EG), Blett\_45 (GA), BobsGarage\_85 (L2), Bolt007\_43 (FH), Bongo\_67 (M1), BossLady\_37 (AO2), BourbonZero\_85 (L3), BrainDrainer\_83 (L4), Bran\_47 (EP), BrazzalePHS\_63 (EC), Breezona\_85 (L2), Brent\_35 (AO1), Bricole\_66 (M1), Bromden\_84 (L4), BruhMoment\_82 (AP3), BrutonGaster\_101 (CQ2), Brynnie\_51 (AS1), Bubbykins\_106 (UNK), Bumble\_38 (FH), Busephilis\_63 (EC), Bush\_46 (GA), CalWood4100\_45 (FH), Calm\_84 (L1), Camara\_55 (AS3), Cardigan\_138 (DD), Carrillo\_47 (GA), Catfish\_52 (CU5), Chaser\_82 (L4), Chickaboom\_54 (AS1), Chicken\_53 (AS1), Chipper1996\_1020 (AR), Chocolat\_101 (AR), Chubster\_101 (AR), ChutneyChips\_82 (L4), CicholasNage\_79 (L1), Cinna\_60 (EI), Circuit\_38 (FH), Claus\_84 (L2), Clautastrophe\_82 (L3), Clawz\_88 (CP), ClubL\_126 (CQ1), ColdSoup\_89 (CP), Colossa\_43 (KA), Colucci\_104 (AR), Conboy\_100 (AR), CookieDog\_45 (GA), Cranjjs\_65 (EC), CrazyRich\_63 (EC), Cressida\_63 (EI), Crisis\_65 (EC), Crossroads\_85 (L2), Cucurbita\_127 (CQ1), Culver\_126 (CQ1), Cumberbatch\_46 (BP), Cygnet\_54 (AS2), DHan\_89 (L2), DaRealMyers\_44 (BC1), DanBing\_85 (L2), DanHam62\_55 (AS3), Dardanus\_49 (CU3), Darolandstone\_44 (BC2), DelaGarza\_43 (GF), Diminimus\_68 (M1), Ding\_69 (AY), DinoDaryn\_55 (CU1), DirkDirk\_79 (L1), DogYard\_96 (AP2), DonTron\_86 (CP), Douge\_84 (L4), Douzhi\_83 (L4), DrSeegs\_85 (L2), DrYang\_97 (AR), DreamEater\_54 (FJ), Dropshot\_45 (GA), Dulcita\_68 (M1), DuncansLeg\_84 (L3), Dusty\_123 (CQ1), DyoEdafos\_87 (L4), EarickHC\_65 (EC), Eastland\_45 (BP), EdgarPoe\_101 (AR), Edmundo\_14 (AL), Eesa\_52 (AS1), Eklok\_45 (BP), Ellson\_83 (L3), Enceladus\_79 (L1), Engineer\_128 (CQ1), Estes\_75 (M2), Faith1\_85 (L2), FarmResident\_84 (L4), Finemlucis\_85 (L2), Fingolfin\_55 (AS3), Finnry\_83 (L3), Forrestell\_95 (AP2), Forthebois\_13 (BO), Franzy\_35 (AO1), FreakyGoo\_68 (M1), FrumpyGal\_46 (BP), GUPitcher\_53 (FJ), Gabriela\_85 (L2), Galaxy\_52 (AS1), Gallop\_58 (ES), Ganandorf\_63 (EC), Gardann\_85 (L2), GardenSalsa\_76 (M2), Geeche\_124 (CQ1), GenevaB15\_75 (M2), Gingerbug\_42 (GF), Glaske16\_68 (M1), Glorp\_65 (EC), Glotell\_56 (AS3), Goib\_55

(CU1), GoldDust\_38 (FL), Gooberta\_38 (FL), Gravel\_64 (AS1), GravityBall\_37 (AO2), Grekaycon\_37 (AO2), Grumio\_87 (CP), Gsput1\_47 (CU2), GuuelaD\_83 (L2), Guzman\_45 (GA), HFrancette\_46 (BP), Hafay\_86 (L2), Halena\_80 (L1), HamCheese\_55 (AS3), Hermeonysus\_64 (EC), Hirko\_37 (FL), Hive\_93 (AP2), Honeyfin\_65 (EC), Huffy\_55 (CU1), HumptyDumpty\_101 (AR), IPhane7\_67 (M1), Ididsumtinwong\_47 (BC3), Ignacio\_45 (BP), Itos\_85 (L2), Izel\_68 (M1), JKerns\_37 (AO2), JaNo\_100 (AR), JakeTheSnake\_75 (AY), Jakelyne\_48 (GA), Jamun\_52 (AS1), Jawnski\_35 (AO1), JayCookie\_102 (AR), Jayden\_65 (EC), Jefe\_64 (EC), Jobypre\_84 (L3), JoeDirt\_83 (L1), Jollipop\_65 (EC), Jollymon\_86 (CP), JonJames\_135 (DD), Jordan\_37 (AO2), Jubie\_83 (L3), Juno112\_54 (AS3), KBurrousTX\_97 (AR), KHumphrey\_55 (AS3), Kabreeze\_101 (AR), Kahlid\_85 (L2), KaiHaiDragon\_65 (EC), KendraB23\_63 (AS1), Kharcho\_81 (FM), Khuang\_62 (FS), King2\_35 (AO1), Kingsolomon\_81 (L3), KingstonB\_88 (CP), KirDoubleO7\_82 (L3), KleverKiS\_66 (M1), Klevey\_43 (FH), Kovu\_15 (AL), Kowalski\_63 (EC), Kozie\_60 (EI), Kropertea\_79 (L4), Krypton555\_84 (L3), Kubulix\_96 (AP2), Kukla\_55 (FJ), Kuleana\_55 (AS2), Kumao\_63 (singleton), Kumotta\_55 (FB), Laphuphu24k\_54 (AS3), LeBron\_81 (L1), LeeroyJ\_37 (AO2), Leona\_54 (AS3), Lesiram\_44 (GF), Lewan\_86 (L2), LilDestine\_84 (L2), LilhomieP\_66 (M1), Lilmac1015\_45 (FH), Linus\_101 (AR), Lishka\_43 (BC3), LittleFortune\_66 (EC), LittleTokyo\_52 (AS2), LiyuLake\_83 (L3), Loadrie\_83 (L2), Lolly9\_82 (L3), Losacky\_47 (GA), Lozinak\_126 (CQ1), Lucretia\_64 (EC), Lukepolitites\_39 (singleton), Lumos\_84 (L3), Lymara\_99 (AR), Lynnae\_87 (L2), MAckerman\_81 (L1), Makar\_90 (CP), Margaery\_59 (EI), MargaretKali\_51 (FB), Mariel\_48 (GA), Martha\_37 (AO2), Maruru\_48 (FG), Matzah\_62 (EI), MellowYellow\_97 (AP2), MementoMori\_61 (EI), MenE\_47 (GA), Merry\_(EC), MicyPS\_75 (EQ), Miley16\_85 (L2), Min1\_23 (singleton), MiniLon\_87 (L3), MiniMac\_87 (L3), Miskis\_121 (CQ1), MkaliMitinis3\_86 (L2), Mojorita\_46 (BC1), Moostard\_81 (L3), Mordred\_101 (AR), MoyaNatalis\_101 (AR), MrMagoo\_77 (M2), MsGreen\_84 (L3), Mufasa8\_48 (FG), Music\_38 (FL), NCRodriguez\_47 (GA), Nandito\_43 (FH), Nanosmite\_72 (M3), NathanVaag\_35 (AO1), Netyap\_86 (L2), Niblet\_57 (AS1), Nicholas\_81 (L3), Nicholasp3\_85 (L2), Nicole72\_62 (EC), Nikan\_93 (AP2), Norvs\_125 (CQ1), Nostromo\_35 (AO3), NyleyClemson\_96 (AP2), Odyssey395\_96 (AP2), OhShagHennessy\_79 (L1), Ollypop\_91 (AP2), OneUp\_111 (CQ2), Onika\_63 (EC), Oppalora\_54 (AS3), Orcanus\_53 (AS1), Orkz\_48 (FL), Ottawa\_81 (FM), OverPar\_87 (L2), PFR1\_50 (BX), PFR2\_52 (BX), PSonyx\_96 (EQ), PYPDinur\_82 (L4), PapayaSalad\_45 (BC3), Paschalis\_64 (EC), PegLeg\_66 (M1), Pelletreau\_64 (AS1), PetriParty\_56 (FJ), PhedwardCullen\_62 (EC), PhillyJawn\_46 (GA), Phingu\_48 (GA), PhinkBoden\_126 (CQ1), PhluffyCoco\_55 (AS3), Phonegingi\_45 (GA), Phorgeous\_64 (EC), Phrancesco\_64 (EC), PhuzzTulsa\_94 (AP2), Picard\_46 (BC1), Piccadilly\_45 (BP), Piccoletto\_35 (AO1), Pickles13\_44 (GA), PierreOrion\_64 (EC), PiperSansNom\_65 (EC), Piperis\_65 (EC), Pippa\_37 (AO2), Pointis\_93 (AP2), Poochiewood\_80 (L1), Popstraw\_92 (AP2), Prairie\_42 (FH), PrincessTrina\_102 (AR), Pulchra\_66 (EC), Pureglobe5\_96 (AP2), Purplicious\_86 (CP), Quby\_83 (L4), Quhwah\_68 (EC), RIPWilbur\_95 (AP2), Raleigh\_44 (BC2), Ramiel05\_63 (EC), Ranunculus\_85 (AP), Rattail\_55 (AS3), RazzB\_95 (AP2), Red305\_85 (L3), RedFox\_55 (AS3), Reindeer\_69 (M1), Ren19\_88 (AP2), Renna12\_54 (AS3), Rey\_73 (M2), RickRoss\_14 (BO), Rizwana\_72 (AP1), Rockwell\_63 (EC), Rose5\_83 (L1), RoseMarie\_71 (M1), RosiePosie\_101 (AR), Rossetti\_86 (L2), Ruchi\_52 (AS1), Rumpelstiltskin\_82 (L2), SV1\_43 (BC1), Samty\_82 (L3), Sarshaun\_86 (L2), Savannah\_63 (EC), Scavito\_102 (AR), Schlegelian\_46 (BP), Schmidt\_48 (CU4), ScoobySnack\_42 (GA), Scumberland\_66 (EC), Selwyn23\_65 (EC), Shade\_37 (AO2), Shen\_52 (AS1), Sheng711\_84 (L4), Shotgun\_64 (EC), Sicarius2\_38 (AO2), SilentRX\_70 (AP4), Silverleaf\_82 (L1), Skinny\_69 (M1), Skugga\_64 (EC), SlimJimmy\_66 (M1), Smarties\_74 (EC), Smoothie\_127 (CQ1),

Snenia\_83 (L3), SoJo\_44 (BC1), SoJulia\_87 (L2), Soap141\_85 (L2), Sonali\_48 (FG), Sonny\_37 (AO2), Soos\_82 (CP), Splinter\_54 (CU1), StevieBAY\_37 (AO2), Stillion\_89 (CP), Sting\_85 (CP), StuartMinion\_46 (AS3), Sunfish\_74 (singleton), Sunny\_(EC), Sunshine23\_50 (FG), Sweetums\_43 (GF), TZGordon\_56 (CU1), TaeYoung\_37 (AO2), Tank\_72 (AP1), Taotie\_93 (EQ), TaylorSipt\_54 (AS1), Teng\_47 (GF), Terij\_60 (EI), Timinator\_37 (AO2), TinaLin\_53 (CU1), Toad24\_55 (AS1), ToastyFinz\_43 (BC1), Toniann\_126 (CQ1), Tophat\_102 (AR), Tourach\_84 (L2), TpudiCK\_69 (M1), TriFive\_85 (L3), TripleJ\_56 (FJ), Tubberson\_44 (BC1), TyDawg\_67 (M1), Tyson\_83 (L1), UPIE\_81 (L1), Underpass\_77 (L2), ValentiniPuff\_105 (GL), VanLee\_42 (KA), Vendetta\_54 (CU1), Vetrix\_84 (L2), Vibaki\_38 (FL), Violeta\_47 (GA), Vitus\_39 (FL), Vondra\_44 (BP), Vulpecula\_52 (AS1), Waltz\_14 (AL), Wamburggrxpress\_82 (L1), Warren\_45 (GA), Westrich\_63 (AS1), WheeHeim\_13 (BO), Wheelbite\_14 (AL), Whirlwind\_84 (L3), Wigglewiggles\_84 (L2), Wilca\_64 (EG), Wilde\_74 (AP1), Wilder\_86 (L2), WileyE\_54 (AS1), WilliamBoone\_125 (CQ1), Winchester007\_61 (GA), Winky\_85 (L2), Wrackline\_57 (GF), Wyatt2\_83 (L1), Wyborn\_38 (AO2), Yeti\_66 (EC), Yvonetastic\_132 (DD), Zakai\_86 (L2), Zaria\_83 (L1), Zartrosa\_37 (AO2), ZhongYanYuan\_83 (L2), Zhuangyuan\_57 (AS2), Zixiang\_56 (AS1),

#### Start 101:

- Found in 7 of 712 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 7 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100\_77 (V), Cosmo\_78 (V), EastWest\_38 (AO), EniyanLRS\_74 (V), Finkle\_70 (singleton), MaryV\_78 (V), Wildcat\_78 (V),

#### Start 102:

- Found in 144 of 712 ( 20.2% ) of genes in pham
- Manual Annotations of this start: 127 of 553
- Called 97.2% of time when present
- Phage (with cluster) where this start called: 244\_101 (E), ABCat\_97 (E), Adnama\_104 (E), Amao\_100 (E), AmericanBeauty\_104 (E), Argent26\_104 (E), Asriel\_98 (E), BaboJay\_100 (E), BadStone\_97 (E), Balomoji\_100 (E), Barbarian\_99 (E), Bask21\_100 (E), Bench\_103 (E), BigBubba\_100 (E), BilboSwaggins\_98 (E), Bogg\_100 (E), Brewer\_94 (E), Bruin\_97 (E), Buck\_101 (E), Budgie\_109 (E), BugsBunny\_99 (E), Cactus\_104 (E), ChosenOne\_100 (E), ChotaBhai\_100 (E), Cjw1\_101 (E), Command613\_102 (E), Contagion\_96 (E), Cookies\_97 (E), CrystalP\_99 (E), Czystczon1\_101 (E), Daikon\_100 (E), DoctorDiddles\_99 (E), DrDrey\_100 (E), Dumbo\_100 (E), Dusk\_97 (E), Easy2Say\_100 (E), Elite2014\_99 (E), Elph10\_100 (E), Emmina\_100 (E), Eureka\_99 (E), FairyPath\_100 (E), Filch\_102 (E), FireRed\_103 (E), Flypotenuse\_96 (E), FoghornLeghorn\_93 (E), Gage\_102 (E), Gator\_98 (E), Gemini\_105 (E), Glexan\_99 (E), Goku\_99 (E), GoldenSpark\_104 (E), Goldilocks\_103 (E), GooberAzure\_103 (E), Greep\_104 (E), HanKaySha\_101 (E), Harella\_100 (E), Henry\_97 (E), Highbury\_97 (E), Holt\_105 (E), Hoonter\_103 (E), Hopey\_101 (E), HufflyPuff\_102 (E), IHOP\_98 (E), Icee\_101 (E), Inca\_97 (E), JeTaimie\_99 (E), Kanye\_97 (E), Kimchi\_104 (E), Kostya\_100 (E), Lilac\_102 (E), Lilizi\_101 (E), Lilpickle\_99 (E), MISSy\_101 (E), MPhalcon\_101 (E), MadamMonkfish\_100 (E), Manda\_101 (E), Marshmallow\_97 (E), Maxxinista\_102 (E), Mindy\_99 (E), Miniwave\_95 (E), Misfit\_101 (E), Moldemort\_103 (E), MollyToe\_94 (E), Mosby\_96 (E), Murica\_103 (E), Murphy\_100 (E), Myrale\_100 (E), Nala\_102 (E), NelitzaMV\_97 (E), Nimrod\_100 (E), NoSleep\_101 (E), OrionPax\_99 (E), PaddyBaddy\_100 (E), Palpatine\_101 (E), Paperbeatsrock\_99 (E), Pat3\_97 (E),

Petra64142\_104 (E), Phaja\_98 (E), Pharsalus\_97 (E), PhatBacter\_103 (E), Phaux\_102 (E), Phrux\_97 (E), Policronamos\_102 (E), Porky\_99 (E), Pumpkin\_102 (E), Quallification\_101 (E), Rimmer\_98 (E), RiverMonster\_100 (E), Saints25\_97 (E), Sassay\_95 (E), ShamWow\_100 (E), ShereKhan\_98 (E), Simpliphy\_99 (E), SirDuracell\_100 (E), SophKB\_97 (E), Sotrice96\_101 (E), Stank\_102 (E), Stark\_101 (E), StellaBean\_99 (E), StolenFromERC\_102 (E), StormChicken\_101 (E), TBrady12\_103 (E), Tarkin\_99 (E), TeamEdward\_100 (E), TeardropMSU\_96 (E), Teaspoon\_101 (E), Terminus\_103 (E), Thimble\_102 (E), Thresher\_102 (E), Tomaszewski\_95 (E), Toto\_98 (E), Traaww1\_96 (E), Tuco\_101 (E), Ukulele\_95 (E), Wiggin\_102 (E), Willez\_95 (E), Xandras\_99 (E), YassJohnny\_97 (E), Youngblood\_103 (E), xkcd\_103 (E),

#### Start 103:

- Found in 1 of 712 ( 0.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ3\_26 (singleton),

#### Start 104:

- Found in 57 of 712 ( 8.0% ) of genes in pham
- Manual Annotations of this start: 34 of 553
- Called 98.2% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_73 (AY), AdaS\_69 (AY), Aikyam\_70 (AY), Alatato\_54 (FB), Anekin\_74 (AY), BasketStar\_72 (AY), Bauer\_65 (FN), BellaJr\_64 (FN), BenchScraper\_72 (AY), Bhageatrice\_76 (AY), BillyTP\_73 (AY), BlackSpider\_59 (FN), BlueShadow\_70 (AY), BrayBeast\_55 (FB), CookieBear\_71 (AY), CosmicBrownie\_67 (AY), Crescenzo\_75 (AY), DarwinJr\_76 (AY), EvePickles\_69 (AY), Faja\_73 (AY), Gibbzilla\_62 (FB), Gorpy\_70 (AY), Hestia\_64 (AY), Isolde\_70 (AY), JeanClaude\_53 (FB), JellyBread\_68 (AY), Kabloowy\_71 (AY), Lasker\_73 (AY), Lawnathon\_73 (AY), LeBruni\_73 (AY), MUWow\_71 (AY), Mapleville\_67 (AY), MaterMagnus\_71 (AY), MurphyJoseph\_68 (AY), Nyilah\_73 (AY), Persistence\_65 (AY), Phrank15\_74 (AY), Pigu\_55 (FB), Raphaella\_71 (AY), Raqqa\_67 (AY), Richie\_74 (AY), Rooter\_57 (FB), Sakai\_69 (AY), Sarge\_49 (FB), Satrap\_72 (AY), Seahorse\_76 (AY), Shoya\_55 (FB), Shukran\_69 (AY), SonDevVon\_78 (AY), Spartan\_54 (ES), Sporco\_74 (AY), ThayneTheZag\_76 (AY), Tiff81\_67 (AY), Windest\_74 (AY), YoungHarleezy\_71 (AY), Zucker\_67 (FN),

#### Start 105:

- Found in 7 of 712 ( 1.0% ) of genes in pham
- Manual Annotations of this start: 7 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bantam\_84 (DL), Daredevil\_74 (DL), DatBoi\_81 (DL), Jace\_65 (singleton), Mollymur\_84 (DL), SpeedDemon\_850 (DL), Towmatter\_74 (DL),

#### Start 106:

- Found in 6 of 712 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 6 of 553
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole\_47 (BV), B3\_49 (BV), Doucette\_53 (BW), E1\_47 (BV), E6\_53 (BW), G4\_64 (BW),

#### Start 107:

- Found in 24 of 712 ( 3.4% ) of genes in pham
- Manual Annotations of this start: 10 of 553
- Called 75.0% of time when present
- Phage (with cluster) where this start called: AirForce1\_45 (FL), ArV2\_54 (singleton), Auxilium\_68 (AY), Cassini\_67 (FN), DillyDally\_47 (singleton), Divya\_48 (FL), Globfish\_72 (AY), GumGum\_75 (AY), Hillester\_76 (AY), Jinkies\_44 (FL), Merpity\_60 (FQ), MidnightRain\_74 (AY), MrSmee\_59 (FQ), RadFad\_76 (AY), Sashimi\_69 (AY), SpicyFrank\_74 (AY), SunnyJune\_46 (FL), Vopal\_73 (AY),

Start 108:

- Found in 1 of 712 ( 0.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BigAnti\_47 (singleton),

Start 116:

- Found in 11 of 712 ( 1.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 9.1% of time when present
- Phage (with cluster) where this start called: NewKitty\_74 (AY),

Start 117:

- Found in 17 of 712 ( 2.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 5.9% of time when present
- Phage (with cluster) where this start called: pZL12\_1c (singleton),

Start 121:

- Found in 166 of 712 ( 23.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 1.8% of time when present
- Phage (with cluster) where this start called: Becksu\_98 (E), NonchalantPear\_98 (E), Ptowny\_96 (E),

### **Summary by clusters:**

There are 64 clusters represented in this pham: FQ, singleton, FS, AO1, AP2, AP3, DD, FG, DL, AP4, FB, BW, M1, CU4, M3, M2, FH, EI, FJ, V, FL, FM, FN, CU5, GL, CU3, CU2, CU1, BX, CQ2, CQ1, AS3, AS2, AS1, BO, E, EG, AL, EC, GF, L4, AR, L2, AO2, GA, L1, AY, CP, UNK, EQ, EP, ES, AP1, KA, AP, AO, BV, AO3, L5, BP, BC3, BC1, BC2, L3,

Info for manual annotations of cluster AL:

- Start number 100 was manually annotated 5 times for cluster AL.

Info for manual annotations of cluster AO:

- Start number 101 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 100 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 100 was manually annotated 17 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 100 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AP:

- Start number 100 was manually annotated 1 time for cluster AP.

Info for manual annotations of cluster AP1:

- Start number 100 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AP2:

- Start number 100 was manually annotated 10 times for cluster AP2.

Info for manual annotations of cluster AP3:

- Start number 100 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

- Start number 100 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster AR:

- Start number 100 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster AS1:

- Start number 100 was manually annotated 13 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 100 was manually annotated 5 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 100 was manually annotated 14 times for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 104 was manually annotated 27 times for cluster AY.
- Start number 107 was manually annotated 7 times for cluster AY.

Info for manual annotations of cluster BC1:

- Start number 100 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 100 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 100 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BO:

- Start number 100 was manually annotated 3 times for cluster BO.

Info for manual annotations of cluster BP:

- Start number 100 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster BV:

- Start number 106 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:

- Start number 106 was manually annotated 3 times for cluster BW.

Info for manual annotations of cluster CP:

- Start number 100 was manually annotated 5 times for cluster CP.

Info for manual annotations of cluster CQ1:

- Start number 100 was manually annotated 15 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 100 was manually annotated 2 times for cluster CQ2.

Info for manual annotations of cluster CU1:

- Start number 100 was manually annotated 8 times for cluster CU1.

Info for manual annotations of cluster CU3:

- Start number 100 was manually annotated 1 time for cluster CU3.

Info for manual annotations of cluster CU4:

- Start number 100 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster CU5:

- Start number 100 was manually annotated 1 time for cluster CU5.

Info for manual annotations of cluster DD:

- Start number 100 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 105 was manually annotated 6 times for cluster DL.

Info for manual annotations of cluster E:

- Start number 42 was manually annotated 1 time for cluster E.
- Start number 102 was manually annotated 127 times for cluster E.

Info for manual annotations of cluster EC:

- Start number 95 was manually annotated 11 times for cluster EC.
- Start number 100 was manually annotated 36 times for cluster EC.

Info for manual annotations of cluster EG:

- Start number 100 was manually annotated 2 times for cluster EG.

Info for manual annotations of cluster EI:

- Start number 100 was manually annotated 7 times for cluster EI.

Info for manual annotations of cluster EP:

- Start number 100 was manually annotated 1 time for cluster EP.

Info for manual annotations of cluster EQ:

- Start number 100 was manually annotated 2 times for cluster EQ.

Info for manual annotations of cluster FB:

- Start number 100 was manually annotated 2 times for cluster FB.
- Start number 104 was manually annotated 4 times for cluster FB.

Info for manual annotations of cluster FG:

- Start number 100 was manually annotated 3 times for cluster FG.

Info for manual annotations of cluster FH:

- Start number 100 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FJ:

- Start number 100 was manually annotated 2 times for cluster FJ.

Info for manual annotations of cluster FL:

- Start number 100 was manually annotated 4 times for cluster FL.
- Start number 107 was manually annotated 1 time for cluster FL.

Info for manual annotations of cluster FM:

- Start number 100 was manually annotated 2 times for cluster FM.

Info for manual annotations of cluster FN:

- Start number 104 was manually annotated 3 times for cluster FN.

Info for manual annotations of cluster FQ:

- Start number 99 was manually annotated 3 times for cluster FQ.
- Start number 107 was manually annotated 1 time for cluster FQ.

Info for manual annotations of cluster FS:

- Start number 100 was manually annotated 1 time for cluster FS.

Info for manual annotations of cluster GA:

- Start number 100 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 100 was manually annotated 4 times for cluster GF.

Info for manual annotations of cluster GL:

- Start number 100 was manually annotated 1 time for cluster GL.

Info for manual annotations of cluster KA:

- Start number 100 was manually annotated 1 time for cluster KA.

Info for manual annotations of cluster L1:

- Start number 100 was manually annotated 19 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 100 was manually annotated 31 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 100 was manually annotated 19 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 100 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 100 was manually annotated 2 times for cluster L5.

Info for manual annotations of cluster M1:

- Start number 100 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 100 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 100 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster V:

- Start number 101 was manually annotated 5 times for cluster V.

### **Gene Information:**

Gene: 244\_101 Start: 59239, Stop: 59679, Start Num: 102

Candidate Starts for 244\_101:

(36, 59038), (37, 59041), (Start: 42 @59068 has 1 MA's), (43, 59071), (52, 59113), (70, 59167), (Start: 102 @59239 has 127 MA's), (125, 59338), (138, 59434), (149, 59470), (162, 59536), (179, 59584),

Gene: ABCat\_97 Start: 60224, Stop: 60664, Start Num: 102

Candidate Starts for ABCat\_97:

(Start: 102 @60224 has 127 MA's), (125, 60323), (149, 60455), (162, 60521), (179, 60569),

Gene: AWGoat\_69 Start: 49925, Stop: 49359, Start Num: 100

Candidate Starts for AWGoat\_69:

(Start: 100 @49925 has 346 MA's), (118, 49871), (121, 49844), (131, 49784), (137, 49739), (138, 49727), (144, 49703), (159, 49631), (202, 49412),

Gene: Abba\_37 Start: 29639, Stop: 30190, Start Num: 100

Candidate Starts for Abba\_37:

(Start: 100 @29639 has 346 MA's), (134, 29804), (144, 29864), (175, 29978), (179, 29990),

Gene: AbbyDaisy\_73 Start: 38801, Stop: 39268, Start Num: 104

Candidate Starts for AbbyDaisy\_73:

(24, 38504), (69, 38717), (Start: 104 @38801 has 34 MA's), (137, 38993), (182, 39170),

Gene: Abidatro\_55 Start: 34615, Stop: 35133, Start Num: 100

Candidate Starts for Abidatro\_55:

(Start: 100 @34615 has 346 MA's), (121, 34696), (124, 34711), (144, 34837), (146, 34843), (149, 34849), (164, 34921),

Gene: Abscondus\_125 Start: 71279, Stop: 71788, Start Num: 100

Candidate Starts for Abscondus\_125:

(Start: 100 @71279 has 346 MA's), (109, 71294), (112, 71303), (144, 71501), (179, 71627), (185, 71678), (196, 71738),

Gene: Acquire49\_82 Start: 53525, Stop: 53908, Start Num: 100  
Candidate Starts for Acquire49\_82:  
(Start: 100 @53525 has 346 MA's), (124, 53618), (133, 53672), (136, 53690), (149, 53750), (158, 53807),

Gene: AdaS\_69 Start: 36141, Stop: 36647, Start Num: 104  
Candidate Starts for AdaS\_69:  
(Start: 104 @36141 has 34 MA's), (121, 36222), (140, 36360),

Gene: Adnama\_104 Start: 59534, Stop: 59974, Start Num: 102  
Candidate Starts for Adnama\_104:  
(36, 59333), (37, 59336), (Start: 42 @59363 has 1 MA's), (43, 59366), (52, 59408), (70, 59462), (Start: 102 @59534 has 127 MA's), (125, 59633), (149, 59765), (162, 59831), (179, 59879),

Gene: AdoptaAdorbs\_54 Start: 33395, Stop: 33904, Start Num: 100  
Candidate Starts for AdoptaAdorbs\_54:  
(Start: 100 @33395 has 346 MA's), (117, 33434), (121, 33476), (128, 33509), (136, 33569), (144, 33617), (149, 33629), (158, 33686), (164, 33701), (172, 33722), (179, 33743),

Gene: Aegeus\_92 Start: 56890, Stop: 57282, Start Num: 100  
Candidate Starts for Aegeus\_92:  
(92, 56872), (Start: 100 @56890 has 346 MA's), (111, 56905), (146, 57115), (149, 57121),

Gene: Aikyam\_70 Start: 36571, Stop: 37089, Start Num: 104  
Candidate Starts for Aikyam\_70:  
(Start: 104 @36571 has 34 MA's), (126, 36673), (140, 36790),

Gene: AirForce1\_45 Start: 32559, Stop: 32999, Start Num: 107  
Candidate Starts for AirForce1\_45:  
(Start: 107 @32559 has 10 MA's), (122, 32634),

Gene: Alatato\_54 Start: 31377, Stop: 31928, Start Num: 104  
Candidate Starts for Alatato\_54:  
(Start: 104 @31377 has 34 MA's), (122, 31461), (140, 31596),

Gene: AlexMinion\_56 Start: 33422, Stop: 33934, Start Num: 100  
Candidate Starts for AlexMinion\_56:  
(Start: 100 @33422 has 346 MA's), (118, 33476), (128, 33536), (133, 33578), (136, 33596), (164, 33728), (172, 33749),

Gene: Altadena\_40 Start: 29404, Stop: 29982, Start Num: 100  
Candidate Starts for Altadena\_40:  
(Start: 100 @29404 has 346 MA's), (133, 29560), (144, 29626), (146, 29632), (158, 29695), (188, 29821),

Gene: Altheas\_60 Start: 43871, Stop: 43149, Start Num: 100  
Candidate Starts for Altheas\_60:  
(Start: 100 @43871 has 346 MA's), (134, 43709), (144, 43649), (147, 43640), (149, 43637), (179, 43523), (181, 43514), (186, 43472), (200, 43379), (205, 43313), (207, 43292), (208, 43280), (209, 43247), (210, 43226),

Gene: Altostratus\_62 Start: 36172, Stop: 36696, Start Num: 100  
Candidate Starts for Altostratus\_62:

(47, 36022), (54, 36043), (Start: 100 @36172 has 346 MA's), (138, 36370), (149, 36406), (172, 36499), (179, 36520),

Gene: Amanises\_62 Start: 34987, Stop: 35466, Start Num: 100

Candidate Starts for Amanises\_62:

(Start: 100 @34987 has 346 MA's), (121, 35068), (136, 35161), (144, 35209), (146, 35215), (164, 35293), (181, 35344),

Gene: Amao\_100 Start: 59648, Stop: 60088, Start Num: 102

Candidate Starts for Amao\_100:

(77, 59591), (Start: 102 @59648 has 127 MA's), (125, 59747), (149, 59879), (162, 59945), (179, 59993),

Gene: AmericanBeauty\_104 Start: 59774, Stop: 60214, Start Num: 102

Candidate Starts for AmericanBeauty\_104:

(36, 59573), (37, 59576), (Start: 42 @59603 has 1 MA's), (43, 59606), (52, 59648), (70, 59702), (Start: 102 @59774 has 127 MA's), (121, 59855), (125, 59873), (149, 60005), (162, 60071), (179, 60119),

Gene: AmiCi24\_54 Start: 33504, Stop: 34013, Start Num: 100

Candidate Starts for AmiCi24\_54:

(Start: 100 @33504 has 346 MA's), (117, 33543), (121, 33585), (128, 33618), (136, 33678), (144, 33726), (149, 33738), (158, 33795), (164, 33810), (172, 33831), (179, 33852),

Gene: Amo99\_89 Start: 55869, Stop: 56291, Start Num: 100

Candidate Starts for Amo99\_89:

(34, 55644), (40, 55683), (61, 55764), (97, 55866), (Start: 100 @55869 has 346 MA's), (122, 55953), (126, 55971), (159, 56163), (162, 56169),

Gene: Amphitrite\_55 Start: 33394, Stop: 33903, Start Num: 100

Candidate Starts for Amphitrite\_55:

(Start: 100 @33394 has 346 MA's), (117, 33433), (121, 33475), (128, 33508), (136, 33568), (144, 33616), (149, 33628), (158, 33685), (164, 33700), (172, 33721), (179, 33742),

Gene: Anatole\_47 Start: 31132, Stop: 31596, Start Num: 106

Candidate Starts for Anatole\_47:

(Start: 106 @31132 has 6 MA's), (124, 31222), (126, 31228), (135, 31291), (146, 31351),

Gene: Andrew\_57 Start: 33845, Stop: 34357, Start Num: 100

Candidate Starts for Andrew\_57:

(87, 33827), (Start: 100 @33845 has 346 MA's), (121, 33926), (124, 33941), (136, 34019), (138, 34043), (144, 34067), (146, 34073), (149, 34079), (158, 34136), (179, 34193), (198, 34271),

Gene: Anekin\_74 Start: 39408, Stop: 39929, Start Num: 104

Candidate Starts for Anekin\_74:

(Start: 104 @39408 has 34 MA's), (131, 39549), (140, 39627), (159, 39714),

Gene: Antares\_64 Start: 40804, Stop: 41310, Start Num: 100

Candidate Starts for Antares\_64:

(Start: 100 @40804 has 346 MA's), (109, 40819), (144, 41026), (164, 41110), (179, 41152),

Gene: Antrice\_55 Start: 33380, Stop: 33889, Start Num: 100

Candidate Starts for Antrice\_55:

(61, 33275), (Start: 100 @33380 has 346 MA's), (124, 33476), (139, 33581), (149, 33614), (175, 33716),

Gene: Antuna\_47 Start: 28781, Stop: 29272, Start Num: 100

Candidate Starts for Antuna\_47:

(Start: 100 @28781 has 346 MA's), (138, 28979), (144, 29003), (179, 29129),

Gene: Aphelion\_126 Start: 72342, Stop: 72881, Start Num: 100

Candidate Starts for Aphelion\_126:

(Start: 100 @72342 has 346 MA's), (109, 72357), (112, 72366), (144, 72564), (179, 72690), (185, 72741), (196, 72801),

Gene: ApoKipo\_15 Start: 9802, Stop: 10389, Start Num: 100

Candidate Starts for ApoKipo\_15:

(Start: 100 @9802 has 346 MA's), (121, 9883), (137, 9988), (138, 10000), (151, 10045), (179, 10150),

Gene: Appa\_45 Start: 28538, Stop: 29032, Start Num: 100

Candidate Starts for Appa\_45:

(Start: 100 @28538 has 346 MA's), (144, 28760), (151, 28781), (179, 28886),

Gene: Appletree2\_81 Start: 53136, Stop: 53519, Start Num: 100

Candidate Starts for Appletree2\_81:

(Start: 100 @53136 has 346 MA's), (124, 53229), (133, 53283), (136, 53301), (149, 53361), (158, 53418),

Gene: ArV1\_088 Start: 62726, Stop: 63295, Start Num: 100

Candidate Starts for ArV1\_088:

(Start: 100 @62726 has 346 MA's), (112, 62750), (121, 62807), (134, 62888), (138, 62924), (144, 62948), (146, 62954), (149, 62960), (164, 63032), (172, 63053), (179, 63074), (202, 63242),

Gene: ArV2\_54 Start: 30423, Stop: 30827, Start Num: 107

Candidate Starts for ArV2\_54:

(Start: 107 @30423 has 10 MA's),

Gene: Archie\_82 Start: 55052, Stop: 55447, Start Num: 100

Candidate Starts for Archie\_82:

(Start: 100 @55052 has 346 MA's), (118, 55103), (120, 55124), (124, 55145), (131, 55184), (133, 55199), (136, 55217), (147, 55274), (149, 55277), (155, 55307),

Gene: Argent26\_104 Start: 59458, Stop: 59898, Start Num: 102

Candidate Starts for Argent26\_104:

(36, 59257), (37, 59260), (Start: 42 @59287 has 1 MA's), (43, 59290), (52, 59332), (70, 59386), (Start: 102 @59458 has 127 MA's), (125, 59557), (149, 59689), (162, 59755), (179, 59803),

Gene: Ariadne\_74 Start: 42439, Stop: 42945, Start Num: 100

Candidate Starts for Ariadne\_74:

(63, 42349), (79, 42394), (Start: 96 @42436 has 1 MA's), (Start: 100 @42439 has 346 MA's), (136, 42613), (144, 42661), (146, 42667), (164, 42745), (179, 42787),

Gene: ArizonaGT\_46 Start: 30696, Stop: 31175, Start Num: 100

Candidate Starts for ArizonaGT\_46:

(Start: 100 @30696 has 346 MA's), (158, 30987),

Gene: Asriel\_98 Start: 57871, Stop: 58311, Start Num: 102  
Candidate Starts for Asriel\_98:  
(36, 57670), (37, 57673), (Start: 42 @57700 has 1 MA's), (43, 57703), (52, 57745), (70, 57799), (Start:  
102 @57871 has 127 MA's), (121, 57952), (125, 57970), (149, 58102), (162, 58168), (179, 58216),

Gene: Atlantica\_55 Start: 33506, Stop: 34015, Start Num: 100  
Candidate Starts for Atlantica\_55:  
(Start: 100 @33506 has 346 MA's), (117, 33545), (121, 33587), (128, 33620), (136, 33680), (144,  
33728), (149, 33740), (158, 33797), (164, 33812), (172, 33833), (179, 33854),

Gene: Auspice\_67 Start: 43863, Stop: 44309, Start Num: 100  
Candidate Starts for Auspice\_67:  
(84, 43827), (Start: 100 @43863 has 346 MA's), (121, 43947), (134, 44028), (137, 44052), (179,  
44211),

Gene: Austintatious\_43 Start: 28177, Stop: 28638, Start Num: 100  
Candidate Starts for Austintatious\_43:  
(16, 27802), (35, 27961), (60, 28069), (Start: 100 @28177 has 346 MA's), (134, 28339), (135, 28345),

Gene: Auxilium\_68 Start: 35492, Stop: 35971, Start Num: 107  
Candidate Starts for Auxilium\_68:  
(Start: 107 @35492 has 10 MA's), (118, 35537), (142, 35693),

Gene: AvadaKedavra\_82 Start: 53604, Stop: 53987, Start Num: 100  
Candidate Starts for AvadaKedavra\_82:  
(Start: 100 @53604 has 346 MA's), (124, 53697), (133, 53751), (136, 53769), (149, 53829), (158,  
53886),

Gene: AxeJC\_44 Start: 30398, Stop: 30877, Start Num: 100  
Candidate Starts for AxeJC\_44:  
(Start: 100 @30398 has 346 MA's), (158, 30689),

Gene: Azaz\_56 Start: 33586, Stop: 34098, Start Num: 100  
Candidate Starts for Azaz\_56:  
(Start: 100 @33586 has 346 MA's), (121, 33667), (128, 33700), (136, 33760), (144, 33808), (149,  
33820), (158, 33877), (164, 33892), (172, 33913), (179, 33934),

Gene: Aziz\_74 Start: 45899, Stop: 46336, Start Num: 100  
Candidate Starts for Aziz\_74:  
(Start: 100 @45899 has 346 MA's), (121, 45983), (134, 46064),

Gene: Azrael100\_77 Start: 49155, Stop: 49544, Start Num: 101  
Candidate Starts for Azrael100\_77:  
(Start: 101 @49155 has 7 MA's), (125, 49251), (133, 49302), (136, 49320), (146, 49374), (159, 49440),  
(179, 49494),

Gene: B3\_49 Start: 31795, Stop: 32259, Start Num: 106  
Candidate Starts for B3\_49:  
(Start: 106 @31795 has 6 MA's), (124, 31885), (126, 31891), (135, 31954), (146, 32014),

Gene: BaboJay\_100 Start: 60412, Stop: 60852, Start Num: 102  
Candidate Starts for BaboJay\_100:  
(Start: 102 @60412 has 127 MA's), (125, 60511), (149, 60643), (162, 60709), (179, 60757),

Gene: Babushka\_52 Start: 33317, Stop: 33829, Start Num: 100

Candidate Starts for Babushka\_52:

(Start: 100 @33317 has 346 MA's), (109, 33332), (121, 33398), (124, 33413), (128, 33431), (136, 33491), (146, 33545), (149, 33551), (158, 33608), (164, 33623), (206, 33788),

Gene: Bachita\_129 Start: 72298, Stop: 72807, Start Num: 100

Candidate Starts for Bachita\_129:

(Start: 100 @72298 has 346 MA's), (109, 72313), (112, 72322), (144, 72520), (179, 72646), (185, 72697), (196, 72757),

Gene: BadStone\_97 Start: 59793, Stop: 60233, Start Num: 102

Candidate Starts for BadStone\_97:

(Start: 102 @59793 has 127 MA's), (125, 59892), (149, 60024), (162, 60090), (179, 60138),

Gene: Balomoji\_100 Start: 59654, Stop: 60094, Start Num: 102

Candidate Starts for Balomoji\_100:

(36, 59453), (37, 59456), (Start: 42 @59483 has 1 MA's), (43, 59486), (52, 59528), (70, 59582), (Start: 102 @59654 has 127 MA's), (125, 59753), (138, 59849), (149, 59885), (162, 59951), (179, 59999),

Gene: Banquo\_53 Start: 35074, Stop: 35562, Start Num: 100

Candidate Starts for Banquo\_53:

(Start: 100 @35074 has 346 MA's), (134, 35236), (156, 35353), (158, 35365), (159, 35368), (164, 35380),

Gene: Bantam\_84 Start: 57099, Stop: 56536, Start Num: 105

Candidate Starts for Bantam\_84:

(Start: 105 @57099 has 7 MA's), (132, 56937), (164, 56766), (183, 56697),

Gene: Baoshan\_85 Start: 55708, Stop: 56106, Start Num: 100

Candidate Starts for Baoshan\_85:

(Start: 100 @55708 has 346 MA's), (118, 55759), (120, 55780), (124, 55801), (131, 55840), (133, 55855), (136, 55873), (147, 55930), (149, 55933), (158, 55990), (172, 56026),

Gene: Barbarian\_99 Start: 57871, Stop: 58311, Start Num: 102

Candidate Starts for Barbarian\_99:

(36, 57670), (37, 57673), (Start: 42 @57700 has 1 MA's), (43, 57703), (52, 57745), (70, 57799), (Start: 102 @57871 has 127 MA's), (121, 57952), (125, 57970), (149, 58102), (162, 58168), (179, 58216),

Gene: BarretLemon\_37 Start: 30898, Stop: 31434, Start Num: 100

Candidate Starts for BarretLemon\_37:

(Start: 100 @30898 has 346 MA's), (112, 30922), (144, 31120), (179, 31246), (199, 31342),

Gene: Basilisk\_53 Start: 33835, Stop: 34356, Start Num: 100

Candidate Starts for Basilisk\_53:

(Start: 100 @33835 has 346 MA's), (121, 33916), (144, 34057), (146, 34063), (181, 34192),

Gene: Bask21\_100 Start: 58510, Stop: 58950, Start Num: 102

Candidate Starts for Bask21\_100:

(36, 58309), (37, 58312), (Start: 42 @58339 has 1 MA's), (43, 58342), (52, 58384), (70, 58438), (Start: 102 @58510 has 127 MA's), (121, 58591), (125, 58609), (149, 58741), (162, 58807), (179, 58855),

Gene: BasketStar\_72 Start: 38904, Stop: 39422, Start Num: 104

Candidate Starts for BasketStar\_72:

(Start: 104 @38904 has 34 MA's), (126, 39006), (140, 39123),

Gene: Baudelaire\_92 Start: 56890, Stop: 57282, Start Num: 100

Candidate Starts for Baudelaire\_92:

(92, 56872), (Start: 100 @56890 has 346 MA's), (111, 56905), (146, 57115), (149, 57121),

Gene: Bauer\_65 Start: 36668, Stop: 37132, Start Num: 104

Candidate Starts for Bauer\_65:

(Start: 104 @36668 has 34 MA's), (125, 36767), (137, 36860), (182, 37037),

Gene: Bazzle\_83 Start: 55608, Stop: 56003, Start Num: 100

Candidate Starts for Bazzle\_83:

(Start: 100 @55608 has 346 MA's), (118, 55659), (120, 55680), (124, 55701), (133, 55755), (136, 55773), (147, 55830), (149, 55833), (155, 55863),

Gene: Beagle\_98 Start: 57722, Stop: 57117, Start Num: 100

Candidate Starts for Beagle\_98:

(Start: 100 @57722 has 346 MA's), (118, 57668), (134, 57560), (159, 57428), (162, 57422), (164, 57416),

Gene: BeagleBug\_63 Start: 40584, Stop: 41090, Start Num: 100

Candidate Starts for BeagleBug\_63:

(Start: 100 @40584 has 346 MA's), (109, 40599), (144, 40806), (164, 40890), (179, 40932),

Gene: Beans\_35 Start: 30601, Stop: 31176, Start Num: 100

Candidate Starts for Beans\_35:

(Start: 100 @30601 has 346 MA's), (112, 30625), (144, 30823), (175, 30937), (195, 31081),

Gene: Becksu\_98 Start: 59928, Stop: 60287, Start Num: 121

Candidate Starts for Becksu\_98:

(36, 59646), (37, 59649), (Start: 42 @59676 has 1 MA's), (43, 59679), (52, 59721), (70, 59775), (Start: 102 @59847 has 127 MA's), (121, 59928), (125, 59946), (149, 60078), (162, 60144), (179, 60192),

Gene: BellaJr\_64 Start: 36885, Stop: 37349, Start Num: 104

Candidate Starts for BellaJr\_64:

(24, 36588), (69, 36801), (Start: 104 @36885 has 34 MA's), (137, 37077), (141, 37107), (182, 37254),

Gene: Bellis\_84 Start: 55408, Stop: 55791, Start Num: 100

Candidate Starts for Bellis\_84:

(Start: 100 @55408 has 346 MA's), (119, 55468), (120, 55480), (124, 55501), (133, 55561), (136, 55579), (149, 55639), (172, 55729),

Gene: Bench\_103 Start: 60413, Stop: 60853, Start Num: 102

Candidate Starts for Bench\_103:

(Start: 102 @60413 has 127 MA's), (125, 60512), (138, 60608), (149, 60644), (162, 60710), (179, 60758),

Gene: BenchScraper\_72 Start: 37528, Stop: 38034, Start Num: 104

Candidate Starts for BenchScraper\_72:

(Start: 104 @37528 has 34 MA's), (121, 37609), (140, 37747), (151, 37783), (159, 37834),

Gene: BetaFish\_96 Start: 57938, Stop: 57333, Start Num: 100

Candidate Starts for BetaFish\_96:

(Start: 100 @57938 has 346 MA's), (118, 57884), (134, 57776), (159, 57644), (162, 57638), (164, 57632), (180, 57587),

Gene: Bhageatrice\_76 Start: 41192, Stop: 41716, Start Num: 104

Candidate Starts for Bhageatrice\_76:

(Start: 104 @41192 has 34 MA's), (140, 41411), (162, 41504), (168, 41519),

Gene: BigAnti\_47 Start: 43251, Stop: 43760, Start Num: 108

Candidate Starts for BigAnti\_47:

(108, 43251), (113, 43266), (124, 43338), (133, 43395), (135, 43407), (137, 43425), (146, 43467), (157, 43530), (160, 43536), (166, 43551), (178, 43578), (180, 43584), (182, 43593),

Gene: BigBubba\_100 Start: 58566, Stop: 59006, Start Num: 102

Candidate Starts for BigBubba\_100:

(36, 58365), (37, 58368), (Start: 42 @58395 has 1 MA's), (43, 58398), (52, 58440), (70, 58494), (Start: 102 @58566 has 127 MA's), (121, 58647), (125, 58665), (138, 58761), (149, 58797), (162, 58863), (179, 58911),

Gene: BigCheese\_85 Start: 55471, Stop: 55857, Start Num: 100

Candidate Starts for BigCheese\_85:

(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: BigDome\_37 Start: 30890, Stop: 31423, Start Num: 100

Candidate Starts for BigDome\_37:

(Start: 100 @30890 has 346 MA's), (112, 30914), (144, 31112), (175, 31226), (179, 31238), (199, 31331),

Gene: BilboSwaggins\_98 Start: 60193, Stop: 60633, Start Num: 102

Candidate Starts for BilboSwaggins\_98:

(Start: 102 @60193 has 127 MA's), (125, 60292), (138, 60388), (149, 60424), (162, 60490), (179, 60538),

Gene: BillyTP\_73 Start: 39383, Stop: 39889, Start Num: 104

Candidate Starts for BillyTP\_73:

(Start: 104 @39383 has 34 MA's), (121, 39464), (140, 39602),

Gene: Bioscum\_46 Start: 30484, Stop: 30945, Start Num: 100

Candidate Starts for Bioscum\_46:

(Start: 100 @30484 has 346 MA's), (134, 30646), (135, 30652),

Gene: BirdInFrench\_64 Start: 43759, Stop: 43046, Start Num: 100

Candidate Starts for BirdInFrench\_64:

(Start: 100 @43759 has 346 MA's), (Start: 107 @43747 has 10 MA's), (116, 43723), (128, 43642), (134, 43594), (139, 43555), (159, 43456), (167, 43435),

Gene: BlackJade\_52 Start: 34209, Stop: 34730, Start Num: 99

Candidate Starts for BlackJade\_52:

(Start: 99 @34209 has 3 MA's), (121, 34290), (134, 34371), (137, 34395), (149, 34446), (159, 34506), (197, 34674),

Gene: BlackSpider\_59 Start: 35527, Stop: 36036, Start Num: 104

Candidate Starts for BlackSpider\_59:  
(Start: 104 @35527 has 34 MA's), (140, 35746),

Gene: Blett\_45 Start: 28732, Stop: 29223, Start Num: 100  
Candidate Starts for Blett\_45:  
(Start: 100 @28732 has 346 MA's), (144, 28954), (151, 28975), (164, 29038), (179, 29080),

Gene: BlueShadow\_70 Start: 38419, Stop: 38937, Start Num: 104  
Candidate Starts for BlueShadow\_70:  
(Start: 104 @38419 has 34 MA's), (126, 38521), (140, 38638),

Gene: BobsGarage\_85 Start: 55471, Stop: 55857, Start Num: 100  
Candidate Starts for BobsGarage\_85:  
(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: Bogg\_100 Start: 59733, Stop: 60173, Start Num: 102  
Candidate Starts for Bogg\_100:  
(Start: 102 @59733 has 127 MA's), (125, 59832), (138, 59928), (149, 59964), (162, 60030), (179, 60078),

Gene: Bolt007\_43 Start: 32404, Stop: 32961, Start Num: 100  
Candidate Starts for Bolt007\_43:  
(Start: 100 @32404 has 346 MA's), (144, 32626),

Gene: Bongo\_67 Start: 43867, Stop: 44313, Start Num: 100  
Candidate Starts for Bongo\_67:  
(84, 43831), (Start: 100 @43867 has 346 MA's), (121, 43951), (134, 44032), (137, 44056), (179, 44215),

Gene: BossLady\_37 Start: 30876, Stop: 31424, Start Num: 100  
Candidate Starts for BossLady\_37:  
(66, 30789), (Start: 100 @30876 has 346 MA's), (112, 30900), (136, 31050), (137, 31062), (144, 31098), (172, 31203), (179, 31224), (195, 31308),

Gene: BourbonZero\_85 Start: 55437, Stop: 55820, Start Num: 100  
Candidate Starts for BourbonZero\_85:  
(Start: 100 @55437 has 346 MA's), (119, 55497), (120, 55509), (124, 55530), (133, 55590), (149, 55668), (172, 55758),

Gene: BrainDrainer\_83 Start: 54240, Stop: 54647, Start Num: 100  
Candidate Starts for BrainDrainer\_83:  
(Start: 100 @54240 has 346 MA's), (120, 54312), (124, 54333), (131, 54372), (147, 54462), (149, 54465), (184, 54606),

Gene: Bran\_47 Start: 33745, Stop: 34197, Start Num: 100  
Candidate Starts for Bran\_47:  
(2, 33049), (3, 33052), (4, 33067), (7, 33169), (8, 33190), (12, 33292), (19, 33382), (Start: 100 @33745 has 346 MA's), (121, 33829), (124, 33844), (128, 33862), (133, 33904), (139, 33949), (144, 33970), (179, 34096),

Gene: BrayBeast\_55 Start: 31242, Stop: 31763, Start Num: 104  
Candidate Starts for BrayBeast\_55:

(Start: 104 @31242 has 34 MA's), (140, 31461),

Gene: BrazzalePHS\_63 Start: 40566, Stop: 41072, Start Num: 100

Candidate Starts for BrazzalePHS\_63:

(Start: 100 @40566 has 346 MA's), (109, 40581), (144, 40788), (164, 40872), (179, 40914),

Gene: Breezona\_85 Start: 55471, Stop: 55857, Start Num: 100

Candidate Starts for Breezona\_85:

(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: Brent\_35 Start: 30565, Stop: 31143, Start Num: 100

Candidate Starts for Brent\_35:

(Start: 100 @30565 has 346 MA's), (112, 30589), (116, 30601), (137, 30751), (144, 30787), (179, 30913), (195, 31024),

Gene: Brewer\_94 Start: 58392, Stop: 58832, Start Num: 102

Candidate Starts for Brewer\_94:

(36, 58191), (37, 58194), (Start: 42 @58221 has 1 MA's), (43, 58224), (52, 58266), (70, 58320), (Start: 102 @58392 has 127 MA's), (121, 58473), (125, 58491), (149, 58623), (162, 58689), (179, 58737),

Gene: Bricole\_66 Start: 43589, Stop: 44035, Start Num: 100

Candidate Starts for Bricole\_66:

(84, 43553), (Start: 100 @43589 has 346 MA's), (121, 43673), (134, 43754), (137, 43778), (179, 43937),

Gene: Bromden\_84 Start: 55234, Stop: 55644, Start Num: 100

Candidate Starts for Bromden\_84:

(Start: 100 @55234 has 346 MA's), (120, 55306), (124, 55327), (131, 55366), (133, 55381), (147, 55456), (149, 55459),

Gene: BruhMoment\_82 Start: 54954, Stop: 54415, Start Num: 100

Candidate Starts for BruhMoment\_82:

(Start: 100 @54954 has 346 MA's), (136, 54780), (137, 54768), (138, 54756),

Gene: Bruin\_97 Start: 58899, Stop: 59339, Start Num: 102

Candidate Starts for Bruin\_97:

(Start: 102 @58899 has 127 MA's), (125, 58998), (138, 59094), (149, 59130), (162, 59196), (179, 59244),

Gene: BrutonGaster\_101 Start: 65631, Stop: 66143, Start Num: 100

Candidate Starts for BrutonGaster\_101:

(Start: 100 @65631 has 346 MA's), (123, 65721), (138, 65829),

Gene: Brynnie\_51 Start: 33460, Stop: 33981, Start Num: 100

Candidate Starts for Brynnie\_51:

(Start: 100 @33460 has 346 MA's), (121, 33541), (144, 33682), (146, 33688), (181, 33817),

Gene: Bubbykins\_106 Start: 62400, Stop: 62954, Start Num: 100

Candidate Starts for Bubbykins\_106:

(Start: 100 @62400 has 346 MA's), (121, 62481), (133, 62556), (146, 62628), (149, 62634),

Gene: Buck\_101 Start: 60736, Stop: 61176, Start Num: 102

Candidate Starts for Buck\_101:

(Start: 102 @60736 has 127 MA's), (125, 60835), (138, 60931), (149, 60967), (162, 61033), (179, 61081),

Gene: Budgie\_109 Start: 60097, Stop: 60540, Start Num: 102

Candidate Starts for Budgie\_109:

(Start: 102 @60097 has 127 MA's), (120, 60172), (164, 60400),

Gene: BugsBunny\_99 Start: 60212, Stop: 60652, Start Num: 102

Candidate Starts for BugsBunny\_99:

(Start: 102 @60212 has 127 MA's), (125, 60311), (138, 60407), (149, 60443), (162, 60509), (179, 60557),

Gene: Bumble\_38 Start: 29473, Stop: 30051, Start Num: 100

Candidate Starts for Bumble\_38:

(Start: 100 @29473 has 346 MA's), (133, 29629), (136, 29647), (144, 29695), (146, 29701), (194, 29926),

Gene: Busephilis\_63 Start: 40511, Stop: 41017, Start Num: 100

Candidate Starts for Busephilis\_63:

(Start: 100 @40511 has 346 MA's), (109, 40526), (144, 40733), (164, 40817), (179, 40859),

Gene: Bush\_46 Start: 28681, Stop: 29172, Start Num: 100

Candidate Starts for Bush\_46:

(Start: 100 @28681 has 346 MA's), (144, 28903), (151, 28924), (164, 28987),

Gene: Cactus\_104 Start: 59153, Stop: 59593, Start Num: 102

Candidate Starts for Cactus\_104:

(Start: 102 @59153 has 127 MA's), (125, 59252), (149, 59384), (162, 59450), (179, 59498),

Gene: CalWood4100\_45 Start: 31895, Stop: 32452, Start Num: 100

Candidate Starts for CalWood4100\_45:

(Start: 100 @31895 has 346 MA's), (144, 32117), (158, 32186),

Gene: Calm\_84 Start: 53847, Stop: 54230, Start Num: 100

Candidate Starts for Calm\_84:

(Start: 100 @53847 has 346 MA's), (124, 53940), (133, 53994), (136, 54012), (149, 54072), (158, 54129),

Gene: Camara\_55 Start: 33397, Stop: 33906, Start Num: 100

Candidate Starts for Camara\_55:

(Start: 100 @33397 has 346 MA's), (117, 33436), (121, 33478), (128, 33511), (136, 33571), (144, 33619), (149, 33631), (158, 33688), (164, 33703), (172, 33724), (179, 33745),

Gene: Cardigan\_138 Start: 77634, Stop: 78149, Start Num: 100

Candidate Starts for Cardigan\_138:

(76, 77571), (Start: 100 @77634 has 346 MA's), (124, 77730), (138, 77832), (144, 77856), (196, 78099),

Gene: Carrillo\_47 Start: 28654, Stop: 29145, Start Num: 100

Candidate Starts for Carrillo\_47:

(Start: 100 @28654 has 346 MA's), (144, 28876), (151, 28897), (164, 28960),

Gene: Cassini\_67 Start: 37137, Stop: 37616, Start Num: 107  
Candidate Starts for Cassini\_67:  
(Start: 107 @37137 has 10 MA's), (153, 37380), (155, 37395), (159, 37431), (163, 37437),

Gene: Catfish\_52 Start: 36484, Stop: 37020, Start Num: 100  
Candidate Starts for Catfish\_52:  
(29, 36223), (33, 36253), (58, 36373), (Start: 100 @36484 has 346 MA's), (128, 36601), (138, 36685),

Gene: Chaser\_82 Start: 53878, Stop: 54270, Start Num: 100  
Candidate Starts for Chaser\_82:  
(Start: 100 @53878 has 346 MA's), (120, 53950), (124, 53971), (131, 54010), (133, 54025), (137, 54055), (147, 54100), (149, 54103), (184, 54226),

Gene: Chickaboom\_54 Start: 34174, Stop: 34692, Start Num: 100  
Candidate Starts for Chickaboom\_54:  
(Start: 100 @34174 has 346 MA's), (121, 34255), (144, 34396), (146, 34402), (158, 34465), (181, 34531),

Gene: Chicken\_53 Start: 34312, Stop: 34791, Start Num: 100  
Candidate Starts for Chicken\_53:  
(Start: 100 @34312 has 346 MA's), (146, 34540), (164, 34618), (181, 34669),

Gene: Chipper1996\_1020 Start: 64351, Stop: 64920, Start Num: 100  
Candidate Starts for Chipper1996\_1020:  
(Start: 100 @64351 has 346 MA's), (121, 64432), (133, 64507), (138, 64549), (144, 64573), (146, 64579), (149, 64585), (164, 64657), (172, 64678), (179, 64699),

Gene: Chocolat\_101 Start: 64058, Stop: 64627, Start Num: 100  
Candidate Starts for Chocolat\_101:  
(Start: 100 @64058 has 346 MA's), (121, 64139), (133, 64214), (138, 64256), (141, 64268), (144, 64280), (146, 64286), (149, 64292), (164, 64364), (172, 64385), (179, 64406),

Gene: ChosenOne\_100 Start: 59101, Stop: 59541, Start Num: 102  
Candidate Starts for ChosenOne\_100:  
(Start: 102 @59101 has 127 MA's), (125, 59200), (149, 59332), (162, 59398), (179, 59446),

Gene: ChotaBhai\_100 Start: 59512, Stop: 59952, Start Num: 102  
Candidate Starts for ChotaBhai\_100:  
(77, 59455), (Start: 102 @59512 has 127 MA's), (125, 59611), (149, 59743), (162, 59809), (179, 59857),

Gene: Chubster\_101 Start: 64298, Stop: 64867, Start Num: 100  
Candidate Starts for Chubster\_101:  
(Start: 100 @64298 has 346 MA's), (121, 64379), (133, 64454), (138, 64496), (144, 64520), (146, 64526), (149, 64532), (164, 64604), (172, 64625), (179, 64646),

Gene: ChutneyChips\_82 Start: 54211, Stop: 54603, Start Num: 100  
Candidate Starts for ChutneyChips\_82:  
(Start: 100 @54211 has 346 MA's), (120, 54283), (124, 54304), (131, 54343), (133, 54358), (137, 54388), (147, 54433), (149, 54436), (184, 54559),

Gene: CicholasNage\_79 Start: 53189, Stop: 53572, Start Num: 100  
Candidate Starts for CicholasNage\_79:

(Start: 100 @53189 has 346 MA's), (124, 53282), (133, 53336), (136, 53354), (149, 53414), (158, 53471),

Gene: Cinna\_60 Start: 41333, Stop: 41833, Start Num: 100

Candidate Starts for Cinna\_60:

(Start: 100 @41333 has 346 MA's), (144, 41555), (146, 41561), (164, 41639),

Gene: Circuit\_38 Start: 30441, Stop: 31019, Start Num: 100

Candidate Starts for Circuit\_38:

(71, 30369), (Start: 100 @30441 has 346 MA's), (133, 30597), (136, 30615), (144, 30663), (146, 30669), (194, 30906),

Gene: Cjw1\_101 Start: 61106, Stop: 61546, Start Num: 102

Candidate Starts for Cjw1\_101:

(Start: 102 @61106 has 127 MA's), (125, 61205), (138, 61301), (149, 61337), (162, 61403), (179, 61451),

Gene: Claus\_84 Start: 55406, Stop: 55789, Start Num: 100

Candidate Starts for Claus\_84:

(Start: 100 @55406 has 346 MA's), (118, 55457), (120, 55478), (124, 55499), (131, 55538), (133, 55553), (136, 55571), (147, 55628), (149, 55631), (158, 55688), (172, 55724),

Gene: Clautastrophe\_82 Start: 55406, Stop: 55789, Start Num: 100

Candidate Starts for Clautastrophe\_82:

(Start: 100 @55406 has 346 MA's), (119, 55466), (120, 55478), (124, 55499), (133, 55559), (136, 55577), (149, 55637), (172, 55727),

Gene: Clawz\_88 Start: 56168, Stop: 56587, Start Num: 100

Candidate Starts for Clawz\_88:

(34, 55943), (40, 55982), (44, 55991), (Start: 100 @56168 has 346 MA's), (122, 56252), (124, 56264), (126, 56270), (159, 56462), (164, 56474), (172, 56495),

Gene: ClearAsMud\_68 Start: 41092, Stop: 41592, Start Num: 95

Candidate Starts for ClearAsMud\_68:

(Start: 95 @41092 has 11 MA's), (121, 41173), (144, 41314), (164, 41398), (179, 41440),

Gene: ClubL\_126 Start: 70869, Stop: 71378, Start Num: 100

Candidate Starts for ClubL\_126:

(Start: 100 @70869 has 346 MA's), (109, 70884), (112, 70893), (144, 71091), (179, 71217), (185, 71268), (196, 71328),

Gene: ColdSoup\_89 Start: 55950, Stop: 56372, Start Num: 100

Candidate Starts for ColdSoup\_89:

(34, 55725), (40, 55764), (61, 55845), (97, 55947), (Start: 100 @55950 has 346 MA's), (122, 56034), (126, 56052), (159, 56244), (162, 56250),

Gene: Colossa\_43 Start: 32262, Stop: 32750, Start Num: 100

Candidate Starts for Colossa\_43:

(94, 32253), (Start: 100 @32262 has 346 MA's), (121, 32343), (123, 32352), (133, 32418), (136, 32436), (146, 32490), (147, 32493),

Gene: Colucci\_104 Start: 64674, Stop: 65246, Start Num: 100

Candidate Starts for Colucci\_104:

(Start: 100 @64674 has 346 MA's), (112, 64698), (121, 64755), (134, 64836), (138, 64872), (144, 64896), (146, 64902), (149, 64908), (164, 64980), (172, 65001), (179, 65022),

Gene: Command613\_102 Start: 59668, Stop: 60108, Start Num: 102

Candidate Starts for Command613\_102:

(36, 59467), (37, 59470), (Start: 42 @59497 has 1 MA's), (43, 59500), (52, 59542), (70, 59596), (Start: 102 @59668 has 127 MA's), (125, 59767), (149, 59899), (162, 59965), (179, 60013),

Gene: Conboy\_100 Start: 63864, Stop: 64433, Start Num: 100

Candidate Starts for Conboy\_100:

(Start: 100 @63864 has 346 MA's), (112, 63888), (121, 63945), (134, 64026), (138, 64062), (144, 64086), (146, 64092), (149, 64098), (164, 64170), (172, 64191), (179, 64212),

Gene: Contagion\_96 Start: 59261, Stop: 59701, Start Num: 102

Candidate Starts for Contagion\_96:

(Start: 102 @59261 has 127 MA's), (125, 59360), (138, 59456), (149, 59492), (162, 59558), (179, 59606),

Gene: CookieBear\_71 Start: 38002, Stop: 38508, Start Num: 104

Candidate Starts for CookieBear\_71:

(Start: 104 @38002 has 34 MA's), (126, 38104), (140, 38221),

Gene: CookieDog\_45 Start: 28654, Stop: 29145, Start Num: 100

Candidate Starts for CookieDog\_45:

(Start: 100 @28654 has 346 MA's), (144, 28876), (151, 28897), (164, 28960),

Gene: Cookies\_97 Start: 59438, Stop: 59878, Start Num: 102

Candidate Starts for Cookies\_97:

(77, 59381), (Start: 102 @59438 has 127 MA's), (125, 59537), (149, 59669), (162, 59735), (179, 59783),

Gene: CosmicBrownie\_67 Start: 37142, Stop: 37669, Start Num: 104

Candidate Starts for CosmicBrownie\_67:

(Start: 104 @37142 has 34 MA's), (140, 37361), (187, 37574),

Gene: Cosmo\_78 Start: 49156, Stop: 49545, Start Num: 101

Candidate Starts for Cosmo\_78:

(Start: 101 @49156 has 7 MA's), (125, 49252), (133, 49303), (136, 49321), (146, 49375), (159, 49441), (179, 49495),

Gene: Cranjjs\_65 Start: 40759, Stop: 41265, Start Num: 100

Candidate Starts for Cranjjs\_65:

(Start: 100 @40759 has 346 MA's), (109, 40774), (144, 40981), (164, 41065), (179, 41107),

Gene: CrazyRich\_63 Start: 40568, Stop: 41071, Start Num: 100

Candidate Starts for CrazyRich\_63:

(Start: 100 @40568 has 346 MA's), (109, 40583), (144, 40790), (164, 40874), (179, 40916),

Gene: Crescenzo\_75 Start: 40122, Stop: 40631, Start Num: 104

Candidate Starts for Crescenzo\_75:

(Start: 104 @40122 has 34 MA's), (121, 40203), (140, 40341), (151, 40377), (172, 40461),

Gene: Cressida\_63 Start: 40938, Stop: 41438, Start Num: 100

Candidate Starts for Cressida\_63:

(Start: 100 @40938 has 346 MA's), (136, 41112), (144, 41160), (146, 41166), (164, 41244),

Gene: Crisis\_65 Start: 40574, Stop: 41080, Start Num: 100

Candidate Starts for Crisis\_65:

(Start: 100 @40574 has 346 MA's), (109, 40589), (144, 40796), (164, 40880), (179, 40922),

Gene: Crossroads\_85 Start: 55546, Stop: 55932, Start Num: 100

Candidate Starts for Crossroads\_85:

(Start: 100 @55546 has 346 MA's), (118, 55597), (120, 55618), (124, 55639), (131, 55678), (133, 55693), (136, 55711), (147, 55768), (149, 55771), (158, 55828),

Gene: CrystalP\_99 Start: 60193, Stop: 60633, Start Num: 102

Candidate Starts for CrystalP\_99:

(Start: 102 @60193 has 127 MA's), (125, 60292), (138, 60388), (149, 60424), (162, 60490), (179, 60538),

Gene: Cucurbita\_127 Start: 72611, Stop: 73120, Start Num: 100

Candidate Starts for Cucurbita\_127:

(Start: 100 @72611 has 346 MA's), (109, 72626), (112, 72635), (144, 72833), (179, 72959), (185, 73010), (196, 73070),

Gene: Culver\_126 Start: 70629, Stop: 71138, Start Num: 100

Candidate Starts for Culver\_126:

(Start: 100 @70629 has 346 MA's), (109, 70644), (112, 70653), (144, 70851), (179, 70977), (185, 71028), (196, 71088),

Gene: Cumberbatch\_46 Start: 30696, Stop: 31175, Start Num: 100

Candidate Starts for Cumberbatch\_46:

(Start: 100 @30696 has 346 MA's), (158, 30987),

Gene: Cygnet\_54 Start: 33984, Stop: 34493, Start Num: 100

Candidate Starts for Cygnet\_54:

(61, 33879), (Start: 100 @33984 has 346 MA's), (124, 34080), (128, 34098), (139, 34185), (149, 34218), (175, 34320),

Gene: Czyszczonek1\_101 Start: 59453, Stop: 59893, Start Num: 102

Candidate Starts for Czyszczonek1\_101:

(36, 59252), (37, 59255), (Start: 42 @59282 has 1 MA's), (43, 59285), (52, 59327), (70, 59381), (Start: 102 @59453 has 127 MA's), (125, 59552), (138, 59648), (149, 59684), (162, 59750), (179, 59798),

Gene: DHan\_89 Start: 55771, Stop: 56169, Start Num: 100

Candidate Starts for DHan\_89:

(Start: 100 @55771 has 346 MA's), (118, 55822), (120, 55843), (124, 55864), (131, 55903), (133, 55918), (136, 55936), (147, 55993), (149, 55996), (158, 56053), (172, 56089),

Gene: DaRealMyers\_44 Start: 31983, Stop: 32510, Start Num: 100

Candidate Starts for DaRealMyers\_44:

(23, 31692), (26, 31707), (39, 31800), (59, 31881), (62, 31890), (Start: 100 @31983 has 346 MA's), (135, 32151), (146, 32211), (150, 32220), (179, 32328), (201, 32490),

Gene: Daikon\_100 Start: 59067, Stop: 59507, Start Num: 102

Candidate Starts for Daikon\_100:

(70, 58995), (Start: 102 @59067 has 127 MA's), (125, 59166), (138, 59262), (149, 59298), (162, 59364), (179, 59412),

Gene: DanBing\_85 Start: 55276, Stop: 55665, Start Num: 100

Candidate Starts for DanBing\_85:

(Start: 100 @55276 has 346 MA's), (118, 55327), (120, 55348), (124, 55369), (136, 55447), (147, 55504), (149, 55507), (172, 55597),

Gene: DanHam62\_55 Start: 33505, Stop: 34014, Start Num: 100

Candidate Starts for DanHam62\_55:

(Start: 100 @33505 has 346 MA's), (117, 33544), (121, 33586), (128, 33619), (136, 33679), (144, 33727), (149, 33739), (158, 33796), (164, 33811), (172, 33832), (179, 33853),

Gene: Dardanus\_49 Start: 33729, Stop: 34202, Start Num: 100

Candidate Starts for Dardanus\_49:

(41, 33552), (Start: 100 @33729 has 346 MA's), (118, 33783), (128, 33843), (134, 33891), (135, 33897), (147, 33960), (158, 34020), (162, 34029),

Gene: Daredevil\_74 Start: 52691, Stop: 52191, Start Num: 105

Candidate Starts for Daredevil\_74:

(Start: 105 @52691 has 7 MA's), (122, 52613),

Gene: Darolandstone\_44 Start: 33598, Stop: 34095, Start Num: 100

Candidate Starts for Darolandstone\_44:

(54, 33475), (56, 33484), (Start: 100 @33598 has 346 MA's), (124, 33694), (136, 33772), (146, 33826),

Gene: DarwinJr\_76 Start: 40077, Stop: 40586, Start Num: 104

Candidate Starts for DarwinJr\_76:

(Start: 104 @40077 has 34 MA's), (121, 40158), (140, 40296), (151, 40332), (172, 40416),

Gene: DatBoi\_81 Start: 56811, Stop: 56245, Start Num: 105

Candidate Starts for DatBoi\_81:

(Start: 105 @56811 has 7 MA's), (135, 56628), (183, 56424),

Gene: DelaGarza\_43 Start: 26483, Stop: 25980, Start Num: 100

Candidate Starts for DelaGarza\_43:

(Start: 100 @26483 has 346 MA's), (144, 26261), (179, 26135),

Gene: DillyDally\_47 Start: 30225, Stop: 30653, Start Num: 107

Candidate Starts for DillyDally\_47:

(Start: 107 @30225 has 10 MA's), (135, 30378),

Gene: Diminimus\_68 Start: 43862, Stop: 44308, Start Num: 100

Candidate Starts for Diminimus\_68:

(84, 43826), (Start: 100 @43862 has 346 MA's), (121, 43946), (134, 44027), (137, 44051), (179, 44210),

Gene: Ding\_69 Start: 37319, Stop: 37894, Start Num: 100

Candidate Starts for Ding\_69:

(Start: 100 @37319 has 346 MA's), (138, 37517), (146, 37547),

Gene: DinoDaryn\_55 Start: 35610, Stop: 36101, Start Num: 100

Candidate Starts for DinoDaryn\_55:

(Start: 100 @35610 has 346 MA's), (118, 35664), (134, 35772), (149, 35844), (164, 35916),

Gene: DirkDirk\_79 Start: 52716, Stop: 53099, Start Num: 100

Candidate Starts for DirkDirk\_79:

(Start: 100 @52716 has 346 MA's), (124, 52809), (133, 52863), (136, 52881), (149, 52941), (158, 52998),

Gene: Divya\_48 Start: 33463, Stop: 33903, Start Num: 107

Candidate Starts for Divya\_48:

(Start: 107 @33463 has 10 MA's), (122, 33538), (137, 33637), (146, 33679), (149, 33685), (159, 33751), (162, 33757),

Gene: DoctorDiddles\_99 Start: 58916, Stop: 59356, Start Num: 102

Candidate Starts for DoctorDiddles\_99:

(36, 58715), (37, 58718), (Start: 42 @58745 has 1 MA's), (43, 58748), (52, 58790), (70, 58844), (Start: 102 @58916 has 127 MA's), (121, 58997), (125, 59015), (149, 59147), (162, 59213), (179, 59261),

Gene: DogYard\_96 Start: 57427, Stop: 56822, Start Num: 100

Candidate Starts for DogYard\_96:

(Start: 100 @57427 has 346 MA's), (118, 57373), (134, 57265), (159, 57133), (162, 57127), (164, 57121),

Gene: DonTron\_86 Start: 55828, Stop: 56250, Start Num: 100

Candidate Starts for DonTron\_86:

(34, 55603), (40, 55642), (61, 55723), (97, 55825), (Start: 100 @55828 has 346 MA's), (122, 55912), (126, 55930), (159, 56122), (162, 56128),

Gene: Doucette\_53 Start: 34241, Stop: 34705, Start Num: 106

Candidate Starts for Doucette\_53:

(Start: 106 @34241 has 6 MA's), (124, 34331), (135, 34400), (149, 34466),

Gene: Douge\_84 Start: 54186, Stop: 54593, Start Num: 100

Candidate Starts for Douge\_84:

(Start: 100 @54186 has 346 MA's), (120, 54258), (124, 54279), (131, 54318), (133, 54333), (137, 54363), (147, 54408), (149, 54411), (184, 54552),

Gene: Douzhi\_83 Start: 54057, Stop: 54464, Start Num: 100

Candidate Starts for Douzhi\_83:

(Start: 100 @54057 has 346 MA's), (120, 54129), (124, 54150), (131, 54189), (133, 54204), (147, 54279), (149, 54282), (184, 54423),

Gene: DrDrey\_100 Start: 60931, Stop: 61371, Start Num: 102

Candidate Starts for DrDrey\_100:

(Start: 102 @60931 has 127 MA's), (125, 61030), (149, 61162), (162, 61228), (179, 61276),

Gene: DrSeegs\_85 Start: 55471, Stop: 55857, Start Num: 100

Candidate Starts for DrSeegs\_85:

(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: DrYang\_97 Start: 63553, Stop: 64098, Start Num: 100

Candidate Starts for DrYang\_97:

(50, 63412), (89, 63526), (Start: 100 @63553 has 346 MA's), (131, 63694), (134, 63715), (135, 63721), (138, 63751), (144, 63775), (150, 63790), (162, 63853),

Gene: DreamEater\_54 Start: 35281, Stop: 35736, Start Num: 100

Candidate Starts for DreamEater\_54:

(88, 35254), (Start: 100 @35281 has 346 MA's), (121, 35362), (133, 35437), (136, 35455), (137, 35467), (159, 35575), (172, 35608), (195, 35725),

Gene: Dropshot\_45 Start: 28373, Stop: 28867, Start Num: 100

Candidate Starts for Dropshot\_45:

(Start: 100 @28373 has 346 MA's), (144, 28595), (151, 28616), (179, 28721),

Gene: Dulcita\_68 Start: 43863, Stop: 44309, Start Num: 100

Candidate Starts for Dulcita\_68:

(84, 43827), (Start: 100 @43863 has 346 MA's), (121, 43947), (134, 44028), (137, 44052), (179, 44211),

Gene: Dumbo\_100 Start: 59489, Stop: 59929, Start Num: 102

Candidate Starts for Dumbo\_100:

(Start: 102 @59489 has 127 MA's), (125, 59588), (149, 59720), (162, 59786), (179, 59834),

Gene: DuncansLeg\_84 Start: 55425, Stop: 55808, Start Num: 100

Candidate Starts for DuncansLeg\_84:

(Start: 100 @55425 has 346 MA's), (119, 55485), (120, 55497), (124, 55518), (133, 55578), (149, 55656), (172, 55746),

Gene: Dusk\_97 Start: 59453, Stop: 59893, Start Num: 102

Candidate Starts for Dusk\_97:

(Start: 102 @59453 has 127 MA's), (125, 59552), (149, 59684), (162, 59750), (179, 59798),

Gene: Dusty\_123 Start: 70841, Stop: 71350, Start Num: 100

Candidate Starts for Dusty\_123:

(Start: 100 @70841 has 346 MA's), (109, 70856), (112, 70865), (144, 71063), (179, 71189), (185, 71240), (196, 71300),

Gene: DyoEdafos\_87 Start: 54732, Stop: 55139, Start Num: 100

Candidate Starts for DyoEdafos\_87:

(Start: 100 @54732 has 346 MA's), (120, 54804), (124, 54825), (133, 54879), (147, 54954), (149, 54957),

Gene: E1\_47 Start: 31132, Stop: 31596, Start Num: 106

Candidate Starts for E1\_47:

(Start: 106 @31132 has 6 MA's), (124, 31222), (126, 31228), (135, 31291), (146, 31351),

Gene: E6\_53 Start: 34060, Stop: 34527, Start Num: 106

Candidate Starts for E6\_53:

(38, 33853), (40, 33862), (51, 33910), (53, 33913), (Start: 106 @34060 has 6 MA's), (124, 34150), (135, 34219), (146, 34279), (171, 34372),

Gene: EarickHC\_65 Start: 40496, Stop: 41002, Start Num: 100

Candidate Starts for EarickHC\_65:

(Start: 100 @40496 has 346 MA's), (109, 40511), (144, 40718), (164, 40802), (179, 40844),

Gene: EastWest\_38 Start: 30167, Stop: 30706, Start Num: 101  
Candidate Starts for EastWest\_38:  
(97, 30161), (Start: 101 @30167 has 7 MA's), (179, 30512),

Gene: Eastland\_45 Start: 30656, Stop: 31135, Start Num: 100  
Candidate Starts for Eastland\_45:  
(Start: 100 @30656 has 346 MA's), (158, 30947),

Gene: Easy2Say\_100 Start: 59925, Stop: 60365, Start Num: 102  
Candidate Starts for Easy2Say\_100:  
(36, 59724), (37, 59727), (Start: 42 @59754 has 1 MA's), (43, 59757), (52, 59799), (70, 59853), (Start: 102 @59925 has 127 MA's), (125, 60024), (149, 60156), (162, 60222), (179, 60270),

Gene: EdgarPoe\_101 Start: 64215, Stop: 64784, Start Num: 100  
Candidate Starts for EdgarPoe\_101:  
(Start: 100 @64215 has 346 MA's), (121, 64296), (133, 64371), (138, 64413), (141, 64425), (144, 64437), (146, 64443), (149, 64449), (164, 64521), (179, 64563),

Gene: Edmundo\_14 Start: 9885, Stop: 10643, Start Num: 100  
Candidate Starts for Edmundo\_14:  
(Start: 100 @9885 has 346 MA's), (142, 10098), (144, 10107), (179, 10233), (203, 10446),

Gene: Eesa\_52 Start: 34727, Stop: 35206, Start Num: 100  
Candidate Starts for Eesa\_52:  
(Start: 100 @34727 has 346 MA's), (121, 34808), (136, 34901), (144, 34949), (146, 34955), (164, 35033), (181, 35084),

Gene: Eklok\_45 Start: 30455, Stop: 30934, Start Num: 100  
Candidate Starts for Eklok\_45:  
(Start: 100 @30455 has 346 MA's), (158, 30746),

Gene: Elite2014\_99 Start: 59100, Stop: 59540, Start Num: 102  
Candidate Starts for Elite2014\_99:  
(Start: 102 @59100 has 127 MA's), (125, 59199), (149, 59331), (162, 59397), (179, 59445),

Gene: Ellson\_83 Start: 55740, Stop: 56123, Start Num: 100  
Candidate Starts for Ellson\_83:  
(Start: 100 @55740 has 346 MA's), (119, 55800), (120, 55812), (124, 55833), (133, 55893), (149, 55971), (172, 56061),

Gene: Elph10\_100 Start: 59135, Stop: 59575, Start Num: 102  
Candidate Starts for Elph10\_100:  
(Start: 102 @59135 has 127 MA's), (125, 59234), (138, 59330), (149, 59366), (162, 59432), (179, 59480),

Gene: Emmina\_100 Start: 58876, Stop: 59316, Start Num: 102  
Candidate Starts for Emmina\_100:  
(Start: 102 @58876 has 127 MA's), (125, 58975), (138, 59071), (149, 59107), (162, 59173), (179, 59221),

Gene: Enceladus\_79 Start: 53493, Stop: 53876, Start Num: 100  
Candidate Starts for Enceladus\_79:

(Start: 100 @53493 has 346 MA's), (124, 53586), (133, 53640), (136, 53658), (149, 53718), (158, 53775),

Gene: Engineer\_128 Start: 72271, Stop: 72780, Start Num: 100

Candidate Starts for Engineer\_128:

(Start: 100 @72271 has 346 MA's), (109, 72286), (112, 72295), (144, 72493), (179, 72619), (185, 72670), (196, 72730),

Gene: EniyanLRS\_74 Start: 48895, Stop: 49284, Start Num: 101

Candidate Starts for EniyanLRS\_74:

(Start: 101 @48895 has 7 MA's), (124, 48988), (125, 48991), (133, 49042), (136, 49060), (146, 49114), (159, 49180), (179, 49234),

Gene: Estes\_75 Start: 46028, Stop: 46465, Start Num: 100

Candidate Starts for Estes\_75:

(Start: 100 @46028 has 346 MA's), (121, 46112), (134, 46193),

Gene: Eureka\_99 Start: 60064, Stop: 60504, Start Num: 102

Candidate Starts for Eureka\_99:

(Start: 102 @60064 has 127 MA's), (125, 60163), (138, 60259), (149, 60295), (162, 60361), (179, 60409),

Gene: EvePickles\_69 Start: 38354, Stop: 38866, Start Num: 104

Candidate Starts for EvePickles\_69:

(Start: 104 @38354 has 34 MA's), (121, 38435), (140, 38573),

Gene: FairyPath\_100 Start: 60369, Stop: 60809, Start Num: 102

Candidate Starts for FairyPath\_100:

(Start: 102 @60369 has 127 MA's), (125, 60468), (149, 60600), (162, 60666), (179, 60714),

Gene: Faith1\_85 Start: 55471, Stop: 55857, Start Num: 100

Candidate Starts for Faith1\_85:

(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: Faja\_73 Start: 39133, Stop: 39654, Start Num: 104

Candidate Starts for Faja\_73:

(Start: 104 @39133 has 34 MA's), (121, 39214), (140, 39352),

Gene: FarmResident\_84 Start: 53796, Stop: 54203, Start Num: 100

Candidate Starts for FarmResident\_84:

(Start: 100 @53796 has 346 MA's), (120, 53868), (124, 53889), (131, 53928), (133, 53943), (137, 53973), (147, 54018), (149, 54021), (184, 54162),

Gene: Filch\_102 Start: 59448, Stop: 59888, Start Num: 102

Candidate Starts for Filch\_102:

(Start: 102 @59448 has 127 MA's), (125, 59547), (138, 59643), (149, 59679), (162, 59745), (179, 59793),

Gene: Finemlucis\_85 Start: 56160, Stop: 56546, Start Num: 100

Candidate Starts for Finemlucis\_85:

(90, 56142), (Start: 100 @56160 has 346 MA's), (118, 56211), (120, 56232), (124, 56253), (131, 56292), (133, 56307), (136, 56325), (147, 56382), (149, 56385), (158, 56442),

Gene: Fingolfin\_55 Start: 33508, Stop: 34017, Start Num: 100

Candidate Starts for Fingolfin\_55:

(Start: 100 @33508 has 346 MA's), (117, 33547), (121, 33589), (128, 33622), (136, 33682), (144, 33730), (149, 33742), (158, 33799), (164, 33814), (172, 33835), (179, 33856),

Gene: Finkle\_70 Start: 43173, Stop: 43691, Start Num: 101

Candidate Starts for Finkle\_70:

(78, 43113), (Start: 101 @43173 has 7 MA's), (116, 43206),

Gene: Finnry\_83 Start: 55427, Stop: 55810, Start Num: 100

Candidate Starts for Finnry\_83:

(Start: 100 @55427 has 346 MA's), (119, 55487), (120, 55499), (124, 55520), (133, 55580), (136, 55598), (149, 55658), (172, 55748),

Gene: FireRed\_103 Start: 60340, Stop: 60780, Start Num: 102

Candidate Starts for FireRed\_103:

(Start: 102 @60340 has 127 MA's), (125, 60439), (138, 60535), (149, 60571), (162, 60637), (179, 60685),

Gene: Fireman\_67 Start: 42549, Stop: 43052, Start Num: 95

Candidate Starts for Fireman\_67:

(Start: 95 @42549 has 11 MA's), (136, 42723), (144, 42771), (179, 42897),

Gene: Flypotenuse\_96 Start: 58525, Stop: 58965, Start Num: 102

Candidate Starts for Flypotenuse\_96:

(36, 58324), (37, 58327), (Start: 42 @58354 has 1 MA's), (43, 58357), (52, 58399), (70, 58453), (Start: 102 @58525 has 127 MA's), (121, 58606), (125, 58624), (149, 58756), (162, 58822), (179, 58870),

Gene: FoghornLeghorn\_93 Start: 57230, Stop: 57670, Start Num: 102

Candidate Starts for FoghornLeghorn\_93:

(36, 57029), (37, 57032), (Start: 42 @57059 has 1 MA's), (43, 57062), (52, 57104), (70, 57158), (Start: 102 @57230 has 127 MA's), (121, 57311), (125, 57329), (149, 57461), (162, 57527), (179, 57575),

Gene: Forrestell\_95 Start: 56132, Stop: 55527, Start Num: 100

Candidate Starts for Forrestell\_95:

(Start: 100 @56132 has 346 MA's), (134, 55970), (159, 55838), (162, 55832), (164, 55826), (172, 55805),

Gene: Forthebois\_13 Start: 6604, Stop: 6182, Start Num: 100

Candidate Starts for Forthebois\_13:

(Start: 100 @6604 has 346 MA's), (114, 6571), (131, 6457), (138, 6400), (158, 6307), (173, 6268),

Gene: Franzy\_35 Start: 30564, Stop: 31142, Start Num: 100

Candidate Starts for Franzy\_35:

(68, 30480), (Start: 100 @30564 has 346 MA's), (112, 30588), (116, 30600), (137, 30750), (144, 30786), (149, 30798), (179, 30912), (195, 31023),

Gene: FreakyGoo\_68 Start: 43863, Stop: 44309, Start Num: 100

Candidate Starts for FreakyGoo\_68:

(84, 43827), (Start: 100 @43863 has 346 MA's), (121, 43947), (134, 44028), (137, 44052), (179, 44211),

Gene: FrumpyGal\_46 Start: 30656, Stop: 31135, Start Num: 100  
Candidate Starts for FrumpyGal\_46:  
(Start: 100 @30656 has 346 MA's), (158, 30947),

Gene: G4\_64 Start: 35908, Stop: 36363, Start Num: 106  
Candidate Starts for G4\_64:  
(40, 35710), (51, 35758), (53, 35761), (Start: 106 @35908 has 6 MA's), (124, 35998), (135, 36067),  
(146, 36127),

Gene: GUPitcher\_53 Start: 35415, Stop: 35852, Start Num: 100  
Candidate Starts for GUPitcher\_53:  
(Start: 100 @35415 has 346 MA's), (121, 35496), (137, 35601), (146, 35643), (158, 35706), (172,  
35742),

Gene: Gabriela\_85 Start: 54817, Stop: 55203, Start Num: 100  
Candidate Starts for Gabriela\_85:  
(Start: 100 @54817 has 346 MA's), (118, 54868), (120, 54889), (124, 54910), (131, 54949), (133,  
54964), (136, 54982), (147, 55039), (149, 55042), (158, 55099),

Gene: Gage\_102 Start: 59596, Stop: 60036, Start Num: 102  
Candidate Starts for Gage\_102:  
(36, 59395), (37, 59398), (Start: 42 @59425 has 1 MA's), (43, 59428), (52, 59470), (70, 59524), (Start:  
102 @59596 has 127 MA's), (125, 59695), (149, 59827), (162, 59893), (179, 59941),

Gene: Galaxy\_52 Start: 33030, Stop: 33548, Start Num: 100  
Candidate Starts for Galaxy\_52:  
(Start: 100 @33030 has 346 MA's), (121, 33111), (124, 33126), (144, 33252), (146, 33258), (149,  
33264), (164, 33336), (202, 33495),

Gene: Gallop\_58 Start: 40358, Stop: 40924, Start Num: 100  
Candidate Starts for Gallop\_58:  
(Start: 100 @40358 has 346 MA's), (121, 40439), (141, 40568), (144, 40580), (149, 40592), (179,  
40706),

Gene: Ganandorf\_63 Start: 40592, Stop: 41098, Start Num: 100  
Candidate Starts for Ganandorf\_63:  
(Start: 100 @40592 has 346 MA's), (109, 40607), (144, 40814), (164, 40898), (179, 40940),

Gene: Gardann\_85 Start: 55306, Stop: 55692, Start Num: 100  
Candidate Starts for Gardann\_85:  
(Start: 100 @55306 has 346 MA's), (118, 55357), (120, 55378), (124, 55399), (131, 55438), (133,  
55453), (136, 55471), (147, 55528), (149, 55531), (158, 55588),

Gene: GardenSalsa\_76 Start: 46450, Stop: 46887, Start Num: 100  
Candidate Starts for GardenSalsa\_76:  
(Start: 100 @46450 has 346 MA's), (121, 46534), (134, 46615),

Gene: Gator\_98 Start: 59381, Stop: 59821, Start Num: 102  
Candidate Starts for Gator\_98:  
(36, 59180), (37, 59183), (Start: 42 @59210 has 1 MA's), (43, 59213), (52, 59255), (70, 59309), (Start:  
102 @59381 has 127 MA's), (121, 59462), (125, 59480), (149, 59612), (162, 59678), (179, 59726),

Gene: Geeche\_124 Start: 71064, Stop: 71573, Start Num: 100

Candidate Starts for Geeche\_124:

(Start: 100 @71064 has 346 MA's), (109, 71079), (112, 71088), (144, 71286), (179, 71412), (185, 71463), (196, 71523),

Gene: Gemini\_105 Start: 59975, Stop: 60415, Start Num: 102

Candidate Starts for Gemini\_105:

(36, 59774), (37, 59777), (Start: 42 @59804 has 1 MA's), (43, 59807), (52, 59849), (70, 59903), (Start: 102 @59975 has 127 MA's), (125, 60074), (149, 60206), (162, 60272), (179, 60320),

Gene: GenevaB15\_75 Start: 45899, Stop: 46336, Start Num: 100

Candidate Starts for GenevaB15\_75:

(Start: 100 @45899 has 346 MA's), (121, 45983), (134, 46064),

Gene: Gibbzilla\_62 Start: 32565, Stop: 33086, Start Num: 104

Candidate Starts for Gibbzilla\_62:

(21, 32253), (31, 32310), (Start: 104 @32565 has 34 MA's), (122, 32649), (124, 32661), (140, 32784),

Gene: Gilgamesh\_89 Start: 83492, Stop: 83953, Start Num: 96

Candidate Starts for Gilgamesh\_89:

(Start: 96 @83492 has 1 MA's), (136, 83666), (144, 83714), (149, 83726),

Gene: Gina\_68 Start: 40668, Stop: 41171, Start Num: 95

Candidate Starts for Gina\_68:

(Start: 95 @40668 has 11 MA's), (144, 40890), (164, 40974),

Gene: Gingerbug\_42 Start: 27000, Stop: 26503, Start Num: 100

Candidate Starts for Gingerbug\_42:

(9, 27522), (20, 27312), (25, 27285), (28, 27270), (Start: 100 @27000 has 346 MA's), (121, 26919), (134, 26838), (179, 26652),

Gene: Glaske16\_68 Start: 43862, Stop: 44308, Start Num: 100

Candidate Starts for Glaske16\_68:

(84, 43826), (Start: 100 @43862 has 346 MA's), (121, 43946), (134, 44027), (137, 44051), (179, 44210),

Gene: Glexan\_99 Start: 59655, Stop: 60095, Start Num: 102

Candidate Starts for Glexan\_99:

(36, 59454), (37, 59457), (Start: 42 @59484 has 1 MA's), (43, 59487), (52, 59529), (70, 59583), (Start: 102 @59655 has 127 MA's), (121, 59736), (125, 59754), (149, 59886), (162, 59952), (179, 60000),

Gene: Globfish\_72 Start: 37764, Stop: 38243, Start Num: 107

Candidate Starts for Globfish\_72:

(Start: 107 @37764 has 10 MA's), (153, 38007), (155, 38022), (159, 38058), (163, 38064),

Gene: Glorp\_65 Start: 40559, Stop: 41062, Start Num: 100

Candidate Starts for Glorp\_65:

(Start: 100 @40559 has 346 MA's), (109, 40574), (144, 40781), (164, 40865), (179, 40907),

Gene: Glotell\_56 Start: 33552, Stop: 34061, Start Num: 100

Candidate Starts for Glotell\_56:

(Start: 100 @33552 has 346 MA's), (117, 33591), (121, 33633), (128, 33666), (136, 33726), (144, 33774), (149, 33786), (158, 33843), (164, 33858), (172, 33879), (179, 33900),

Gene: Goib\_55 Start: 36148, Stop: 36654, Start Num: 100

Candidate Starts for Goib\_55:

(Start: 100 @36148 has 346 MA's), (134, 36310), (149, 36382), (164, 36454), (179, 36496),

Gene: Goku\_99 Start: 59793, Stop: 60233, Start Num: 102

Candidate Starts for Goku\_99:

(Start: 102 @59793 has 127 MA's), (125, 59892), (138, 59988), (149, 60024), (162, 60090), (179, 60138),

Gene: GoldDust\_38 Start: 32737, Stop: 33288, Start Num: 100

Candidate Starts for GoldDust\_38:

(Start: 100 @32737 has 346 MA's), (112, 32761), (144, 32959), (149, 32971),

Gene: GoldenSpark\_104 Start: 59458, Stop: 59898, Start Num: 102

Candidate Starts for GoldenSpark\_104:

(36, 59257), (37, 59260), (Start: 42 @59287 has 1 MA's), (43, 59290), (52, 59332), (70, 59386), (Start: 102 @59458 has 127 MA's), (125, 59557), (149, 59689), (162, 59755), (179, 59803),

Gene: Goldilocks\_103 Start: 59375, Stop: 59815, Start Num: 102

Candidate Starts for Goldilocks\_103:

(Start: 102 @59375 has 127 MA's), (125, 59474), (149, 59606), (162, 59672), (179, 59720),

Gene: GooberAzure\_103 Start: 59458, Stop: 59898, Start Num: 102

Candidate Starts for GooberAzure\_103:

(36, 59257), (37, 59260), (Start: 42 @59287 has 1 MA's), (43, 59290), (52, 59332), (70, 59386), (Start: 102 @59458 has 127 MA's), (125, 59557), (149, 59689), (162, 59755), (179, 59803),

Gene: Gooberta\_38 Start: 32736, Stop: 33287, Start Num: 100

Candidate Starts for Gooberta\_38:

(Start: 100 @32736 has 346 MA's), (112, 32760), (144, 32958), (149, 32970),

Gene: Gorpy\_70 Start: 38991, Stop: 39509, Start Num: 104

Candidate Starts for Gorpy\_70:

(Start: 104 @38991 has 34 MA's), (126, 39093), (140, 39210),

Gene: Gravel\_64 Start: 35301, Stop: 35780, Start Num: 100

Candidate Starts for Gravel\_64:

(Start: 100 @35301 has 346 MA's), (121, 35382), (136, 35475), (144, 35523), (146, 35529), (164, 35607), (181, 35658),

Gene: GravityBall\_37 Start: 30898, Stop: 31446, Start Num: 100

Candidate Starts for GravityBall\_37:

(Start: 100 @30898 has 346 MA's), (112, 30922), (144, 31120), (175, 31234), (179, 31246), (195, 31324),

Gene: Greep\_104 Start: 61030, Stop: 61470, Start Num: 102

Candidate Starts for Greep\_104:

(Start: 102 @61030 has 127 MA's), (125, 61129), (138, 61225), (149, 61261), (162, 61327), (179, 61375),

Gene: Grekaycon\_37 Start: 30822, Stop: 31370, Start Num: 100

Candidate Starts for Grekaycon\_37:

(66, 30735), (Start: 100 @30822 has 346 MA's), (112, 30846), (137, 31008), (144, 31044), (172, 31149), (179, 31170), (195, 31254),

Gene: Grumio\_87 Start: 55428, Stop: 55850, Start Num: 100

Candidate Starts for Grumio\_87:

(34, 55203), (40, 55242), (61, 55323), (Start: 100 @55428 has 346 MA's), (122, 55512), (126, 55530), (159, 55722), (162, 55728),

Gene: Gspu1\_47 Start: 34521, Stop: 34976, Start Num: 100

Candidate Starts for Gspu1\_47:

(10, 34035), (18, 34152), (22, 34212), (41, 34338), (45, 34353), (49, 34377), (58, 34407), (Start: 100 @34521 has 346 MA's), (123, 34608), (130, 34632), (136, 34686), (154, 34764), (180, 34860),

Gene: GumGum\_75 Start: 38218, Stop: 38685, Start Num: 107

Candidate Starts for GumGum\_75:

(Start: 107 @38218 has 10 MA's), (118, 38263), (142, 38419),

Gene: GuuelaD\_83 Start: 55445, Stop: 55831, Start Num: 100

Candidate Starts for GuuelaD\_83:

(Start: 100 @55445 has 346 MA's), (118, 55496), (124, 55538), (131, 55577), (133, 55592), (136, 55610), (147, 55667), (149, 55670), (158, 55727), (172, 55763),

Gene: Guzman\_45 Start: 28637, Stop: 29128, Start Num: 100

Candidate Starts for Guzman\_45:

(Start: 100 @28637 has 346 MA's), (144, 28859), (151, 28880), (164, 28943),

Gene: HFrancette\_46 Start: 31430, Stop: 31909, Start Num: 100

Candidate Starts for HFrancette\_46:

(1, 30659), (11, 30968), (64, 31334), (69, 31352), (Start: 100 @31430 has 346 MA's), (144, 31652), (158, 31721),

Gene: Hafay\_86 Start: 55401, Stop: 55784, Start Num: 100

Candidate Starts for Hafay\_86:

(Start: 100 @55401 has 346 MA's), (118, 55452), (120, 55473), (124, 55494), (131, 55533), (133, 55548), (136, 55566), (147, 55623), (149, 55626), (158, 55683), (172, 55719),

Gene: Halena\_80 Start: 52763, Stop: 53146, Start Num: 100

Candidate Starts for Halena\_80:

(Start: 100 @52763 has 346 MA's), (124, 52856), (133, 52910), (136, 52928), (149, 52988), (158, 53045),

Gene: HamCheese\_55 Start: 33492, Stop: 34001, Start Num: 100

Candidate Starts for HamCheese\_55:

(Start: 100 @33492 has 346 MA's), (117, 33531), (121, 33573), (128, 33606), (136, 33666), (144, 33714), (149, 33726), (158, 33783), (164, 33798), (172, 33819), (179, 33840),

Gene: HanKaySha\_101 Start: 59845, Stop: 60285, Start Num: 102

Candidate Starts for HanKaySha\_101:

(Start: 102 @59845 has 127 MA's), (125, 59944), (138, 60040), (149, 60076), (162, 60142), (179, 60190),

Gene: Harella\_100 Start: 60171, Stop: 60611, Start Num: 102

Candidate Starts for Harella\_100:

(36, 59970), (37, 59973), (Start: 42 @60000 has 1 MA's), (43, 60003), (52, 60045), (70, 60099), (Start: 102 @60171 has 127 MA's), (121, 60252), (125, 60270), (149, 60402), (162, 60468), (179, 60516),

Gene: Henry\_97 Start: 59498, Stop: 59938, Start Num: 102

Candidate Starts for Henry\_97:

(Start: 102 @59498 has 127 MA's), (125, 59597), (138, 59693), (149, 59729), (162, 59795), (179, 59843),

Gene: Hermeonysus\_64 Start: 40487, Stop: 40993, Start Num: 100

Candidate Starts for Hermeonysus\_64:

(Start: 100 @40487 has 346 MA's), (109, 40502), (144, 40709), (164, 40793), (179, 40835),

Gene: Hestia\_64 Start: 35356, Stop: 35877, Start Num: 104

Candidate Starts for Hestia\_64:

(Start: 104 @35356 has 34 MA's), (121, 35437), (140, 35575),

Gene: Highbury\_97 Start: 58002, Stop: 58442, Start Num: 102

Candidate Starts for Highbury\_97:

(48, 57852), (57, 57882), (73, 57930), (80, 57945), (83, 57957), (Start: 102 @58002 has 127 MA's), (125, 58101), (138, 58197), (149, 58233), (162, 58299), (179, 58347),

Gene: Hillester\_76 Start: 38827, Stop: 39300, Start Num: 107

Candidate Starts for Hillester\_76:

(Start: 107 @38827 has 10 MA's), (118, 38872), (142, 39028),

Gene: Hirko\_37 Start: 32245, Stop: 32802, Start Num: 100

Candidate Starts for Hirko\_37:

(Start: 100 @32245 has 346 MA's), (134, 32407), (144, 32467), (158, 32536),

Gene: Hive\_93 Start: 57411, Stop: 56806, Start Num: 100

Candidate Starts for Hive\_93:

(Start: 100 @57411 has 346 MA's), (118, 57357), (134, 57249), (159, 57117), (162, 57111), (164, 57105), (180, 57060),

Gene: Holt\_105 Start: 59872, Stop: 60312, Start Num: 102

Candidate Starts for Holt\_105:

(36, 59671), (37, 59674), (Start: 42 @59701 has 1 MA's), (43, 59704), (52, 59746), (70, 59800), (Start: 102 @59872 has 127 MA's), (125, 59971), (149, 60103), (162, 60169), (179, 60217),

Gene: Honeyfin\_65 Start: 40747, Stop: 41253, Start Num: 100

Candidate Starts for Honeyfin\_65:

(Start: 100 @40747 has 346 MA's), (109, 40762), (144, 40969), (164, 41053), (179, 41095),

Gene: Hoonter\_103 Start: 59949, Stop: 60389, Start Num: 102

Candidate Starts for Hoonter\_103:

(Start: 102 @59949 has 127 MA's), (125, 60048), (138, 60144), (149, 60180), (162, 60246), (179, 60294),

Gene: Hopecy\_101 Start: 60455, Stop: 60895, Start Num: 102

Candidate Starts for Hopecy\_101:

(Start: 102 @60455 has 127 MA's), (125, 60554), (138, 60650), (149, 60686), (162, 60752), (179, 60800),

Gene: HufflyPuff\_102 Start: 60566, Stop: 61006, Start Num: 102  
Candidate Starts for HufflyPuff\_102:  
(77, 60509), (Start: 102 @60566 has 127 MA's), (125, 60665), (149, 60797), (162, 60863), (179, 60911),

Gene: Huffly\_55 Start: 35610, Stop: 36101, Start Num: 100  
Candidate Starts for Huffly\_55:  
(Start: 100 @35610 has 346 MA's), (118, 35664), (134, 35772), (149, 35844), (164, 35916),

Gene: Hum25\_61 Start: 35235, Stop: 35735, Start Num: 99  
Candidate Starts for Hum25\_61:  
(Start: 99 @35235 has 3 MA's), (112, 35259), (121, 35316), (136, 35409), (144, 35457), (172, 35562), (179, 35583),

Gene: HumptyDumpty\_101 Start: 64018, Stop: 64587, Start Num: 100  
Candidate Starts for HumptyDumpty\_101:  
(Start: 100 @64018 has 346 MA's), (121, 64099), (133, 64174), (138, 64216), (144, 64240), (146, 64246), (149, 64252), (164, 64324), (172, 64345), (179, 64366),

Gene: IHOP\_98 Start: 59174, Stop: 59614, Start Num: 102  
Candidate Starts for IHOP\_98:  
(36, 58973), (37, 58976), (Start: 42 @59003 has 1 MA's), (43, 59006), (52, 59048), (66, 59090), (70, 59102), (Start: 102 @59174 has 127 MA's), (121, 59255), (125, 59273), (149, 59405), (162, 59471), (179, 59519),

Gene: IPhane7\_67 Start: 43867, Stop: 44313, Start Num: 100  
Candidate Starts for IPhane7\_67:  
(84, 43831), (Start: 100 @43867 has 346 MA's), (121, 43951), (134, 44032), (137, 44056), (179, 44215),

Gene: Icee\_101 Start: 58982, Stop: 59422, Start Num: 102  
Candidate Starts for Icee\_101:  
(36, 58781), (37, 58784), (Start: 42 @58811 has 1 MA's), (43, 58814), (52, 58856), (70, 58910), (Start: 102 @58982 has 127 MA's), (121, 59063), (125, 59081), (149, 59213), (162, 59279), (179, 59327),

Gene: Ididsumtinwong\_47 Start: 30484, Stop: 30948, Start Num: 100  
Candidate Starts for Ididsumtinwong\_47:  
(Start: 100 @30484 has 346 MA's), (134, 30646), (135, 30652),

Gene: Ignacio\_45 Start: 31333, Stop: 31812, Start Num: 100  
Candidate Starts for Ignacio\_45:  
(1, 30562), (11, 30871), (64, 31237), (69, 31255), (Start: 100 @31333 has 346 MA's), (144, 31555), (158, 31624),

Gene: Inca\_97 Start: 57663, Stop: 58103, Start Num: 102  
Candidate Starts for Inca\_97:  
(36, 57462), (37, 57465), (Start: 42 @57492 has 1 MA's), (43, 57495), (52, 57537), (70, 57591), (Start: 102 @57663 has 127 MA's), (121, 57744), (125, 57762), (149, 57894), (162, 57960), (179, 58008),

Gene: Isolde\_70 Start: 38113, Stop: 38619, Start Num: 104  
Candidate Starts for Isolde\_70:  
(Start: 104 @38113 has 34 MA's), (140, 38332),

Gene: Itos\_85 Start: 54377, Stop: 54763, Start Num: 100

Candidate Starts for Itos\_85:

(Start: 100 @54377 has 346 MA's), (118, 54428), (120, 54449), (124, 54470), (131, 54509), (133, 54524), (136, 54542), (147, 54599), (149, 54602), (158, 54659),

Gene: Izel\_68 Start: 43862, Stop: 44308, Start Num: 100

Candidate Starts for Izel\_68:

(84, 43826), (Start: 100 @43862 has 346 MA's), (121, 43946), (134, 44027), (137, 44051), (179, 44210),

Gene: JKerns\_37 Start: 30786, Stop: 31343, Start Num: 100

Candidate Starts for JKerns\_37:

(66, 30699), (Start: 100 @30786 has 346 MA's), (112, 30810), (142, 30999), (144, 31008), (172, 31113), (175, 31122), (179, 31134), (195, 31227),

Gene: JaNo\_100 Start: 63989, Stop: 64558, Start Num: 100

Candidate Starts for JaNo\_100:

(Start: 100 @63989 has 346 MA's), (121, 64070), (133, 64145), (138, 64187), (144, 64211), (146, 64217), (149, 64223), (164, 64295), (172, 64316), (179, 64337),

Gene: Jace\_65 Start: 39601, Stop: 40059, Start Num: 105

Candidate Starts for Jace\_65:

(Start: 105 @39601 has 7 MA's), (110, 39613), (125, 39697), (141, 39811), (143, 39823), (145, 39829), (148, 39835),

Gene: JakeTheSnake\_75 Start: 40626, Stop: 41177, Start Num: 100

Candidate Starts for JakeTheSnake\_75:

(Start: 100 @40626 has 346 MA's), (121, 40707), (138, 40824), (149, 40860),

Gene: Jakelyne\_48 Start: 28747, Stop: 29238, Start Num: 100

Candidate Starts for Jakelyne\_48:

(Start: 100 @28747 has 346 MA's), (144, 28969), (164, 29053), (179, 29095),

Gene: Jamun\_52 Start: 34262, Stop: 34783, Start Num: 100

Candidate Starts for Jamun\_52:

(Start: 100 @34262 has 346 MA's), (144, 34484), (146, 34490), (149, 34496), (158, 34553), (181, 34619), (202, 34730),

Gene: Jawnski\_35 Start: 30570, Stop: 31145, Start Num: 100

Candidate Starts for Jawnski\_35:

(Start: 100 @30570 has 346 MA's), (112, 30594), (144, 30792), (175, 30906), (195, 31050),

Gene: JayCookie\_102 Start: 64608, Stop: 65165, Start Num: 100

Candidate Starts for JayCookie\_102:

(Start: 100 @64608 has 346 MA's), (112, 64632), (121, 64689), (134, 64770), (138, 64806), (141, 64818), (144, 64830), (146, 64836), (149, 64842), (164, 64914), (179, 64956),

Gene: Jayden\_65 Start: 41095, Stop: 41595, Start Num: 100

Candidate Starts for Jayden\_65:

(55, 40975), (Start: 96 @41092 has 1 MA's), (Start: 100 @41095 has 346 MA's), (136, 41269), (144, 41317), (152, 41341), (164, 41401), (179, 41443),

Gene: JeTaime\_99 Start: 59281, Stop: 59721, Start Num: 102

Candidate Starts for JeTaime\_99:

(70, 59209), (Start: 102 @59281 has 127 MA's), (121, 59362), (125, 59380), (149, 59512), (162, 59578), (179, 59626),

Gene: JeanClaude\_53 Start: 29745, Stop: 30239, Start Num: 104

Candidate Starts for JeanClaude\_53:

(Start: 104 @29745 has 34 MA's), (140, 29964), (164, 30063),

Gene: Jefe\_64 Start: 40545, Stop: 41048, Start Num: 100

Candidate Starts for Jefe\_64:

(Start: 100 @40545 has 346 MA's), (109, 40560), (144, 40767), (164, 40851), (179, 40893),

Gene: JellyBread\_68 Start: 37347, Stop: 37868, Start Num: 104

Candidate Starts for JellyBread\_68:

(Start: 104 @37347 has 34 MA's), (126, 37449), (140, 37566),

Gene: Jinkies\_44 Start: 33571, Stop: 34011, Start Num: 107

Candidate Starts for Jinkies\_44:

(Start: 107 @33571 has 10 MA's), (122, 33646),

Gene: Jobypre\_84 Start: 55406, Stop: 55789, Start Num: 100

Candidate Starts for Jobypre\_84:

(Start: 100 @55406 has 346 MA's), (119, 55466), (120, 55478), (124, 55499), (133, 55559), (136, 55577), (149, 55637), (172, 55727),

Gene: JoeDirt\_83 Start: 54091, Stop: 54474, Start Num: 100

Candidate Starts for JoeDirt\_83:

(Start: 100 @54091 has 346 MA's), (124, 54184), (133, 54238), (136, 54256), (149, 54316), (158, 54373),

Gene: Jollipop\_65 Start: 40927, Stop: 41430, Start Num: 100

Candidate Starts for Jollipop\_65:

(Start: 100 @40927 has 346 MA's), (109, 40942), (144, 41149), (164, 41233), (179, 41275),

Gene: Jollymon\_86 Start: 55950, Stop: 56372, Start Num: 100

Candidate Starts for Jollymon\_86:

(34, 55725), (40, 55764), (61, 55845), (97, 55947), (Start: 100 @55950 has 346 MA's), (122, 56034), (126, 56052), (159, 56244), (162, 56250),

Gene: JonJames\_135 Start: 77869, Stop: 78390, Start Num: 100

Candidate Starts for JonJames\_135:

(Start: 100 @77869 has 346 MA's), (Start: 107 @77881 has 10 MA's), (112, 77893), (118, 77923), (124, 77965), (125, 77968), (146, 78097), (196, 78334),

Gene: Jordan\_37 Start: 30836, Stop: 31393, Start Num: 100

Candidate Starts for Jordan\_37:

(66, 30749), (Start: 100 @30836 has 346 MA's), (112, 30860), (142, 31049), (144, 31058), (172, 31163), (175, 31172), (179, 31184), (195, 31277),

Gene: JrWilcox\_106 Start: 58456, Stop: 58953, Start Num: 98

Candidate Starts for JrWilcox\_106:

(27, 58177), (75, 58393), (Start: 96 @58453 has 1 MA's), (98, 58456), (Start: 107 @58468 has 10 MA's), (112, 58480), (134, 58618), (136, 58630), (144, 58678),

Gene: Jubie\_83 Start: 55541, Stop: 55924, Start Num: 100

Candidate Starts for Jubie\_83:

(Start: 100 @55541 has 346 MA's), (119, 55601), (120, 55613), (124, 55634), (133, 55694), (136, 55712), (149, 55772), (172, 55862),

Gene: Juno112\_54 Start: 33508, Stop: 34017, Start Num: 100

Candidate Starts for Juno112\_54:

(Start: 100 @33508 has 346 MA's), (117, 33547), (121, 33589), (128, 33622), (136, 33682), (144, 33730), (149, 33742), (158, 33799), (164, 33814), (172, 33835), (179, 33856),

Gene: KBurrousTX\_97 Start: 64742, Stop: 65284, Start Num: 100

Candidate Starts for KBurrousTX\_97:

(81, 64694), (Start: 100 @64742 has 346 MA's), (118, 64796), (138, 64940), (144, 64964), (146, 64970), (149, 64976), (164, 65048), (179, 65090),

Gene: KHumphrey\_55 Start: 33396, Stop: 33905, Start Num: 100

Candidate Starts for KHumphrey\_55:

(Start: 100 @33396 has 346 MA's), (117, 33435), (121, 33477), (128, 33510), (136, 33570), (144, 33618), (149, 33630), (158, 33687), (164, 33702), (172, 33723), (179, 33744),

Gene: Kabloowy\_71 Start: 38230, Stop: 38751, Start Num: 104

Candidate Starts for Kabloowy\_71:

(Start: 104 @38230 has 34 MA's), (126, 38332), (140, 38449),

Gene: Kabreeze\_101 Start: 64075, Stop: 64644, Start Num: 100

Candidate Starts for Kabreeze\_101:

(Start: 100 @64075 has 346 MA's), (121, 64156), (133, 64231), (138, 64273), (144, 64297), (146, 64303), (149, 64309), (164, 64381), (172, 64402), (179, 64423),

Gene: Kahlid\_85 Start: 55257, Stop: 55643, Start Num: 100

Candidate Starts for Kahlid\_85:

(Start: 100 @55257 has 346 MA's), (118, 55308), (120, 55329), (124, 55350), (131, 55389), (133, 55404), (136, 55422), (147, 55479), (149, 55482), (158, 55539),

Gene: KaiHaiDragon\_65 Start: 40496, Stop: 41002, Start Num: 100

Candidate Starts for KaiHaiDragon\_65:

(Start: 100 @40496 has 346 MA's), (109, 40511), (144, 40718), (164, 40802), (179, 40844),

Gene: Kanye\_97 Start: 59707, Stop: 60147, Start Num: 102

Candidate Starts for Kanye\_97:

(Start: 102 @59707 has 127 MA's), (125, 59806), (138, 59902), (149, 59938), (162, 60004), (179, 60052),

Gene: KendraB23\_63 Start: 34989, Stop: 35468, Start Num: 100

Candidate Starts for KendraB23\_63:

(Start: 100 @34989 has 346 MA's), (121, 35070), (136, 35163), (144, 35211), (146, 35217), (164, 35295), (181, 35346),

Gene: Kharcho\_81 Start: 48261, Stop: 48899, Start Num: 100

Candidate Starts for Kharcho\_81:

(Start: 100 @48261 has 346 MA's), (121, 48342), (164, 48564),

Gene: Khuang\_62 Start: 36400, Stop: 36924, Start Num: 100  
Candidate Starts for Khuang\_62:  
(Start: 100 @36400 has 346 MA's), (138, 36598), (149, 36634), (172, 36727),

Gene: Kimchi\_104 Start: 59599, Stop: 60039, Start Num: 102  
Candidate Starts for Kimchi\_104:  
(36, 59398), (37, 59401), (Start: 42 @59428 has 1 MA's), (43, 59431), (52, 59473), (70, 59527), (Start: 102 @59599 has 127 MA's), (125, 59698), (149, 59830), (162, 59896), (179, 59944),

Gene: King2\_35 Start: 30559, Stop: 31137, Start Num: 100  
Candidate Starts for King2\_35:  
(Start: 100 @30559 has 346 MA's), (112, 30583), (116, 30595), (134, 30721), (136, 30733), (137, 30745), (144, 30781), (149, 30793), (179, 30907), (195, 31018),

Gene: Kingsolomon\_81 Start: 55183, Stop: 55566, Start Num: 100  
Candidate Starts for Kingsolomon\_81:  
(Start: 100 @55183 has 346 MA's), (119, 55243), (120, 55255), (124, 55276), (133, 55336), (136, 55354), (149, 55414), (172, 55504),

Gene: KingstonB\_88 Start: 55361, Stop: 55783, Start Num: 100  
Candidate Starts for KingstonB\_88:  
(34, 55136), (40, 55175), (61, 55256), (97, 55358), (Start: 100 @55361 has 346 MA's), (122, 55445), (126, 55463), (159, 55655), (162, 55661),

Gene: KirDoubleO7\_82 Start: 55427, Stop: 55810, Start Num: 100  
Candidate Starts for KirDoubleO7\_82:  
(Start: 100 @55427 has 346 MA's), (119, 55487), (120, 55499), (124, 55520), (133, 55580), (149, 55658), (172, 55748),

Gene: KleverKiS\_66 Start: 43583, Stop: 44029, Start Num: 100  
Candidate Starts for KleverKiS\_66:  
(84, 43547), (Start: 100 @43583 has 346 MA's), (121, 43667), (134, 43748), (137, 43772), (179, 43931),

Gene: Klevey\_43 Start: 31378, Stop: 31935, Start Num: 100  
Candidate Starts for Klevey\_43:  
(Start: 100 @31378 has 346 MA's), (144, 31600), (158, 31669),

Gene: Kostya\_100 Start: 59276, Stop: 59716, Start Num: 102  
Candidate Starts for Kostya\_100:  
(36, 59075), (37, 59078), (Start: 42 @59105 has 1 MA's), (43, 59108), (52, 59150), (70, 59204), (Start: 102 @59276 has 127 MA's), (125, 59375), (149, 59507), (162, 59573), (179, 59621),

Gene: Kovu\_15 Start: 9876, Stop: 10469, Start Num: 100  
Candidate Starts for Kovu\_15:  
(Start: 100 @9876 has 346 MA's), (121, 9957), (137, 10062), (138, 10074), (151, 10119), (179, 10224),

Gene: Kowalski\_63 Start: 40561, Stop: 41067, Start Num: 100  
Candidate Starts for Kowalski\_63:  
(Start: 100 @40561 has 346 MA's), (109, 40576), (144, 40783), (164, 40867), (179, 40909),

Gene: Kozie\_60 Start: 40548, Stop: 41045, Start Num: 100  
Candidate Starts for Kozie\_60:

(Start: 100 @40548 has 346 MA's), (144, 40770), (164, 40854), (179, 40896),

Gene: Kropertea\_79 Start: 54008, Stop: 54415, Start Num: 100

Candidate Starts for Kropertea\_79:

(Start: 100 @54008 has 346 MA's), (120, 54080), (124, 54101), (131, 54140), (133, 54155), (147, 54230), (149, 54233),

Gene: Krypton555\_84 Start: 55452, Stop: 55835, Start Num: 100

Candidate Starts for Krypton555\_84:

(Start: 100 @55452 has 346 MA's), (119, 55512), (120, 55524), (124, 55545), (133, 55605), (136, 55623), (149, 55683), (172, 55773),

Gene: Kubulix\_96 Start: 57094, Stop: 56489, Start Num: 100

Candidate Starts for Kubulix\_96:

(Start: 100 @57094 has 346 MA's), (118, 57040), (134, 56932), (159, 56800), (162, 56794), (164, 56788),

Gene: Kukla\_55 Start: 34866, Stop: 35303, Start Num: 100

Candidate Starts for Kukla\_55:

(Start: 100 @34866 has 346 MA's), (121, 34947), (159, 35160), (172, 35193),

Gene: Kuleana\_55 Start: 32730, Stop: 33242, Start Num: 100

Candidate Starts for Kuleana\_55:

(Start: 100 @32730 has 346 MA's), (138, 32928), (144, 32952), (146, 32958),

Gene: Kumao\_63 Start: 44478, Stop: 44960, Start Num: 100

Candidate Starts for Kumao\_63:

(Start: 100 @44478 has 346 MA's), (111, 44496), (112, 44502), (121, 44559), (141, 44688), (151, 44721), (179, 44826),

Gene: Kumotta\_55 Start: 31998, Stop: 32498, Start Num: 100

Candidate Starts for Kumotta\_55:

(Start: 100 @31998 has 346 MA's), (121, 32079), (124, 32094), (137, 32184), (138, 32196), (144, 32220), (179, 32346),

Gene: Laphuphu24k\_54 Start: 33492, Stop: 34001, Start Num: 100

Candidate Starts for Laphuphu24k\_54:

(Start: 100 @33492 has 346 MA's), (117, 33531), (121, 33573), (128, 33606), (136, 33666), (144, 33714), (149, 33726), (158, 33783), (164, 33798), (172, 33819), (179, 33840),

Gene: Lasker\_73 Start: 38725, Stop: 39246, Start Num: 104

Candidate Starts for Lasker\_73:

(Start: 104 @38725 has 34 MA's), (121, 38806), (140, 38944), (159, 39031),

Gene: Lawnathon\_73 Start: 37451, Stop: 37972, Start Num: 104

Candidate Starts for Lawnathon\_73:

(Start: 104 @37451 has 34 MA's), (126, 37553), (140, 37670),

Gene: LeBron\_81 Start: 52762, Stop: 53145, Start Num: 100

Candidate Starts for LeBron\_81:

(Start: 100 @52762 has 346 MA's), (124, 52855), (133, 52909), (136, 52927), (149, 52987), (158, 53044),

Gene: LeBruni\_73 Start: 37162, Stop: 37683, Start Num: 104

Candidate Starts for LeBruni\_73:

(85, 37123), (Start: 104 @37162 has 34 MA's), (140, 37381),

Gene: LeeroyJ\_37 Start: 30897, Stop: 31436, Start Num: 100

Candidate Starts for LeeroyJ\_37:

(Start: 100 @30897 has 346 MA's), (112, 30921), (144, 31119), (179, 31245), (199, 31344),

Gene: Leona\_54 Start: 33587, Stop: 34099, Start Num: 100

Candidate Starts for Leona\_54:

(Start: 100 @33587 has 346 MA's), (121, 33668), (128, 33701), (136, 33761), (144, 33809), (149, 33821), (158, 33878), (164, 33893), (172, 33914), (179, 33935),

Gene: Lesiram\_44 Start: 26454, Stop: 25951, Start Num: 100

Candidate Starts for Lesiram\_44:

(63, 26550), (Start: 100 @26454 has 346 MA's), (144, 26232), (179, 26106),

Gene: Lewan\_86 Start: 55312, Stop: 55698, Start Num: 100

Candidate Starts for Lewan\_86:

(Start: 100 @55312 has 346 MA's), (118, 55363), (120, 55384), (124, 55405), (131, 55444), (133, 55459), (136, 55477), (147, 55534), (149, 55537), (158, 55594),

Gene: LilDestine\_84 Start: 55161, Stop: 55547, Start Num: 100

Candidate Starts for LilDestine\_84:

(Start: 100 @55161 has 346 MA's), (118, 55212), (120, 55233), (124, 55254), (131, 55293), (133, 55308), (136, 55326), (147, 55383), (149, 55386), (158, 55443),

Gene: Lilac\_102 Start: 60598, Stop: 61038, Start Num: 102

Candidate Starts for Lilac\_102:

(Start: 102 @60598 has 127 MA's), (125, 60697), (138, 60793), (149, 60829), (162, 60895), (179, 60943),

Gene: LilhomieP\_66 Start: 43867, Stop: 44313, Start Num: 100

Candidate Starts for LilhomieP\_66:

(84, 43831), (Start: 100 @43867 has 346 MA's), (121, 43951), (134, 44032), (137, 44056), (179, 44215),

Gene: Lilizi\_101 Start: 59884, Stop: 60324, Start Num: 102

Candidate Starts for Lilizi\_101:

(Start: 102 @59884 has 127 MA's), (125, 59983), (138, 60079), (149, 60115), (162, 60181), (179, 60229),

Gene: Lilmac1015\_45 Start: 31895, Stop: 32452, Start Num: 100

Candidate Starts for Lilmac1015\_45:

(Start: 100 @31895 has 346 MA's), (144, 32117), (158, 32186),

Gene: Lilpickle\_99 Start: 59100, Stop: 59540, Start Num: 102

Candidate Starts for Lilpickle\_99:

(Start: 102 @59100 has 127 MA's), (125, 59199), (149, 59331), (162, 59397), (179, 59445),

Gene: Linus\_101 Start: 64523, Stop: 65092, Start Num: 100

Candidate Starts for Linus\_101:

(Start: 100 @64523 has 346 MA's), (121, 64604), (133, 64679), (138, 64721), (141, 64733), (144, 64745), (146, 64751), (149, 64757), (164, 64829), (172, 64850), (179, 64871),

Gene: Lishka\_43 Start: 28179, Stop: 28640, Start Num: 100

Candidate Starts for Lishka\_43:

(16, 27804), (35, 27963), (60, 28071), (Start: 100 @28179 has 346 MA's), (134, 28341), (135, 28347),

Gene: LittleFortune\_66 Start: 40852, Stop: 41358, Start Num: 100

Candidate Starts for LittleFortune\_66:

(Start: 100 @40852 has 346 MA's), (109, 40867), (144, 41074), (164, 41158), (179, 41200),

Gene: LittleTokyo\_52 Start: 31946, Stop: 32464, Start Num: 100

Candidate Starts for LittleTokyo\_52:

(35, 31730), (61, 31841), (Start: 100 @31946 has 346 MA's), (118, 32000), (121, 32027), (133, 32102), (136, 32120), (146, 32177), (149, 32183),

Gene: LiyuLake\_83 Start: 55500, Stop: 55883, Start Num: 100

Candidate Starts for LiyuLake\_83:

(Start: 100 @55500 has 346 MA's), (119, 55560), (120, 55572), (124, 55593), (133, 55653), (149, 55731), (172, 55821),

Gene: Loadrie\_83 Start: 55336, Stop: 55722, Start Num: 100

Candidate Starts for Loadrie\_83:

(Start: 100 @55336 has 346 MA's), (118, 55387), (120, 55408), (124, 55429), (131, 55468), (133, 55483), (136, 55501), (147, 55558), (149, 55561), (158, 55618),

Gene: Lolly9\_82 Start: 55259, Stop: 55642, Start Num: 100

Candidate Starts for Lolly9\_82:

(Start: 100 @55259 has 346 MA's), (119, 55319), (120, 55331), (124, 55352), (133, 55412), (136, 55430), (149, 55490), (172, 55580),

Gene: Losacky\_47 Start: 28911, Stop: 29402, Start Num: 100

Candidate Starts for Losacky\_47:

(Start: 100 @28911 has 346 MA's), (144, 29133), (179, 29259),

Gene: Lozinak\_126 Start: 71932, Stop: 72441, Start Num: 100

Candidate Starts for Lozinak\_126:

(Start: 100 @71932 has 346 MA's), (109, 71947), (112, 71956), (144, 72154), (179, 72280), (185, 72331), (196, 72391),

Gene: Lucretia\_64 Start: 40477, Stop: 40980, Start Num: 100

Candidate Starts for Lucretia\_64:

(Start: 100 @40477 has 346 MA's), (109, 40492), (144, 40699), (164, 40783), (179, 40825),

Gene: Lukepolites\_39 Start: 30745, Stop: 31308, Start Num: 100

Candidate Starts for Lukepolites\_39:

(Start: 100 @30745 has 346 MA's), (112, 30769), (144, 30967), (158, 31036), (159, 31039),

Gene: Lumos\_84 Start: 55403, Stop: 55786, Start Num: 100

Candidate Starts for Lumos\_84:

(Start: 100 @55403 has 346 MA's), (119, 55463), (120, 55475), (124, 55496), (133, 55556), (136, 55574), (149, 55634), (172, 55724),

Gene: Lymara\_99 Start: 62866, Stop: 63429, Start Num: 100  
Candidate Starts for Lymara\_99:  
(Start: 100 @62866 has 346 MA's), (112, 62890), (121, 62947), (134, 63028), (138, 63064), (144, 63088), (158, 63157), (164, 63172), (172, 63193), (179, 63214),

Gene: Lynnae\_87 Start: 55269, Stop: 55655, Start Num: 100  
Candidate Starts for Lynnae\_87:  
(Start: 100 @55269 has 346 MA's), (118, 55320), (120, 55341), (124, 55362), (131, 55401), (133, 55416), (136, 55434), (147, 55491), (149, 55494), (158, 55551),

Gene: MAckerman\_81 Start: 52756, Stop: 53139, Start Num: 100  
Candidate Starts for MAckerman\_81:  
(Start: 100 @52756 has 346 MA's), (124, 52849), (133, 52903), (136, 52921), (149, 52981), (158, 53038),

Gene: MISSy\_101 Start: 60384, Stop: 60824, Start Num: 102  
Candidate Starts for MISSy\_101:  
(Start: 102 @60384 has 127 MA's), (125, 60483), (149, 60615), (162, 60681), (179, 60729),

Gene: MPhalcon\_101 Start: 59801, Stop: 60241, Start Num: 102  
Candidate Starts for MPhalcon\_101:  
(Start: 102 @59801 has 127 MA's), (125, 59900), (149, 60032), (162, 60098), (179, 60146),

Gene: MUWow\_71 Start: 38583, Stop: 39104, Start Num: 104  
Candidate Starts for MUWow\_71:  
(Start: 104 @38583 has 34 MA's), (131, 38724), (140, 38802), (159, 38889), (162, 38895),

Gene: MadamMonkfish\_100 Start: 59307, Stop: 59747, Start Num: 102  
Candidate Starts for MadamMonkfish\_100:  
(Start: 102 @59307 has 127 MA's), (125, 59406), (138, 59502), (149, 59538), (162, 59604), (179, 59652),

Gene: Makar\_90 Start: 55900, Stop: 56322, Start Num: 100  
Candidate Starts for Makar\_90:  
(34, 55675), (40, 55714), (44, 55723), (Start: 100 @55900 has 346 MA's), (122, 55984), (124, 55996), (126, 56002), (159, 56194), (162, 56200),

Gene: Manda\_101 Start: 59838, Stop: 60278, Start Num: 102  
Candidate Starts for Manda\_101:  
(48, 59691), (57, 59721), (73, 59769), (80, 59784), (83, 59796), (Start: 102 @59838 has 127 MA's), (121, 59919), (125, 59937), (149, 60069), (162, 60135), (179, 60183),

Gene: Mapleville\_67 Start: 36770, Stop: 37291, Start Num: 104  
Candidate Starts for Mapleville\_67:  
(Start: 104 @36770 has 34 MA's), (126, 36872), (140, 36989),

Gene: Margaery\_59 Start: 40552, Stop: 41055, Start Num: 100  
Candidate Starts for Margaery\_59:  
(65, 40465), (Start: 100 @40552 has 346 MA's), (136, 40726), (144, 40774), (164, 40858),

Gene: MargaretKali\_51 Start: 30616, Stop: 31116, Start Num: 100  
Candidate Starts for MargaretKali\_51:

(Start: 100 @30616 has 346 MA's), (121, 30697), (124, 30712), (137, 30802), (138, 30814), (144, 30838), (179, 30964),

Gene: Mariel\_48 Start: 29119, Stop: 29610, Start Num: 100

Candidate Starts for Mariel\_48:

(Start: 100 @29119 has 346 MA's), (144, 29341), (179, 29467),

Gene: Marshmallow\_97 Start: 59796, Stop: 60236, Start Num: 102

Candidate Starts for Marshmallow\_97:

(36, 59595), (37, 59598), (Start: 42 @59625 has 1 MA's), (43, 59628), (52, 59670), (70, 59724), (Start: 102 @59796 has 127 MA's), (121, 59877), (125, 59895), (149, 60027), (162, 60093), (179, 60141),

Gene: Martha\_37 Start: 30823, Stop: 31371, Start Num: 100

Candidate Starts for Martha\_37:

(66, 30736), (Start: 100 @30823 has 346 MA's), (112, 30847), (136, 30997), (137, 31009), (144, 31045), (172, 31150), (179, 31171), (195, 31255),

Gene: Maruru\_48 Start: 38164, Stop: 38760, Start Num: 100

Candidate Starts for Maruru\_48:

(Start: 100 @38164 has 346 MA's), (137, 38350), (147, 38395), (164, 38470),

Gene: MaryV\_78 Start: 48977, Stop: 49366, Start Num: 101

Candidate Starts for MaryV\_78:

(Start: 101 @48977 has 7 MA's), (125, 49073), (133, 49124), (136, 49142), (146, 49196), (159, 49262), (179, 49316),

Gene: MaterMagnus\_71 Start: 38743, Stop: 39261, Start Num: 104

Candidate Starts for MaterMagnus\_71:

(Start: 104 @38743 has 34 MA's), (126, 38845), (140, 38962),

Gene: Matzah\_62 Start: 41397, Stop: 41900, Start Num: 100

Candidate Starts for Matzah\_62:

(Start: 100 @41397 has 346 MA's), (136, 41571), (144, 41619), (146, 41625), (147, 41628), (164, 41703),

Gene: Maxxinista\_102 Start: 59784, Stop: 60224, Start Num: 102

Candidate Starts for Maxxinista\_102:

(Start: 102 @59784 has 127 MA's), (125, 59883), (138, 59979), (149, 60015), (162, 60081), (179, 60129),

Gene: Megan\_61 Start: 44759, Stop: 45289, Start Num: 95

Candidate Starts for Megan\_61:

(Start: 95 @44759 has 11 MA's), (Start: 100 @44762 has 346 MA's), (122, 44846), (144, 44984), (162, 45062), (164, 45068), (179, 45110),

Gene: MellowYellow\_97 Start: 57337, Stop: 56732, Start Num: 100

Candidate Starts for MellowYellow\_97:

(Start: 100 @57337 has 346 MA's), (118, 57283), (134, 57175), (159, 57043), (162, 57037), (164, 57031),

Gene: MementoMori\_61 Start: 40995, Stop: 41495, Start Num: 100

Candidate Starts for MementoMori\_61:

(83, 40959), (84, 40962), (Start: 100 @40995 has 346 MA's), (112, 41019), (144, 41217), (146, 41223), (147, 41226), (164, 41301),

Gene: MenE\_47 Start: 28803, Stop: 29294, Start Num: 100  
Candidate Starts for MenE\_47:  
(Start: 100 @28803 has 346 MA's), (144, 29025), (179, 29151),

Gene: Merpity\_60 Start: 35023, Stop: 35478, Start Num: 107  
Candidate Starts for Merpity\_60:  
(Start: 107 @35023 has 10 MA's), (129, 35128), (135, 35179), (146, 35242), (149, 35248), (152, 35260), (161, 35314), (165, 35326), (170, 35335),

Gene: Merry\_ Start: 42731, Stop: 43237, Start Num: 100  
Candidate Starts for Merry\_:  
(Start: 100 @42731 has 346 MA's), (136, 42905), (138, 42929), (142, 42944), (151, 42974), (164, 43037), (179, 43079),

Gene: Metamorphoo\_67 Start: 41843, Stop: 42346, Start Num: 95  
Candidate Starts for Metamorphoo\_67:  
(Start: 95 @41843 has 11 MA's), (136, 42017), (144, 42065), (179, 42191),

Gene: MicyPS\_75 Start: 48218, Stop: 47601, Start Num: 100  
Candidate Starts for MicyPS\_75:  
(74, 48284), (Start: 100 @48218 has 346 MA's), (138, 48020), (144, 47996), (152, 47972), (158, 47927),

Gene: MidnightRain\_74 Start: 38613, Stop: 39080, Start Num: 107  
Candidate Starts for MidnightRain\_74:  
(Start: 107 @38613 has 10 MA's), (118, 38658), (142, 38814),

Gene: Miley16\_85 Start: 55471, Stop: 55857, Start Num: 100  
Candidate Starts for Miley16\_85:  
(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: Min1\_23 Start: 11006, Stop: 11470, Start Num: 100  
Candidate Starts for Min1\_23:  
(Start: 100 @11006 has 346 MA's), (109, 11021), (114, 11033), (121, 11087), (136, 11180), (138, 11204), (144, 11228), (164, 11312),

Gene: Mindy\_99 Start: 59117, Stop: 59557, Start Num: 102  
Candidate Starts for Mindy\_99:  
(Start: 102 @59117 has 127 MA's), (125, 59216), (149, 59348), (162, 59414), (179, 59462),

Gene: MiniLon\_87 Start: 55260, Stop: 55643, Start Num: 100  
Candidate Starts for MiniLon\_87:  
(Start: 100 @55260 has 346 MA's), (119, 55320), (120, 55332), (124, 55353), (133, 55413), (136, 55431), (149, 55491), (172, 55581),

Gene: MiniMac\_87 Start: 55255, Stop: 55638, Start Num: 100  
Candidate Starts for MiniMac\_87:  
(Start: 100 @55255 has 346 MA's), (119, 55315), (120, 55327), (124, 55348), (133, 55408), (136, 55426), (149, 55486), (172, 55576),

Gene: Miniwave\_95 Start: 59294, Stop: 59734, Start Num: 102  
Candidate Starts for Miniwave\_95:  
(Start: 102 @59294 has 127 MA's), (121, 59375), (125, 59393), (149, 59525), (162, 59591), (179, 59639),

Gene: Misfit\_101 Start: 60897, Stop: 61337, Start Num: 102  
Candidate Starts for Misfit\_101:  
(Start: 102 @60897 has 127 MA's), (125, 60996), (138, 61092), (149, 61128), (162, 61194), (179, 61242),

Gene: Miskis\_121 Start: 71364, Stop: 71873, Start Num: 100  
Candidate Starts for Miskis\_121:  
(Start: 100 @71364 has 346 MA's), (109, 71379), (112, 71388), (144, 71586), (179, 71712), (185, 71763), (196, 71823),

Gene: MkaliMitinis3\_86 Start: 55320, Stop: 55706, Start Num: 100  
Candidate Starts for MkaliMitinis3\_86:  
(Start: 100 @55320 has 346 MA's), (118, 55371), (120, 55392), (124, 55413), (131, 55452), (133, 55467), (136, 55485), (147, 55542), (149, 55545), (158, 55602),

Gene: Mojorita\_46 Start: 31281, Stop: 31766, Start Num: 100  
Candidate Starts for Mojorita\_46:  
(39, 31095), (59, 31176), (62, 31185), (Start: 100 @31281 has 346 MA's), (146, 31509),

Gene: Moldemort\_103 Start: 59765, Stop: 60205, Start Num: 102  
Candidate Starts for Moldemort\_103:  
(Start: 102 @59765 has 127 MA's), (125, 59864), (138, 59960), (149, 59996), (162, 60062), (179, 60110),

Gene: MollyToe\_94 Start: 57695, Stop: 58135, Start Num: 102  
Candidate Starts for MollyToe\_94:  
(36, 57494), (37, 57497), (Start: 42 @57524 has 1 MA's), (43, 57527), (52, 57569), (70, 57623), (Start: 102 @57695 has 127 MA's), (121, 57776), (125, 57794), (149, 57926), (162, 57992), (179, 58040),

Gene: Mollymur\_84 Start: 57822, Stop: 57259, Start Num: 105  
Candidate Starts for Mollymur\_84:  
(Start: 105 @57822 has 7 MA's), (125, 57723), (164, 57489),

Gene: Moostard\_81 Start: 55178, Stop: 55561, Start Num: 100  
Candidate Starts for Moostard\_81:  
(Start: 100 @55178 has 346 MA's), (119, 55238), (120, 55250), (124, 55271), (133, 55331), (136, 55349), (149, 55409), (172, 55499),

Gene: Mordred\_101 Start: 64114, Stop: 64683, Start Num: 100  
Candidate Starts for Mordred\_101:  
(Start: 100 @64114 has 346 MA's), (121, 64195), (133, 64270), (138, 64312), (144, 64336), (146, 64342), (149, 64348), (164, 64420), (172, 64441), (179, 64462),

Gene: Mosby\_96 Start: 59261, Stop: 59701, Start Num: 102  
Candidate Starts for Mosby\_96:  
(Start: 102 @59261 has 127 MA's), (125, 59360), (138, 59456), (149, 59492), (162, 59558), (179, 59606),

Gene: MoyaNatalis\_101 Start: 64054, Stop: 64611, Start Num: 100  
Candidate Starts for MoyaNatalis\_101:  
(Start: 100 @64054 has 346 MA's), (112, 64078), (121, 64135), (134, 64216), (138, 64252), (141, 64264), (144, 64276), (146, 64282), (149, 64288), (164, 64360), (179, 64402),

Gene: MrMagoo\_77 Start: 46450, Stop: 46887, Start Num: 100  
Candidate Starts for MrMagoo\_77:  
(Start: 100 @46450 has 346 MA's), (121, 46534), (134, 46615),

Gene: MrSmee\_59 Start: 34937, Stop: 35392, Start Num: 107  
Candidate Starts for MrSmee\_59:  
(Start: 107 @34937 has 10 MA's), (129, 35042), (135, 35093), (146, 35156), (147, 35159), (149, 35162), (152, 35174), (161, 35228), (165, 35240), (170, 35249),

Gene: MsGreen\_84 Start: 55405, Stop: 55788, Start Num: 100  
Candidate Starts for MsGreen\_84:  
(Start: 100 @55405 has 346 MA's), (119, 55465), (120, 55477), (124, 55498), (133, 55558), (136, 55576), (149, 55636), (172, 55726),

Gene: Mufasa8\_48 Start: 36302, Stop: 36853, Start Num: 100  
Candidate Starts for Mufasa8\_48:  
(Start: 100 @36302 has 346 MA's), (121, 36383), (144, 36524), (149, 36536),

Gene: Murica\_103 Start: 61600, Stop: 62040, Start Num: 102  
Candidate Starts for Murica\_103:  
(Start: 102 @61600 has 127 MA's), (125, 61699), (149, 61831), (162, 61897), (179, 61945),

Gene: Murphy\_100 Start: 60156, Stop: 60596, Start Num: 102  
Candidate Starts for Murphy\_100:  
(Start: 102 @60156 has 127 MA's), (125, 60255), (149, 60387), (162, 60453), (179, 60501),

Gene: MurphyJoseph\_68 Start: 36529, Stop: 37035, Start Num: 104  
Candidate Starts for MurphyJoseph\_68:  
(Start: 104 @36529 has 34 MA's), (126, 36631), (140, 36748),

Gene: Music\_38 Start: 32590, Stop: 33141, Start Num: 100  
Candidate Starts for Music\_38:  
(Start: 100 @32590 has 346 MA's), (112, 32614), (134, 32752), (144, 32812), (149, 32824),

Gene: Myrale\_100 Start: 59956, Stop: 60396, Start Num: 102  
Candidate Starts for Myrale\_100:  
(36, 59755), (37, 59758), (Start: 42 @59785 has 1 MA's), (43, 59788), (52, 59830), (70, 59884), (Start: 102 @59956 has 127 MA's), (121, 60037), (125, 60055), (149, 60187), (162, 60253), (179, 60301),

Gene: NCRodriguez\_47 Start: 28874, Stop: 29365, Start Num: 100  
Candidate Starts for NCRodriguez\_47:  
(Start: 100 @28874 has 346 MA's), (144, 29096), (151, 29117), (164, 29180), (179, 29222),

Gene: Nala\_102 Start: 60310, Stop: 60750, Start Num: 102  
Candidate Starts for Nala\_102:  
(Start: 102 @60310 has 127 MA's), (125, 60409), (138, 60505), (149, 60541), (162, 60607), (179, 60655),

Gene: Nandito\_43 Start: 31585, Stop: 32151, Start Num: 100

Candidate Starts for Nandito\_43:

(Start: 100 @31585 has 346 MA's),

Gene: Nanosmite\_72 Start: 45490, Stop: 45942, Start Num: 100

Candidate Starts for Nanosmite\_72:

(Start: 100 @45490 has 346 MA's), (152, 45739),

Gene: NathanVaag\_35 Start: 30573, Stop: 31163, Start Num: 100

Candidate Starts for NathanVaag\_35:

(Start: 100 @30573 has 346 MA's), (112, 30597), (144, 30795), (175, 30909), (195, 31044),

Gene: NelitzaMV\_97 Start: 58304, Stop: 58744, Start Num: 102

Candidate Starts for NelitzaMV\_97:

(70, 58232), (Start: 102 @58304 has 127 MA's), (125, 58403), (138, 58499), (149, 58535), (162, 58601), (179, 58649),

Gene: Netyap\_86 Start: 55472, Stop: 55858, Start Num: 100

Candidate Starts for Netyap\_86:

(Start: 100 @55472 has 346 MA's), (118, 55523), (120, 55544), (124, 55565), (131, 55604), (133, 55619), (136, 55637), (147, 55694), (149, 55697), (158, 55754),

Gene: NewKitty\_74 Start: 39038, Stop: 39523, Start Num: 116

Candidate Starts for NewKitty\_74:

(Start: 104 @39002 has 34 MA's), (116, 39038), (140, 39221),

Gene: Niblet\_57 Start: 34610, Stop: 35089, Start Num: 100

Candidate Starts for Niblet\_57:

(Start: 100 @34610 has 346 MA's), (121, 34691), (136, 34784), (144, 34832), (146, 34838), (149, 34844), (164, 34916),

Gene: Nicholas\_81 Start: 55183, Stop: 55566, Start Num: 100

Candidate Starts for Nicholas\_81:

(Start: 100 @55183 has 346 MA's), (119, 55243), (120, 55255), (124, 55276), (133, 55336), (136, 55354), (149, 55414), (172, 55504),

Gene: Nicholasp3\_85 Start: 55306, Stop: 55692, Start Num: 100

Candidate Starts for Nicholasp3\_85:

(Start: 100 @55306 has 346 MA's), (118, 55357), (120, 55378), (124, 55399), (131, 55438), (133, 55453), (136, 55471), (147, 55528), (149, 55531), (158, 55588),

Gene: Nicole72\_62 Start: 45253, Stop: 45780, Start Num: 100

Candidate Starts for Nicole72\_62:

(Start: 100 @45253 has 346 MA's), (112, 45277), (114, 45280), (136, 45427), (144, 45475), (164, 45559), (179, 45601),

Gene: Nikan\_93 Start: 57119, Stop: 56496, Start Num: 100

Candidate Starts for Nikan\_93:

(76, 57176), (Start: 100 @57119 has 346 MA's), (124, 57023), (134, 56957), (138, 56921), (159, 56825), (168, 56804),

Gene: Nimrod\_100 Start: 59923, Stop: 60363, Start Num: 102

Candidate Starts for Nimrod\_100:

(36, 59722), (37, 59725), (Start: 42 @59752 has 1 MA's), (43, 59755), (52, 59797), (70, 59851), (Start: 102 @59923 has 127 MA's), (121, 60004), (125, 60022), (149, 60154), (162, 60220), (179, 60268),

Gene: NoSleep\_101 Start: 59317, Stop: 59757, Start Num: 102

Candidate Starts for NoSleep\_101:

(Start: 102 @59317 has 127 MA's), (125, 59416), (138, 59512), (149, 59548), (162, 59614), (179, 59662),

Gene: NonchalantPear\_98 Start: 58632, Stop: 58991, Start Num: 121

Candidate Starts for NonchalantPear\_98:

(36, 58350), (37, 58353), (Start: 42 @58380 has 1 MA's), (43, 58383), (52, 58425), (70, 58479), (Start: 102 @58551 has 127 MA's), (121, 58632), (125, 58650), (149, 58782), (162, 58848), (179, 58896),

Gene: NoodlelyBoi\_65 Start: 41341, Stop: 41841, Start Num: 95

Candidate Starts for NoodlelyBoi\_65:

(Start: 95 @41341 has 11 MA's), (138, 41539), (144, 41563), (164, 41647), (179, 41689),

Gene: Norvs\_125 Start: 71351, Stop: 71860, Start Num: 100

Candidate Starts for Norvs\_125:

(Start: 100 @71351 has 346 MA's), (109, 71366), (112, 71375), (144, 71573), (179, 71699), (185, 71750), (196, 71810),

Gene: Nostromo\_35 Start: 29713, Stop: 30264, Start Num: 100

Candidate Starts for Nostromo\_35:

(Start: 100 @29713 has 346 MA's), (121, 29797), (134, 29878), (136, 29890), (144, 29938), (149, 29950), (162, 30016),

Gene: Nyilah\_73 Start: 37600, Stop: 38106, Start Num: 104

Candidate Starts for Nyilah\_73:

(Start: 104 @37600 has 34 MA's), (131, 37741), (140, 37819),

Gene: NyleyClemson\_96 Start: 56955, Stop: 56350, Start Num: 100

Candidate Starts for NyleyClemson\_96:

(Start: 100 @56955 has 346 MA's), (134, 56793), (159, 56661), (162, 56655), (164, 56649), (172, 56628),

Gene: Odyssey395\_96 Start: 57117, Stop: 56512, Start Num: 100

Candidate Starts for Odyssey395\_96:

(Start: 100 @57117 has 346 MA's), (118, 57063), (134, 56955), (159, 56823), (162, 56817), (164, 56811), (180, 56766),

Gene: OhShagHennessy\_79 Start: 53016, Stop: 53399, Start Num: 100

Candidate Starts for OhShagHennessy\_79:

(93, 53001), (Start: 100 @53016 has 346 MA's), (124, 53109), (133, 53163), (136, 53181), (149, 53241), (158, 53298),

Gene: Ollypop\_91 Start: 57958, Stop: 57332, Start Num: 100

Candidate Starts for Ollypop\_91:

(46, 58114), (79, 58012), (Start: 100 @57958 has 346 MA's), (116, 57922), (117, 57919), (118, 57904), (121, 57877), (124, 57862), (134, 57796), (168, 57643), (180, 57607),

Gene: OneUp\_111 Start: 69624, Stop: 70130, Start Num: 100

Candidate Starts for OneUp\_111:  
(Start: 100 @69624 has 346 MA's), (138, 69822),

Gene: Onika\_63 Start: 40570, Stop: 41076, Start Num: 100  
Candidate Starts for Onika\_63:  
(Start: 100 @40570 has 346 MA's), (109, 40585), (144, 40792), (164, 40876), (179, 40918),

Gene: Oppalora\_54 Start: 33506, Stop: 34015, Start Num: 100  
Candidate Starts for Oppalora\_54:  
(Start: 100 @33506 has 346 MA's), (117, 33545), (121, 33587), (128, 33620), (136, 33680), (144, 33728), (149, 33740), (158, 33797), (164, 33812), (172, 33833), (179, 33854),

Gene: Orcanus\_53 Start: 34413, Stop: 34919, Start Num: 100  
Candidate Starts for Orcanus\_53:  
(49, 34269), (Start: 100 @34413 has 346 MA's), (121, 34494), (136, 34587), (144, 34635), (146, 34641), (164, 34719), (181, 34770),

Gene: OrionPax\_99 Start: 59389, Stop: 59829, Start Num: 102  
Candidate Starts for OrionPax\_99:  
(Start: 102 @59389 has 127 MA's), (125, 59488), (138, 59584), (149, 59620), (162, 59686), (179, 59734),

Gene: Orkz\_48 Start: 32007, Stop: 32492, Start Num: 100  
Candidate Starts for Orkz\_48:  
(Start: 100 @32007 has 346 MA's), (112, 32031), (144, 32229),

Gene: Ottawa\_81 Start: 48211, Stop: 48849, Start Num: 100  
Candidate Starts for Ottawa\_81:  
(Start: 100 @48211 has 346 MA's), (121, 48292), (164, 48514),

Gene: OverPar\_87 Start: 55336, Stop: 55722, Start Num: 100  
Candidate Starts for OverPar\_87:  
(Start: 100 @55336 has 346 MA's), (118, 55387), (120, 55408), (124, 55429), (131, 55468), (133, 55483), (136, 55501), (147, 55558), (149, 55561), (158, 55618),

Gene: PFR1\_50 Start: 34850, Stop: 35323, Start Num: 100  
Candidate Starts for PFR1\_50:  
(Start: 100 @34850 has 346 MA's), (114, 34877), (136, 35024), (138, 35048), (144, 35072), (146, 35078), (158, 35141), (168, 35165), (172, 35177),

Gene: PFR2\_52 Start: 36419, Stop: 36892, Start Num: 100  
Candidate Starts for PFR2\_52:  
(Start: 100 @36419 has 346 MA's), (114, 36446), (136, 36593), (138, 36617), (144, 36641), (146, 36647), (158, 36710), (168, 36734), (172, 36746),

Gene: PSonyx\_96 Start: 53094, Stop: 52513, Start Num: 100  
Candidate Starts for PSonyx\_96:  
(74, 53160), (Start: 100 @53094 has 346 MA's), (118, 53040), (138, 52896), (144, 52872),

Gene: PYPDinur\_82 Start: 54492, Stop: 54899, Start Num: 100  
Candidate Starts for PYPDinur\_82:  
(Start: 100 @54492 has 346 MA's), (120, 54564), (124, 54585), (131, 54624), (147, 54714), (149, 54717), (184, 54858),

Gene: PaddyBaddy\_100 Start: 59508, Stop: 59948, Start Num: 102  
Candidate Starts for PaddyBaddy\_100:  
(Start: 102 @59508 has 127 MA's), (125, 59607), (138, 59703), (149, 59739), (162, 59805), (179, 59853),

Gene: Palpatine\_101 Start: 60595, Stop: 61035, Start Num: 102  
Candidate Starts for Palpatine\_101:  
(Start: 102 @60595 has 127 MA's), (125, 60694), (138, 60790), (149, 60826), (162, 60892), (179, 60940),

Gene: PapayaSalad\_45 Start: 30774, Stop: 31235, Start Num: 100  
Candidate Starts for PapayaSalad\_45:  
(30, 30519), (32, 30534), (67, 30690), (Start: 100 @30774 has 346 MA's), (134, 30936), (135, 30942),

Gene: Paperbeatsrock\_99 Start: 59972, Stop: 60412, Start Num: 102  
Candidate Starts for Paperbeatsrock\_99:  
(Start: 102 @59972 has 127 MA's), (121, 60053), (125, 60071), (149, 60203), (162, 60269), (179, 60317),

Gene: Paschalis\_64 Start: 40592, Stop: 41095, Start Num: 100  
Candidate Starts for Paschalis\_64:  
(Start: 100 @40592 has 346 MA's), (109, 40607), (144, 40814), (164, 40898), (179, 40940),

Gene: Pat3\_97 Start: 58489, Stop: 58929, Start Num: 102  
Candidate Starts for Pat3\_97:  
(77, 58432), (Start: 102 @58489 has 127 MA's), (125, 58588), (149, 58720), (162, 58786), (179, 58834),

Gene: PegLeg\_66 Start: 43606, Stop: 44052, Start Num: 100  
Candidate Starts for PegLeg\_66:  
(84, 43570), (Start: 100 @43606 has 346 MA's), (121, 43690), (134, 43771), (137, 43795), (179, 43954),

Gene: Pelletreau\_64 Start: 35301, Stop: 35780, Start Num: 100  
Candidate Starts for Pelletreau\_64:  
(Start: 100 @35301 has 346 MA's), (121, 35382), (136, 35475), (144, 35523), (146, 35529), (164, 35607), (181, 35658),

Gene: Persistence\_65 Start: 36167, Stop: 36694, Start Num: 104  
Candidate Starts for Persistence\_65:  
(Start: 104 @36167 has 34 MA's), (140, 36386), (162, 36479), (168, 36494),

Gene: Petra64142\_104 Start: 60461, Stop: 60901, Start Num: 102  
Candidate Starts for Petra64142\_104:  
(70, 60389), (Start: 102 @60461 has 127 MA's), (125, 60560), (138, 60656), (149, 60692), (162, 60758), (179, 60806),

Gene: PetriParty\_56 Start: 34889, Stop: 35326, Start Num: 100  
Candidate Starts for PetriParty\_56:  
(Start: 100 @34889 has 346 MA's), (121, 34970),

Gene: Phaja\_98 Start: 59176, Stop: 59616, Start Num: 102

Candidate Starts for Phaja\_98:

(36, 58975), (37, 58978), (Start: 42 @59005 has 1 MA's), (43, 59008), (52, 59050), (70, 59104), (Start: 102 @59176 has 127 MA's), (121, 59257), (125, 59275), (149, 59407), (162, 59473), (179, 59521),

Gene: Pharsalus\_97 Start: 59671, Stop: 60111, Start Num: 102

Candidate Starts for Pharsalus\_97:

(Start: 102 @59671 has 127 MA's), (125, 59770), (149, 59902), (162, 59968), (179, 60016),

Gene: PhatBacter\_103 Start: 60340, Stop: 60780, Start Num: 102

Candidate Starts for PhatBacter\_103:

(Start: 102 @60340 has 127 MA's), (125, 60439), (138, 60535), (149, 60571), (162, 60637), (179, 60685),

Gene: Phaux\_102 Start: 60900, Stop: 61340, Start Num: 102

Candidate Starts for Phaux\_102:

(Start: 102 @60900 has 127 MA's), (125, 60999), (138, 61095), (149, 61131), (162, 61197), (179, 61245),

Gene: PhedwardCullen\_62 Start: 40315, Stop: 40818, Start Num: 100

Candidate Starts for PhedwardCullen\_62:

(Start: 100 @40315 has 346 MA's), (109, 40330), (144, 40537), (164, 40621), (179, 40663),

Gene: PhillyJawn\_46 Start: 28535, Stop: 29029, Start Num: 100

Candidate Starts for PhillyJawn\_46:

(Start: 100 @28535 has 346 MA's), (144, 28757), (151, 28778), (179, 28883),

Gene: Phingu\_48 Start: 28765, Stop: 29259, Start Num: 100

Candidate Starts for Phingu\_48:

(Start: 100 @28765 has 346 MA's), (144, 28987), (151, 29008), (164, 29071), (179, 29113),

Gene: PhinkBoden\_126 Start: 72216, Stop: 72725, Start Num: 100

Candidate Starts for PhinkBoden\_126:

(Start: 100 @72216 has 346 MA's), (109, 72231), (112, 72240), (144, 72438), (179, 72564), (185, 72615), (196, 72675),

Gene: PhluffyCoco\_55 Start: 33606, Stop: 34115, Start Num: 100

Candidate Starts for PhluffyCoco\_55:

(Start: 100 @33606 has 346 MA's), (117, 33645), (121, 33687), (128, 33720), (136, 33780), (144, 33828), (149, 33840), (158, 33897), (164, 33912), (172, 33933), (179, 33954),

Gene: Phonegingi\_45 Start: 28583, Stop: 29074, Start Num: 100

Candidate Starts for Phonegingi\_45:

(Start: 100 @28583 has 346 MA's), (144, 28805), (164, 28889), (179, 28931),

Gene: Phorgeous\_64 Start: 40378, Stop: 40884, Start Num: 100

Candidate Starts for Phorgeous\_64:

(Start: 100 @40378 has 346 MA's), (109, 40393), (144, 40600), (164, 40684), (179, 40726),

Gene: Phrancesco\_64 Start: 40701, Stop: 41207, Start Num: 100

Candidate Starts for Phrancesco\_64:

(Start: 100 @40701 has 346 MA's), (109, 40716), (144, 40923), (164, 41007), (179, 41049),

Gene: Phrank15\_74 Start: 38031, Stop: 38585, Start Num: 104

Candidate Starts for Phrank15\_74:

(85, 37992), (Start: 104 @38031 has 34 MA's), (126, 38133), (140, 38250),

Gene: Phrux\_97 Start: 59176, Stop: 59616, Start Num: 102

Candidate Starts for Phrux\_97:

(Start: 102 @59176 has 127 MA's), (125, 59275), (138, 59371), (149, 59407), (162, 59473), (179, 59521),

Gene: PhuzzTulsa\_94 Start: 57565, Stop: 56960, Start Num: 100

Candidate Starts for PhuzzTulsa\_94:

(Start: 100 @57565 has 346 MA's), (118, 57511), (134, 57403), (159, 57271), (162, 57265), (164, 57259), (172, 57238),

Gene: Picard\_46 Start: 31479, Stop: 31958, Start Num: 100

Candidate Starts for Picard\_46:

(13, 31044), (23, 31185), (26, 31200), (39, 31293), (59, 31374), (Start: 100 @31479 has 346 MA's), (136, 31653), (146, 31707),

Gene: Piccadilly\_45 Start: 30655, Stop: 31134, Start Num: 100

Candidate Starts for Piccadilly\_45:

(Start: 100 @30655 has 346 MA's), (158, 30946),

Gene: Piccoletto\_35 Start: 30574, Stop: 31161, Start Num: 100

Candidate Starts for Piccoletto\_35:

(Start: 100 @30574 has 346 MA's), (112, 30598), (144, 30796), (175, 30910), (195, 31045),

Gene: Pickles13\_44 Start: 28847, Stop: 29341, Start Num: 100

Candidate Starts for Pickles13\_44:

(Start: 100 @28847 has 346 MA's), (144, 29069), (151, 29090), (164, 29153), (179, 29195),

Gene: PierreOrion\_64 Start: 40801, Stop: 41307, Start Num: 100

Candidate Starts for PierreOrion\_64:

(Start: 100 @40801 has 346 MA's), (109, 40816), (144, 41023), (164, 41107), (179, 41149),

Gene: Pigu\_55 Start: 30241, Stop: 30699, Start Num: 104

Candidate Starts for Pigu\_55:

(Start: 104 @30241 has 34 MA's), (112, 30265), (118, 30295), (164, 30559),

Gene: PiperSansNom\_65 Start: 40883, Stop: 41386, Start Num: 100

Candidate Starts for PiperSansNom\_65:

(Start: 100 @40883 has 346 MA's), (109, 40898), (144, 41105), (164, 41189), (179, 41231),

Gene: Piperis\_65 Start: 40503, Stop: 41009, Start Num: 100

Candidate Starts for Piperis\_65:

(Start: 100 @40503 has 346 MA's), (109, 40518), (144, 40725), (164, 40809), (179, 40851),

Gene: Pippa\_37 Start: 30966, Stop: 31526, Start Num: 100

Candidate Starts for Pippa\_37:

(Start: 100 @30966 has 346 MA's), (112, 30990), (144, 31188), (172, 31293), (175, 31302), (179, 31314), (195, 31410),

Gene: Pitbull\_60 Start: 34082, Stop: 34579, Start Num: 99

Candidate Starts for Pitbull\_60:

(Start: 99 @34082 has 3 MA's), (136, 34256), (158, 34373), (172, 34409), (179, 34430),

Gene: Pointis\_93 Start: 57013, Stop: 56408, Start Num: 100

Candidate Starts for Pointis\_93:

(Start: 100 @57013 has 346 MA's), (118, 56959), (134, 56851), (159, 56719), (162, 56713), (164, 56707), (180, 56662),

Gene: Policronamos\_102 Start: 60604, Stop: 61044, Start Num: 102

Candidate Starts for Policronamos\_102:

(Start: 102 @60604 has 127 MA's), (125, 60703), (138, 60799), (149, 60835), (162, 60901), (179, 60949),

Gene: Poochiewood\_80 Start: 54099, Stop: 54482, Start Num: 100

Candidate Starts for Poochiewood\_80:

(Start: 100 @54099 has 346 MA's), (124, 54192), (133, 54246), (136, 54264), (149, 54324), (158, 54381),

Gene: Popstraw\_92 Start: 57189, Stop: 56584, Start Num: 100

Candidate Starts for Popstraw\_92:

(Start: 100 @57189 has 346 MA's), (118, 57135), (134, 57027), (159, 56895), (162, 56889), (164, 56883),

Gene: Porky\_99 Start: 58920, Stop: 59360, Start Num: 102

Candidate Starts for Porky\_99:

(Start: 102 @58920 has 127 MA's), (125, 59019), (138, 59115), (149, 59151), (162, 59217), (179, 59265),

Gene: Prairie\_42 Start: 31210, Stop: 31767, Start Num: 100

Candidate Starts for Prairie\_42:

(Start: 100 @31210 has 346 MA's), (144, 31432), (158, 31501), (179, 31558),

Gene: PrincessTrina\_102 Start: 64305, Stop: 64874, Start Num: 100

Candidate Starts for PrincessTrina\_102:

(Start: 100 @64305 has 346 MA's), (121, 64386), (133, 64461), (138, 64503), (144, 64527), (146, 64533), (149, 64539), (164, 64611), (172, 64632), (179, 64653),

Gene: Ptowny\_96 Start: 58093, Stop: 58452, Start Num: 121

Candidate Starts for Ptowny\_96:

(36, 57811), (37, 57814), (Start: 42 @57841 has 1 MA's), (43, 57844), (52, 57886), (70, 57940), (Start: 102 @58012 has 127 MA's), (121, 58093), (125, 58111), (149, 58243), (162, 58309), (179, 58357),

Gene: Pulchra\_66 Start: 40899, Stop: 41405, Start Num: 100

Candidate Starts for Pulchra\_66:

(Start: 100 @40899 has 346 MA's), (109, 40914), (144, 41121), (164, 41205), (179, 41247),

Gene: Pumpkin\_102 Start: 59517, Stop: 59957, Start Num: 102

Candidate Starts for Pumpkin\_102:

(43, 59355), (70, 59445), (Start: 102 @59517 has 127 MA's), (125, 59616), (149, 59748), (162, 59814), (179, 59862),

Gene: Pureglobe5\_96 Start: 57675, Stop: 57070, Start Num: 100

Candidate Starts for Pureglobe5\_96:

(Start: 100 @57675 has 346 MA's), (118, 57621), (134, 57513), (159, 57381), (162, 57375), (164, 57369), (180, 57324),

Gene: Purplicious\_86 Start: 55193, Stop: 55615, Start Num: 100

Candidate Starts for Purplicious\_86:

(34, 54968), (40, 55007), (61, 55088), (97, 55190), (Start: 100 @55193 has 346 MA's), (122, 55277), (126, 55295), (159, 55487), (162, 55493),

Gene: Quallification\_101 Start: 60386, Stop: 60826, Start Num: 102

Candidate Starts for Quallification\_101:

(Start: 102 @60386 has 127 MA's), (125, 60485), (138, 60581), (149, 60617), (162, 60683), (179, 60731),

Gene: Quby\_83 Start: 53820, Stop: 54227, Start Num: 100

Candidate Starts for Quby\_83:

(Start: 100 @53820 has 346 MA's), (120, 53892), (124, 53913), (131, 53952), (133, 53967), (137, 53997), (147, 54042), (149, 54045), (184, 54186),

Gene: Quhwah\_68 Start: 41191, Stop: 41694, Start Num: 100

Candidate Starts for Quhwah\_68:

(Start: 100 @41191 has 346 MA's), (109, 41206), (144, 41413), (164, 41497), (179, 41539),

Gene: REQ3\_26 Start: 12169, Stop: 12615, Start Num: 103

Candidate Starts for REQ3\_26:

(103, 12169), (117, 12205), (118, 12220), (134, 12328), (136, 12340), (141, 12376), (179, 12514),

Gene: RIPWilbur\_95 Start: 56992, Stop: 56387, Start Num: 100

Candidate Starts for RIPWilbur\_95:

(Start: 100 @56992 has 346 MA's), (118, 56938), (134, 56830), (159, 56698), (162, 56692), (164, 56686), (172, 56665),

Gene: RadFad\_76 Start: 38827, Stop: 39300, Start Num: 107

Candidate Starts for RadFad\_76:

(Start: 107 @38827 has 10 MA's), (118, 38872), (142, 39028),

Gene: Rakim\_101 Start: 59237, Stop: 59848, Start Num: 42

Candidate Starts for Rakim\_101:

(36, 59207), (37, 59210), (Start: 42 @59237 has 1 MA's), (43, 59240), (52, 59282), (70, 59336), (Start: 102 @59408 has 127 MA's), (125, 59507), (149, 59639), (162, 59705), (179, 59753),

Gene: Raleigh\_44 Start: 33967, Stop: 34464, Start Num: 100

Candidate Starts for Raleigh\_44:

(54, 33844), (56, 33853), (Start: 100 @33967 has 346 MA's), (124, 34063), (133, 34123), (135, 34135), (146, 34195),

Gene: Ramiel05\_63 Start: 40561, Stop: 41067, Start Num: 100

Candidate Starts for Ramiel05\_63:

(Start: 100 @40561 has 346 MA's), (109, 40576), (144, 40783), (164, 40867), (179, 40909),

Gene: Ranunculus\_85 Start: 57963, Stop: 57334, Start Num: 100

Candidate Starts for Ranunculus\_85:

(82, 58008), (Start: 100 @57963 has 346 MA's), (121, 57882), (136, 57789), (176, 57624), (189, 57519),

Gene: Raphaella\_71 Start: 37149, Stop: 37670, Start Num: 104

Candidate Starts for Raphaella\_71:

(Start: 104 @37149 has 34 MA's), (126, 37251), (140, 37368),

Gene: Raqqa\_67 Start: 35948, Stop: 36466, Start Num: 104

Candidate Starts for Raqqa\_67:

(Start: 104 @35948 has 34 MA's), (121, 36029), (140, 36167), (151, 36203), (159, 36254),

Gene: Rattail\_55 Start: 33692, Stop: 34201, Start Num: 100

Candidate Starts for Rattail\_55:

(Start: 100 @33692 has 346 MA's), (121, 33773), (128, 33806), (136, 33866), (144, 33914), (149, 33926), (158, 33983), (164, 33998), (172, 34019), (179, 34040),

Gene: RazzB\_95 Start: 56544, Stop: 55939, Start Num: 100

Candidate Starts for RazzB\_95:

(Start: 100 @56544 has 346 MA's), (134, 56382), (159, 56250), (162, 56244), (164, 56238), (172, 56217),

Gene: Red305\_85 Start: 55406, Stop: 55789, Start Num: 100

Candidate Starts for Red305\_85:

(Start: 100 @55406 has 346 MA's), (119, 55466), (120, 55478), (124, 55499), (133, 55559), (136, 55577), (149, 55637), (172, 55727),

Gene: RedFox\_55 Start: 33605, Stop: 34114, Start Num: 100

Candidate Starts for RedFox\_55:

(Start: 100 @33605 has 346 MA's), (121, 33686), (128, 33719), (136, 33779), (144, 33827), (149, 33839), (158, 33896), (164, 33911), (172, 33932), (179, 33953),

Gene: Reindeer\_69 Start: 45000, Stop: 45446, Start Num: 100

Candidate Starts for Reindeer\_69:

(86, 44970), (91, 44976), (Start: 100 @45000 has 346 MA's), (121, 45084), (134, 45165), (156, 45279), (179, 45348),

Gene: Ren19\_88 Start: 56144, Stop: 55521, Start Num: 100

Candidate Starts for Ren19\_88:

(76, 56201), (Start: 100 @56144 has 346 MA's), (124, 56048), (134, 55982), (138, 55946), (159, 55850), (168, 55829),

Gene: Renna12\_54 Start: 33458, Stop: 33970, Start Num: 100

Candidate Starts for Renna12\_54:

(Start: 100 @33458 has 346 MA's), (121, 33539), (128, 33572), (136, 33632), (144, 33680), (149, 33692), (158, 33749), (164, 33764), (172, 33785), (179, 33806),

Gene: Rey\_73 Start: 45977, Stop: 46417, Start Num: 100

Candidate Starts for Rey\_73:

(Start: 100 @45977 has 346 MA's), (134, 46142), (146, 46208), (162, 46280),

Gene: Richie\_74 Start: 38954, Stop: 39472, Start Num: 104

Candidate Starts for Richie\_74:

(Start: 104 @38954 has 34 MA's), (126, 39056), (140, 39173),

Gene: RickRoss\_14 Start: 6690, Stop: 6268, Start Num: 100

Candidate Starts for RickRoss\_14:

(Start: 100 @6690 has 346 MA's), (114, 6657), (131, 6543), (158, 6393), (173, 6354),

Gene: Rimmer\_98 Start: 59798, Stop: 60238, Start Num: 102

Candidate Starts for Rimmer\_98:

(77, 59741), (Start: 102 @59798 has 127 MA's), (125, 59897), (149, 60029), (162, 60095), (179, 60143),

Gene: RiverMonster\_100 Start: 60072, Stop: 60512, Start Num: 102

Candidate Starts for RiverMonster\_100:

(Start: 102 @60072 has 127 MA's), (125, 60171), (138, 60267), (149, 60303), (162, 60369), (179, 60417),

Gene: Rizwana\_72 Start: 51720, Stop: 51190, Start Num: 100

Candidate Starts for Rizwana\_72:

(Start: 100 @51720 has 346 MA's), (112, 51696), (131, 51579), (144, 51498), (152, 51474), (159, 51423), (164, 51411), (202, 51243),

Gene: RobsFeet\_68 Start: 42128, Stop: 42631, Start Num: 95

Candidate Starts for RobsFeet\_68:

(Start: 95 @42128 has 11 MA's), (136, 42302), (144, 42350), (179, 42476),

Gene: Rockwell\_63 Start: 40594, Stop: 41097, Start Num: 100

Candidate Starts for Rockwell\_63:

(Start: 100 @40594 has 346 MA's), (109, 40609), (144, 40816), (164, 40900), (179, 40942),

Gene: Rooter\_57 Start: 31640, Stop: 32134, Start Num: 104

Candidate Starts for Rooter\_57:

(Start: 104 @31640 has 34 MA's), (164, 31958),

Gene: Rose5\_83 Start: 53936, Stop: 54319, Start Num: 100

Candidate Starts for Rose5\_83:

(Start: 100 @53936 has 346 MA's), (124, 54029), (133, 54083), (136, 54101), (149, 54161), (158, 54218),

Gene: RoseMarie\_71 Start: 47075, Stop: 47518, Start Num: 100

Candidate Starts for RoseMarie\_71:

(84, 47039), (Start: 100 @47075 has 346 MA's), (121, 47159), (134, 47240), (137, 47264), (179, 47423),

Gene: RosiePosie\_101 Start: 64170, Stop: 64727, Start Num: 100

Candidate Starts for RosiePosie\_101:

(Start: 100 @64170 has 346 MA's), (116, 64206), (121, 64251), (124, 64266), (141, 64380), (144, 64392), (149, 64404), (164, 64476), (172, 64497), (179, 64518),

Gene: Rossetti\_86 Start: 55660, Stop: 56046, Start Num: 100

Candidate Starts for Rossetti\_86:

(Start: 100 @55660 has 346 MA's), (118, 55711), (120, 55732), (124, 55753), (131, 55792), (133, 55807), (136, 55825), (146, 55879), (147, 55882), (149, 55885), (158, 55942),

Gene: Ruchi\_52 Start: 33757, Stop: 34278, Start Num: 100

Candidate Starts for Ruchi\_52:

(Start: 100 @33757 has 346 MA's), (121, 33838), (144, 33979), (146, 33985), (181, 34114),

Gene: Rumpelstiltskin\_82 Start: 55099, Stop: 55485, Start Num: 100

Candidate Starts for Rumpelstiltskin\_82:

(Start: 100 @55099 has 346 MA's), (118, 55150), (120, 55171), (124, 55192), (131, 55231), (133, 55246), (136, 55264), (147, 55321), (149, 55324), (158, 55381),

Gene: SV1\_43 Start: 30169, Stop: 30636, Start Num: 100

Candidate Starts for SV1\_43:

(Start: 100 @30169 has 346 MA's), (114, 30196), (146, 30397),

Gene: Saints25\_97 Start: 58002, Stop: 58442, Start Num: 102

Candidate Starts for Saints25\_97:

(48, 57852), (57, 57882), (73, 57930), (80, 57945), (83, 57957), (Start: 102 @58002 has 127 MA's), (125, 58101), (138, 58197), (149, 58233), (162, 58299), (179, 58347),

Gene: Sakai\_69 Start: 37702, Stop: 38220, Start Num: 104

Candidate Starts for Sakai\_69:

(Start: 104 @37702 has 34 MA's), (126, 37804), (140, 37921),

Gene: Samty\_82 Start: 55171, Stop: 55554, Start Num: 100

Candidate Starts for Samty\_82:

(Start: 100 @55171 has 346 MA's), (119, 55231), (120, 55243), (124, 55264), (133, 55324), (136, 55342), (149, 55402), (172, 55492),

Gene: Sarge\_49 Start: 28989, Stop: 29513, Start Num: 104

Candidate Starts for Sarge\_49:

(Start: 104 @28989 has 34 MA's), (140, 29208),

Gene: Sarshaun\_86 Start: 55564, Stop: 55950, Start Num: 100

Candidate Starts for Sarshaun\_86:

(Start: 100 @55564 has 346 MA's), (118, 55615), (120, 55636), (124, 55657), (131, 55696), (133, 55711), (136, 55729), (147, 55786), (149, 55789), (158, 55846),

Gene: Sashimi\_69 Start: 38075, Stop: 38557, Start Num: 107

Candidate Starts for Sashimi\_69:

(Start: 107 @38075 has 10 MA's), (118, 38120), (121, 38147), (137, 38249), (149, 38297), (165, 38375),

Gene: Sassay\_95 Start: 58223, Stop: 58663, Start Num: 102

Candidate Starts for Sassay\_95:

(Start: 102 @58223 has 127 MA's), (125, 58322), (138, 58418), (149, 58454), (162, 58520), (179, 58568),

Gene: Satrap\_72 Start: 38229, Stop: 38750, Start Num: 104

Candidate Starts for Satrap\_72:

(85, 38190), (Start: 104 @38229 has 34 MA's), (140, 38448),

Gene: Savannah\_63 Start: 40621, Stop: 41124, Start Num: 100

Candidate Starts for Savannah\_63:

(Start: 100 @40621 has 346 MA's), (109, 40636), (144, 40843), (164, 40927), (179, 40969),

Gene: Scavito\_102 Start: 64163, Stop: 64732, Start Num: 100

Candidate Starts for Scavito\_102:

(Start: 100 @64163 has 346 MA's), (121, 64244), (133, 64319), (138, 64361), (144, 64385), (146, 64391), (149, 64397), (164, 64469), (172, 64490), (179, 64511),

Gene: Schlegelian\_46 Start: 31205, Stop: 31678, Start Num: 100

Candidate Starts for Schlegelian\_46:

(Start: 100 @31205 has 346 MA's), (144, 31427), (158, 31496),

Gene: Schmidt\_48 Start: 32790, Stop: 33275, Start Num: 100

Candidate Starts for Schmidt\_48:

(Start: 100 @32790 has 346 MA's), (114, 32817), (131, 32931), (134, 32952), (158, 33081), (164, 33096), (179, 33138),

Gene: ScoobySnack\_42 Start: 28346, Stop: 28837, Start Num: 100

Candidate Starts for ScoobySnack\_42:

(Start: 100 @28346 has 346 MA's), (144, 28568), (151, 28589), (164, 28652),

Gene: Scumberland\_66 Start: 40816, Stop: 41319, Start Num: 100

Candidate Starts for Scumberland\_66:

(Start: 100 @40816 has 346 MA's), (109, 40831), (144, 41038), (164, 41122), (179, 41164),

Gene: Seahorse\_76 Start: 40120, Stop: 40581, Start Num: 104

Candidate Starts for Seahorse\_76:

(Start: 104 @40120 has 34 MA's), (125, 40219), (137, 40312), (141, 40342), (182, 40489),

Gene: Selwyn23\_65 Start: 40733, Stop: 41236, Start Num: 100

Candidate Starts for Selwyn23\_65:

(Start: 100 @40733 has 346 MA's), (109, 40748), (144, 40955), (164, 41039), (179, 41081),

Gene: Shade\_37 Start: 30810, Stop: 31367, Start Num: 100

Candidate Starts for Shade\_37:

(66, 30723), (Start: 100 @30810 has 346 MA's), (112, 30834), (142, 31023), (144, 31032), (172, 31137), (175, 31146), (179, 31158), (195, 31251),

Gene: ShamWow\_100 Start: 60193, Stop: 60633, Start Num: 102

Candidate Starts for ShamWow\_100:

(Start: 102 @60193 has 127 MA's), (125, 60292), (138, 60388), (149, 60424), (162, 60490), (179, 60538),

Gene: Shen\_52 Start: 32901, Stop: 33380, Start Num: 100

Candidate Starts for Shen\_52:

(Start: 100 @32901 has 346 MA's), (121, 32982), (136, 33075), (144, 33123), (146, 33129), (164, 33207), (181, 33258),

Gene: Sheng711\_84 Start: 54126, Stop: 54533, Start Num: 100

Candidate Starts for Sheng711\_84:

(Start: 100 @54126 has 346 MA's), (120, 54198), (124, 54219), (131, 54258), (133, 54273), (137, 54303), (147, 54348), (149, 54351), (184, 54492),

Gene: ShereKhan\_98 Start: 60632, Stop: 61072, Start Num: 102

Candidate Starts for ShereKhan\_98:

(Start: 102 @60632 has 127 MA's), (125, 60731), (138, 60827), (149, 60863), (162, 60929), (179, 60977),

Gene: Shotgun\_64 Start: 40497, Stop: 41003, Start Num: 100  
Candidate Starts for Shotgun\_64:  
(Start: 100 @40497 has 346 MA's), (109, 40512), (144, 40719), (164, 40803), (179, 40845),

Gene: Shoya\_55 Start: 31189, Stop: 31710, Start Num: 104  
Candidate Starts for Shoya\_55:  
(Start: 104 @31189 has 34 MA's), (122, 31273), (124, 31285), (140, 31408),

Gene: Shrubaron\_68 Start: 41723, Stop: 42226, Start Num: 95  
Candidate Starts for Shrubaron\_68:  
(Start: 95 @41723 has 11 MA's), (144, 41945), (179, 42071),

Gene: Shukran\_69 Start: 37006, Stop: 37530, Start Num: 104  
Candidate Starts for Shukran\_69:  
(Start: 104 @37006 has 34 MA's), (140, 37225),

Gene: Sicarius2\_38 Start: 30424, Stop: 30954, Start Num: 100  
Candidate Starts for Sicarius2\_38:  
(Start: 100 @30424 has 346 MA's), (134, 30586), (136, 30598), (144, 30646), (151, 30667),

Gene: SilentRX\_70 Start: 50764, Stop: 50189, Start Num: 100  
Candidate Starts for SilentRX\_70:  
(Start: 100 @50764 has 346 MA's), (121, 50683), (137, 50578), (138, 50566), (144, 50542), (159, 50470),

Gene: Silverleaf\_82 Start: 53392, Stop: 53775, Start Num: 100  
Candidate Starts for Silverleaf\_82:  
(Start: 100 @53392 has 346 MA's), (124, 53485), (133, 53539), (136, 53557), (149, 53617), (158, 53674),

Gene: Simpliphy\_99 Start: 59643, Stop: 60083, Start Num: 102  
Candidate Starts for Simpliphy\_99:  
(Start: 102 @59643 has 127 MA's), (125, 59742), (138, 59838), (149, 59874), (162, 59940), (179, 59988),

Gene: SirDuracell\_100 Start: 59010, Stop: 59450, Start Num: 102  
Candidate Starts for SirDuracell\_100:  
(77, 58953), (Start: 102 @59010 has 127 MA's), (125, 59109), (149, 59241), (162, 59307), (179, 59355),

Gene: SirFrank\_64 Start: 40787, Stop: 41287, Start Num: 95  
Candidate Starts for SirFrank\_64:  
(Start: 95 @40787 has 11 MA's), (144, 41009), (152, 41033), (164, 41093), (179, 41135),

Gene: Skinny\_69 Start: 44296, Stop: 44742, Start Num: 100  
Candidate Starts for Skinny\_69:  
(84, 44260), (Start: 100 @44296 has 346 MA's), (121, 44380), (134, 44461), (137, 44485), (179, 44644),

Gene: Skitty\_54 Start: 33126, Stop: 33626, Start Num: 99  
Candidate Starts for Skitty\_54:  
(Start: 99 @33126 has 3 MA's), (136, 33300), (172, 33456), (179, 33477),

Gene: Skugga\_64 Start: 41045, Stop: 41545, Start Num: 100

Candidate Starts for Skugga\_64:

(Start: 100 @41045 has 346 MA's), (144, 41267), (164, 41351),

Gene: SlimJimmy\_66 Start: 43851, Stop: 44297, Start Num: 100

Candidate Starts for SlimJimmy\_66:

(84, 43815), (Start: 100 @43851 has 346 MA's), (121, 43935), (134, 44016), (137, 44040), (179, 44199),

Gene: Smarties\_74 Start: 42439, Stop: 42945, Start Num: 100

Candidate Starts for Smarties\_74:

(63, 42349), (79, 42394), (Start: 96 @42436 has 1 MA's), (Start: 100 @42439 has 346 MA's), (136, 42613), (144, 42661), (146, 42667), (164, 42745), (179, 42787),

Gene: Smoothie\_127 Start: 71932, Stop: 72441, Start Num: 100

Candidate Starts for Smoothie\_127:

(Start: 100 @71932 has 346 MA's), (109, 71947), (112, 71956), (144, 72154), (179, 72280), (185, 72331), (196, 72391),

Gene: Snenia\_83 Start: 55407, Stop: 55790, Start Num: 100

Candidate Starts for Snenia\_83:

(Start: 100 @55407 has 346 MA's), (119, 55467), (120, 55479), (124, 55500), (133, 55560), (136, 55578), (149, 55638), (172, 55728),

Gene: SoJo\_44 Start: 31978, Stop: 32505, Start Num: 100

Candidate Starts for SoJo\_44:

(23, 31687), (26, 31702), (39, 31795), (59, 31876), (62, 31885), (Start: 100 @31978 has 346 MA's), (135, 32146), (146, 32206), (150, 32215), (179, 32323), (201, 32485),

Gene: SoJulia\_87 Start: 56632, Stop: 57018, Start Num: 100

Candidate Starts for SoJulia\_87:

(Start: 100 @56632 has 346 MA's), (118, 56683), (120, 56704), (124, 56725), (131, 56764), (133, 56779), (136, 56797), (147, 56854), (149, 56857), (158, 56914),

Gene: Soap141\_85 Start: 55564, Stop: 55950, Start Num: 100

Candidate Starts for Soap141\_85:

(Start: 100 @55564 has 346 MA's), (118, 55615), (120, 55636), (124, 55657), (131, 55696), (133, 55711), (136, 55729), (147, 55786), (149, 55789), (158, 55846),

Gene: SonDevVon\_78 Start: 38751, Stop: 39269, Start Num: 104

Candidate Starts for SonDevVon\_78:

(85, 38712), (Start: 104 @38751 has 34 MA's), (140, 38970),

Gene: Sonali\_48 Start: 38621, Stop: 39217, Start Num: 100

Candidate Starts for Sonali\_48:

(Start: 100 @38621 has 346 MA's), (137, 38807), (147, 38852), (164, 38927),

Gene: Sonny\_37 Start: 30840, Stop: 31397, Start Num: 100

Candidate Starts for Sonny\_37:

(66, 30753), (Start: 100 @30840 has 346 MA's), (112, 30864), (142, 31053), (144, 31062), (172, 31167), (175, 31176), (179, 31188), (195, 31281),

Gene: Soos\_82 Start: 55154, Stop: 55576, Start Num: 100

Candidate Starts for Soos\_82:

(34, 54929), (40, 54968), (61, 55049), (97, 55151), (Start: 100 @55154 has 346 MA's), (122, 55238), (126, 55256), (159, 55448), (162, 55454),

Gene: SophKB\_97 Start: 58991, Stop: 59434, Start Num: 102

Candidate Starts for SophKB\_97:

(Start: 102 @58991 has 127 MA's), (121, 59072), (125, 59090), (149, 59222), (162, 59288), (179, 59336), (192, 59423),

Gene: Sotrice96\_101 Start: 59897, Stop: 60337, Start Num: 102

Candidate Starts for Sotrice96\_101:

(Start: 102 @59897 has 127 MA's), (125, 59996), (149, 60128), (162, 60194), (179, 60242),

Gene: Spartan\_54 Start: 40548, Stop: 41030, Start Num: 104

Candidate Starts for Spartan\_54:

(Start: 104 @40548 has 34 MA's), (115, 40578), (125, 40647), (139, 40746), (146, 40773), (149, 40779), (169, 40842), (174, 40857), (178, 40863), (180, 40869),

Gene: SpeedDemon\_850 Start: 59020, Stop: 58460, Start Num: 105

Candidate Starts for SpeedDemon\_850:

(Start: 105 @59020 has 7 MA's), (164, 58687), (183, 58621),

Gene: SpicyFrank\_74 Start: 38376, Stop: 38855, Start Num: 107

Candidate Starts for SpicyFrank\_74:

(Start: 107 @38376 has 10 MA's), (153, 38619), (155, 38634), (159, 38670), (163, 38676),

Gene: Splinter\_54 Start: 36171, Stop: 36677, Start Num: 100

Candidate Starts for Splinter\_54:

(Start: 100 @36171 has 346 MA's), (134, 36333), (149, 36405), (164, 36477), (179, 36519),

Gene: Sporco\_74 Start: 39484, Stop: 40005, Start Num: 104

Candidate Starts for Sporco\_74:

(Start: 104 @39484 has 34 MA's), (126, 39586), (140, 39703),

Gene: Stank\_102 Start: 59671, Stop: 60111, Start Num: 102

Candidate Starts for Stank\_102:

(36, 59470), (37, 59473), (Start: 42 @59500 has 1 MA's), (43, 59503), (52, 59545), (70, 59599), (Start: 102 @59671 has 127 MA's), (125, 59770), (149, 59902), (162, 59968), (179, 60016),

Gene: Stark\_101 Start: 59955, Stop: 60395, Start Num: 102

Candidate Starts for Stark\_101:

(Start: 102 @59955 has 127 MA's), (125, 60054), (138, 60150), (149, 60186), (162, 60252), (179, 60300),

Gene: StellaBean\_99 Start: 60033, Stop: 60473, Start Num: 102

Candidate Starts for StellaBean\_99:

(Start: 102 @60033 has 127 MA's), (125, 60132), (149, 60264), (162, 60330), (179, 60378),

Gene: StevieBAY\_37 Start: 30898, Stop: 31446, Start Num: 100

Candidate Starts for StevieBAY\_37:

(Start: 100 @30898 has 346 MA's), (112, 30922), (144, 31120), (175, 31234), (179, 31246), (195, 31324),

Gene: Stillion\_89 Start: 56519, Stop: 56941, Start Num: 100

Candidate Starts for Stillion\_89:

(34, 56294), (40, 56333), (61, 56414), (97, 56516), (Start: 100 @56519 has 346 MA's), (122, 56603), (159, 56813), (162, 56819),

Gene: Sting\_85 Start: 55593, Stop: 56015, Start Num: 100

Candidate Starts for Sting\_85:

(34, 55368), (40, 55407), (61, 55488), (97, 55590), (Start: 100 @55593 has 346 MA's), (122, 55677), (126, 55695), (159, 55887), (162, 55893),

Gene: StolenFromERC\_102 Start: 59596, Stop: 60036, Start Num: 102

Candidate Starts for StolenFromERC\_102:

(36, 59395), (37, 59398), (Start: 42 @59425 has 1 MA's), (43, 59428), (52, 59470), (70, 59524), (Start: 102 @59596 has 127 MA's), (125, 59695), (149, 59827), (162, 59893), (179, 59941),

Gene: StormChicken\_101 Start: 59962, Stop: 60402, Start Num: 102

Candidate Starts for StormChicken\_101:

(70, 59890), (Start: 102 @59962 has 127 MA's), (125, 60061), (138, 60157), (149, 60193), (162, 60259), (179, 60307),

Gene: StuartMinion\_46 Start: 30321, Stop: 30833, Start Num: 100

Candidate Starts for StuartMinion\_46:

(Start: 100 @30321 has 346 MA's), (118, 30375), (128, 30435), (133, 30477), (136, 30495), (164, 30627), (172, 30648),

Gene: Sunfish\_74 Start: 46316, Stop: 45759, Start Num: 100

Candidate Starts for Sunfish\_74:

(Start: 100 @46316 has 346 MA's), (112, 46292), (118, 46262), (121, 46235), (172, 45989), (179, 45968), (190, 45893), (204, 45806),

Gene: Sunny\_ Start: 42733, Stop: 43239, Start Num: 100

Candidate Starts for Sunny\_:

(Start: 100 @42733 has 346 MA's), (136, 42907), (138, 42931), (142, 42946), (151, 42976), (164, 43039), (179, 43081),

Gene: SunnyJune\_46 Start: 33142, Stop: 33582, Start Num: 107

Candidate Starts for SunnyJune\_46:

(Start: 107 @33142 has 10 MA's), (122, 33217),

Gene: Sunshine23\_50 Start: 38506, Stop: 39102, Start Num: 100

Candidate Starts for Sunshine23\_50:

(Start: 100 @38506 has 346 MA's), (137, 38692), (147, 38737), (164, 38812),

Gene: Sweetums\_43 Start: 26566, Stop: 26072, Start Num: 100

Candidate Starts for Sweetums\_43:

(Start: 100 @26566 has 346 MA's), (179, 26218),

Gene: TBrady12\_103 Start: 59111, Stop: 59551, Start Num: 102

Candidate Starts for TBrady12\_103:

(36, 58910), (37, 58913), (Start: 42 @58940 has 1 MA's), (43, 58943), (52, 58985), (70, 59039), (Start: 102 @59111 has 127 MA's), (125, 59210), (138, 59306), (149, 59342), (162, 59408), (179, 59456),

Gene: TZGordon\_56 Start: 35517, Stop: 36008, Start Num: 100

Candidate Starts for TZGordon\_56:

(Start: 100 @35517 has 346 MA's), (134, 35679), (149, 35751), (156, 35796), (164, 35823),

Gene: TaeYoung\_37 Start: 30823, Stop: 31371, Start Num: 100

Candidate Starts for TaeYoung\_37:

(66, 30736), (Start: 100 @30823 has 346 MA's), (112, 30847), (136, 30997), (137, 31009), (144, 31045), (172, 31150), (179, 31171), (195, 31255),

Gene: Tank\_72 Start: 51819, Stop: 51199, Start Num: 100

Candidate Starts for Tank\_72:

(Start: 100 @51819 has 346 MA's), (112, 51795), (121, 51738), (144, 51597), (165, 51513),

Gene: Taotie\_93 Start: 50121, Stop: 49516, Start Num: 100

Candidate Starts for Taotie\_93:

(74, 50187), (Start: 100 @50121 has 346 MA's), (144, 49899), (152, 49875),

Gene: Tarkin\_99 Start: 60497, Stop: 60937, Start Num: 102

Candidate Starts for Tarkin\_99:

(Start: 102 @60497 has 127 MA's), (125, 60596), (138, 60692), (149, 60728), (162, 60794), (179, 60842),

Gene: TaylorSipht\_54 Start: 34187, Stop: 34702, Start Num: 100

Candidate Starts for TaylorSipht\_54:

(Start: 100 @34187 has 346 MA's), (121, 34268), (146, 34415), (149, 34421), (164, 34493), (172, 34514), (181, 34544),

Gene: TeamEdward\_100 Start: 60159, Stop: 60599, Start Num: 102

Candidate Starts for TeamEdward\_100:

(Start: 102 @60159 has 127 MA's), (125, 60258), (138, 60354), (149, 60390), (162, 60456), (179, 60504),

Gene: Teamocil\_68 Start: 40761, Stop: 41264, Start Num: 95

Candidate Starts for Teamocil\_68:

(Start: 95 @40761 has 11 MA's), (144, 40983), (164, 41067),

Gene: TeardropMSU\_96 Start: 58978, Stop: 59418, Start Num: 102

Candidate Starts for TeardropMSU\_96:

(Start: 102 @58978 has 127 MA's), (125, 59077), (149, 59209), (162, 59275), (179, 59323),

Gene: Teaspoon\_101 Start: 59854, Stop: 60294, Start Num: 102

Candidate Starts for Teaspoon\_101:

(Start: 102 @59854 has 127 MA's), (125, 59953), (138, 60049), (149, 60085), (162, 60151), (179, 60199),

Gene: Teng\_47 Start: 26473, Stop: 25979, Start Num: 100

Candidate Starts for Teng\_47:

(Start: 100 @26473 has 346 MA's), (134, 26311), (179, 26125),

Gene: Terij\_60 Start: 39794, Stop: 40297, Start Num: 100

Candidate Starts for Terij\_60:

(Start: 100 @39794 has 346 MA's), (144, 40016), (164, 40100), (179, 40142),

Gene: Terminus\_103 Start: 60897, Stop: 61337, Start Num: 102

Candidate Starts for Terminus\_103:

(Start: 102 @60897 has 127 MA's), (125, 60996), (138, 61092), (149, 61128), (162, 61194), (179, 61242),

Gene: ThayneTheZag\_76 Start: 38042, Stop: 38506, Start Num: 104

Candidate Starts for ThayneTheZag\_76:

(Start: 104 @38042 has 34 MA's), (125, 38141), (137, 38234), (182, 38411),

Gene: Thimble\_102 Start: 58861, Stop: 59301, Start Num: 102

Candidate Starts for Thimble\_102:

(36, 58660), (37, 58663), (Start: 42 @58690 has 1 MA's), (43, 58693), (52, 58735), (70, 58789), (Start: 102 @58861 has 127 MA's), (125, 58960), (138, 59056), (149, 59092), (162, 59158), (179, 59206),

Gene: Thresher\_102 Start: 60735, Stop: 61175, Start Num: 102

Candidate Starts for Thresher\_102:

(Start: 102 @60735 has 127 MA's), (125, 60834), (138, 60930), (149, 60966), (162, 61032), (179, 61080),

Gene: Tiff81\_67 Start: 36649, Stop: 37155, Start Num: 104

Candidate Starts for Tiff81\_67:

(Start: 104 @36649 has 34 MA's), (121, 36730), (140, 36868),

Gene: Timinator\_37 Start: 30897, Stop: 31436, Start Num: 100

Candidate Starts for Timinator\_37:

(Start: 100 @30897 has 346 MA's), (112, 30921), (144, 31119), (179, 31245), (199, 31344),

Gene: TinaLin\_53 Start: 34968, Stop: 35471, Start Num: 100

Candidate Starts for TinaLin\_53:

(Start: 100 @34968 has 346 MA's), (134, 35130), (156, 35247), (158, 35259), (159, 35262), (164, 35274),

Gene: Toad24\_55 Start: 35041, Stop: 35520, Start Num: 100

Candidate Starts for Toad24\_55:

(Start: 100 @35041 has 346 MA's), (121, 35122), (136, 35215), (144, 35263), (146, 35269), (164, 35347), (181, 35398),

Gene: ToastyFinz\_43 Start: 32811, Stop: 33314, Start Num: 100

Candidate Starts for ToastyFinz\_43:

(5, 32205), (6, 32223), (13, 32376), (14, 32385), (23, 32517), (26, 32532), (39, 32625), (59, 32706), (62, 32715), (Start: 100 @32811 has 346 MA's), (118, 32865), (121, 32892), (136, 32985), (146, 33039), (162, 33108),

Gene: Tomaszewski\_95 Start: 59435, Stop: 59875, Start Num: 102

Candidate Starts for Tomaszewski\_95:

(77, 59378), (Start: 102 @59435 has 127 MA's), (125, 59534), (138, 59630), (149, 59666), (162, 59732), (179, 59780),

Gene: Toniann\_126 Start: 71461, Stop: 71970, Start Num: 100

Candidate Starts for Toniann\_126:

(Start: 100 @71461 has 346 MA's), (109, 71476), (112, 71485), (144, 71683), (179, 71809), (185, 71860), (196, 71920),

Gene: Tophat\_102 Start: 64352, Stop: 64921, Start Num: 100

Candidate Starts for Tophat\_102:

(Start: 100 @64352 has 346 MA's), (121, 64433), (133, 64508), (138, 64550), (144, 64574), (146, 64580), (149, 64586), (164, 64658), (172, 64679), (179, 64700),

Gene: Toto\_98 Start: 60193, Stop: 60633, Start Num: 102

Candidate Starts for Toto\_98:

(Start: 102 @60193 has 127 MA's), (125, 60292), (138, 60388), (149, 60424), (162, 60490), (179, 60538),

Gene: Tourach\_84 Start: 55589, Stop: 55975, Start Num: 100

Candidate Starts for Tourach\_84:

(Start: 100 @55589 has 346 MA's), (118, 55640), (120, 55661), (124, 55682), (131, 55721), (133, 55736), (136, 55754), (147, 55811), (149, 55814), (158, 55871), (172, 55907),

Gene: Towmatter\_74 Start: 52770, Stop: 52270, Start Num: 105

Candidate Starts for Towmatter\_74:

(Start: 105 @52770 has 7 MA's), (122, 52692),

Gene: TpudiCK\_69 Start: 43866, Stop: 44312, Start Num: 100

Candidate Starts for TpudiCK\_69:

(84, 43830), (Start: 100 @43866 has 346 MA's), (121, 43950), (134, 44031), (137, 44055), (179, 44214),

Gene: Traaww1\_96 Start: 58700, Stop: 59140, Start Num: 102

Candidate Starts for Traaww1\_96:

(36, 58499), (37, 58502), (Start: 42 @58529 has 1 MA's), (43, 58532), (52, 58574), (70, 58628), (Start: 102 @58700 has 127 MA's), (121, 58781), (125, 58799), (149, 58931), (162, 58997), (179, 59045),

Gene: TriFive\_85 Start: 55519, Stop: 55902, Start Num: 100

Candidate Starts for TriFive\_85:

(Start: 100 @55519 has 346 MA's), (119, 55579), (120, 55591), (124, 55612), (133, 55672), (136, 55690), (149, 55750), (172, 55840),

Gene: TripleJ\_56 Start: 34802, Stop: 35257, Start Num: 100

Candidate Starts for TripleJ\_56:

(88, 34775), (Start: 100 @34802 has 346 MA's), (121, 34883), (136, 34976), (137, 34988), (146, 35030), (159, 35096),

Gene: Tubberson\_44 Start: 31979, Stop: 32506, Start Num: 100

Candidate Starts for Tubberson\_44:

(23, 31688), (26, 31703), (39, 31796), (59, 31877), (62, 31886), (Start: 100 @31979 has 346 MA's), (135, 32147), (146, 32207), (150, 32216), (179, 32324), (201, 32486),

Gene: Tuco\_101 Start: 61058, Stop: 61498, Start Num: 102

Candidate Starts for Tuco\_101:

(Start: 102 @61058 has 127 MA's), (125, 61157), (149, 61289), (162, 61355), (179, 61403),

Gene: TyDawg\_67 Start: 43867, Stop: 44313, Start Num: 100

Candidate Starts for TyDawg\_67:

(84, 43831), (Start: 100 @43867 has 346 MA's), (121, 43951), (134, 44032), (137, 44056), (179, 44215),

Gene: Tyrumbra\_63 Start: 41408, Stop: 41914, Start Num: 95

Candidate Starts for Tyrumbra\_63:

(15, 41000), (17, 41045), (Start: 95 @41408 has 11 MA's), (136, 41582), (144, 41630), (179, 41756),

Gene: Tyson\_83 Start: 53862, Stop: 54245, Start Num: 100

Candidate Starts for Tyson\_83:

(Start: 100 @53862 has 346 MA's), (124, 53955), (133, 54009), (136, 54027), (149, 54087), (158, 54144),

Gene: UPIE\_81 Start: 53458, Stop: 53841, Start Num: 100

Candidate Starts for UPIE\_81:

(Start: 100 @53458 has 346 MA's), (124, 53551), (133, 53605), (136, 53623), (149, 53683), (158, 53740),

Gene: Ukulele\_95 Start: 59455, Stop: 59895, Start Num: 102

Candidate Starts for Ukulele\_95:

(Start: 102 @59455 has 127 MA's), (125, 59554), (138, 59650), (149, 59686), (162, 59752), (179, 59800),

Gene: Underpass\_77 Start: 50342, Stop: 50728, Start Num: 100

Candidate Starts for Underpass\_77:

(Start: 100 @50342 has 346 MA's), (118, 50393), (120, 50414), (124, 50435), (131, 50474), (133, 50489), (136, 50507), (147, 50564), (149, 50567), (158, 50624),

Gene: ValentiniPuff\_105 Start: 59002, Stop: 59508, Start Num: 100

Candidate Starts for ValentiniPuff\_105:

(72, 58930), (Start: 100 @59002 has 346 MA's), (Start: 107 @59014 has 10 MA's), (109, 59017), (118, 59056), (128, 59116), (134, 59164), (136, 59176), (144, 59224), (188, 59398),

Gene: VanLee\_42 Start: 32268, Stop: 32756, Start Num: 100

Candidate Starts for VanLee\_42:

(Start: 100 @32268 has 346 MA's), (111, 32286), (121, 32349), (133, 32424), (136, 32442), (147, 32499), (191, 32712),

Gene: Vendetta\_54 Start: 36171, Stop: 36677, Start Num: 100

Candidate Starts for Vendetta\_54:

(Start: 100 @36171 has 346 MA's), (134, 36333), (149, 36405), (164, 36477), (179, 36519),

Gene: Vetric\_84 Start: 55168, Stop: 55554, Start Num: 100

Candidate Starts for Vetric\_84:

(Start: 100 @55168 has 346 MA's), (118, 55219), (120, 55240), (124, 55261), (131, 55300), (133, 55315), (136, 55333), (147, 55390), (149, 55393), (158, 55450),

Gene: Vibaki\_38 Start: 32552, Stop: 33103, Start Num: 100

Candidate Starts for Vibaki\_38:

(Start: 100 @32552 has 346 MA's), (112, 32576), (134, 32714), (144, 32774), (149, 32786),

Gene: Violeta\_47 Start: 28645, Stop: 29136, Start Num: 100

Candidate Starts for Violeta\_47:

(Start: 100 @28645 has 346 MA's), (144, 28867), (151, 28888), (164, 28951),

Gene: Vitus\_39 Start: 31606, Stop: 32157, Start Num: 100

Candidate Starts for Vitus\_39:

(Start: 100 @31606 has 346 MA's), (116, 31642), (134, 31768), (137, 31792), (144, 31828), (158, 31897), (172, 31933),

Gene: Vondra\_44 Start: 30507, Stop: 30950, Start Num: 100

Candidate Starts for Vondra\_44:

(Start: 100 @30507 has 346 MA's), (158, 30798),

Gene: Vopal\_73 Start: 40295, Stop: 40768, Start Num: 107

Candidate Starts for Vopal\_73:

(Start: 107 @40295 has 10 MA's), (118, 40340), (142, 40496),

Gene: Vulpecula\_52 Start: 33417, Stop: 33938, Start Num: 100

Candidate Starts for Vulpecula\_52:

(Start: 100 @33417 has 346 MA's), (121, 33498), (144, 33639), (146, 33645), (181, 33774),

Gene: Waltz\_14 Start: 9797, Stop: 10513, Start Num: 100

Candidate Starts for Waltz\_14:

(Start: 100 @9797 has 346 MA's), (121, 9878), (136, 9971), (138, 9995), (144, 10019), (179, 10145), (205, 10352),

Gene: Wamburgexpress\_82 Start: 53897, Stop: 54280, Start Num: 100

Candidate Starts for Wamburgexpress\_82:

(Start: 100 @53897 has 346 MA's), (124, 53990), (133, 54044), (136, 54062), (149, 54122), (158, 54179),

Gene: Warren\_45 Start: 28593, Stop: 29075, Start Num: 100

Candidate Starts for Warren\_45:

(Start: 100 @28593 has 346 MA's), (144, 28815), (151, 28836), (164, 28899), (179, 28941),

Gene: Westrich\_63 Start: 35225, Stop: 35704, Start Num: 100

Candidate Starts for Westrich\_63:

(Start: 100 @35225 has 346 MA's), (121, 35306), (136, 35399), (144, 35447), (146, 35453), (164, 35531), (181, 35582),

Gene: WheeHeim\_13 Start: 6628, Stop: 6206, Start Num: 100

Candidate Starts for WheeHeim\_13:

(Start: 100 @6628 has 346 MA's), (114, 6595), (131, 6481), (138, 6424), (158, 6331), (173, 6292),

Gene: Wheelbite\_14 Start: 9719, Stop: 10477, Start Num: 100

Candidate Starts for Wheelbite\_14:

(Start: 100 @9719 has 346 MA's), (142, 9932), (144, 9941), (179, 10067), (203, 10280),

Gene: Whirlwind\_84 Start: 55415, Stop: 55798, Start Num: 100

Candidate Starts for Whirlwind\_84:

(Start: 100 @55415 has 346 MA's), (119, 55475), (120, 55487), (124, 55508), (133, 55568), (136, 55586), (149, 55646), (172, 55736),

Gene: Wiggin\_102 Start: 59101, Stop: 59541, Start Num: 102

Candidate Starts for Wiggin\_102:

(36, 58900), (37, 58903), (Start: 42 @58930 has 1 MA's), (43, 58933), (52, 58975), (70, 59029), (Start: 102 @59101 has 127 MA's), (125, 59200), (149, 59332), (162, 59398), (179, 59446),

Gene: Wigglewobble\_84 Start: 55113, Stop: 55499, Start Num: 100

Candidate Starts for Wigglewiggle\_84:

(Start: 100 @55113 has 346 MA's), (118, 55164), (120, 55185), (124, 55206), (131, 55245), (133, 55260), (136, 55278), (147, 55335), (149, 55338), (158, 55395),

Gene: Wilca\_64 Start: 43759, Stop: 43046, Start Num: 100

Candidate Starts for Wilca\_64:

(Start: 100 @43759 has 346 MA's), (Start: 107 @43747 has 10 MA's), (116, 43723), (128, 43642), (134, 43594), (139, 43555), (159, 43456), (167, 43435),

Gene: Wildcat\_78 Start: 48987, Stop: 49376, Start Num: 101

Candidate Starts for Wildcat\_78:

(Start: 101 @48987 has 7 MA's), (125, 49083), (133, 49134), (136, 49152), (146, 49206), (159, 49272), (179, 49326),

Gene: Wilde\_74 Start: 52160, Stop: 51552, Start Num: 100

Candidate Starts for Wilde\_74:

(Start: 100 @52160 has 346 MA's), (112, 52136), (121, 52079), (144, 51938), (165, 51854),

Gene: Wilder\_86 Start: 55257, Stop: 55643, Start Num: 100

Candidate Starts for Wilder\_86:

(Start: 100 @55257 has 346 MA's), (118, 55308), (120, 55329), (124, 55350), (131, 55389), (133, 55404), (136, 55422), (147, 55479), (149, 55482), (158, 55539),

Gene: WileyE\_54 Start: 34174, Stop: 34692, Start Num: 100

Candidate Starts for WileyE\_54:

(Start: 100 @34174 has 346 MA's), (121, 34255), (144, 34396), (146, 34402), (158, 34465), (181, 34531),

Gene: Willez\_95 Start: 58223, Stop: 58663, Start Num: 102

Candidate Starts for Willez\_95:

(Start: 102 @58223 has 127 MA's), (125, 58322), (138, 58418), (149, 58454), (162, 58520), (179, 58568),

Gene: WilliamBoone\_125 Start: 69149, Stop: 69661, Start Num: 100

Candidate Starts for WilliamBoone\_125:

(Start: 100 @69149 has 346 MA's), (111, 69167), (116, 69185), (138, 69347), (144, 69371), (185, 69545), (196, 69605),

Gene: Winchester007\_61 Start: 34650, Stop: 35144, Start Num: 100

Candidate Starts for Winchester007\_61:

(Start: 100 @34650 has 346 MA's), (144, 34872), (151, 34893), (179, 34998),

Gene: Windest\_74 Start: 36509, Stop: 37030, Start Num: 104

Candidate Starts for Windest\_74:

(Start: 104 @36509 has 34 MA's), (126, 36611), (140, 36728),

Gene: Winky\_85 Start: 55471, Stop: 55857, Start Num: 100

Candidate Starts for Winky\_85:

(Start: 100 @55471 has 346 MA's), (118, 55522), (120, 55543), (124, 55564), (131, 55603), (133, 55618), (136, 55636), (147, 55693), (149, 55696), (158, 55753),

Gene: Wrackline\_57 Start: 30502, Stop: 29993, Start Num: 100

Candidate Starts for Wrackline\_57:

(Start: 100 @30502 has 346 MA's), (112, 30478), (114, 30475), (121, 30421), (136, 30328), (144, 30280), (159, 30208), (164, 30196),

Gene: Wyatt2\_83 Start: 53860, Stop: 54243, Start Num: 100

Candidate Starts for Wyatt2\_83:

(Start: 100 @53860 has 346 MA's), (124, 53953), (133, 54007), (136, 54025), (149, 54085), (158, 54142),

Gene: Wyborn\_38 Start: 31062, Stop: 31586, Start Num: 100

Candidate Starts for Wyborn\_38:

(Start: 100 @31062 has 346 MA's), (134, 31224), (136, 31236), (144, 31284), (151, 31305), (180, 31413),

Gene: Xandras\_99 Start: 58924, Stop: 59364, Start Num: 102

Candidate Starts for Xandras\_99:

(36, 58723), (37, 58726), (Start: 42 @58753 has 1 MA's), (43, 58756), (52, 58798), (70, 58852), (Start: 102 @58924 has 127 MA's), (121, 59005), (125, 59023), (149, 59155), (162, 59221), (179, 59269),

Gene: YassJohnny\_97 Start: 58244, Stop: 58684, Start Num: 102

Candidate Starts for YassJohnny\_97:

(36, 58043), (37, 58046), (Start: 42 @58073 has 1 MA's), (43, 58076), (52, 58118), (70, 58172), (Start: 102 @58244 has 127 MA's), (121, 58325), (125, 58343), (149, 58475), (162, 58541), (179, 58589),

Gene: Yeti\_66 Start: 40535, Stop: 41041, Start Num: 100

Candidate Starts for Yeti\_66:

(Start: 100 @40535 has 346 MA's), (109, 40550), (144, 40757), (164, 40841), (179, 40883),

Gene: YoungHarleezy\_71 Start: 37838, Stop: 38341, Start Num: 104

Candidate Starts for YoungHarleezy\_71:

(Start: 104 @37838 has 34 MA's), (121, 37919), (140, 38057),

Gene: Youngblood\_103 Start: 60394, Stop: 60834, Start Num: 102

Candidate Starts for Youngblood\_103:

(36, 60193), (37, 60196), (Start: 42 @60223 has 1 MA's), (43, 60226), (52, 60268), (70, 60322), (Start: 102 @60394 has 127 MA's), (121, 60475), (125, 60493), (138, 60589), (149, 60625), (162, 60691), (179, 60739),

Gene: Yvonnetastic\_132 Start: 74503, Stop: 75024, Start Num: 100

Candidate Starts for Yvonnetastic\_132:

(Start: 100 @74503 has 346 MA's), (Start: 107 @74515 has 10 MA's), (112, 74527), (118, 74557), (124, 74599), (125, 74602), (146, 74731), (196, 74968),

Gene: Zakai\_86 Start: 55577, Stop: 55963, Start Num: 100

Candidate Starts for Zakai\_86:

(Start: 100 @55577 has 346 MA's), (118, 55628), (120, 55649), (124, 55670), (131, 55709), (133, 55724), (136, 55742), (147, 55799), (149, 55802), (158, 55859),

Gene: Zapato\_64 Start: 41387, Stop: 41893, Start Num: 95

Candidate Starts for Zapato\_64:

(Start: 95 @41387 has 11 MA's), (144, 41609), (164, 41693), (179, 41735),

Gene: Zaria\_83 Start: 53312, Stop: 53695, Start Num: 100

Candidate Starts for Zaria\_83:

(Start: 100 @53312 has 346 MA's), (124, 53405), (133, 53459), (136, 53477), (149, 53537), (158, 53594),

Gene: Zartrosa\_37 Start: 30749, Stop: 31297, Start Num: 100

Candidate Starts for Zartrosa\_37:

(66, 30662), (Start: 100 @30749 has 346 MA's), (112, 30773), (144, 30971), (172, 31076), (195, 31181),

Gene: ZhongYanYuan\_83 Start: 55291, Stop: 55689, Start Num: 100

Candidate Starts for ZhongYanYuan\_83:

(Start: 100 @55291 has 346 MA's), (118, 55342), (120, 55363), (124, 55384), (131, 55423), (133, 55438), (136, 55456), (147, 55513), (149, 55516), (158, 55573), (172, 55609),

Gene: Zhuangyuan\_57 Start: 34030, Stop: 34542, Start Num: 100

Candidate Starts for Zhuangyuan\_57:

(Start: 100 @34030 has 346 MA's), (112, 34054), (124, 34126), (146, 34258), (149, 34264), (150, 34267), (164, 34336),

Gene: Zixiang\_56 Start: 34405, Stop: 34884, Start Num: 100

Candidate Starts for Zixiang\_56:

(Start: 100 @34405 has 346 MA's), (121, 34486), (136, 34579), (144, 34627), (146, 34633), (164, 34711), (181, 34762),

Gene: Zucker\_67 Start: 38807, Stop: 39271, Start Num: 104

Candidate Starts for Zucker\_67:

(Start: 104 @38807 has 34 MA's), (125, 38906), (137, 38999), (182, 39176),

Gene: pZL12\_1c Start: 1177, Stop: 662, Start Num: 117

Candidate Starts for pZL12\_1c:

(Start: 100 @1216 has 346 MA's), (109, 1201), (112, 1192), (114, 1189), (117, 1177), (121, 1135), (124, 1120), (127, 1111), (133, 1057), (136, 1039), (144, 991), (149, 979), (156, 934), (158, 922), (164, 907), (168, 898), (177, 868), (179, 865), (193, 781),

Gene: xkcd\_103 Start: 60578, Stop: 61018, Start Num: 102

Candidate Starts for xkcd\_103:

(36, 60377), (37, 60380), (Start: 42 @60407 has 1 MA's), (43, 60410), (52, 60452), (70, 60506), (Start: 102 @60578 has 127 MA's), (121, 60659), (125, 60677), (149, 60809), (162, 60875), (179, 60923),