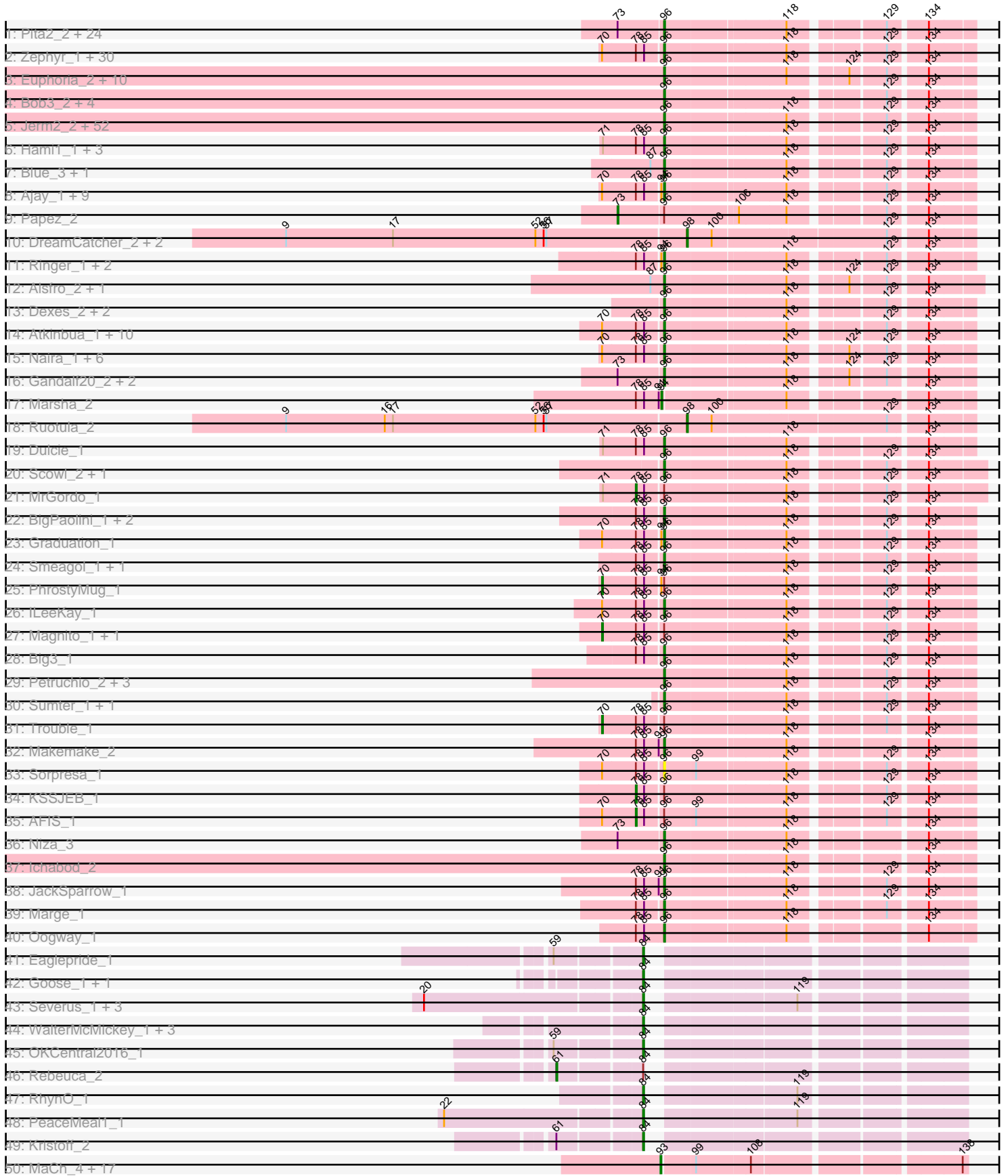


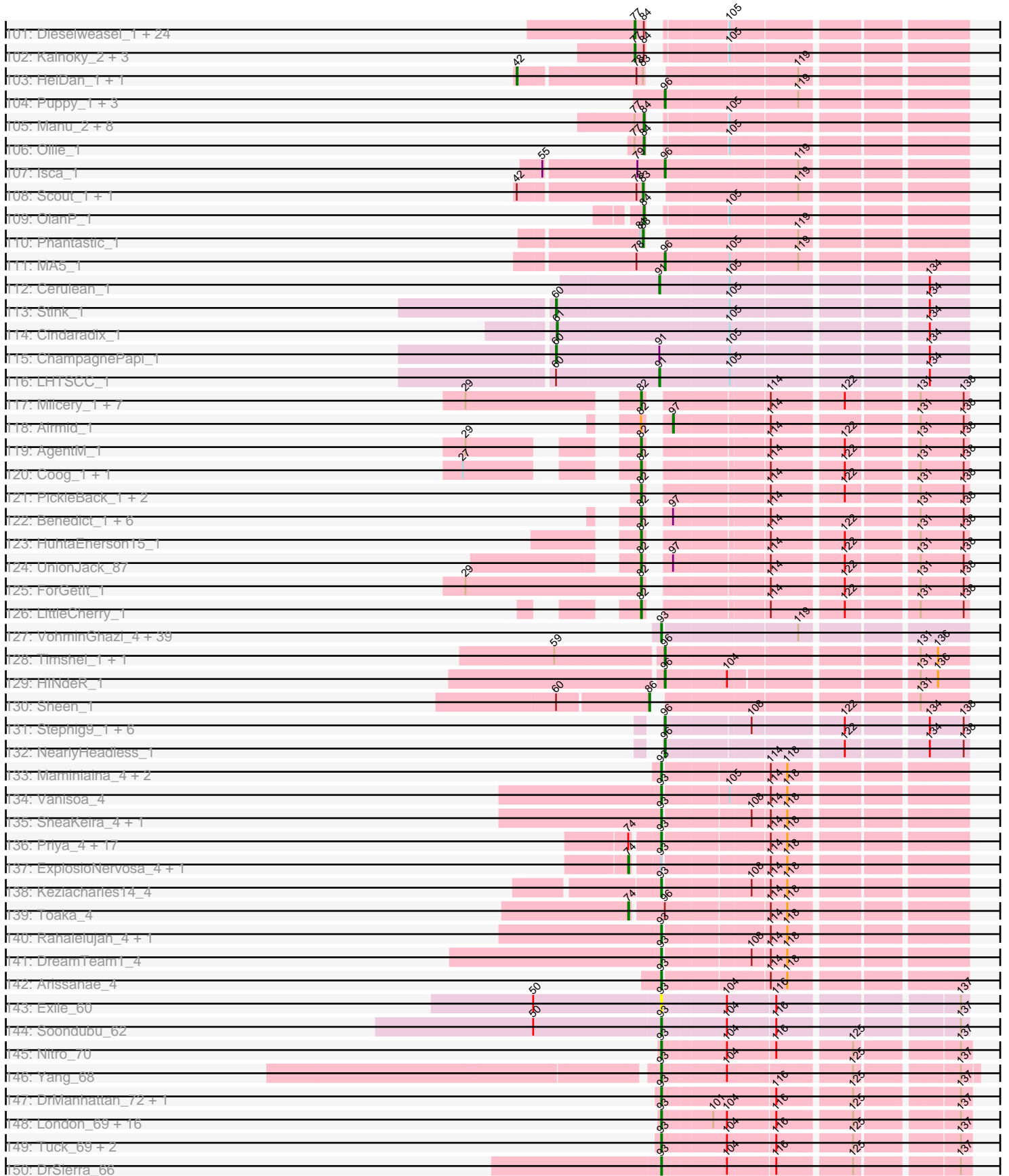
Pham 171079



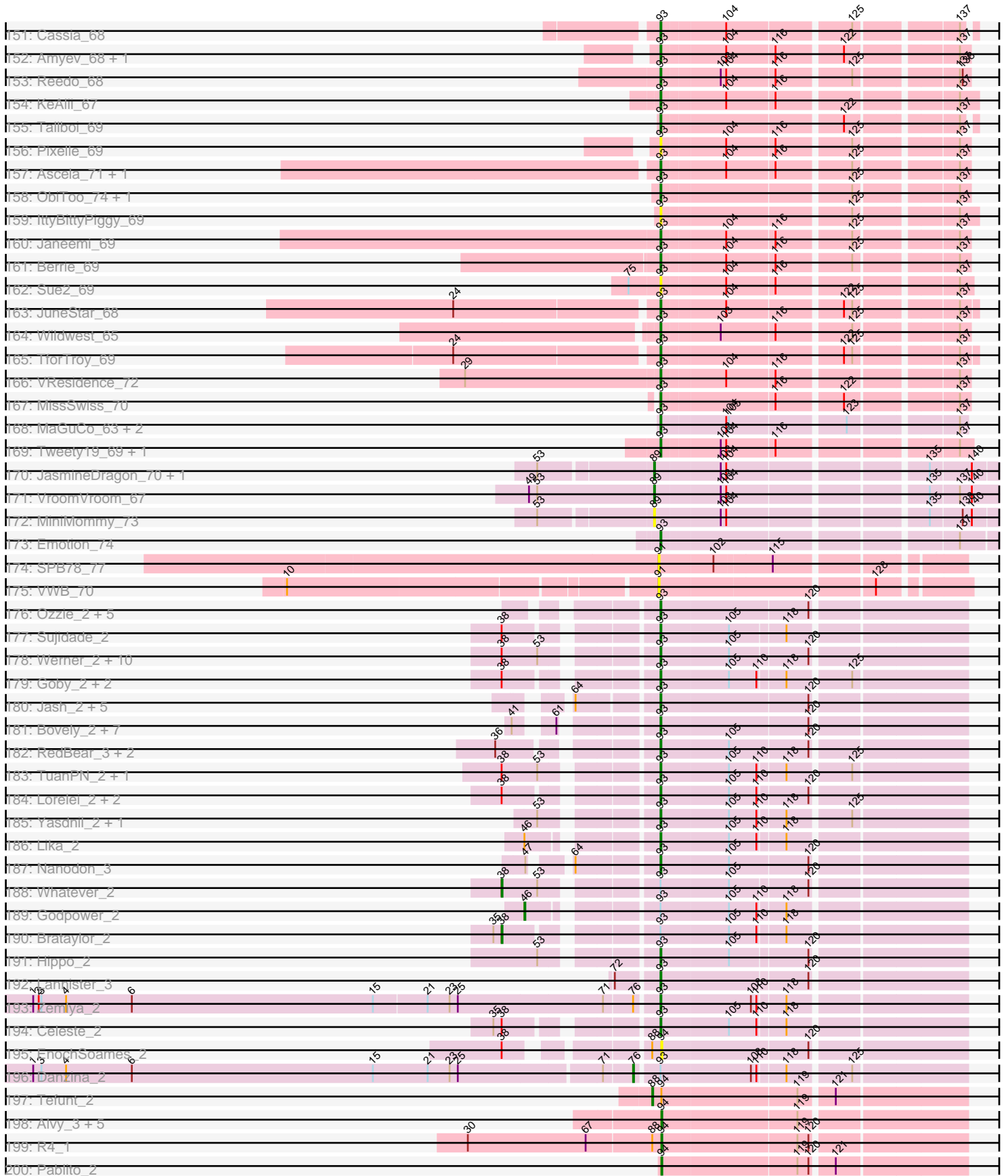
# Pham 171079



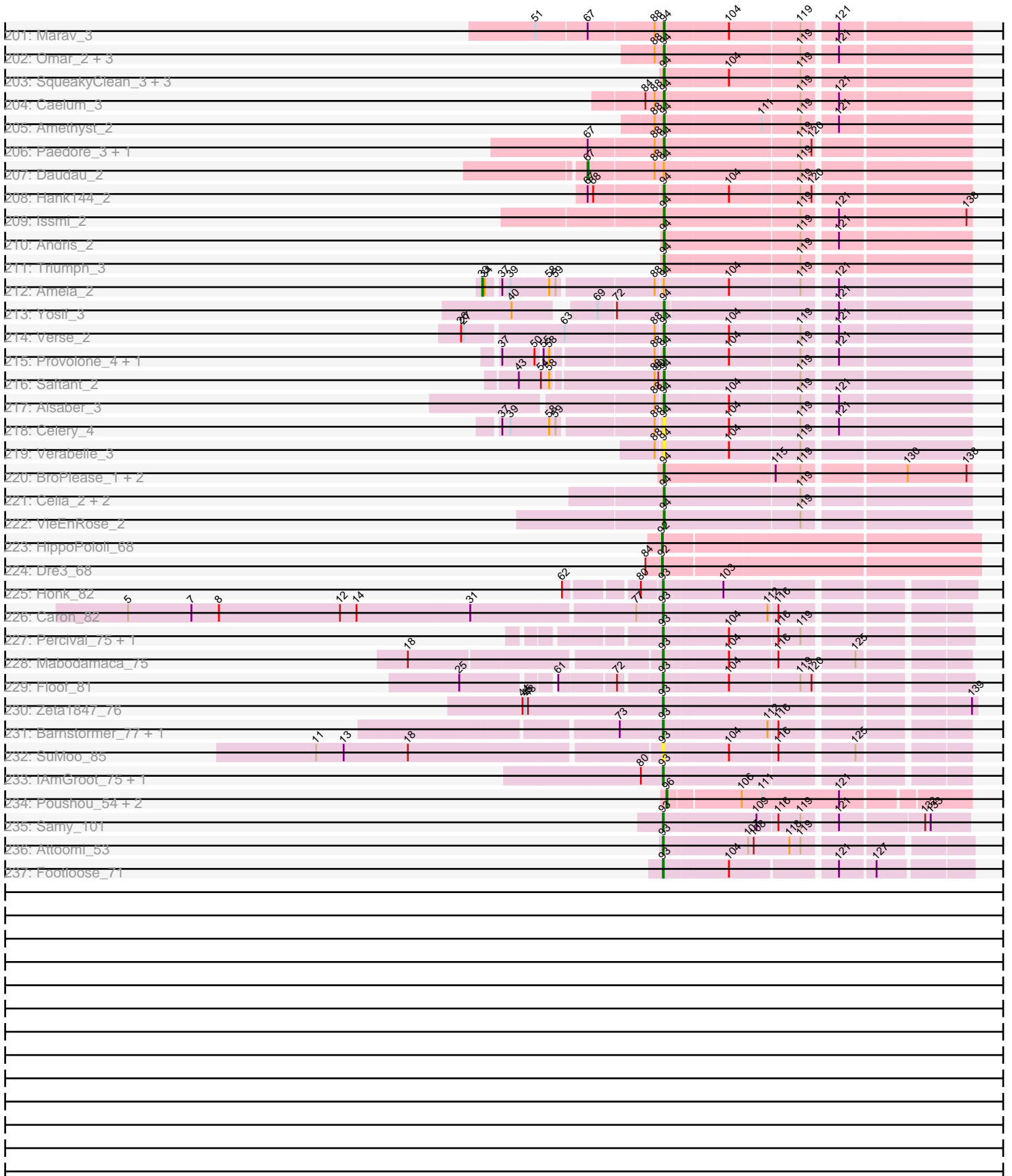
Pham 171079



Pham 171079



Pham 171079



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 171079 Report

This analysis was run 07/09/24 on database version 566.

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 171079 has 778 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Pita2\_2, Gompeii16\_2, PSullivan\_2, Bircsak\_2, PherrisBueller\_2, STLscum\_2, PacerPaul\_2, Rohr\_2, Altman\_3, Pepe\_2, SkiPole\_2, Lopton\_2, BPBiabs31\_2, Kanely\_3, Tote\_2, TwoPeat\_2, KBG\_2, Target\_2, Jasper\_2, Francis47\_2, Dreamboat\_2, Homines\_2, Wheeler\_2, JuliaChild\_2, ConceptII\_2
- Track 2 : Zephyr\_1, Paphu\_1, Fascinus\_1, Rutherferd\_1, Bones\_1, ShortQueendom\_1, Topgun\_1, Michley\_1, Maroc7\_1, Ashballer\_1, Snazzy\_1, Parliament\_1, Zeeculate\_1, DrFeelGood\_1, StewieG\_1, Adahisdi\_1, Crispicous1\_1, Seanderson\_1, Cueyllyss\_1, Solon\_1, Teodoridan\_1, Ohno789\_1, Sunshine924\_1, Bigfoot\_1, CactusRose\_1, Wilkins\_1, Applejack\_1, Killigrew\_1, SpikeBT\_1, Tripl3t\_1, Squee\_1
- Track 3 : Euphoria\_2, Alvin\_3, Seabiscuit\_2, Abbyshoes\_2, Lockley\_2, Kenmech\_2, Briton15\_2, DD5\_2, McGuire\_2, Dussy\_2, BeesKnees\_2
- Track 4 : Bob3\_2, Burton\_2, MPlant7149\_2, Museum\_3, Nhonho\_2
- Track 5 : Jerm2\_2, MetalQZJ\_2, Greg\_2, Monet\_2, Barriga\_2, RidgeCB\_2, GrecoEtereo\_2, Fushigi\_2, Sagefire\_2, Chanagan\_2, Violet\_2, Corvo\_2, Bethlehem\_2, BigMau\_3, Rufus\_2, Pippin\_2, BillKnuckles\_2, Molly\_2, Slagathor\_2, PascalRango\_2, HermioneGrange\_2, JC27\_2, U2\_2, Buttons\_2, Lamina13\_2, Petp2012\_2, Payneful\_2, Thor\_2, BaconJack\_2, Manatee\_2, Licorice\_2, MaryBeth\_2, Treddle\_2, Arlo\_2, Dynamix\_2, Anglerfish\_2, Fajezeel\_2, Hermia\_2, TheloniousMonk\_2, Sibs6\_2, PattyP\_2, Pari\_2, NEHalo\_2, Norz\_2, Watermelon\_2, Switzer\_2, Rhynn\_1, SarFire\_2, HarryOW\_2, Arcanine\_2, Rubeus\_2, Rajelicia\_2, Edtherson\_2
- Track 6 : Hami1\_1, Ciao\_1, Nerujay\_1, Kugel\_1
- Track 7 : Blue\_3, Tasp14\_2
- Track 8 : Ajay\_1, Beatrix\_1, Bexan\_1, StrongArm\_1, Smairt\_1, Mule\_1, Aeneas\_1, Zeuska\_1, Perseus\_1, Hope4ever\_1
- Track 9 : Papez\_2
- Track 10 : DreamCatcher\_2, Sanya\_1, Abrogate\_20
- Track 11 : Ringer\_1, IgnatiusPatJac\_1, BluSpix\_1
- Track 12 : Alsfro\_2, Carlyle\_2
- Track 13 : Dexes\_2, Acme\_2, Traft412\_3
- Track 14 : Atkinbua\_1, Lesedi\_1, KyMonks1A\_1, Turj99\_1, Kykar\_1, Magnar\_1, Eyeball\_1, Bxb1\_1, Mryolo\_1, Paraselene\_1, QTRlifeCrisis\_1

- Track 15 : Naira\_1, Bruns\_1, Fenn\_1, Moose\_1, PinkPlastic\_1, SwissCheese\_1, Forsytheast\_1
- Track 16 : Gandalf20\_2, Jorgensen\_2, Espresso\_2
- Track 17 : Marsha\_2
- Track 18 : Ruotula\_2
- Track 19 : Dulcie\_1
- Track 20 : Scowl\_2, GageAP\_2
- Track 21 : MrGordo\_1
- Track 22 : BigPaolini\_1, Peterson\_1, Doom\_1
- Track 23 : Graduation\_1
- Track 24 : Smeagol\_1, LilBib\_1
- Track 25 : PhrostyMug\_1
- Track 26 : lLeeKay\_1
- Track 27 : Magnito\_1, Pinto\_1
- Track 28 : Big3\_1
- Track 29 : Petruchio\_2, Froghopper\_2, Marcell\_2, Gyzlar\_2
- Track 30 : Sumter\_1, Gwendoluna\_1
- Track 31 : Trouble\_1
- Track 32 : Makemake\_2
- Track 33 : Sorpresa\_1
- Track 34 : KSSJEB\_1
- Track 35 : AFIS\_1
- Track 36 : Niza\_3
- Track 37 : Ichabod\_2
- Track 38 : JackSparrow\_1
- Track 39 : Marge\_1
- Track 40 : Oogway\_1
- Track 41 : Eaglepride\_1
- Track 42 : Goose\_1, Chupacabra\_1
- Track 43 : Severus\_1, Drake94\_1, Poompha\_1, KittenMittens\_1
- Track 44 : WalterMcMickey\_1, Twister\_1, Edison31\_1, Topanga\_1
- Track 45 : OKCentral2016\_1
- Track 46 : Rebeuca\_2
- Track 47 : RhynO\_1
- Track 48 : PeaceMeal1\_1
- Track 49 : Kristoff\_2
- Track 50 : MaCh\_4, Sham4\_4, Flaverint\_4, Fibonacci\_4, Aneem\_4, Munch\_4, Lucivia\_4, Joselito\_4, Gilberta\_4, Hutc2\_4, Mulciber\_4, Bud\_4, Bowtie\_4, Insomnia\_4, Salz\_4, Jabith\_4, Timothy\_4, Snape\_4
- Track 51 : Ebony\_4, Orange\_4, Bachome\_4
- Track 52 : Refuge\_4
- Track 53 : Zimmer\_4
- Track 54 : Steamy\_4
- Track 55 : DARTHPhader\_4
- Track 56 : Pharaoh\_4
- Track 57 : SororFago\_4
- Track 58 : Jeeves\_4
- Track 59 : Luchador\_4
- Track 60 : Gail\_4
- Track 61 : Waits\_4, Switzerland\_4, Epsocamisio\_4, Rosalind\_4, MinecraftSteve\_5, DekHockey33\_4, ShayRa\_5, JSwag\_4, KatherineG\_4, Nebulosus\_4, Boohoo\_4, Battleship\_5, LastResort\_4, ReMo\_4, Looper\_4, Anaysia\_4
- Track 62 : Nedarya\_4

- Track 63 : Strosahl\_4, Remus\_4, Soups\_4
- Track 64 : EagleEye\_4, Lucyedi\_4, PainterBoy\_4
- Track 65 : 40AC\_5
- Track 66 : MyraDee\_1
- Track 67 : Kimona\_1
- Track 68 : NicoleTera\_4, Chargerpower\_5, EZMoney23\_4, Trixie\_4
- Track 69 : Journey13\_4
- Track 70 : Adzzy\_4
- Track 71 : AnnaL29\_4, Loser\_4, RedRock\_4, CRB1\_4
- Track 72 : Buggy\_5, Agape74\_5, FiringLine\_5, SemperFi\_5, Smeagan\_5, LadyBird\_4, Deloris\_4, EvilGenius\_5, Jerm\_5, Dignity\_5, SnapTap\_5, SweetiePie\_5, Georgie2\_5, LilTurb\_5, AN3\_4, KingCyrus\_5, ChipMunk\_5, Crucio\_5, BengiVuitton\_4, AbbyPaige\_5, Power\_5, QueenBeesly\_5, VA6\_4, JoshKayV\_5, Leviathan\_5, Whabigail7\_5, Turbido\_5
- Track 73 : Flare16\_5, Drake55\_5, WideWale\_5, MiculUcigas\_5, HarryHoudini\_5, Equemioh13\_5, Piro94\_4, Centaur\_5, NaSiaTalie\_5, Baehexic\_5, Updawg\_5
- Track 74 : Ph8s\_4
- Track 75 : DudeLittle\_5, Anselm\_5, Heffalump\_5, Dalmatian\_5, QueenB2\_5, Fameo\_5, Retro23\_5
- Track 76 : Leogania\_4, BiancaTri92\_4
- Track 77 : Lokk\_5, Rachaly\_5, BobSwaget\_5
- Track 78 : Changeling\_4, 20ES\_4, ArcherNM\_4, First\_004, Miko\_5
- Track 79 : StarStuff\_4, Tomathan\_4, C3\_04, AN9\_4, D32\_4, VC3\_4, Kerberos\_4, D29\_4, DBQu4n\_4, ANI8\_4, Naji\_4, Duplo\_4, Pomar16\_4
- Track 80 : XianYue\_4
- Track 81 : TarsusIV\_5
- Track 82 : Herbertwm\_1
- Track 83 : Jaan\_4, IronMan\_4, Phaded\_4, Bactobuster\_4
- Track 84 : Larenn\_5, Malec\_5
- Track 85 : Colin\_5, WeiHuaDA\_5
- Track 86 : Che12\_4
- Track 87 : Kalpine\_4
- Track 88 : GaugeLDP\_4, BabyBack\_4
- Track 89 : Benvolio\_5, Echild\_5
- Track 90 : Jsquared\_4, L5\_4, TipsytheTRex\_4, Serenity\_4
- Track 91 : MissWhite\_4
- Track 92 : Pukovnik\_4, Odin\_3, Superchunk\_4
- Track 93 : Trooper\_5, Acolyte\_4, Yecey3\_4
- Track 94 : Iwokeuplikedis\_5
- Track 95 : Anthony\_1
- Track 96 : Grub\_1, Grif\_1, Phoxy\_1, Louie6\_1, Tiffany\_1, Spike509\_1, Bxz2\_1, Vix\_1, Lilith\_1, Microwolf\_1, Aglet\_1, Fernando\_1, Grum1\_1, Stagni\_1, StepMih\_1, Mainiac\_1, MarQuardt\_1, EpicPhail\_1, LarryKay\_1, Beauxregard13\_1, Penny1\_1, Sabinator\_1, PGHhamlin\_3, GtownJaz\_1, DaHudson\_1, Watson\_1, Malinsilva\_3, JHC117\_1, KADY\_2, AugsMagnumOpus\_3, Methuselah\_1, Anubis\_3, Farber\_1, Hercules11\_1
- Track 97 : Todacoro\_1, Pocahontas\_1, Caviar\_1, Hookmount\_1, Noella\_1, Lambert1\_1, Margo\_1
- Track 98 : GingkoMaracino\_1
- Track 99 : BabyRay\_1
- Track 100 : JF4\_1, MK4\_1, JF2\_1
- Track 101 : Dieselweasel\_1, Soshari\_3, JenCasNa\_1, SoilDragon\_1, Cullens\_1, PotatoSplit\_2, MoneyMay\_1, Sabia\_1, LBerry\_1, MadMarie\_1, Colbster\_1, Daishi\_1,



BreSam8\_1, AgronaGT15\_1, Taurus\_1, Zetzy\_1, Jobu08\_1, P28Green\_1, HashRod\_2, LugYA\_3, Pembroke\_1, Marie\_1, Rummer\_1, Wooldri\_3, Phoebe\_1

- Track 102 : Kalnok\_2, PurpleHaze\_1, Gemma\_1, Heliosoles\_1
- Track 103 : HelDan\_1, Heathen\_1
- Track 104 : Puppy\_1, TNguyen7\_1, Pistachio\_1, BlueBird\_1
- Track 105 : Manu\_2, Reba\_2, Kalb97\_2, JeppNRM\_2, Groupthink\_2, HaveUMetTed\_2, Marius\_2, Phranny\_2, PhishRPhriends\_1
- Track 106 : Ollie\_1
- Track 107 : Isca\_1
- Track 108 : Scout\_1, Fred313\_1
- Track 109 : OlanP\_1
- Track 110 : Phantastic\_1
- Track 111 : MA5\_1
- Track 112 : Cerulean\_1
- Track 113 : Stink\_1
- Track 114 : Cindaradix\_1
- Track 115 : ChampagnePapi\_1
- Track 116 : LHTSCC\_1
- Track 117 : Milcery\_1, Aragog\_1, Cuco\_1, Discoknowium\_1, Lev2\_1, Tiger\_1, Phlorence\_1, Archetta\_1
- Track 118 : Airmid\_1
- Track 119 : AgentM\_1
- Track 120 : Coog\_1, Midas2\_1
- Track 121 : PickleBack\_1, Conspiracy\_1, Jovo\_1
- Track 122 : Benedict\_1, ElTiger69\_1, PetterN\_1, Jabiru\_1, Chadwick\_1, Scorpia\_1, Naca\_1
- Track 123 : HuhtaEnerson15\_1
- Track 124 : UnionJack\_87
- Track 125 : ForGetIt\_1
- Track 126 : LittleCherry\_1
- Track 127 : VohminGhazi\_4, Anon\_4, SuperAwesome\_4, Indra\_4, DaVinci\_4, CloudWang3\_4, EricB\_4, Hoot\_4, Artemis2UCLA\_4, Gladiator\_4, SuperCallie99\_4, BABullseye\_4, JewelBug\_4, Wiks\_4, Kipper29\_4, Yokurt\_4, Pmask\_4, Cookiedough\_4, Jeffabunny\_4, Zulu\_4, Tucker\_4, McFly\_4, Rifter\_4, Koko\_4, Gruunaga\_4, GreedyLawyer\_4, Jordennis\_4, Priamo\_4, WunderPhul\_4, SmellyB\_4, Roksolana\_4, Hexamo\_4, Zaka\_4, Hammer\_4, Blue7\_4, Kazan\_4, Newrala\_4, Isiphiwo\_4, Blinn1\_4, Neeharika16\_4
- Track 128 : Timshel\_1, DroogsArmy\_1
- Track 129 : HINdeR\_1
- Track 130 : Sheen\_1
- Track 131 : Stephig9\_1, Dixon\_1, Phillis\_1, Smeadley\_1, Saintus\_1, Astro\_1, Roary\_1
- Track 132 : NearlyHeadless\_1
- Track 133 : Maminiaina\_4, LoneWolf\_4, Elephantoon\_4
- Track 134 : Vanisoa\_4
- Track 135 : SheaKeira\_4, Charm\_4
- Track 136 : Priya\_4, Conquerage\_4, Phaeder\_4, HortumSL17\_4, Tubs\_4, Eidsmoe\_4, Aliter\_4, Scherzo\_4, Alma\_4, Pioneer\_4, EmyBug\_4, Myxus\_4, Spouty\_3, Catalina\_4, Beemo\_4, PackMan\_4, Phonnegut\_4, Fayely\_4
- Track 137 : ExplosioNervosa\_4, Qobbit\_4
- Track 138 : Keziacharles14\_4
- Track 139 : Toaka\_4
- Track 140 : Rahalelujah\_4, BogosyJay\_4

- Track 141 : DreamTeam1\_4
- Track 142 : Arissanae\_4
- Track 143 : Exile\_60
- Track 144 : Soondubu\_62
- Track 145 : Nitro\_70
- Track 146 : Yang\_68
- Track 147 : DrManhattan\_72, Adolin\_71
- Track 148 : London\_69, Turab\_68, Eraser\_69, AEgle\_67, Niobe\_69, Asa16\_69, Tbone\_69, Adumb2043\_68, Elezi\_68, Lizalica\_69, JohnDoe\_70, Powerpuff\_71, YesChef\_69, Lego\_69, Kaylissa\_71, Warda\_70, Tutumahutu\_71
- Track 149 : Tuck\_69, Community\_70, Phives\_70
- Track 150 : DrSierra\_66
- Track 151 : Cassia\_68
- Track 152 : Amyev\_68, Tian\_67
- Track 153 : Reedo\_68
- Track 154 : KeAlii\_67
- Track 155 : Tallboi\_69
- Track 156 : Pixelle\_69
- Track 157 : Ascela\_71, Iter\_70
- Track 158 : ObiToo\_74, Crewmate\_74
- Track 159 : IttyBittyPiggy\_69
- Track 160 : Janeemi\_69
- Track 161 : Berrie\_69
- Track 162 : Sue2\_69
- Track 163 : JuneStar\_68
- Track 164 : Wildwest\_65
- Track 165 : TforTroy\_69
- Track 166 : VResidence\_72
- Track 167 : MissSwiss\_70
- Track 168 : MaGuCo\_63, Maureen\_69, Liebe\_69
- Track 169 : Tweety19\_69, Snek\_68
- Track 170 : JasmineDragon\_70, ShakeltOph\_72
- Track 171 : VroomVroom\_67
- Track 172 : MiniMommy\_73
- Track 173 : Emotion\_74
- Track 174 : SPB78\_77
- Track 175 : VWB\_70
- Track 176 : Ozzie\_2, Caliburn\_2, Legacy\_2, Hydra\_3, SunsetPointe\_2, BeardedLady\_2
- Track 177 : Sujidade\_2
- Track 178 : Werner\_2, TagePhighter\_3, BarryBee\_3, Triste\_2, SarahRose\_2, Asten\_2, Chucky\_2, OzzyJ\_3, Emaanora\_3, Dwayne\_2, Snorlax\_2
- Track 179 : Goby\_2, Toma\_2, Dattran\_2
- Track 180 : Jash\_2, Eddasa\_2, Izzy\_2, Rusticus\_2, BryanRecycles\_2, Oliynyk\_2
- Track 181 : Bovely\_2, Phettuccine\_2, Esperer\_2, Aaronocolus\_2, Unstoppable\_2, Leviticus\_2, Nerdos\_2, Indigo\_2
- Track 182 : RedBear\_3, South40\_2, Katalie\_2
- Track 183 : TuanPN\_2, Ejemplo\_2
- Track 184 : Lorelei\_2, Nabi\_2, Rana\_2
- Track 185 : Yasdnii\_2, Maneekul\_2
- Track 186 : Lika\_2
- Track 187 : Nanodon\_3
- Track 188 : Whatever\_2

- Track 189 : Godpower\_2
- Track 190 : Brataylor\_2
- Track 191 : Hippo\_2
- Track 192 : Lannister\_3
- Track 193 : Zemlya\_2
- Track 194 : Celeste\_2
- Track 195 : EnochSoames\_2
- Track 196 : Danzina\_2
- Track 197 : Tefunt\_2
- Track 198 : Alvy\_3, Bowden\_2, BartholomewSD\_3, TinaBelcher\_2, TrvxScott\_2, Thestral\_2
- Track 199 : R4\_1
- Track 200 : Pablito\_2
- Track 201 : Marav\_3
- Track 202 : Omar\_2, Haizum\_2, Nishikigoi\_2, Diane\_2
- Track 203 : SqueakyClean\_3, Animus\_3, Janus\_3, GirlDinner\_3
- Track 204 : Caelum\_3
- Track 205 : Amethyst\_2
- Track 206 : Paedore\_3, Loofah\_3
- Track 207 : Daudau\_2
- Track 208 : Hank144\_2
- Track 209 : Issmi\_2
- Track 210 : Andris\_2
- Track 211 : Triumph\_3
- Track 212 : Amela\_2
- Track 213 : Yosif\_3
- Track 214 : Verse\_2
- Track 215 : Provolone\_4, ElGato\_5
- Track 216 : Saftant\_2
- Track 217 : Alsaber\_3
- Track 218 : Celery\_4
- Track 219 : Verabelle\_3
- Track 220 : BroPlease\_1, phiHau3\_1, GreenWeasel\_1
- Track 221 : Celia\_2, Itza\_2, Urza\_2
- Track 222 : VieEnRose\_2
- Track 223 : HippoPololi\_68
- Track 224 : Dre3\_68
- Track 225 : Honk\_82
- Track 226 : Caron\_82
- Track 227 : Percival\_75, Gretchen\_74
- Track 228 : Mabodamaca\_75
- Track 229 : Floof\_81
- Track 230 : Zeta1847\_76
- Track 231 : Barnstormer\_77, UtzChips\_77
- Track 232 : SuMoo\_85
- Track 233 : IAmGroot\_75, GardenState\_76
- Track 234 : Poushou\_54, TouchMeNot\_54, Arianna\_54
- Track 235 : Samy\_101
- Track 236 : Attoomi\_53
- Track 237 : Footloose\_71

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

The start number called the most often in the published annotations is 93, it was called in 252 of the 742 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AEgle\_67, AN9\_4, ANI8\_4, Aaronocolus\_2, Adolin\_71, Adumb2043\_68, Adzzy\_4, Aliter\_4, Alma\_4, Amyev\_68, Anaysia\_4, Aneem\_4, Anon\_4, Arissanae\_4, Artemis2UCLA\_4, Asa16\_69, Ascela\_71, Asten\_2, Attoomi\_53, BABullseye\_4, BabyBack\_4, Bactobuster\_4, Barnstormer\_77, BarryBee\_3, Battleship\_5, BeardedLady\_2, Beemo\_4, Berrie\_69, Blinn1\_4, Blue7\_4, BogosyJay\_4, Boohoo\_4, Bovely\_2, Bowtie\_4, BryanRecycles\_2, Bud\_4, C3\_04, Caliburn\_2, Caron\_82, Cassia\_68, Catalina\_4, Celeste\_2, Charm\_4, Che12\_4, Chucky\_2, CloudWang3\_4, Community\_70, Conquerage\_4, Cookiedough\_4, Crewmate\_74, D29\_4, D32\_4, DBQu4n\_4, DaVinci\_4, Dattran\_2, DekHockey33\_4, DrManhattan\_72, DrSierra\_66, DreamTeam1\_4, Duplo\_4, Dwayne\_2, EagleEye\_4, Eddasa\_2, Eidsmoe\_4, Ejemplo\_2, Elephantoon\_4, Elezi\_68, Emaanora\_3, Emotion\_74, EmyBug\_4, Epsocamisio\_4, Eraser\_69, EricB\_4, Esperer\_2, Exile\_60, Fayely\_4, Fibonacci\_4, Flaverint\_4, Floof\_81, Footloose\_71, GardenState\_76, GaugeLDP\_4, Gilberta\_4, Gladiator\_4, Goby\_2, GreedyLawyer\_4, Gretchen\_74, Gruunaga\_4, Hammer\_4, Herbertwm\_1, Hexamo\_4, Hippo\_2, Honk\_82, Hoot\_4, HortumSL17\_4, Hutc2\_4, Hydra\_3, IAmGroot\_75, Indigo\_2, Indra\_4, Insomnia\_4, IronMan\_4, Isiphiwo\_4, Iter\_70, IttyBittyPiggy\_69, Iwokeuplikedis\_5, Izzy\_2, JSwag\_4, Jaan\_4, Jabith\_4, Janeemi\_69, Jash\_2, Jeffabunny\_4, JewelBug\_4, JohnDoe\_70, Jordennis\_4, Joselito\_4, Journey13\_4, Jsquared\_4, JuneStar\_68, Katalie\_2, KatherineG\_4, Kaylissa\_71, Kazan\_4, KeAlii\_67, Kerberos\_4, Keziacharles14\_4, Kipper29\_4, Koko\_4, L5\_4, Lannister\_3, LastResort\_4, Legacy\_2, Lego\_69, Leviticus\_2, Liebe\_69, Lika\_2, Lizalica\_69, London\_69, LoneWolf\_4, Looper\_4, Lorelei\_2, Lucivia\_4, Lucyedi\_4, MaCh\_4, MaGuCo\_63, Mabodamaca\_75, Maminiana\_4, Maneekul\_2, Maureen\_69, McFly\_4, MinecraftSteve\_5, MissSwiss\_70, MissWhite\_4, Mulciber\_4, Munch\_4, Myxus\_4, Nabi\_2, Naji\_4, Nanodon\_3, Nebulosus\_4, Nedarya\_4, Neeharika16\_4, Nerdos\_2, Newrala\_4, Niobe\_69, Nitro\_70, ObiToo\_74, Odin\_3, Oliynyk\_2, Ozzie\_2, OzzyJ\_3, PackMan\_4, PainterBoy\_4, Percival\_75, Ph8s\_4, Phaded\_4, Phaeder\_4, Phettuccine\_2, Phives\_70, Phonnegut\_4, Pioneer\_4, Pixelle\_69, Pmask\_4, Pomar16\_4, Powerpuff\_71, Priamo\_4, Priya\_4, Pukovnik\_4, Rahalelujah\_4, Rana\_2, ReMo\_4, RedBear\_3, Reedo\_68, Remus\_4, Rifter\_4, Roksolana\_4, Rosalind\_4, Rusticus\_2, Salz\_4, Samy\_101, SarahRose\_2, Scherzo\_4, Serenity\_4, Sham4\_4, ShayRa\_5, SheaKeira\_4, SmellyB\_4, Snape\_4, Snek\_68, Snorlax\_2, Soondubu\_62, Soups\_4, South40\_2, Spouty\_3, StarStuff\_4, Strosahl\_4, SuMoo\_85, Sue2\_69, Sujidade\_2, SunsetPointe\_2, SuperAwesome\_4, SuperCallie99\_4, Superchunk\_4, Switzerland\_4, TagePhighter\_3, Tallboi\_69, Tbone\_69, TforTroy\_69, Tian\_67, Timothy\_4, TipsytheTRex\_4, Toma\_2, Tomathan\_4, Triste\_2, TuanPN\_2, Tubs\_4, Tuck\_69, Tucker\_4, Turab\_68, Tutumahutu\_71, Tweety19\_69, Unstoppable\_2, UtzChips\_77, VC3\_4, VResidence\_72, Vanisoa\_4, VohminGhazi\_4, Waits\_4, Warda\_70, Werner\_2, Wiks\_4, Wildwest\_65, WunderPhul\_4, Yang\_68, Yasdnil\_2, YesChef\_69, Yokurt\_4, Zaka\_4, Zemlya\_2, Zeta1847\_76, Zulu\_4,

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

- Bachome\_4, Brataylor\_2, Danzina\_2, Ebony\_4, ExplosioNervosa\_4, Godpower\_2, Orange\_4, Qobbit\_4, Whatever\_2,

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

• 20ES\_4, 40AC\_5, AFIS\_1, AN3\_4, AbbyPaige\_5, Abbyshoes\_2, Abrogate\_20, Acme\_2, Acolyte\_4, Adahisdi\_1, Aeneas\_1, Agape74\_5, AgentM\_1, Aglet\_1, AgronaGT15\_1, Airmid\_1, Ajay\_1, Alsaber\_3, Alsfro\_2, Altman\_3, Alvin\_3, Alvy\_3, Amela\_2, Amethyst\_2, Andris\_2, Anglerfish\_2, Animus\_3, AnnaL29\_4, Anselm\_5, Anthony\_1, Anubis\_3, Applejack\_1, Aragog\_1, Arcanine\_2, ArcherNM\_4, Archetta\_1, Arianna\_54, Arlo\_2, Ashballer\_1, Astro\_1, Atkinbua\_1, AugsMagnumOpus\_3, BPBiabs31\_2, BabyRay\_1, BaconJack\_2, Baehexic\_5, Barriga\_2, BartholomewSD\_3, Beatrix\_1, Beauxregard13\_1, BeesKnees\_2, Benedict\_1, BengiVuitton\_4, Benvolio\_5, Bethlehem\_2, Bexan\_1, BiancaTri92\_4, Big3\_1, BigMau\_3, BigPaolini\_1, Bigfoot\_1, BillKnuckles\_2, Bircsak\_2, BluSpix\_1, BlueBird\_1, Blue\_3, Bob3\_2, BobSwaget\_5, Bones\_1, Bowden\_2, BreSam8\_1, Briton15\_2, BroPlease\_1, Bruns\_1, Buggy\_5, Burton\_2, Buttons\_2, Bxb1\_1, Bxz2\_1, CRB1\_4, CactusRose\_1, Caelum\_3, Carlyle\_2, Caviar\_1, Celery\_4, Celia\_2, Centaur\_5, Cerulean\_1, Chadwick\_1, ChampagnePapi\_1, Chanagan\_2, Changeling\_4, Chargerpower\_5, ChipMunk\_5, Chupacabra\_1, Ciao\_1, Cindaradix\_1, Colbster\_1, Colin\_5, ConceptII\_2, Conspiracy\_1, Coog\_1, Corvo\_2, Crispicous1\_1, Crucio\_5, Cuco\_1, Cueyllyss\_1, Cullens\_1, DD5\_2, DaHudson\_1, Daishi\_1, Dalmatian\_5, DarthPhader\_4, Daudau\_2, Deloris\_4, Dexes\_2, Diane\_2, Dieselweasel\_1, Dignity\_5, Discoknowium\_1, Dixon\_1, Doom\_1, DrFeelGood\_1, Drake55\_5, Drake94\_1, Dre3\_68, DreamCatcher\_2, Dreamboat\_2, DroogsArmy\_1, DudeLittle\_5, Dulcie\_1, Dussy\_2, Dynamix\_2, EZMoney23\_4, Eaglepride\_1, Echild\_5, Edison31\_1, Edtherson\_2, ElGato\_5, ElTiger69\_1, EnochSoames\_2, EpicPhail\_1, Equemioh13\_5, Espresso\_2, Euphoria\_2, EvilGenius\_5, Eyeball\_1, Fajezeel\_2, Fameo\_5, Farber\_1, Fascinus\_1, Fenn\_1, Fernando\_1, FiringLine\_5, First\_004, Flare16\_5, ForGetIt\_1, Forsytheast\_1, Francis47\_2, Fred313\_1, FrogHopper\_2, Fushigi\_2, GageAP\_2, Gail\_4, Gandalf20\_2, Gemma\_1, Georgie2\_5, GingkoMaracino\_1, GirlDinner\_3, Gompeii16\_2, Goose\_1, Graduation\_1, GrecoEtereo\_2, GreenWeasel\_1, Greg\_2, Grif\_1, Groupthink\_2, Grub\_1, Grum1\_1, GtownJaz\_1, Gwendoluna\_1, Gyzlar\_2, HINdeR\_1, Haizum\_2, Hami1\_1, Hank144\_2, HarryHoudini\_5, HarryOW\_2, HashRod\_2, HaveUMetTed\_2, Heathen\_1, Heffalump\_5, HelDan\_1, Heliosoles\_1, Hercules11\_1, Hermia\_2, HermioneGrange\_2, HippoPololi\_68, Homines\_2, Hookmount\_1, Hope4ever\_1, HuhtaEnerson15\_1, ILeeKay\_1, Ichabod\_2, IgnatiusPatJac\_1, Isca\_1, Issmi\_2, Itza\_2, JC27\_2, JF2\_1, JF4\_1, JHC117\_1, Jabiru\_1, JackSparrow\_1, Janus\_3, JasmineDragon\_70, Jasper\_2, Jeeves\_4, JenCasNa\_1, JeppNRM\_2, Jerm2\_2, Jerm\_5, Jobu08\_1, Jorgensen\_2, JoshKayV\_5, Jovo\_1, JuliaChild\_2, KADY\_2, KBG\_2, KSSJEB\_1, Kalb97\_2, Kalnoky\_2, Kalpine\_4, Kanely\_3, Kenmech\_2, Killigrew\_1, Kimona\_1, KingCyrus\_5, KittenMittens\_1, Kristoff\_2, Kugel\_1, KyMonks1A\_1, Kykar\_1, LBerry\_1, LHTSCC\_1, LadyBird\_4, Lambert1\_1, Lamina13\_2, Larenn\_5, LarryKay\_1, Leogania\_4, Lesedi\_1, Lev2\_1, Leviathan\_5, Licorice\_2, LilBib\_1, LilTurb\_5, Lilith\_1, LittleCherry\_1, Lockley\_2, Lokk\_5, Loofah\_3, Lopton\_2, Loser\_4, Louie6\_1, Luchador\_4, LugYA\_3, MA5\_1, MK4\_1, MPlant7149\_2, MadMarie\_1, Magnar\_1, Magnito\_1, Mainiac\_1, Makemake\_2, Malec\_5, Malinsilva\_3, Manatee\_2, Manu\_2, MarQuardt\_1, Marav\_3, Marcell\_2, Marge\_1, Margo\_1, Marie\_1, Marius\_2, Maroc7\_1, Marsha\_2, MaryBeth\_2, McGuire\_2, MetalQZJ\_2, Methuselah\_1, Michley\_1, Microwolf\_1, MiculUcigas\_5, Midas2\_1, Miko\_5, Milcery\_1, MiniMommy\_73, Molly\_2, Monet\_2, MoneyMay\_1, Moose\_1, MrGordo\_1, Mryolo\_1, Mule\_1, Museum\_3, MyraDee\_1, NEHalo\_2, NaSiaTalie\_5, Naca\_1, Naira\_1, NearlyHeadless\_1, Nerujay\_1, Nhonho\_2, NicoleTera\_4, Nishikigoi\_2, Niza\_3, Noella\_1, Norz\_2, OKCentral2016\_1, Ohno789\_1, OlanP\_1, Ollie\_1, Omar\_2, Oogway\_1, P28Green\_1, PGHhamlin\_3, PSullivan\_2, Pablito\_2, PacerPaul\_2, Paedore\_3, Papez\_2, Paphu\_1, Paraselene\_1,

Pari\_2, Parliament\_1, PascalRango\_2, PattyP\_2, Payneful\_2, PeaceMeal1\_1, Pembroke\_1, Penny1\_1, Pepe\_2, Perseus\_1, Peterson\_1, Petp2012\_2, Petruchio\_2, PetterN\_1, Phantastic\_1, Pharaoh\_4, PherrisBueller\_2, Phillis\_1, PhishRPhriends\_1, Phlorence\_1, Phoebe\_1, Phoxy\_1, Phranny\_2, PhrostyMug\_1, PickleBack\_1, PinkPlastic\_1, Pinto\_1, Pippin\_2, Piro94\_4, Pistachio\_1, Pita2\_2, Pocahontas\_1, Poompha\_1, PotatoSplit\_2, Poushou\_54, Power\_5, Provolone\_4, Puppy\_1, PurpleHaze\_1, QTRlifeCrisis\_1, QueenB2\_5, QueenBeesly\_5, R4\_1, Rachaly\_5, Rajelicia\_2, Reba\_2, Rebeuca\_2, RedRock\_4, Refuge\_4, Retro23\_5, RhynO\_1, Rhynn\_1, RidgeCB\_2, Ringer\_1, Roary\_1, Rohr\_2, Rubeus\_2, Rufus\_2, Rummer\_1, Ruotula\_2, Rutherford\_1, SPB78\_77, STLscum\_2, Sabia\_1, Sabinator\_1, Saftant\_2, Sagefire\_2, Saintus\_1, Sanya\_1, SarFire\_2, Scorpia\_1, Scout\_1, Scowl\_2, Seabiscuit\_2, Seanderson\_1, SemperFi\_5, Severus\_1, ShakeltOph\_72, Sheen\_1, ShortQueendom\_1, Sibs6\_2, SkiPole\_2, Slagathor\_2, Smairt\_1, Smeadley\_1, Smeagan\_5, Smeagol\_1, SnapTap\_5, Snazzy\_1, SoilDragon\_1, Solon\_1, SororFago\_4, Sorpresa\_1, Soshari\_3, Spike509\_1, SpikeBT\_1, SqueakyClean\_3, Squee\_1, Stagni\_1, Steamy\_4, StepMih\_1, Stephig9\_1, StewieG\_1, Stink\_1, StrongArm\_1, Sumter\_1, Sunshine924\_1, SweetiePie\_5, SwissCheese\_1, Switzer\_2, TNguyen7\_1, Target\_2, TarsusIV\_5, Tasp14\_2, Taurus\_1, Tefunt\_2, Teodoridan\_1, TheloniousMonk\_2, Thestral\_2, Thor\_2, Tiffany\_1, Tiger\_1, Timshel\_1, TinaBelcher\_2, Toaka\_4, Todacoro\_1, Topanga\_1, Topgun\_1, Tote\_2, TouchMeNot\_54, Traft412\_3, Treddle\_2, Tripl3t\_1, Triumph\_3, Trixie\_4, Trooper\_5, Trouble\_1, TrvxScott\_2, Turbido\_5, Turj99\_1, Twister\_1, TwoPeat\_2, U2\_2, UnionJack\_87, Updawg\_5, Urza\_2, VA6\_4, VWB\_70, Verabelle\_3, Verse\_2, VieEnRose\_2, Violet\_2, Vix\_1, VroomVroom\_67, WalterMcMickey\_1, Watermelon\_2, Watson\_1, WeiHuaDA\_5, Whabigail7\_5, Wheeler\_2, WideWale\_5, Wilkins\_1, Wooldri\_3, XianYue\_4, Yecey3\_4, Yosif\_3, Zeeculate\_1, Zephyr\_1, Zetzy\_1, Zeuska\_1, Zimmer\_4, phiHau3\_1,

### Summary by start number:

#### Start 33:

- Found in 1 of 778 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amela\_2 (BD3),

#### Start 38:

- Found in 24 of 778 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 2 of 742
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Brataylor\_2 (BD1), Whatever\_2 (BD1),

#### Start 42:

- Found in 7 of 778 ( 0.9% ) of genes in pham
- Manual Annotations of this start: 2 of 742
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Heathen\_1 (A3), HelDan\_1 (A3),

#### Start 46:

- Found in 2 of 778 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Godpower\_2 (BD1),

Start 60:

- Found in 4 of 778 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 2 of 742
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ChampagnePapi\_1 (A4), Stink\_1 (A4),

Start 61:

- Found in 12 of 778 ( 1.5% ) of genes in pham
- Manual Annotations of this start: 2 of 742
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Cindaradix\_1 (A4), Rebeuca\_2 (A10),

Start 67:

- Found in 6 of 778 ( 0.8% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Daudau\_2 (BD2),

Start 70:

- Found in 67 of 778 ( 8.6% ) of genes in pham
- Manual Annotations of this start: 4 of 742
- Called 6.0% of time when present
- Phage (with cluster) where this start called: Magnito\_1 (A1), PhrostyMug\_1 (A1), Pinto\_1 (A1), Trouble\_1 (A1),

Start 73:

- Found in 32 of 778 ( 4.1% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 3.1% of time when present
- Phage (with cluster) where this start called: Papez\_2 (A1),

Start 74:

- Found in 21 of 778 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 3 of 742
- Called 14.3% of time when present
- Phage (with cluster) where this start called: ExplosioNervosa\_4 (A9), Qobbit\_4 (A9), Toaka\_4 (A9),

Start 76:

- Found in 2 of 778 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Danzina\_2 (BD1),

Start 77:

- Found in 75 of 778 ( 9.6% ) of genes in pham
- Manual Annotations of this start: 30 of 742
- Called 40.0% of time when present
- Phage (with cluster) where this start called: AgronaGT15\_1 (A3), BreSam8\_1 (A3), Colbster\_1 (A3), Cullens\_1 (A3), Daishi\_1 (A3), Dieselweasel\_1 (A3), Gemma\_1 (A3), GingkoMaracino\_1 (A3), HashRod\_2 (A3), Heliosoles\_1 (A3), JenCasNa\_1 (A3), Jobu08\_1 (A3), Kalnoky\_2 (A3), LBerry\_1 (A3), LugYA\_3 (A3), MadMarie\_1

(A3), Marie\_1 (A3), MoneyMay\_1 (A3), P28Green\_1 (A3), Pembroke\_1 (A3), Phoebe\_1 (A3), PotatoSplit\_2 (A3), PurpleHaze\_1 (A3), Rummer\_1 (A3), Sabia\_1 (A3), SoilDragon\_1 (A3), Soshari\_3 (A3), Taurus\_1 (A3), Wooldri\_3 (A3), Zetzy\_1 (A3),

Start 78:

- Found in 98 of 778 ( 12.6% ) of genes in pham
- Manual Annotations of this start: 3 of 742
- Called 3.1% of time when present
- Phage (with cluster) where this start called: AFIS\_1 (A1), KSSJEB\_1 (A1), MrGordo\_1 (A1),

Start 82:

- Found in 26 of 778 ( 3.3% ) of genes in pham
- Manual Annotations of this start: 25 of 742
- Called 96.2% of time when present
- Phage (with cluster) where this start called: AgentM\_1 (A5), Aragog\_1 (A5), Archetta\_1 (A5), Benedict\_1 (A5), Chadwick\_1 (A5), Conspiracy\_1 (A5), Coog\_1 (A5), Cuco\_1 (A5), Discoknowium\_1 (A5), EITiger69\_1 (A5), ForGetIt\_1 (A5), HuhtaEnerson15\_1 (A5), Jabiru\_1 (A5), Jovo\_1 (A5), Lev2\_1 (A5), LittleCherry\_1 (A5), Midas2\_1 (A5), Milcery\_1 (A5), Naca\_1 (A5), PetterN\_1 (A5), Phlorence\_1 (A5), PickleBack\_1 (A5), Scorpia\_1 (A5), Tiger\_1 (A5), UnionJack\_87 (A5),

Start 83:

- Found in 5 of 778 ( 0.6% ) of genes in pham
- Manual Annotations of this start: 3 of 742
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Fred313\_1 (A3), Phantastic\_1 (A3), Scout\_1 (A3),

Start 84:

- Found in 94 of 778 ( 12.1% ) of genes in pham
- Manual Annotations of this start: 61 of 742
- Called 64.9% of time when present
- Phage (with cluster) where this start called: Aglet\_1 (A3), Anthony\_1 (A20), Anubis\_3 (A3), AugsMagnumOpus\_3 (A3), Beauxregard13\_1 (A3), Bxz2\_1 (A3), Chupacabra\_1 (A10), DaHudson\_1 (A3), Drake94\_1 (A10), Eaglepride\_1 (A10), Edison31\_1 (A10), EpicPhail\_1 (A3), Farber\_1 (A3), Fernando\_1 (A3), Goose\_1 (A10), Grif\_1 (A3), Groupthink\_2 (A3), Grub\_1 (A3), Grum1\_1 (A3), GtownJaz\_1 (A3), HaveUMetTed\_2 (A3), Hercules11\_1 (A3), JHC117\_1 (A3), JeppNRM\_2 (A3), KADY\_2 (A3), Kalb97\_2 (A3), KittenMittens\_1 (A10), Kristoff\_2 (A10), LarryKay\_1 (A3), Lilith\_1 (A3), Louie6\_1 (A3), Mainiac\_1 (A3), Malinsilva\_3 (A3), Manu\_2 (A3), MarQuardt\_1 (A3), Marius\_2 (A3), Methuselah\_1 (A3), Microwolf\_1 (A3), OKCentral2016\_1 (A10), OlanP\_1 (A3), Ollie\_1 (A3), PGHhamlin\_3 (A3), PeaceMeal1\_1 (A10), Penny1\_1 (A3), PhishRPhriends\_1 (A3), Phoxy\_1 (A3), Phranny\_2 (A3), Poompha\_1 (A10), Reba\_2 (A3), RhynO\_1 (A10), Sabinator\_1 (A3), Severus\_1 (A10), Spike509\_1 (A3), Stagni\_1 (A3), StepMih\_1 (A3), Tiffany\_1 (A3), Topanga\_1 (A10), Twister\_1 (A10), Vix\_1 (A3), WalterMcMickey\_1 (A10), Watson\_1 (A3),

Start 85:

- Found in 89 of 778 ( 11.4% ) of genes in pham
- Manual Annotations of this start: 1 of 742



- Called 1.1% of time when present
- Phage (with cluster) where this start called: Kimona\_1 (A19),

#### Start 86:

- Found in 1 of 778 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sheen\_1 (A7),

#### Start 88:

- Found in 21 of 778 ( 2.7% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 4.8% of time when present
- Phage (with cluster) where this start called: Tefunt\_2 (BD2),

#### Start 89:

- Found in 4 of 778 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 2 of 742
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JasmineDragon\_70 (AZ4), MiniMommy\_73 (AZ4), ShakeltOph\_72 (AZ4), VroomVroom\_67 (AZ4),

#### Start 91:

- Found in 11 of 778 ( 1.4% ) of genes in pham
- Manual Annotations of this start: 5 of 742
- Called 63.6% of time when present
- Phage (with cluster) where this start called: Cerulean\_1 (A4), DARTHPhader\_4 (A12), LHTSCC\_1 (A4), Pharaoh\_4 (A12), SPB78\_77 (BA), VWB\_70 (BA), Zimmer\_4 (A12),

#### Start 92:

- Found in 2 of 778 ( 0.3% ) of genes in pham
- Manual Annotations of this start: 2 of 742
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dre3\_68 (CT), HippoPololi\_68 (CT),

#### Start 93:

- Found in 271 of 778 ( 34.8% ) of genes in pham
- Manual Annotations of this start: 252 of 742
- Called 96.7% of time when present
- Phage (with cluster) where this start called: AEgle\_67 (AZ1), AN9\_4 (A2), ANI8\_4 (A2), Aaronocolus\_2 (BD1), Adolin\_71 (AZ1), Adumb2043\_68 (AZ1), Adzzy\_4 (A2), Aliter\_4 (A9), Alma\_4 (A9), Amyev\_68 (AZ1), Anaysia\_4 (A15), Aneem\_4 (A11), Anon\_4 (A15), Arissanae\_4 (A9), Artemis2UCLA\_4 (A6), Asa16\_69 (AZ1), Ascela\_71 (AZ1), Asten\_2 (BD1), Attoomi\_53 (singleton), BABullseye\_4 (A6), BabyBack\_4 (A2), Bactobuster\_4 (A2), Barnstormer\_77 (EH), BarryBee\_3 (BD1), Battleship\_5 (A15), BeardedLady\_2 (BD1), Beemo\_4 (A9), Berrie\_69 (AZ1), Blinn1\_4 (A6), Blue7\_4 (A6), BogosyJay\_4 (A9), Boohoo\_4 (A15), Bovely\_2 (BD1), Bowtie\_4 (A11), BryanRecycles\_2 (BD1), Bud\_4 (A11), C3\_04 (A2), Caliburn\_2 (BD1), Caron\_82 (EH), Cassia\_68 (AZ1), Catalina\_4 (A9), Celeste\_2 (BD1), Charm\_4 (A9), Che12\_4 (A2), Chucky\_2 (BD1), CloudWang3\_4 (A6), Community\_70 (AZ1), Conquerage\_4 (A9), Cookiedough\_4 (A6), Crewmate\_74 (AZ1), D29\_4 (A2), D32\_4 (A2), DBQu4n\_4 (A2), DaVinci\_4 (A6), Dattran\_2 (BD1), DekHockey33\_4 (A15), DrManhattan\_72 (AZ1), DrSierra\_66 (AZ1), DreamTeam1\_4 (A9), Duplo\_4 (A2),

Dwayne\_2 (BD1), EagleEye\_4 (A16), Eddasa\_2 (BD1), Eidsmoe\_4 (A9), Ejemplo\_2 (BD1), Elephantoon\_4 (A9), Elezi\_68 (AZ1), Emaanora\_3 (BD1), Emotion\_74 (AZ4), EmyBug\_4 (A9), Epsocamisio\_4 (A15), Eraser\_69 (AZ1), EricB\_4 (A6), Esperer\_2 (BD1), Exile\_60 (AZ), Fayely\_4 (A9), Fibonacci\_4 (A11), Flaverint\_4 (A11), Floof\_81 (EH), Footloose\_71 (singleton), GardenState\_76 (EH), GaugeLDP\_4 (A2), Gilberta\_4 (A11), Gladiator\_4 (A6), Goby\_2 (BD1), GreedyLawyer\_4 (A6), Gretchen\_74 (EH), Gruunaga\_4 (A6), Hammer\_4 (A6), Herbertwm\_1 (A2), Hexamo\_4 (A6), Hippo\_2 (BD1), Honk\_82 (EH), Hoot\_4 (A6), HortumSL17\_4 (A9), Hutc2\_4 (A11), Hydra\_3 (BD1), IAmGroot\_75 (EH), Indigo\_2 (BD1), Indra\_4 (A6), Insomnia\_4 (A11), IronMan\_4 (A2), Isiphiwo\_4 (A6), Iter\_70 (AZ1), IttyBittyPiggy\_69 (AZ1), Iwokeuplikedis\_5 (A2), Izzy\_2 (BD1), JSwag\_4 (A15), Jaan\_4 (A2), Jabith\_4 (A11), Janeemi\_69 (AZ1), Jash\_2 (BD1), Jeffabunny\_4 (A6), JewelBug\_4 (A6), JohnDoe\_70 (AZ1), Jordennis\_4 (A6), Joselito\_4 (A11), Journey13\_4 (A2), Jsquared\_4 (A2), JuneStar\_68 (AZ1), Katalie\_2 (BD1), KatherineG\_4 (A15), Kaylissa\_71 (AZ1), Kazan\_4 (A6), KeAlii\_67 (AZ1), Kerberos\_4 (A2), Keziacharles14\_4 (A9), Kipper29\_4 (A6), Koko\_4 (A6), L5\_4 (A2), Lannister\_3 (BD1), LastResort\_4 (A15), Legacy\_2 (BD1), Lego\_69 (AZ1), Leviticus\_2 (BD1), Liebe\_69 (AZ2), Lika\_2 (BD1), Lizalica\_69 (AZ1), London\_69 (AZ1), LoneWolf\_4 (A9), Looper\_4 (A15), Lorelei\_2 (BD1), Lucivia\_4 (A11), Lucyedi\_4 (A16), MaCh\_4 (A11), MaGuCo\_63 (AZ2), Mabodamaca\_75 (EH), Maminiaina\_4 (A9), Maneekul\_2 (BD1), Maureen\_69 (AZ2), McFly\_4 (A6), MinecraftSteve\_5 (A15), MissSwiss\_70 (AZ1), MissWhite\_4 (A2), Mulciber\_4 (A11), Munch\_4 (A11), Myxus\_4 (A9), Nabi\_2 (BD1), Naji\_4 (A2), Nanodon\_3 (BD1), Nebulosus\_4 (A15), Nedarya\_4 (A15), Neeharika16\_4 (A6), Nerdos\_2 (BD1), Newrala\_4 (A6), Niobe\_69 (AZ1), Nitro\_70 (AZ1), ObiToo\_74 (AZ1), Odin\_3 (A2), Oliynk\_2 (BD1), Ozzie\_2 (BD1), OzzyJ\_3 (BD1), PackMan\_4 (A9), PainterBoy\_4 (A16), Percival\_75 (EH), Ph8s\_4 (A2), Phaded\_4 (A2), Phaeder\_4 (A9), Phettuccine\_2 (BD1), Phives\_70 (AZ1), Phonnegut\_4 (A9), Pioneer\_4 (A9), Pixelle\_69 (AZ1), Pmask\_4 (A6), Pomar16\_4 (A2), Powerpuff\_71 (AZ1), Priamo\_4 (A6), Priya\_4 (A9), Pukovnik\_4 (A2), Rahalelujah\_4 (A9), Rana\_2 (BD1), ReMo\_4 (A15), RedBear\_3 (BD1), Reedo\_68 (AZ1), Remus\_4 (A15), Rifter\_4 (A6), Roksolana\_4 (A6), Rosalind\_4 (A15), Rusticus\_2 (BD1), Salz\_4 (A11), Samy\_101 (singleton), SarahRose\_2 (BD1), Scherzo\_4 (A9), Serenity\_4 (A2), Sham4\_4 (A11), ShayRa\_5 (A15), SheaKeira\_4 (A9), SmellyB\_4 (A6), Snape\_4 (A11), Snek\_68 (AZ3), Snorlax\_2 (BD1), Soondubu\_62 (AZ), Soups\_4 (A15), South40\_2 (BD1), Spouty\_3 (A9), StarStuff\_4 (A2), Strosahl\_4 (A15), SuMoo\_85 (EH), Sue2\_69 (AZ1), Sujidade\_2 (BD1), SunsetPointe\_2 (BD1), SuperAwesome\_4 (A6), SuperCallie99\_4 (A6), Superchunk\_4 (A2), Switzerland\_4 (A15), TagePhighter\_3 (BD1), Tallboi\_69 (AZ1), Tbone\_69 (AZ1), TforTroy\_69 (AZ1), Tian\_67 (AZ1), Timothy\_4 (A11), TopsytheTRex\_4 (A2), Toma\_2 (BD1), Tomathan\_4 (A2), Triste\_2 (BD1), TuanPN\_2 (BD1), Tubs\_4 (A9), Tuck\_69 (AZ1), Tucker\_4 (A6), Turab\_68 (AZ1), Tutumahutu\_71 (AZ1), Tweety19\_69 (AZ3), Unstoppable\_2 (BD1), UtzChips\_77 (EH), VC3\_4 (A2), VResidence\_72 (AZ1), Vanisoa\_4 (A9), VohminGhazi\_4 (A6), Waits\_4 (A15), Warda\_70 (AZ1), Werner\_2 (BD1), Wiks\_4 (A6), Wildwest\_65 (AZ1), WunderPhul\_4 (A6), Yang\_68 (AZ1), Yasdnil\_2 (BD1), YesChef\_69 (AZ1), Yokurt\_4 (A6), Zaka\_4 (A6), Zemlya\_2 (BD1), Zeta1847\_76 (EH), Zulu\_4 (A6),

Start 94:

- Found in 142 of 778 ( 18.3% ) of genes in pham
- Manual Annotations of this start: 111 of 742
- Called 87.3% of time when present
- Phage (with cluster) where this start called: 20ES\_4 (A2), 40AC\_5 (A17), AN3\_4 (A2), AbbyPaige\_5 (A2), Acolyte\_4 (A2), Agape74\_5 (A2), Alsaber\_3 (BD3), Alvy\_3

(BD2), Amethyst\_2 (BD2), Andris\_2 (BD2), Animus\_3 (BD2), AnnaL29\_4 (A2), Anselm\_5 (A2), ArcherNM\_4 (A2), Baehexic\_5 (A2), BartholomewSD\_3 (BD2), BengiVuitton\_4 (A2), Benvolio\_5 (A2), BiancaTri92\_4 (A2), BobSwaget\_5 (A2), Bowden\_2 (BD2), BroPlease\_1 (BD4), Buggy\_5 (A2), CRB1\_4 (A2), Caelum\_3 (BD2), Celery\_4 (BD3), Celia\_2 (BD6), Centaur\_5 (A2), Changeling\_4 (A2), Chargerpower\_5 (A), ChipMunk\_5 (A2), Colin\_5 (A2), Crucio\_5 (A2), Dalmatian\_5 (A2), Deloris\_4 (A2), Diane\_2 (BD2), Dignity\_5 (A2), Drake55\_5 (A2), DudeLittle\_5 (A2), EZMoney23\_4 (A2), Echild\_5 (A2), ElGato\_5 (BD3), EnochSoames\_2 (BD1), Equemioh13\_5 (A2), EvilGenius\_5 (A2), Fameo\_5 (A2), FiringLine\_5 (A2), First\_004 (A2), Flare16\_5 (A2), Gail\_4 (A14), Georgie2\_5 (A2), GirlDinner\_3 (BD2), GreenWeasel\_1 (BD4), Haizum\_2 (BD2), Hank144\_2 (BD2), HarryHoudini\_5 (A2), Heffalump\_5 (A2), Issmi\_2 (BD2), Itza\_2 (BD6), Janus\_3 (BD2), Jeeves\_4 (A14), Jerm\_5 (A2), JoshKayV\_5 (A2), Kalpine\_4 (A2), KingCyrus\_5 (A2), LadyBird\_4 (A2), Larenn\_5 (A2), Leogania\_4 (A2), Leviathan\_5 (A2), LilTurb\_5 (A2), Lokk\_5 (A2), Loofah\_3 (BD2), Loser\_4 (A2), Luchador\_4 (A14), Malec\_5 (A2), Marav\_3 (BD2), Marsha\_2 (A1), MiculUcigas\_5 (A2), Miko\_5 (A2), NaSiaTalie\_5 (A2), NicoleTera\_4 (A2), Nishikigoi\_2 (BD2), Omar\_2 (BD2), Pablito\_2 (BD2), Paedore\_3 (BD2), Piro94\_4 (A2), Power\_5 (A2), Provolone\_4 (BD3), QueenB2\_5 (A2), QueenBeesly\_5 (A2), R4\_1 (BD2), Rachaly\_5 (A2), RedRock\_4 (A2), Refuge\_4 (A12), Retro23\_5 (A2), Saftant\_2 (BD3), SemperFi\_5 (A2), Smeagan\_5 (A2), SnapTap\_5 (A2), SororFago\_4 (A14), SqueakyClean\_3 (BD2), Steamy\_4 (A12), SweetiePie\_5 (A2), TarsusIV\_5 (A2), Thestral\_2 (BD2), TinaBelcher\_2 (BD2), Triumph\_3 (BD2), Trixie\_4 (A2), Trooper\_5 (A2), TrvxScott\_2 (BD2), Turbido\_5 (A2), Updawg\_5 (A2), Urza\_2 (BD6), VA6\_4 (A2), Verabelle\_3 (BD3), Verse\_2 (BD3), VieEnRose\_2 (BD6), WeiHuaDA\_5 (A2), Whabigail7\_5 (A2), WideWale\_5 (A2), XianYue\_4 (A2), Yecey3\_4 (A9), Yosif\_3 (BD3), phiHau3\_1 (BD4),

#### Start 95:

- Found in 1 of 778 ( 0.1% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee\_1 (A18),

#### Start 96:

- Found in 234 of 778 ( 30.1% ) of genes in pham
- Manual Annotations of this start: 217 of 742
- Called 96.2% of time when present
- Phage (with cluster) where this start called: Abbyshoes\_2 (A1), Acme\_2 (A1), Adahisdi\_1 (A1), Aeneas\_1 (A1), Ajay\_1 (A1), Alsfro\_2 (A1), Altman\_3 (A1), Alvin\_3 (A1), Anglerfish\_2 (A1), Applejack\_1 (A1), Arcanine\_2 (A1), Arianna\_54 (EO), Arlo\_2 (A1), Ashballer\_1 (A1), Astro\_1 (A8), Atkinbua\_1 (A1), BPBiabs31\_2 (A1), BabyRay\_1 (A3), BaconJack\_2 (A1), Barriga\_2 (A1), Beatrix\_1 (A1), BeesKnees\_2 (A1), Bethlehem\_2 (A1), Bexan\_1 (A1), Big3\_1 (A1), BigMau\_3 (A1), BigPaolini\_1 (A1), Bigfoot\_1 (A1), BillKnuckles\_2 (A1), Bircsak\_2 (A1), BluSpix\_1 (A1), BlueBird\_1 (A3), Blue\_3 (A1), Bob3\_2 (A1), Bones\_1 (A1), Briton15\_2 (A1), Bruns\_1 (A1), Burton\_2 (A1), Buttons\_2 (A1), Bxb1\_1 (A1), CactusRose\_1 (A1), Carlyle\_2 (A1), Caviar\_1 (A3), Chanagan\_2 (A1), Ciao\_1 (A1), ConceptII\_2 (A1), Corvo\_2 (A1), Crispicous1\_1 (A1), Cueyliss\_1 (A1), DD5\_2 (A1), Dexes\_2 (A1), Dixon\_1 (A8), Doom\_1 (A1), DrFeelGood\_1 (A1), Dreamboat\_2 (A1), DroogsArmy\_1 (A7), Dulcie\_1 (A1), Dussy\_2 (A1), Dynamix\_2 (A1), Edtherson\_2 (A1), Espresso\_2 (A1), Euphoria\_2 (A1), Eyeball\_1 (A1), Fajezeel\_2 (A1), Fascinus\_1 (A1), Fenn\_1 (A1), Forsytheast\_1 (A1), Francis47\_2 (A1), Froghopper\_2 (A1), Fushigi\_2 (A1), GageAP\_2 (A1), Gandalf20\_2 (A1), Gompeii16\_2 (A1), Graduation\_1 (A1),

GrecoEtereo\_2 (A1), Greg\_2 (A1), Gwendoluna\_1 (A1), Gyzlar\_2 (A1), HINdeR\_1 (A7), Hami1\_1 (A1), HarryOW\_2 (A1), Hermia\_2 (A1), HermioneGrange\_2 (A1), Homines\_2 (A1), Hookmount\_1 (A3), Hope4ever\_1 (A1), ILeeKay\_1 (A1), Ichabod\_2 (A1), IgnatiusPatJac\_1 (A1), Isca\_1 (A3), JC27\_2 (A1), JF2\_1 (A3), JF4\_1 (A3), JackSparrow\_1 (A1), Jasper\_2 (A1), Jerm2\_2 (A1), Jorgensen\_2 (A1), JuliaChild\_2 (A1), KBG\_2 (A1), Kanely\_3 (A1), Kenmech\_2 (A1), Killigrew\_1 (A1), Kugel\_1 (A1), KyMonks1A\_1 (A1), Kykar\_1 (A1), Lambert1\_1 (A3), Lamina13\_2 (A1), Lesedi\_1 (A1), Licorice\_2 (A1), LilBib\_1 (A1), Lockley\_2 (A1), Lopton\_2 (A1), MA5\_1 (A3), MK4\_1 (A3), MPlant7149\_2 (A1), Magnar\_1 (A1), Makemake\_2 (A1), Manatee\_2 (A1), Marcell\_2 (A1), Marge\_1 (A1), Margo\_1 (A3), Maroc7\_1 (A1), MaryBeth\_2 (A1), McGuire\_2 (A1), MetalQZJ\_2 (A1), Michley\_1 (A1), Molly\_2 (A1), Monet\_2 (A1), Moose\_1 (A1), Mryolo\_1 (A1), Mule\_1 (A1), Museum\_3 (A1), NEHalo\_2 (A1), Naira\_1 (A1), NearlyHeadless\_1 (A8), Nerujay\_1 (A1), Nhonho\_2 (A1), Niza\_3 (A1), Noella\_1 (A3), Norz\_2 (A1), Ohno789\_1 (A1), Oogway\_1 (A1), PSullivan\_2 (A1), PacerPaul\_2 (A1), Paphu\_1 (A1), Paraselene\_1 (A1), Pari\_2 (A1), Parliament\_1 (A1), PascalRango\_2 (A1), PattyP\_2 (A1), Payneful\_2 (A1), Pepe\_2 (A1), Perseus\_1 (A1), Peterson\_1 (A1), Petp2012\_2 (A1), Petruchio\_2 (A1), PherrisBueller\_2 (A1), Phillis\_1 (A8), PinkPlastic\_1 (A1), Pippin\_2 (A1), Pistachio\_1 (A3), Pita2\_2 (A1), Pocahontas\_1 (A3), Poushou\_54 (EO), Puppy\_1 (A3), QTRlifeCrisis\_1 (A1), Rajelicia\_2 (A1), Rhynn\_1 (A1), RidgeCB\_2 (A1), Ringer\_1 (A1), Roary\_1 (A8), Rohr\_2 (A1), Rubeus\_2 (A1), Rufus\_2 (A1), Rutherford\_1 (A1), STLscum\_2 (A1), Sagefire\_2 (A1), Saintus\_1 (A8), SarFire\_2 (A1), Scowl\_2 (A1), Seabiscuit\_2 (A1), Seanderson\_1 (A1), ShortQueendom\_1 (A1), Sibs6\_2 (A1), SkiPole\_2 (A1), Slagathor\_2 (A1), Smairt\_1 (A1), Smeadley\_1 (A8), Smeagol\_1 (A1), Snazzy\_1 (A1), Solon\_1 (A1), Sorpresa\_1 (A1), SpikeBT\_1 (A1), Squee\_1 (A1), Stephig9\_1 (A8), StewieG\_1 (A1), StrongArm\_1 (A1), Sumter\_1 (A1), Sunshine924\_1 (A1), SwissCheese\_1 (A1), Switzer\_2 (A1), TNguyen7\_1 (A3), Target\_2 (A1), Tasp14\_2 (A1), Teodoridan\_1 (A1), TheloniousMonk\_2 (A1), Thor\_2 (A1), Timshel\_1 (A7), Todacoro\_1 (A3), Topgun\_1 (A1), Tote\_2 (A1), TouchMeNot\_54 (EO), Traft412\_3 (A1), Treddle\_2 (A1), Tripl3t\_1 (A1), Turj99\_1 (A1), TwoPeat\_2 (A1), U2\_2 (A1), Violet\_2 (A1), Watermelon\_2 (A1), Wheeler\_2 (A1), Wilkins\_1 (A1), Zeeculate\_1 (A1), Zephyr\_1 (A1), Zeuska\_1 (A1),

#### Start 97:

- Found in 9 of 778 ( 1.2% ) of genes in pham
- Manual Annotations of this start: 1 of 742
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Airmid\_1 (A5),

#### Start 98:

- Found in 4 of 778 ( 0.5% ) of genes in pham
- Manual Annotations of this start: 3 of 742
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abrogate\_20 (A1), DreamCatcher\_2 (A1), Ruotula\_2 (A1), Sanya\_1 (A1),

#### Start 99:

- Found in 24 of 778 ( 3.1% ) of genes in pham
- Manual Annotations of this start: 3 of 742
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Bachome\_4 (A11), Ebony\_4 (A11), Orange\_4 (A11),

## Summary by clusters:

There are 35 clusters represented in this pham: singleton, BA, A7, A15, A14, A17, A16, A11, A10, A12, A19, A18, A1, BD4, A3, A2, BD1, A5, BD3, BD2, A9, A8, A4, A, EO, EH, A6, AZ, CT, A20, BD6, AZ1, AZ2, AZ3, AZ4,

Info for manual annotations of cluster A:

- Start number 94 was manually annotated 1 time for cluster A.

Info for manual annotations of cluster A1:

- Start number 70 was manually annotated 4 times for cluster A1.
- Start number 73 was manually annotated 1 time for cluster A1.
- Start number 78 was manually annotated 3 times for cluster A1.
- Start number 94 was manually annotated 1 time for cluster A1.
- Start number 96 was manually annotated 186 times for cluster A1.
- Start number 98 was manually annotated 3 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 61 was manually annotated 1 time for cluster A10.
- Start number 84 was manually annotated 15 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 93 was manually annotated 18 times for cluster A11.
- Start number 99 was manually annotated 3 times for cluster A11.

Info for manual annotations of cluster A12:

- Start number 91 was manually annotated 3 times for cluster A12.
- Start number 94 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A14:

- Start number 94 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 93 was manually annotated 21 times for cluster A15.

Info for manual annotations of cluster A16:

- Start number 93 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A18:

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

Info for manual annotations of cluster A19:

- Start number 85 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 93 was manually annotated 33 times for cluster A2.
- Start number 94 was manually annotated 67 times for cluster A2.

Info for manual annotations of cluster A20:

- Start number 84 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:

- Start number 42 was manually annotated 2 times for cluster A3.
- Start number 77 was manually annotated 30 times for cluster A3.
- Start number 83 was manually annotated 3 times for cluster A3.
- Start number 84 was manually annotated 45 times for cluster A3.
- Start number 96 was manually annotated 17 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 60 was manually annotated 2 times for cluster A4.
- Start number 61 was manually annotated 1 time for cluster A4.
- Start number 91 was manually annotated 2 times for cluster A4.

Info for manual annotations of cluster A5:

- Start number 82 was manually annotated 25 times for cluster A5.
- Start number 97 was manually annotated 1 time for cluster A5.

Info for manual annotations of cluster A6:

- Start number 93 was manually annotated 39 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 86 was manually annotated 1 time for cluster A7.
- Start number 96 was manually annotated 3 times for cluster A7.

Info for manual annotations of cluster A8:

- Start number 96 was manually annotated 8 times for cluster A8.

Info for manual annotations of cluster A9:

- Start number 74 was manually annotated 3 times for cluster A9.
- Start number 93 was manually annotated 28 times for cluster A9.
- Start number 94 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AZ:

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

Info for manual annotations of cluster AZ1:

- Start number 93 was manually annotated 38 times for cluster AZ1.

Info for manual annotations of cluster AZ2:

- Start number 93 was manually annotated 3 times for cluster AZ2.

Info for manual annotations of cluster AZ3:

- Start number 93 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ4:

- Start number 89 was manually annotated 2 times for cluster AZ4.
- Start number 93 was manually annotated 1 time for cluster AZ4.

Info for manual annotations of cluster BD1:

- Start number 38 was manually annotated 2 times for cluster BD1.
- Start number 46 was manually annotated 1 time for cluster BD1.
- Start number 76 was manually annotated 1 time for cluster BD1.
- Start number 93 was manually annotated 51 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 67 was manually annotated 1 time for cluster BD2.
- Start number 88 was manually annotated 1 time for cluster BD2.
- Start number 94 was manually annotated 23 times for cluster BD2.

Info for manual annotations of cluster BD3:

- Start number 33 was manually annotated 1 time for cluster BD3.
- Start number 94 was manually annotated 5 times for cluster BD3.

Info for manual annotations of cluster BD4:

- Start number 94 was manually annotated 3 times for cluster BD4.

Info for manual annotations of cluster BD6:

- Start number 94 was manually annotated 4 times for cluster BD6.

Info for manual annotations of cluster CT:

- Start number 92 was manually annotated 2 times for cluster CT.

Info for manual annotations of cluster EH:

- Start number 93 was manually annotated 11 times for cluster EH.

Info for manual annotations of cluster EO:

- Start number 96 was manually annotated 3 times for cluster EO.

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

Gene: 20ES\_4 Start: 2483, Stop: 2779, Start Num: 94

Candidate Starts for 20ES\_4:

(Start: 94 @2483 has 111 MA's),

Gene: 40AC\_5 Start: 2296, Stop: 2592, Start Num: 94

Candidate Starts for 40AC\_5:

(Start: 94 @2296 has 111 MA's), (117, 2413),

Gene: AEgle\_67 Start: 42706, Stop: 43008, Start Num: 93

Candidate Starts for AEgle\_67:

(Start: 93 @42706 has 252 MA's), (101, 42757), (104, 42772), (116, 42823), (125, 42898), (137, 42997),

Gene: AFIS\_1 Start: 572, Stop: 895, Start Num: 78

Candidate Starts for AFIS\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (Start: 99 @632 has 3 MA's), (118, 722), (129, 812), (134, 848),

Gene: AN3\_4 Start: 2464, Stop: 2760, Start Num: 94

Candidate Starts for AN3\_4:

(Start: 94 @2464 has 111 MA's), (118, 2587),

Gene: AN9\_4 Start: 2344, Stop: 2640, Start Num: 93

Candidate Starts for AN9\_4:

(Start: 93 @2344 has 252 MA's),

Gene: ANI8\_4 Start: 2344, Stop: 2640, Start Num: 93

Candidate Starts for ANI8\_4:

(Start: 93 @2344 has 252 MA's),

Gene: Aaronocolus\_2 Start: 740, Stop: 1054, Start Num: 93

Candidate Starts for Aaronocolus\_2:

(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: AbbyPaige\_5 Start: 2538, Stop: 2834, Start Num: 94

Candidate Starts for AbbyPaige\_5:

(Start: 94 @2538 has 111 MA's), (118, 2661),

Gene: Abbysshoes\_2 Start: 758, Stop: 1054, Start Num: 96

Candidate Starts for Abbysshoes\_2:

(Start: 96 @758 has 217 MA's), (118, 881), (124, 935), (129, 971), (134, 1007),

Gene: Abrogate\_20 Start: 1334, Stop: 1624, Start Num: 98

Candidate Starts for Abrogate\_20:

(9, 899), (17, 1016), (52, 1172), (56, 1181), (57, 1184), (Start: 98 @1334 has 3 MA's), (100, 1361), (129, 1541), (134, 1577),

Gene: Acme\_2 Start: 781, Stop: 1089, Start Num: 96

Candidate Starts for Acme\_2:

(Start: 96 @781 has 217 MA's), (118, 904), (129, 994), (134, 1030),

Gene: Acolyte\_4 Start: 2122, Stop: 2418, Start Num: 94

Candidate Starts for Acolyte\_4:

(Start: 94 @2122 has 111 MA's),

Gene: Adahisdi\_1 Start: 600, Stop: 896, Start Num: 96

Candidate Starts for Adahisdi\_1:

(Start: 70 @537 has 4 MA's), (Start: 78 @573 has 3 MA's), (Start: 85 @582 has 1 MA's), (Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: Adolin\_71 Start: 42654, Stop: 42956, Start Num: 93

Candidate Starts for Adolin\_71:

(Start: 93 @42654 has 252 MA's), (116, 42771), (125, 42846), (137, 42945),

Gene: Adumb2043\_68 Start: 42731, Stop: 43033, Start Num: 93

Candidate Starts for Adumb2043\_68:

(Start: 93 @42731 has 252 MA's), (101, 42782), (104, 42797), (116, 42848), (125, 42923), (137, 43022),

Gene: Adzzy\_4 Start: 2160, Stop: 2456, Start Num: 93

Candidate Starts for Adzzy\_4:

(Start: 93 @2160 has 252 MA's), (121, 2328), (126, 2355),

Gene: Aeneas\_1 Start: 595, Stop: 891, Start Num: 96

Candidate Starts for Aeneas\_1:

(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 94 @592 has 111 MA's), (Start: 96 @595 has 217 MA's), (118, 718), (129, 808), (134, 844),



Gene: Agape74\_5 Start: 2538, Stop: 2834, Start Num: 94

Candidate Starts for Agape74\_5:

(Start: 94 @2538 has 111 MA's), (118, 2661),

Gene: AgentM\_1 Start: 504, Stop: 803, Start Num: 82

Candidate Starts for AgentM\_1:

(29, 372), (Start: 82 @504 has 25 MA's), (114, 612), (122, 684), (131, 753), (138, 798),

Gene: Aglet\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Aglet\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: AgronaGT15\_1 Start: 518, Stop: 820, Start Num: 77

Candidate Starts for AgronaGT15\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Airmid\_1 Start: 517, Stop: 801, Start Num: 97

Candidate Starts for Airmid\_1:

(Start: 82 @502 has 25 MA's), (Start: 97 @517 has 1 MA's), (114, 610), (131, 751), (138, 796),

Gene: Ajay\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for Ajay\_1:

(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 94 @593 has 111 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: Aliter\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for Aliter\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Alma\_4 Start: 2333, Stop: 2626, Start Num: 93

Candidate Starts for Alma\_4:

(Start: 74 @2306 has 3 MA's), (Start: 93 @2333 has 252 MA's), (114, 2435), (118, 2453),

Gene: Alsaber\_3 Start: 970, Stop: 1284, Start Num: 94

Candidate Starts for Alsaber\_3:

(Start: 88 @964 has 1 MA's), (Start: 94 @970 has 111 MA's), (104, 1039), (119, 1114), (121, 1147),

Gene: Alsfro\_2 Start: 778, Stop: 1083, Start Num: 96

Candidate Starts for Alsfro\_2:

(87, 763), (Start: 96 @778 has 217 MA's), (118, 901), (124, 955), (129, 991), (134, 1027),

Gene: Altman\_3 Start: 1297, Stop: 1593, Start Num: 96

Candidate Starts for Altman\_3:

(Start: 73 @1249 has 1 MA's), (Start: 96 @1297 has 217 MA's), (118, 1420), (129, 1510), (134, 1546),

Gene: Alvin\_3 Start: 1213, Stop: 1509, Start Num: 96

Candidate Starts for Alvin\_3:

(Start: 96 @1213 has 217 MA's), (118, 1336), (124, 1390), (129, 1426), (134, 1462),

Gene: Alvy\_3 Start: 740, Stop: 1054, Start Num: 94

Candidate Starts for Alvy\_3:

(Start: 94 @740 has 111 MA's), (119, 884),

Gene: Amela\_2 Start: 787, Stop: 1275, Start Num: 33  
Candidate Starts for Amela\_2:  
(Start: 33 @787 has 1 MA's), (34, 790), (37, 802), (39, 811), (58, 853), (59, 859), (Start: 88 @955 has 1 MA's), (Start: 94 @961 has 111 MA's), (104, 1030), (119, 1105), (121, 1138),

Gene: Amethyst\_2 Start: 650, Stop: 964, Start Num: 94  
Candidate Starts for Amethyst\_2:  
(Start: 88 @641 has 1 MA's), (Start: 94 @650 has 111 MA's), (111, 755), (119, 794), (121, 827),

Gene: Amyev\_68 Start: 43916, Stop: 44218, Start Num: 93  
Candidate Starts for Amyev\_68:  
(Start: 93 @43916 has 252 MA's), (104, 43982), (116, 44033), (122, 44099), (137, 44207),

Gene: Anaysia\_4 Start: 2278, Stop: 2574, Start Num: 93  
Candidate Starts for Anaysia\_4:  
(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Andris\_2 Start: 682, Stop: 996, Start Num: 94  
Candidate Starts for Andris\_2:  
(Start: 94 @682 has 111 MA's), (119, 826), (121, 859),

Gene: Aneem\_4 Start: 2356, Stop: 2652, Start Num: 93  
Candidate Starts for Aneem\_4:  
(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Anglerfish\_2 Start: 747, Stop: 1043, Start Num: 96  
Candidate Starts for Anglerfish\_2:  
(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: Animus\_3 Start: 1027, Stop: 1341, Start Num: 94  
Candidate Starts for Animus\_3:  
(Start: 94 @1027 has 111 MA's), (104, 1096), (119, 1171),

Gene: AnnaL29\_4 Start: 2278, Stop: 2574, Start Num: 94  
Candidate Starts for AnnaL29\_4:  
(Start: 94 @2278 has 111 MA's), (118, 2401),

Gene: Anon\_4 Start: 2182, Stop: 2478, Start Num: 93  
Candidate Starts for Anon\_4:  
(Start: 93 @2182 has 252 MA's), (119, 2317),

Gene: Anselm\_5 Start: 2674, Stop: 2970, Start Num: 94  
Candidate Starts for Anselm\_5:  
(Start: 94 @2674 has 111 MA's), (118, 2797),

Gene: Anthony\_1 Start: 406, Stop: 699, Start Num: 84  
Candidate Starts for Anthony\_1:  
(Start: 84 @406 has 61 MA's),

Gene: Anubis\_3 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Anubis\_3:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Applejack\_1 Start: 597, Stop: 893, Start Num: 96  
Candidate Starts for Applejack\_1:  
(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Aragog\_1 Start: 534, Stop: 833, Start Num: 82  
Candidate Starts for Aragog\_1:  
(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: Arcanine\_2 Start: 750, Stop: 1046, Start Num: 96  
Candidate Starts for Arcanine\_2:  
(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: ArcherNM\_4 Start: 2293, Stop: 2589, Start Num: 94  
Candidate Starts for ArcherNM\_4:  
(Start: 94 @2293 has 111 MA's),

Gene: Archetta\_1 Start: 534, Stop: 833, Start Num: 82  
Candidate Starts for Archetta\_1:  
(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: Arianna\_54 Start: 40153, Stop: 40458, Start Num: 96  
Candidate Starts for Arianna\_54:  
(Start: 96 @40153 has 217 MA's), (106, 40228), (111, 40249), (121, 40330),

Gene: Arissanae\_4 Start: 2121, Stop: 2414, Start Num: 93  
Candidate Starts for Arissanae\_4:  
(Start: 93 @2121 has 252 MA's), (114, 2223), (118, 2241),

Gene: Arlo\_2 Start: 747, Stop: 1043, Start Num: 96  
Candidate Starts for Arlo\_2:  
(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: Artemis2UCLA\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Artemis2UCLA\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Asa16\_69 Start: 43233, Stop: 43535, Start Num: 93  
Candidate Starts for Asa16\_69:  
(Start: 93 @43233 has 252 MA's), (101, 43284), (104, 43299), (116, 43350), (125, 43425), (137, 43524),

Gene: Ascela\_71 Start: 43822, Stop: 44124, Start Num: 93  
Candidate Starts for Ascela\_71:  
(Start: 93 @43822 has 252 MA's), (104, 43888), (116, 43939), (125, 44014), (137, 44113),

Gene: Ashballer\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Ashballer\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Asten\_2 Start: 729, Stop: 1040, Start Num: 93  
Candidate Starts for Asten\_2:

(Start: 38 @588 has 2 MA's), (53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (120, 882),

Gene: Astro\_1 Start: 505, Stop: 798, Start Num: 96

Candidate Starts for Astro\_1:

(Start: 96 @505 has 217 MA's), (108, 592), (122, 679), (134, 757), (138, 793),

Gene: Atkinbua\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for Atkinbua\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Attoomi\_53 Start: 41445, Stop: 41750, Start Num: 93

Candidate Starts for Attoomi\_53:

(Start: 93 @41445 has 252 MA's), (107, 41532), (108, 41538), (118, 41577), (119, 41589),

Gene: AugsMagnumOpus\_3 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for AugsMagnumOpus\_3:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: BABullseye\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for BABullseye\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: BPBiebs31\_2 Start: 832, Stop: 1128, Start Num: 96

Candidate Starts for BPBiebs31\_2:

(Start: 73 @784 has 1 MA's), (Start: 96 @832 has 217 MA's), (118, 955), (129, 1045), (134, 1081),

Gene: BabyBack\_4 Start: 2096, Stop: 2392, Start Num: 93

Candidate Starts for BabyBack\_4:

(Start: 93 @2096 has 252 MA's),

Gene: BabyRay\_1 Start: 458, Stop: 754, Start Num: 96

Candidate Starts for BabyRay\_1:

(Start: 78 @449 has 3 MA's), (Start: 96 @458 has 217 MA's), (119, 593),

Gene: Bachome\_4 Start: 2386, Stop: 2649, Start Num: 99

Candidate Starts for Bachome\_4:

(Start: 93 @2353 has 252 MA's), (Start: 99 @2386 has 3 MA's), (108, 2443), (138, 2644),

Gene: BaconJack\_2 Start: 750, Stop: 1046, Start Num: 96

Candidate Starts for BaconJack\_2:

(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: Bactobuster\_4 Start: 2106, Stop: 2402, Start Num: 93

Candidate Starts for Bactobuster\_4:

(Start: 93 @2106 has 252 MA's), (111, 2205), (126, 2301),

Gene: Baehexic\_5 Start: 2625, Stop: 2921, Start Num: 94

Candidate Starts for Baehexic\_5:

(32, 2424), (Start: 94 @2625 has 111 MA's),

Gene: Barnstormer\_77 Start: 46434, Stop: 46733, Start Num: 93

Candidate Starts for Barnstormer\_77:

(Start: 73 @46389 has 1 MA's), (Start: 93 @46434 has 252 MA's), (112, 46542), (116, 46551),

Gene: Barriga\_2 Start: 749, Stop: 1045, Start Num: 96

Candidate Starts for Barriga\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: BarryBee\_3 Start: 729, Stop: 1040, Start Num: 93

Candidate Starts for BarryBee\_3:

(Start: 38 @588 has 2 MA's), (53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (120, 882),

Gene: BartholomewSD\_3 Start: 740, Stop: 1054, Start Num: 94

Candidate Starts for BartholomewSD\_3:

(Start: 94 @740 has 111 MA's), (119, 884),

Gene: Battleship\_5 Start: 2425, Stop: 2721, Start Num: 93

Candidate Starts for Battleship\_5:

(Start: 93 @2425 has 252 MA's), (108, 2515),

Gene: BeardedLady\_2 Start: 739, Stop: 1053, Start Num: 93

Candidate Starts for BeardedLady\_2:

(Start: 93 @739 has 252 MA's), (120, 895),

Gene: Beatrix\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Beatrix\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 94 @596 has 111 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Beauxregard13\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Beauxregard13\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Beemo\_4 Start: 2336, Stop: 2629, Start Num: 93

Candidate Starts for Beemo\_4:

(Start: 74 @2309 has 3 MA's), (Start: 93 @2336 has 252 MA's), (114, 2438), (118, 2456),

Gene: BeesKnees\_2 Start: 751, Stop: 1047, Start Num: 96

Candidate Starts for BeesKnees\_2:

(Start: 96 @751 has 217 MA's), (118, 874), (124, 928), (129, 964), (134, 1000),

Gene: Benedict\_1 Start: 503, Stop: 802, Start Num: 82

Candidate Starts for Benedict\_1:

(Start: 82 @503 has 25 MA's), (Start: 97 @518 has 1 MA's), (114, 611), (131, 752), (138, 797),

Gene: BengiVuitton\_4 Start: 2325, Stop: 2621, Start Num: 94

Candidate Starts for BengiVuitton\_4:

(Start: 94 @2325 has 111 MA's), (118, 2448),

Gene: Benvolio\_5 Start: 2672, Stop: 2968, Start Num: 94

Candidate Starts for Benvolio\_5:

(Start: 94 @2672 has 111 MA's), (118, 2795),

Gene: Berrie\_69 Start: 43434, Stop: 43736, Start Num: 93

Candidate Starts for Berrie\_69:

(Start: 93 @43434 has 252 MA's), (104, 43500), (116, 43551), (125, 43626), (137, 43725),

Gene: Bethlehem\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Bethlehem\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Bexan\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Bexan\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 94 @596 has 111 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: BiancaTri92\_4 Start: 2316, Stop: 2612, Start Num: 94

Candidate Starts for BiancaTri92\_4:

(Start: 94 @2316 has 111 MA's), (117, 2433),

Gene: Big3\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Big3\_1:

(Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: BigMau\_3 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for BigMau\_3:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: BigPaolini\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for BigPaolini\_1:

(Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: Bigfoot\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Bigfoot\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: BillKnuckles\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for BillKnuckles\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Bircsak\_2 Start: 835, Stop: 1131, Start Num: 96

Candidate Starts for Bircsak\_2:

(Start: 73 @787 has 1 MA's), (Start: 96 @835 has 217 MA's), (118, 958), (129, 1048), (134, 1084),

Gene: Blinn1\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Blinn1\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: BluSpix\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for BluSpix\_1:

(Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 94 @594 has 111 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Blue\_3 Start: 1232, Stop: 1528, Start Num: 96

Candidate Starts for Blue\_3:

(87, 1217), (Start: 96 @1232 has 217 MA's), (118, 1355), (129, 1445), (134, 1481),

Gene: Blue7\_4 Start: 2132, Stop: 2428, Start Num: 93

Candidate Starts for Blue7\_4:

(Start: 93 @2132 has 252 MA's), (119, 2267),

Gene: BlueBird\_1 Start: 420, Stop: 716, Start Num: 96

Candidate Starts for BlueBird\_1:

(Start: 96 @420 has 217 MA's), (119, 555),

Gene: Bob3\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Bob3\_2:

(Start: 96 @748 has 217 MA's), (129, 961), (134, 997),

Gene: BobSwaget\_5 Start: 2538, Stop: 2834, Start Num: 94

Candidate Starts for BobSwaget\_5:

(Start: 94 @2538 has 111 MA's),

Gene: BogosyJay\_4 Start: 2102, Stop: 2395, Start Num: 93

Candidate Starts for BogosyJay\_4:

(Start: 93 @2102 has 252 MA's), (114, 2204), (118, 2222),

Gene: Bones\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Bones\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Boohoo\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for Boohoo\_4:

(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Bovely\_2 Start: 740, Stop: 1054, Start Num: 93

Candidate Starts for Bovely\_2:

(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Bowden\_2 Start: 639, Stop: 953, Start Num: 94

Candidate Starts for Bowden\_2:

(Start: 94 @639 has 111 MA's), (119, 783),

Gene: Bowtie\_4 Start: 2356, Stop: 2652, Start Num: 93

Candidate Starts for Bowtie\_4:

(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Brataylor\_2 Start: 590, Stop: 1036, Start Num: 38

Candidate Starts for Brataylor\_2:

(35, 581), (Start: 38 @590 has 2 MA's), (Start: 93 @725 has 252 MA's), (105, 797), (110, 827), (118, 854),

Gene: BreSam8\_1 Start: 518, Stop: 820, Start Num: 77

Candidate Starts for BreSam8\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Briton15\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Briton15\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (124, 925), (129, 961), (134, 997),

Gene: BroPlease\_1 Start: 591, Stop: 905, Start Num: 94

Candidate Starts for BroPlease\_1:

(Start: 94 @591 has 111 MA's), (115, 708), (119, 735), (130, 837), (138, 900),

Gene: Bruns\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for Bruns\_1:

(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (124, 773), (129, 809), (134, 845),

Gene: BryanRecycles\_2 Start: 746, Stop: 1060, Start Num: 93

Candidate Starts for BryanRecycles\_2:

(64, 668), (Start: 93 @746 has 252 MA's), (120, 902),

Gene: Bud\_4 Start: 2362, Stop: 2658, Start Num: 93

Candidate Starts for Bud\_4:

(Start: 93 @2362 has 252 MA's), (Start: 99 @2395 has 3 MA's), (108, 2452), (138, 2653),

Gene: Buggy\_5 Start: 2549, Stop: 2845, Start Num: 94

Candidate Starts for Buggy\_5:

(Start: 94 @2549 has 111 MA's), (118, 2672),

Gene: Burton\_2 Start: 750, Stop: 1046, Start Num: 96

Candidate Starts for Burton\_2:

(Start: 96 @750 has 217 MA's), (129, 963), (134, 999),

Gene: Buttons\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Buttons\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Bxb1\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Bxb1\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Bxz2\_1 Start: 537, Stop: 830, Start Num: 84

Candidate Starts for Bxz2\_1:

(Start: 77 @528 has 30 MA's), (Start: 84 @537 has 61 MA's), (105, 603),

Gene: C3\_04 Start: 2344, Stop: 2640, Start Num: 93

Candidate Starts for C3\_04:

(Start: 93 @2344 has 252 MA's),

Gene: CRB1\_4 Start: 2473, Stop: 2769, Start Num: 94

Candidate Starts for CRB1\_4:

(Start: 94 @2473 has 111 MA's), (118, 2596),

Gene: CactusRose\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for CactusRose\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),



Gene: Caelum\_3 Start: 669, Stop: 983, Start Num: 94  
Candidate Starts for Caelum\_3:  
(Start: 84 @651 has 61 MA's), (Start: 88 @660 has 1 MA's), (Start: 94 @669 has 111 MA's), (119, 813), (121, 846),

Gene: Caliburn\_2 Start: 739, Stop: 1053, Start Num: 93  
Candidate Starts for Caliburn\_2:  
(Start: 93 @739 has 252 MA's), (120, 895),

Gene: Carlyle\_2 Start: 778, Stop: 1074, Start Num: 96  
Candidate Starts for Carlyle\_2:  
(87, 763), (Start: 96 @778 has 217 MA's), (118, 901), (124, 955), (129, 991), (134, 1027),

Gene: Caron\_82 Start: 47300, Stop: 47599, Start Num: 93  
Candidate Starts for Caron\_82:  
(5, 46730), (7, 46799), (8, 46829), (12, 46961), (14, 46979), (31, 47102), (Start: 77 @47273 has 30 MA's), (Start: 93 @47300 has 252 MA's), (112, 47408), (116, 47417),

Gene: Cassia\_68 Start: 43117, Stop: 43419, Start Num: 93  
Candidate Starts for Cassia\_68:  
(Start: 93 @43117 has 252 MA's), (104, 43183), (125, 43309), (137, 43408),

Gene: Catalina\_4 Start: 2335, Stop: 2628, Start Num: 93  
Candidate Starts for Catalina\_4:  
(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Caviar\_1 Start: 445, Stop: 741, Start Num: 96  
Candidate Starts for Caviar\_1:  
(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Celery\_4 Start: 962, Stop: 1276, Start Num: 94  
Candidate Starts for Celery\_4:  
(37, 803), (39, 812), (58, 854), (59, 860), (Start: 88 @956 has 1 MA's), (Start: 94 @962 has 111 MA's), (104, 1031), (119, 1106), (121, 1139),

Gene: Celeste\_2 Start: 725, Stop: 1036, Start Num: 93  
Candidate Starts for Celeste\_2:  
(35, 581), (Start: 38 @590 has 2 MA's), (Start: 93 @725 has 252 MA's), (105, 797), (110, 827), (118, 854),

Gene: Celia\_2 Start: 744, Stop: 1058, Start Num: 94  
Candidate Starts for Celia\_2:  
(Start: 94 @744 has 111 MA's), (119, 888),

Gene: Centaur\_5 Start: 2621, Stop: 2917, Start Num: 94  
Candidate Starts for Centaur\_5:  
(32, 2420), (Start: 94 @2621 has 111 MA's),

Gene: Cerulean\_1 Start: 461, Stop: 763, Start Num: 91  
Candidate Starts for Cerulean\_1:  
(Start: 91 @461 has 5 MA's), (105, 536), (134, 722),

Gene: Chadwick\_1 Start: 501, Stop: 800, Start Num: 82  
Candidate Starts for Chadwick\_1:  
(Start: 82 @501 has 25 MA's), (Start: 97 @516 has 1 MA's), (114, 609), (131, 750), (138, 795),

Gene: ChampagnePapi\_1 Start: 355, Stop: 762, Start Num: 60  
Candidate Starts for ChampagnePapi\_1:  
(Start: 60 @355 has 2 MA's), (Start: 91 @460 has 5 MA's), (105, 535), (134, 721),

Gene: Chanagan\_2 Start: 749, Stop: 1045, Start Num: 96  
Candidate Starts for Chanagan\_2:  
(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: Changeling\_4 Start: 2293, Stop: 2589, Start Num: 94  
Candidate Starts for Changeling\_4:  
(Start: 94 @2293 has 111 MA's),

Gene: Chargerpower\_5 Start: 2445, Stop: 2744, Start Num: 94  
Candidate Starts for Chargerpower\_5:  
(Start: 94 @2445 has 111 MA's),

Gene: Charm\_4 Start: 2108, Stop: 2401, Start Num: 93  
Candidate Starts for Charm\_4:  
(Start: 93 @2108 has 252 MA's), (108, 2195), (114, 2210), (118, 2228),

Gene: Che12\_4 Start: 2115, Stop: 2411, Start Num: 93  
Candidate Starts for Che12\_4:  
(Start: 93 @2115 has 252 MA's),

Gene: ChipMunk\_5 Start: 2559, Stop: 2855, Start Num: 94  
Candidate Starts for ChipMunk\_5:  
(Start: 94 @2559 has 111 MA's), (118, 2682),

Gene: Chucky\_2 Start: 730, Stop: 1041, Start Num: 93  
Candidate Starts for Chucky\_2:  
(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: Chupacabra\_1 Start: 460, Stop: 756, Start Num: 84  
Candidate Starts for Chupacabra\_1:  
(Start: 84 @460 has 61 MA's),

Gene: Ciao\_1 Start: 598, Stop: 906, Start Num: 96  
Candidate Starts for Ciao\_1:  
(71, 535), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's),  
(118, 721), (129, 811), (134, 847),

Gene: Cindaradix\_1 Start: 358, Stop: 765, Start Num: 61  
Candidate Starts for Cindaradix\_1:  
(Start: 61 @358 has 2 MA's), (105, 538), (134, 724),

Gene: CloudWang3\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for CloudWang3\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Colbster\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for Colbster\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Colin\_5 Start: 2440, Stop: 2736, Start Num: 94  
Candidate Starts for Colin\_5:  
(Start: 94 @2440 has 111 MA's), (118, 2563),

Gene: Community\_70 Start: 43720, Stop: 44022, Start Num: 93  
Candidate Starts for Community\_70:  
(Start: 93 @43720 has 252 MA's), (104, 43786), (116, 43837), (125, 43912), (137, 44011),

Gene: ConceptII\_2 Start: 835, Stop: 1131, Start Num: 96  
Candidate Starts for ConceptII\_2:  
(Start: 73 @787 has 1 MA's), (Start: 96 @835 has 217 MA's), (118, 958), (129, 1048), (134, 1084),

Gene: Conquerage\_4 Start: 2332, Stop: 2625, Start Num: 93  
Candidate Starts for Conquerage\_4:  
(Start: 74 @2305 has 3 MA's), (Start: 93 @2332 has 252 MA's), (114, 2434), (118, 2452),

Gene: Conspiracy\_1 Start: 535, Stop: 834, Start Num: 82  
Candidate Starts for Conspiracy\_1:  
(Start: 82 @535 has 25 MA's), (114, 643), (122, 715), (131, 784), (138, 829),

Gene: Coog\_1 Start: 503, Stop: 802, Start Num: 82  
Candidate Starts for Coog\_1:  
(27, 368), (Start: 82 @503 has 25 MA's), (114, 611), (122, 683), (131, 752), (138, 797),

Gene: Cookiedough\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Cookiedough\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Corvo\_2 Start: 751, Stop: 1047, Start Num: 96  
Candidate Starts for Corvo\_2:  
(Start: 96 @751 has 217 MA's), (118, 874), (129, 964), (134, 1000),

Gene: Crewmate\_74 Start: 43978, Stop: 44280, Start Num: 93  
Candidate Starts for Crewmate\_74:  
(Start: 93 @43978 has 252 MA's), (125, 44170), (137, 44269),

Gene: Crispicious1\_1 Start: 599, Stop: 895, Start Num: 96  
Candidate Starts for Crispicious1\_1:  
(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Crucio\_5 Start: 2567, Stop: 2863, Start Num: 94  
Candidate Starts for Crucio\_5:  
(Start: 94 @2567 has 111 MA's), (118, 2690),

Gene: Cuco\_1 Start: 533, Stop: 832, Start Num: 82  
Candidate Starts for Cuco\_1:  
(29, 371), (Start: 82 @533 has 25 MA's), (114, 641), (122, 713), (131, 782), (138, 827),

Gene: Cueylyss\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Cueylyss\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Cullens\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for Cullens\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: D29\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for D29\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: D32\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for D32\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: DBQu4n\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for DBQu4n\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: DD5\_2 Start: 739, Stop: 1035, Start Num: 96  
Candidate Starts for DD5\_2:  
(Start: 96 @739 has 217 MA's), (118, 862), (124, 916), (129, 952), (134, 988),

Gene: DaHudson\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for DaHudson\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: DaVinci\_4 Start: 2144, Stop: 2440, Start Num: 93  
Candidate Starts for DaVinci\_4:  
(Start: 93 @2144 has 252 MA's), (119, 2279),

Gene: Daishi\_1 Start: 518, Stop: 820, Start Num: 77  
Candidate Starts for Daishi\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Dalmatian\_5 Start: 2671, Stop: 2967, Start Num: 94  
Candidate Starts for Dalmatian\_5:  
(Start: 94 @2671 has 111 MA's), (118, 2794),

Gene: Danzina\_2 Start: 679, Stop: 1011, Start Num: 76  
Candidate Starts for Danzina\_2:  
(1, 34), (3, 43), (4, 70), (6, 142), (15, 406), (21, 466), (23, 490), (25, 499), (71, 649), (Start: 76 @679 has 1 MA's), (Start: 93 @700 has 252 MA's), (108, 796), (110, 802), (118, 829), (125, 892),

Gene: DarthPhader\_4 Start: 2246, Stop: 2542, Start Num: 91  
Candidate Starts for DarthPhader\_4:  
(Start: 91 @2246 has 5 MA's),

Gene: Dattran\_2 Start: 723, Stop: 1034, Start Num: 93  
Candidate Starts for Dattran\_2:

(Start: 38 @588 has 2 MA's), (Start: 93 @723 has 252 MA's), (105, 795), (110, 825), (118, 852), (125, 915),

Gene: Daudau\_2 Start: 579, Stop: 968, Start Num: 67

Candidate Starts for Daudau\_2:

(Start: 67 @579 has 1 MA's), (Start: 88 @645 has 1 MA's), (Start: 94 @654 has 111 MA's), (119, 798),

Gene: DekHockey33\_4 Start: 2425, Stop: 2721, Start Num: 93

Candidate Starts for DekHockey33\_4:

(Start: 93 @2425 has 252 MA's), (108, 2515),

Gene: Deloris\_4 Start: 2325, Stop: 2621, Start Num: 94

Candidate Starts for Deloris\_4:

(Start: 94 @2325 has 111 MA's), (118, 2448),

Gene: Dexes\_2 Start: 782, Stop: 1078, Start Num: 96

Candidate Starts for Dexes\_2:

(Start: 96 @782 has 217 MA's), (118, 905), (129, 995), (134, 1031),

Gene: Diane\_2 Start: 652, Stop: 966, Start Num: 94

Candidate Starts for Diane\_2:

(Start: 88 @643 has 1 MA's), (Start: 94 @652 has 111 MA's), (119, 796), (121, 829),

Gene: Dieselweasel\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for Dieselweasel\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Dignity\_5 Start: 2547, Stop: 2843, Start Num: 94

Candidate Starts for Dignity\_5:

(Start: 94 @2547 has 111 MA's), (118, 2670),

Gene: Discoknowium\_1 Start: 534, Stop: 833, Start Num: 82

Candidate Starts for Discoknowium\_1:

(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: Dixon\_1 Start: 505, Stop: 798, Start Num: 96

Candidate Starts for Dixon\_1:

(Start: 96 @505 has 217 MA's), (108, 592), (122, 679), (134, 757), (138, 793),

Gene: Doom\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for Doom\_1:

(Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: DrFeelGood\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for DrFeelGood\_1:

(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: DrManhattan\_72 Start: 42208, Stop: 42510, Start Num: 93

Candidate Starts for DrManhattan\_72:

(Start: 93 @42208 has 252 MA's), (116, 42325), (125, 42400), (137, 42499),

Gene: DrSierra\_66 Start: 42253, Stop: 42555, Start Num: 93  
Candidate Starts for DrSierra\_66:  
(Start: 93 @42253 has 252 MA's), (104, 42319), (116, 42370), (125, 42445), (137, 42544),

Gene: Drake55\_5 Start: 2627, Stop: 2923, Start Num: 94  
Candidate Starts for Drake55\_5:  
(32, 2426), (Start: 94 @2627 has 111 MA's),

Gene: Drake94\_1 Start: 472, Stop: 768, Start Num: 84  
Candidate Starts for Drake94\_1:  
(20, 247), (Start: 84 @472 has 61 MA's), (119, 607),

Gene: Dre3\_68 Start: 45474, Stop: 45806, Start Num: 92  
Candidate Starts for Dre3\_68:  
(Start: 84 @45456 has 61 MA's), (Start: 92 @45474 has 2 MA's),

Gene: DreamCatcher\_2 Start: 1332, Stop: 1622, Start Num: 98  
Candidate Starts for DreamCatcher\_2:  
(9, 897), (17, 1014), (52, 1170), (56, 1179), (57, 1182), (Start: 98 @1332 has 3 MA's), (100, 1359),  
(129, 1539), (134, 1575),

Gene: DreamTeam1\_4 Start: 2108, Stop: 2401, Start Num: 93  
Candidate Starts for DreamTeam1\_4:  
(Start: 93 @2108 has 252 MA's), (108, 2195), (114, 2210), (118, 2228),

Gene: Dreamboat\_2 Start: 863, Stop: 1171, Start Num: 96  
Candidate Starts for Dreamboat\_2:  
(Start: 73 @815 has 1 MA's), (Start: 96 @863 has 217 MA's), (118, 986), (129, 1076), (134, 1112),

Gene: DroogsArmy\_1 Start: 408, Stop: 704, Start Num: 96  
Candidate Starts for DroogsArmy\_1:  
(59, 297), (Start: 96 @408 has 217 MA's), (131, 654), (136, 672),

Gene: DudeLittle\_5 Start: 2671, Stop: 2967, Start Num: 94  
Candidate Starts for DudeLittle\_5:  
(Start: 94 @2671 has 111 MA's), (118, 2794),

Gene: Dulcie\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for Dulcie\_1:  
(71, 533), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's),  
(118, 719), (134, 845),

Gene: Duplo\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for Duplo\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: Dussy\_2 Start: 758, Stop: 1054, Start Num: 96  
Candidate Starts for Dussy\_2:  
(Start: 96 @758 has 217 MA's), (118, 881), (124, 935), (129, 971), (134, 1007),

Gene: Dwayne\_2 Start: 730, Stop: 1041, Start Num: 93  
Candidate Starts for Dwayne\_2:  
(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: Dynamix\_2 Start: 747, Stop: 1043, Start Num: 96  
Candidate Starts for Dynamix\_2:  
(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: EZMoney23\_4 Start: 2295, Stop: 2591, Start Num: 94  
Candidate Starts for EZMoney23\_4:  
(Start: 94 @2295 has 111 MA's),

Gene: EagleEye\_4 Start: 2125, Stop: 2418, Start Num: 93  
Candidate Starts for EagleEye\_4:  
(Start: 93 @2125 has 252 MA's), (105, 2191), (114, 2227), (118, 2245), (119, 2257),

Gene: Eaglepride\_1 Start: 473, Stop: 769, Start Num: 84  
Candidate Starts for Eaglepride\_1:  
(59, 386), (Start: 84 @473 has 61 MA's),

Gene: Ebony\_4 Start: 2395, Stop: 2658, Start Num: 99  
Candidate Starts for Ebony\_4:  
(Start: 93 @2362 has 252 MA's), (Start: 99 @2395 has 3 MA's), (108, 2452), (138, 2653),

Gene: Echild\_5 Start: 2672, Stop: 2968, Start Num: 94  
Candidate Starts for Echild\_5:  
(Start: 94 @2672 has 111 MA's), (118, 2795),

Gene: Eddasa\_2 Start: 746, Stop: 1060, Start Num: 93  
Candidate Starts for Eddasa\_2:  
(64, 668), (Start: 93 @746 has 252 MA's), (120, 902),

Gene: Edison31\_1 Start: 464, Stop: 760, Start Num: 84  
Candidate Starts for Edison31\_1:  
(Start: 84 @464 has 61 MA's),

Gene: Edtherson\_2 Start: 749, Stop: 1045, Start Num: 96  
Candidate Starts for Edtherson\_2:  
(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: Eidsmoe\_4 Start: 2332, Stop: 2625, Start Num: 93  
Candidate Starts for Eidsmoe\_4:  
(Start: 74 @2305 has 3 MA's), (Start: 93 @2332 has 252 MA's), (114, 2434), (118, 2452),

Gene: Ejemplo\_2 Start: 730, Stop: 1041, Start Num: 93  
Candidate Starts for Ejemplo\_2:  
(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (110, 832), (118, 859), (125, 922),

Gene: ElGato\_5 Start: 978, Stop: 1292, Start Num: 94  
Candidate Starts for ElGato\_5:  
(37, 825), (50, 858), (55, 864), (58, 870), (Start: 88 @972 has 1 MA's), (Start: 94 @978 has 111 MA's), (104, 1047), (119, 1122), (121, 1155),

Gene: ElTiger69\_1 Start: 502, Stop: 801, Start Num: 82  
Candidate Starts for ElTiger69\_1:

(Start: 82 @502 has 25 MA's), (Start: 97 @517 has 1 MA's), (114, 610), (131, 751), (138, 796),

Gene: Elephantoan\_4 Start: 2095, Stop: 2388, Start Num: 93

Candidate Starts for Elephantoan\_4:

(Start: 93 @2095 has 252 MA's), (114, 2197), (118, 2215),

Gene: Elezi\_68 Start: 43103, Stop: 43405, Start Num: 93

Candidate Starts for Elezi\_68:

(Start: 93 @43103 has 252 MA's), (101, 43154), (104, 43169), (116, 43220), (125, 43295), (137, 43394),

Gene: Emaanora\_3 Start: 729, Stop: 1040, Start Num: 93

Candidate Starts for Emaanora\_3:

(Start: 38 @588 has 2 MA's), (53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (120, 882),

Gene: Emotion\_74 Start: 44679, Stop: 45029, Start Num: 93

Candidate Starts for Emotion\_74:

(Start: 93 @44679 has 252 MA's), (137, 44970),

Gene: EmyBug\_4 Start: 2332, Stop: 2625, Start Num: 93

Candidate Starts for EmyBug\_4:

(Start: 74 @2305 has 3 MA's), (Start: 93 @2332 has 252 MA's), (114, 2434), (118, 2452),

Gene: EnochSoames\_2 Start: 742, Stop: 1056, Start Num: 94

Candidate Starts for EnochSoames\_2:

(Start: 38 @613 has 2 MA's), (Start: 88 @733 has 1 MA's), (Start: 94 @742 has 111 MA's), (120, 898),

Gene: EpicPhail\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for EpicPhail\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Epsocamisio\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for Epsocamisio\_4:

(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Equemioh13\_5 Start: 2624, Stop: 2920, Start Num: 94

Candidate Starts for Equemioh13\_5:

(32, 2423), (Start: 94 @2624 has 111 MA's),

Gene: Eraser\_69 Start: 43240, Stop: 43542, Start Num: 93

Candidate Starts for Eraser\_69:

(Start: 93 @43240 has 252 MA's), (101, 43291), (104, 43306), (116, 43357), (125, 43432), (137, 43531),

Gene: EricB\_4 Start: 2144, Stop: 2440, Start Num: 93

Candidate Starts for EricB\_4:

(Start: 93 @2144 has 252 MA's), (119, 2279),

Gene: Esperer\_2 Start: 740, Stop: 1054, Start Num: 93

Candidate Starts for Esperer\_2:

(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Espresso\_2 Start: 832, Stop: 1128, Start Num: 96



Candidate Starts for Espresso\_2:

(Start: 73 @784 has 1 MA's), (Start: 96 @832 has 217 MA's), (118, 955), (124, 1009), (129, 1045), (134, 1081),

Gene: Euphoria\_2 Start: 736, Stop: 1032, Start Num: 96

Candidate Starts for Euphoria\_2:

(Start: 96 @736 has 217 MA's), (118, 859), (124, 913), (129, 949), (134, 985),

Gene: EvilGenius\_5 Start: 2559, Stop: 2855, Start Num: 94

Candidate Starts for EvilGenius\_5:

(Start: 94 @2559 has 111 MA's), (118, 2682),

Gene: Exile\_60 Start: 43770, Stop: 44069, Start Num: 93

Candidate Starts for Exile\_60:

(50, 43632), (Start: 93 @43770 has 252 MA's), (104, 43836), (116, 43887), (137, 44061),

Gene: ExplosioNervosa\_4 Start: 2308, Stop: 2628, Start Num: 74

Candidate Starts for ExplosioNervosa\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Eyeball\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Eyeball\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Fajezeel\_2 Start: 749, Stop: 1057, Start Num: 96

Candidate Starts for Fajezeel\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: Fameo\_5 Start: 2671, Stop: 2967, Start Num: 94

Candidate Starts for Fameo\_5:

(Start: 94 @2671 has 111 MA's), (118, 2794),

Gene: Farber\_1 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for Farber\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Fascinus\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Fascinus\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Fayely\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for Fayely\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Fenn\_1 Start: 606, Stop: 902, Start Num: 96

Candidate Starts for Fenn\_1:

(Start: 70 @543 has 4 MA's), (Start: 78 @579 has 3 MA's), (Start: 85 @588 has 1 MA's), (Start: 96 @606 has 217 MA's), (118, 729), (124, 783), (129, 819), (134, 855),

Gene: Fernando\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Fernando\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Fibonacci\_4 Start: 2359, Stop: 2655, Start Num: 93

Candidate Starts for Fibonacci\_4:

(Start: 93 @2359 has 252 MA's), (Start: 99 @2392 has 3 MA's), (108, 2449), (138, 2650),

Gene: FiringLine\_5 Start: 2568, Stop: 2864, Start Num: 94

Candidate Starts for FiringLine\_5:

(Start: 94 @2568 has 111 MA's), (118, 2691),

Gene: First\_004 Start: 2483, Stop: 2779, Start Num: 94

Candidate Starts for First\_004:

(Start: 94 @2483 has 111 MA's),

Gene: Flare16\_5 Start: 2624, Stop: 2920, Start Num: 94

Candidate Starts for Flare16\_5:

(32, 2423), (Start: 94 @2624 has 111 MA's),

Gene: Flaverint\_4 Start: 2356, Stop: 2652, Start Num: 93

Candidate Starts for Flaverint\_4:

(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Floof\_81 Start: 48040, Stop: 48342, Start Num: 93

Candidate Starts for Floof\_81:

(25, 47851), (Start: 61 @47941 has 2 MA's), (72, 47998), (Start: 93 @48040 has 252 MA's), (104, 48106), (119, 48181), (120, 48193),

Gene: Footloose\_71 Start: 39222, Stop: 39524, Start Num: 93

Candidate Starts for Footloose\_71:

(Start: 93 @39222 has 252 MA's), (104, 39288), (121, 39393), (127, 39429),

Gene: ForGetIt\_1 Start: 561, Stop: 860, Start Num: 82

Candidate Starts for ForGetIt\_1:

(29, 372), (Start: 82 @561 has 25 MA's), (114, 669), (122, 741), (131, 810), (138, 855),

Gene: Forsytheast\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for Forsytheast\_1:

(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (124, 773), (129, 809), (134, 845),

Gene: Francis47\_2 Start: 835, Stop: 1131, Start Num: 96

Candidate Starts for Francis47\_2:

(Start: 73 @787 has 1 MA's), (Start: 96 @835 has 217 MA's), (118, 958), (129, 1048), (134, 1084),

Gene: Fred313\_1 Start: 416, Stop: 712, Start Num: 83

Candidate Starts for Fred313\_1:

(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 83 @416 has 3 MA's), (119, 551),

Gene: Froghopper\_2 Start: 749, Stop: 1045, Start Num: 96

Candidate Starts for Froghopper\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: Fushigi\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Fushigi\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: GageAP\_2 Start: 986, Stop: 1282, Start Num: 96

Candidate Starts for GageAP\_2:

(Start: 96 @986 has 217 MA's), (118, 1109), (129, 1199), (134, 1235),

Gene: Gail\_4 Start: 2396, Stop: 2692, Start Num: 94

Candidate Starts for Gail\_4:

(Start: 94 @2396 has 111 MA's), (113, 2498), (116, 2507), (117, 2513),

Gene: Gandalf20\_2 Start: 843, Stop: 1139, Start Num: 96

Candidate Starts for Gandalf20\_2:

(Start: 73 @795 has 1 MA's), (Start: 96 @843 has 217 MA's), (118, 966), (124, 1020), (129, 1056), (134, 1092),

Gene: GardenState\_76 Start: 44995, Stop: 45294, Start Num: 93

Candidate Starts for GardenState\_76:

(80, 44971), (Start: 93 @44995 has 252 MA's),

Gene: GaugeLDP\_4 Start: 2092, Stop: 2388, Start Num: 93

Candidate Starts for GaugeLDP\_4:

(Start: 93 @2092 has 252 MA's),

Gene: Gemma\_1 Start: 522, Stop: 824, Start Num: 77

Candidate Starts for Gemma\_1:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Georgie2\_5 Start: 2570, Stop: 2866, Start Num: 94

Candidate Starts for Georgie2\_5:

(Start: 94 @2570 has 111 MA's), (118, 2693),

Gene: Gilberta\_4 Start: 2353, Stop: 2649, Start Num: 93

Candidate Starts for Gilberta\_4:

(Start: 93 @2353 has 252 MA's), (Start: 99 @2386 has 3 MA's), (108, 2443), (138, 2644),

Gene: GingkoMaracino\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for GingkoMaracino\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: GirlDinner\_3 Start: 690, Stop: 1004, Start Num: 94

Candidate Starts for GirlDinner\_3:

(Start: 94 @690 has 111 MA's), (104, 759), (119, 834),

Gene: Gladiator\_4 Start: 2133, Stop: 2429, Start Num: 93

Candidate Starts for Gladiator\_4:

(Start: 93 @2133 has 252 MA's), (119, 2268),

Gene: Goby\_2 Start: 723, Stop: 1034, Start Num: 93

Candidate Starts for Goby\_2:

(Start: 38 @588 has 2 MA's), (Start: 93 @723 has 252 MA's), (105, 795), (110, 825), (118, 852), (125, 915),

Gene: Godpower\_2 Start: 615, Stop: 1037, Start Num: 46  
Candidate Starts for Godpower\_2:  
(Start: 46 @615 has 1 MA's), (Start: 93 @726 has 252 MA's), (105, 798), (110, 828), (118, 855),

Gene: Gompeii16\_2 Start: 835, Stop: 1131, Start Num: 96  
Candidate Starts for Gompeii16\_2:  
(Start: 73 @787 has 1 MA's), (Start: 96 @835 has 217 MA's), (118, 958), (129, 1048), (134, 1084),

Gene: Goose\_1 Start: 462, Stop: 758, Start Num: 84  
Candidate Starts for Goose\_1:  
(Start: 84 @462 has 61 MA's),

Gene: Graduation\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Graduation\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 94 @595 has 111 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: GrecoEtereo\_2 Start: 749, Stop: 1057, Start Num: 96  
Candidate Starts for GrecoEtereo\_2:  
(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: GreedyLawyer\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for GreedyLawyer\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: GreenWeasel\_1 Start: 591, Stop: 905, Start Num: 94  
Candidate Starts for GreenWeasel\_1:  
(Start: 94 @591 has 111 MA's), (115, 708), (119, 735), (130, 837), (138, 900),

Gene: Greg\_2 Start: 749, Stop: 1057, Start Num: 96  
Candidate Starts for Greg\_2:  
(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: Gretchen\_74 Start: 47033, Stop: 47335, Start Num: 93  
Candidate Starts for Gretchen\_74:  
(Start: 93 @47033 has 252 MA's), (104, 47099), (116, 47150), (119, 47174),

Gene: Grif\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Grif\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Groupthink\_2 Start: 531, Stop: 824, Start Num: 84  
Candidate Starts for Groupthink\_2:  
(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Grub\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Grub\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Grum1\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Grum1\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Gruunaga\_4 Start: 2133, Stop: 2429, Start Num: 93

Candidate Starts for Gruunaga\_4:

(Start: 93 @2133 has 252 MA's), (119, 2268),

Gene: GtownJaz\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for GtownJaz\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Gwendoluna\_1 Start: 600, Stop: 896, Start Num: 96

Candidate Starts for Gwendoluna\_1:

(Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: Gyzlar\_2 Start: 742, Stop: 1038, Start Num: 96

Candidate Starts for Gyzlar\_2:

(Start: 96 @742 has 217 MA's), (118, 865), (129, 955), (134, 991),

Gene: HINdeR\_1 Start: 411, Stop: 704, Start Num: 96

Candidate Starts for HINdeR\_1:

(Start: 96 @411 has 217 MA's), (104, 477), (131, 654), (136, 672),

Gene: Haizum\_2 Start: 652, Stop: 966, Start Num: 94

Candidate Starts for Haizum\_2:

(Start: 88 @643 has 1 MA's), (Start: 94 @652 has 111 MA's), (119, 796), (121, 829),

Gene: Hami1\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Hami1\_1:

(71, 535), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Hammer\_4 Start: 2132, Stop: 2428, Start Num: 93

Candidate Starts for Hammer\_4:

(Start: 93 @2132 has 252 MA's), (119, 2267),

Gene: Hank144\_2 Start: 693, Stop: 1007, Start Num: 94

Candidate Starts for Hank144\_2:

(Start: 67 @618 has 1 MA's), (68, 624), (Start: 94 @693 has 111 MA's), (104, 762), (119, 837), (120, 849),

Gene: HarryHoudini\_5 Start: 2627, Stop: 2923, Start Num: 94

Candidate Starts for HarryHoudini\_5:

(32, 2426), (Start: 94 @2627 has 111 MA's),

Gene: HarryOW\_2 Start: 749, Stop: 1057, Start Num: 96

Candidate Starts for HarryOW\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: HashRod\_2 Start: 518, Stop: 820, Start Num: 77

Candidate Starts for HashRod\_2:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: HaveUMetTed\_2 Start: 531, Stop: 824, Start Num: 84

Candidate Starts for HaveUMetTed\_2:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Heathen\_1 Start: 293, Stop: 712, Start Num: 42  
Candidate Starts for Heathen\_1:  
(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 83 @416 has 3 MA's), (119, 551),

Gene: Heffalump\_5 Start: 2671, Stop: 2967, Start Num: 94  
Candidate Starts for Heffalump\_5:  
(Start: 94 @2671 has 111 MA's), (118, 2794),

Gene: HelDan\_1 Start: 293, Stop: 712, Start Num: 42  
Candidate Starts for HelDan\_1:  
(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 83 @416 has 3 MA's), (119, 551),

Gene: Heliosoles\_1 Start: 522, Stop: 824, Start Num: 77  
Candidate Starts for Heliosoles\_1:  
(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Herbertwm\_1 Start: 414, Stop: 710, Start Num: 93  
Candidate Starts for Herbertwm\_1:  
(65, 327), (66, 330), (Start: 93 @414 has 252 MA's), (111, 513),

Gene: Hercules11\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Hercules11\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Hermia\_2 Start: 750, Stop: 1046, Start Num: 96  
Candidate Starts for Hermia\_2:  
(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: HermioneGrange\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for HermioneGrange\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Hexamo\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Hexamo\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Hippo\_2 Start: 729, Stop: 1040, Start Num: 93  
Candidate Starts for Hippo\_2:  
(53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (120, 882),

Gene: HippoPololi\_68 Start: 45087, Stop: 45419, Start Num: 92  
Candidate Starts for HippoPololi\_68:  
(Start: 92 @45087 has 2 MA's),

Gene: Homines\_2 Start: 832, Stop: 1128, Start Num: 96  
Candidate Starts for Homines\_2:  
(Start: 73 @784 has 1 MA's), (Start: 96 @832 has 217 MA's), (118, 955), (129, 1045), (134, 1081),

Gene: Honk\_82 Start: 49790, Stop: 50095, Start Num: 93  
Candidate Starts for Honk\_82:  
(62, 49700), (80, 49769), (Start: 93 @49790 has 252 MA's), (103, 49850),

Gene: Hookmount\_1 Start: 445, Stop: 741, Start Num: 96

Candidate Starts for Hookmount\_1:

(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Hoot\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Hoot\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Hope4ever\_1 Start: 600, Stop: 896, Start Num: 96

Candidate Starts for Hope4ever\_1:

(Start: 70 @537 has 4 MA's), (Start: 78 @573 has 3 MA's), (Start: 85 @582 has 1 MA's), (Start: 94 @597 has 111 MA's), (Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: HortumSL17\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for HortumSL17\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: HuhtaEnerson15\_1 Start: 535, Stop: 834, Start Num: 82

Candidate Starts for HuhtaEnerson15\_1:

(Start: 82 @535 has 25 MA's), (114, 643), (122, 715), (131, 784), (138, 829),

Gene: Hutc2\_4 Start: 2359, Stop: 2655, Start Num: 93

Candidate Starts for Hutc2\_4:

(Start: 93 @2359 has 252 MA's), (Start: 99 @2392 has 3 MA's), (108, 2449), (138, 2650),

Gene: Hydra\_3 Start: 739, Stop: 1053, Start Num: 93

Candidate Starts for Hydra\_3:

(Start: 93 @739 has 252 MA's), (120, 895),

Gene: IAmGroot\_75 Start: 45197, Stop: 45496, Start Num: 93

Candidate Starts for IAmGroot\_75:

(80, 45173), (Start: 93 @45197 has 252 MA's),

Gene: ILeeKay\_1 Start: 547, Stop: 843, Start Num: 96

Candidate Starts for ILeeKay\_1:

(Start: 70 @484 has 4 MA's), (Start: 78 @520 has 3 MA's), (Start: 85 @529 has 1 MA's), (Start: 96 @547 has 217 MA's), (118, 670), (129, 760), (134, 796),

Gene: Ichabod\_2 Start: 749, Stop: 1045, Start Num: 96

Candidate Starts for Ichabod\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (134, 998),

Gene: IgnatiusPatJac\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for IgnatiusPatJac\_1:

(Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 94 @594 has 111 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Indigo\_2 Start: 740, Stop: 1054, Start Num: 93

Candidate Starts for Indigo\_2:

(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Indra\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Indra\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Insomnia\_4 Start: 2356, Stop: 2652, Start Num: 93

Candidate Starts for Insomnia\_4:

(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: IronMan\_4 Start: 2114, Stop: 2410, Start Num: 93

Candidate Starts for IronMan\_4:

(Start: 93 @2114 has 252 MA's), (111, 2213), (126, 2309),

Gene: Isca\_1 Start: 420, Stop: 716, Start Num: 96

Candidate Starts for Isca\_1:

(55, 318), (79, 411), (Start: 96 @420 has 217 MA's), (119, 555),

Gene: Isiphiwo\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Isiphiwo\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Issmi\_2 Start: 651, Stop: 965, Start Num: 94

Candidate Starts for Issmi\_2:

(Start: 94 @651 has 111 MA's), (119, 795), (121, 828), (138, 960),

Gene: Iter\_70 Start: 43593, Stop: 43895, Start Num: 93

Candidate Starts for Iter\_70:

(Start: 93 @43593 has 252 MA's), (104, 43659), (116, 43710), (125, 43785), (137, 43884),

Gene: IttyBittyPiggy\_69 Start: 41834, Stop: 42145, Start Num: 93

Candidate Starts for IttyBittyPiggy\_69:

(Start: 93 @41834 has 252 MA's), (125, 42026), (137, 42125),

Gene: Itza\_2 Start: 744, Stop: 1058, Start Num: 94

Candidate Starts for Itza\_2:

(Start: 94 @744 has 111 MA's), (119, 888),

Gene: Iwokeuplikedis\_5 Start: 2364, Stop: 2660, Start Num: 93

Candidate Starts for Iwokeuplikedis\_5:

(Start: 93 @2364 has 252 MA's),

Gene: Izzy\_2 Start: 793, Stop: 1107, Start Num: 93

Candidate Starts for Izzy\_2:

(64, 715), (Start: 93 @793 has 252 MA's), (120, 949),

Gene: JC27\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for JC27\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: JF2\_1 Start: 419, Stop: 715, Start Num: 96

Candidate Starts for JF2\_1:

(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 96 @419 has 217 MA's), (119, 554),

Gene: JF4\_1 Start: 419, Stop: 715, Start Num: 96

Candidate Starts for JF4\_1:

(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 96 @419 has 217 MA's), (119, 554),



Gene: JHC117\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for JHC117\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: JSwag\_4 Start: 2278, Stop: 2574, Start Num: 93  
Candidate Starts for JSwag\_4:  
(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Jaan\_4 Start: 2110, Stop: 2406, Start Num: 93  
Candidate Starts for Jaan\_4:  
(Start: 93 @2110 has 252 MA's), (111, 2209), (126, 2305),

Gene: Jabiru\_1 Start: 502, Stop: 801, Start Num: 82  
Candidate Starts for Jabiru\_1:  
(Start: 82 @502 has 25 MA's), (Start: 97 @517 has 1 MA's), (114, 610), (131, 751), (138, 796),

Gene: Jabith\_4 Start: 2356, Stop: 2652, Start Num: 93  
Candidate Starts for Jabith\_4:  
(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: JackSparrow\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for JackSparrow\_1:  
(Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 91 @593 has 5 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: Janeemi\_69 Start: 43509, Stop: 43811, Start Num: 93  
Candidate Starts for Janeemi\_69:  
(Start: 93 @43509 has 252 MA's), (104, 43575), (116, 43626), (125, 43701), (137, 43800),

Gene: Janus\_3 Start: 1027, Stop: 1341, Start Num: 94  
Candidate Starts for Janus\_3:  
(Start: 94 @1027 has 111 MA's), (104, 1096), (119, 1171),

Gene: Jash\_2 Start: 746, Stop: 1060, Start Num: 93  
Candidate Starts for Jash\_2:  
(64, 668), (Start: 93 @746 has 252 MA's), (120, 902),

Gene: JasmineDragon\_70 Start: 43243, Stop: 43605, Start Num: 89  
Candidate Starts for JasmineDragon\_70:  
(53, 43126), (Start: 89 @43243 has 2 MA's), (103, 43312), (104, 43318), (135, 43513), (140, 43555),

Gene: Jasper\_2 Start: 863, Stop: 1171, Start Num: 96  
Candidate Starts for Jasper\_2:  
(Start: 73 @815 has 1 MA's), (Start: 96 @863 has 217 MA's), (118, 986), (129, 1076), (134, 1112),

Gene: Jeeves\_4 Start: 2418, Stop: 2714, Start Num: 94  
Candidate Starts for Jeeves\_4:  
(Start: 94 @2418 has 111 MA's), (116, 2529), (117, 2535),

Gene: Jeffabunny\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Jeffabunny\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: JenCasNa\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for JenCasNa\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: JeppNRM\_2 Start: 531, Stop: 824, Start Num: 84  
Candidate Starts for JeppNRM\_2:  
(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Jerm\_5 Start: 2548, Stop: 2844, Start Num: 94  
Candidate Starts for Jerm\_5:  
(Start: 94 @2548 has 111 MA's), (118, 2671),

Gene: Jerm2\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for Jerm2\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: JewelBug\_4 Start: 2144, Stop: 2440, Start Num: 93  
Candidate Starts for JewelBug\_4:  
(Start: 93 @2144 has 252 MA's), (119, 2279),

Gene: Jobu08\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for Jobu08\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: JohnDoe\_70 Start: 43395, Stop: 43697, Start Num: 93  
Candidate Starts for JohnDoe\_70:  
(Start: 93 @43395 has 252 MA's), (101, 43446), (104, 43461), (116, 43512), (125, 43587), (137, 43686),

Gene: Jordennis\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Jordennis\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Jorgensen\_2 Start: 833, Stop: 1129, Start Num: 96  
Candidate Starts for Jorgensen\_2:  
(Start: 73 @785 has 1 MA's), (Start: 96 @833 has 217 MA's), (118, 956), (124, 1010), (129, 1046), (134, 1082),

Gene: Joselito\_4 Start: 2356, Stop: 2652, Start Num: 93  
Candidate Starts for Joselito\_4:  
(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: JoshKayV\_5 Start: 2563, Stop: 2859, Start Num: 94  
Candidate Starts for JoshKayV\_5:  
(Start: 94 @2563 has 111 MA's), (118, 2686),

Gene: Journey13\_4 Start: 2424, Stop: 2720, Start Num: 93  
Candidate Starts for Journey13\_4:  
(Start: 93 @2424 has 252 MA's), (108, 2514),

Gene: Jovo\_1 Start: 535, Stop: 834, Start Num: 82  
Candidate Starts for Jovo\_1:

(Start: 82 @535 has 25 MA's), (114, 643), (122, 715), (131, 784), (138, 829),

Gene: Jsquared\_4 Start: 2327, Stop: 2623, Start Num: 93

Candidate Starts for Jsquared\_4:

(Start: 93 @2327 has 252 MA's),

Gene: JuliaChild\_2 Start: 834, Stop: 1130, Start Num: 96

Candidate Starts for JuliaChild\_2:

(Start: 73 @786 has 1 MA's), (Start: 96 @834 has 217 MA's), (118, 957), (129, 1047), (134, 1083),

Gene: JuneStar\_68 Start: 44149, Stop: 44457, Start Num: 93

Candidate Starts for JuneStar\_68:

(24, 43936), (Start: 93 @44149 has 252 MA's), (104, 44215), (122, 44332), (125, 44341), (137, 44440),

Gene: KADY\_2 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for KADY\_2:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: KBG\_2 Start: 835, Stop: 1131, Start Num: 96

Candidate Starts for KBG\_2:

(Start: 73 @787 has 1 MA's), (Start: 96 @835 has 217 MA's), (118, 958), (129, 1048), (134, 1084),

Gene: KSSJEB\_1 Start: 580, Stop: 903, Start Num: 78

Candidate Starts for KSSJEB\_1:

(Start: 78 @580 has 3 MA's), (Start: 85 @589 has 1 MA's), (Start: 96 @607 has 217 MA's), (118, 730), (129, 820), (134, 856),

Gene: Kalb97\_2 Start: 528, Stop: 821, Start Num: 84

Candidate Starts for Kalb97\_2:

(Start: 77 @519 has 30 MA's), (Start: 84 @528 has 61 MA's), (105, 594),

Gene: Kalnoky\_2 Start: 522, Stop: 824, Start Num: 77

Candidate Starts for Kalnoky\_2:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Kalpine\_4 Start: 2560, Stop: 2856, Start Num: 94

Candidate Starts for Kalpine\_4:

(Start: 94 @2560 has 111 MA's),

Gene: Kanely\_3 Start: 1297, Stop: 1593, Start Num: 96

Candidate Starts for Kanely\_3:

(Start: 73 @1249 has 1 MA's), (Start: 96 @1297 has 217 MA's), (118, 1420), (129, 1510), (134, 1546),

Gene: Katalie\_2 Start: 726, Stop: 1040, Start Num: 93

Candidate Starts for Katalie\_2:

(36, 582), (Start: 93 @726 has 252 MA's), (105, 798), (120, 882),

Gene: KatherineG\_4 Start: 2425, Stop: 2721, Start Num: 93

Candidate Starts for KatherineG\_4:

(Start: 93 @2425 has 252 MA's), (108, 2515),

Gene: Kaylissa\_71 Start: 43755, Stop: 44057, Start Num: 93

Candidate Starts for Kaylissa\_71:  
(Start: 93 @43755 has 252 MA's), (101, 43806), (104, 43821), (116, 43872), (125, 43947), (137, 44046),

Gene: Kazan\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Kazan\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: KeAlii\_67 Start: 41473, Stop: 41784, Start Num: 93  
Candidate Starts for KeAlii\_67:  
(Start: 93 @41473 has 252 MA's), (104, 41539), (116, 41590), (137, 41764),

Gene: Kenmech\_2 Start: 758, Stop: 1054, Start Num: 96  
Candidate Starts for Kenmech\_2:  
(Start: 96 @758 has 217 MA's), (118, 881), (124, 935), (129, 971), (134, 1007),

Gene: Kerberos\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for Kerberos\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: Keziacharles14\_4 Start: 2212, Stop: 2505, Start Num: 93  
Candidate Starts for Keziacharles14\_4:  
(Start: 93 @2212 has 252 MA's), (108, 2299), (114, 2314), (118, 2332),

Gene: Killigrew\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for Killigrew\_1:  
(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: Kimona\_1 Start: 576, Stop: 872, Start Num: 85  
Candidate Starts for Kimona\_1:  
(Start: 78 @567 has 3 MA's), (Start: 85 @576 has 1 MA's), (Start: 99 @609 has 3 MA's), (119, 711), (131, 822),

Gene: KingCyrus\_5 Start: 2548, Stop: 2844, Start Num: 94  
Candidate Starts for KingCyrus\_5:  
(Start: 94 @2548 has 111 MA's), (118, 2671),

Gene: Kipper29\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Kipper29\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: KittenMittens\_1 Start: 472, Stop: 768, Start Num: 84  
Candidate Starts for KittenMittens\_1:  
(20, 247), (Start: 84 @472 has 61 MA's), (119, 607),

Gene: Koko\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Koko\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Kristoff\_2 Start: 629, Stop: 925, Start Num: 84  
Candidate Starts for Kristoff\_2:  
(Start: 61 @548 has 2 MA's), (Start: 84 @629 has 61 MA's),

Gene: Kugel\_1 Start: 596, Stop: 904, Start Num: 96

Candidate Starts for Kugel\_1:

(71, 533), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: KyMonks1A\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for KyMonks1A\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Kykar\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for Kykar\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: L5\_4 Start: 2332, Stop: 2628, Start Num: 93

Candidate Starts for L5\_4:

(Start: 93 @2332 has 252 MA's),

Gene: LBerry\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for LBerry\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: LHTSCC\_1 Start: 460, Stop: 762, Start Num: 91

Candidate Starts for LHTSCC\_1:

(Start: 60 @355 has 2 MA's), (Start: 91 @460 has 5 MA's), (105, 535), (134, 721),

Gene: LadyBird\_4 Start: 2463, Stop: 2759, Start Num: 94

Candidate Starts for LadyBird\_4:

(Start: 94 @2463 has 111 MA's), (118, 2586),

Gene: Lambert1\_1 Start: 445, Stop: 741, Start Num: 96

Candidate Starts for Lambert1\_1:

(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Lamina13\_2 Start: 750, Stop: 1046, Start Num: 96

Candidate Starts for Lamina13\_2:

(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: Lannister\_3 Start: 743, Stop: 1054, Start Num: 93

Candidate Starts for Lannister\_3:

(72, 701), (Start: 93 @743 has 252 MA's), (120, 896),

Gene: Larenn\_5 Start: 2579, Stop: 2875, Start Num: 94

Candidate Starts for Larenn\_5:

(Start: 94 @2579 has 111 MA's),

Gene: LarryKay\_1 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for LarryKay\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: LastResort\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for LastResort\_4:  
(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Legacy\_2 Start: 739, Stop: 1053, Start Num: 93  
Candidate Starts for Legacy\_2:  
(Start: 93 @739 has 252 MA's), (120, 895),

Gene: Lego\_69 Start: 43077, Stop: 43379, Start Num: 93  
Candidate Starts for Lego\_69:  
(Start: 93 @43077 has 252 MA's), (101, 43128), (104, 43143), (116, 43194), (125, 43269), (137, 43368),

Gene: Leogania\_4 Start: 2319, Stop: 2615, Start Num: 94  
Candidate Starts for Leogania\_4:  
(Start: 94 @2319 has 111 MA's), (117, 2436),

Gene: Lesedi\_1 Start: 599, Stop: 895, Start Num: 96  
Candidate Starts for Lesedi\_1:  
(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Lev2\_1 Start: 534, Stop: 833, Start Num: 82  
Candidate Starts for Lev2\_1:  
(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: Leviathan\_5 Start: 2547, Stop: 2843, Start Num: 94  
Candidate Starts for Leviathan\_5:  
(Start: 94 @2547 has 111 MA's), (118, 2670),

Gene: Leviticus\_2 Start: 740, Stop: 1054, Start Num: 93  
Candidate Starts for Leviticus\_2:  
(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Licorice\_2 Start: 751, Stop: 1047, Start Num: 96  
Candidate Starts for Licorice\_2:  
(Start: 96 @751 has 217 MA's), (118, 874), (129, 964), (134, 1000),

Gene: Liebe\_69 Start: 45433, Stop: 45732, Start Num: 93  
Candidate Starts for Liebe\_69:  
(Start: 93 @45433 has 252 MA's), (104, 45499), (105, 45502), (123, 45619), (137, 45724),

Gene: Lika\_2 Start: 726, Stop: 1037, Start Num: 93  
Candidate Starts for Lika\_2:  
(Start: 46 @615 has 1 MA's), (Start: 93 @726 has 252 MA's), (105, 798), (110, 828), (118, 855),

Gene: LilBib\_1 Start: 600, Stop: 896, Start Num: 96  
Candidate Starts for LilBib\_1:  
(Start: 78 @573 has 3 MA's), (Start: 85 @582 has 1 MA's), (Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: LilTurb\_5 Start: 2548, Stop: 2844, Start Num: 94  
Candidate Starts for LilTurb\_5:  
(Start: 94 @2548 has 111 MA's), (118, 2671),

Gene: Lilith\_1 Start: 527, Stop: 820, Start Num: 84  
Candidate Starts for Lilith\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: LittleCherry\_1 Start: 535, Stop: 834, Start Num: 82  
Candidate Starts for LittleCherry\_1:  
(Start: 82 @535 has 25 MA's), (114, 643), (122, 715), (131, 784), (138, 829),

Gene: Lizalica\_69 Start: 42687, Stop: 42989, Start Num: 93  
Candidate Starts for Lizalica\_69:  
(Start: 93 @42687 has 252 MA's), (101, 42738), (104, 42753), (116, 42804), (125, 42879), (137, 42978),

Gene: Lockley\_2 Start: 739, Stop: 1035, Start Num: 96  
Candidate Starts for Lockley\_2:  
(Start: 96 @739 has 217 MA's), (118, 862), (124, 916), (129, 952), (134, 988),

Gene: Lokk\_5 Start: 2540, Stop: 2836, Start Num: 94  
Candidate Starts for Lokk\_5:  
(Start: 94 @2540 has 111 MA's),

Gene: London\_69 Start: 43231, Stop: 43533, Start Num: 93  
Candidate Starts for London\_69:  
(Start: 93 @43231 has 252 MA's), (101, 43282), (104, 43297), (116, 43348), (125, 43423), (137, 43522),

Gene: LoneWolf\_4 Start: 2099, Stop: 2392, Start Num: 93  
Candidate Starts for LoneWolf\_4:  
(Start: 93 @2099 has 252 MA's), (114, 2201), (118, 2219),

Gene: Loofah\_3 Start: 682, Stop: 996, Start Num: 94  
Candidate Starts for Loofah\_3:  
(Start: 67 @604 has 1 MA's), (Start: 88 @673 has 1 MA's), (Start: 94 @682 has 111 MA's), (119, 826), (120, 838),

Gene: Looper\_4 Start: 2278, Stop: 2574, Start Num: 93  
Candidate Starts for Looper\_4:  
(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Lopton\_2 Start: 841, Stop: 1137, Start Num: 96  
Candidate Starts for Lopton\_2:  
(Start: 73 @793 has 1 MA's), (Start: 96 @841 has 217 MA's), (118, 964), (129, 1054), (134, 1090),

Gene: Lorelei\_2 Start: 726, Stop: 1037, Start Num: 93  
Candidate Starts for Lorelei\_2:  
(Start: 38 @591 has 2 MA's), (Start: 93 @726 has 252 MA's), (105, 798), (110, 828), (120, 879),

Gene: Loser\_4 Start: 2277, Stop: 2573, Start Num: 94  
Candidate Starts for Loser\_4:  
(Start: 94 @2277 has 111 MA's), (118, 2400),

Gene: Louie6\_1 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for Louie6\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Luchador\_4 Start: 2402, Stop: 2698, Start Num: 94

Candidate Starts for Luchador\_4:

(Start: 94 @2402 has 111 MA's), (113, 2504), (116, 2513), (117, 2519),

Gene: Lucivia\_4 Start: 2353, Stop: 2649, Start Num: 93

Candidate Starts for Lucivia\_4:

(Start: 93 @2353 has 252 MA's), (Start: 99 @2386 has 3 MA's), (108, 2443), (138, 2644),

Gene: Lucyedi\_4 Start: 2125, Stop: 2418, Start Num: 93

Candidate Starts for Lucyedi\_4:

(Start: 93 @2125 has 252 MA's), (105, 2191), (114, 2227), (118, 2245), (119, 2257),

Gene: LugYA\_3 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for LugYA\_3:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: MA5\_1 Start: 429, Stop: 725, Start Num: 96

Candidate Starts for MA5\_1:

(Start: 78 @420 has 3 MA's), (Start: 96 @429 has 217 MA's), (105, 498), (119, 564),

Gene: MK4\_1 Start: 419, Stop: 715, Start Num: 96

Candidate Starts for MK4\_1:

(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 96 @419 has 217 MA's), (119, 554),

Gene: MPlant7149\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for MPlant7149\_2:

(Start: 96 @748 has 217 MA's), (129, 961), (134, 997),

Gene: MaCh\_4 Start: 2353, Stop: 2649, Start Num: 93

Candidate Starts for MaCh\_4:

(Start: 93 @2353 has 252 MA's), (Start: 99 @2386 has 3 MA's), (108, 2443), (138, 2644),

Gene: MaGuCo\_63 Start: 43554, Stop: 43853, Start Num: 93

Candidate Starts for MaGuCo\_63:

(Start: 93 @43554 has 252 MA's), (104, 43620), (105, 43623), (123, 43740), (137, 43845),

Gene: Mabodamaca\_75 Start: 48569, Stop: 48868, Start Num: 93

Candidate Starts for Mabodamaca\_75:

(18, 48311), (Start: 93 @48569 has 252 MA's), (104, 48635), (116, 48686), (125, 48761),

Gene: MadMarie\_1 Start: 518, Stop: 820, Start Num: 77

Candidate Starts for MadMarie\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Magnar\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Magnar\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Magnito\_1 Start: 535, Stop: 894, Start Num: 70



Candidate Starts for Magnito\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Mainiac\_1 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for Mainiac\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Makemake\_2 Start: 1064, Stop: 1360, Start Num: 96

Candidate Starts for Makemake\_2:

(Start: 78 @1034 has 3 MA's), (Start: 85 @1043 has 1 MA's), (Start: 91 @1058 has 5 MA's), (Start: 96 @1064 has 217 MA's), (118, 1187), (134, 1313),

Gene: Malec\_5 Start: 2579, Stop: 2875, Start Num: 94

Candidate Starts for Malec\_5:

(Start: 94 @2579 has 111 MA's),

Gene: Malinsilva\_3 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Malinsilva\_3:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Maminiaina\_4 Start: 2102, Stop: 2395, Start Num: 93

Candidate Starts for Maminiaina\_4:

(Start: 93 @2102 has 252 MA's), (114, 2204), (118, 2222),

Gene: Manatee\_2 Start: 747, Stop: 1043, Start Num: 96

Candidate Starts for Manatee\_2:

(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: Maneekul\_2 Start: 729, Stop: 1040, Start Num: 93

Candidate Starts for Maneekul\_2:

(53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (110, 831), (118, 858), (125, 921),

Gene: Manu\_2 Start: 531, Stop: 824, Start Num: 84

Candidate Starts for Manu\_2:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: MarQuardt\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for MarQuardt\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Marav\_3 Start: 1035, Stop: 1349, Start Num: 94

Candidate Starts for Marav\_3:

(51, 909), (Start: 67 @963 has 1 MA's), (Start: 88 @1029 has 1 MA's), (Start: 94 @1035 has 111 MA's), (104, 1104), (119, 1179), (121, 1212),

Gene: Marcell\_2 Start: 743, Stop: 1039, Start Num: 96

Candidate Starts for Marcell\_2:

(Start: 96 @743 has 217 MA's), (118, 866), (129, 956), (134, 992),

Gene: Marge\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Marge\_1:

(Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Margo\_1 Start: 445, Stop: 741, Start Num: 96

Candidate Starts for Margo\_1:

(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Marie\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for Marie\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Marius\_2 Start: 531, Stop: 824, Start Num: 84

Candidate Starts for Marius\_2:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Maroc7\_1 Start: 600, Stop: 896, Start Num: 96

Candidate Starts for Maroc7\_1:

(Start: 70 @537 has 4 MA's), (Start: 78 @573 has 3 MA's), (Start: 85 @582 has 1 MA's), (Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: Marsha\_2 Start: 1060, Stop: 1356, Start Num: 94

Candidate Starts for Marsha\_2:

(Start: 78 @1033 has 3 MA's), (Start: 85 @1042 has 1 MA's), (Start: 91 @1057 has 5 MA's), (Start: 94 @1060 has 111 MA's), (118, 1183), (134, 1309),

Gene: MaryBeth\_2 Start: 751, Stop: 1047, Start Num: 96

Candidate Starts for MaryBeth\_2:

(Start: 96 @751 has 217 MA's), (118, 874), (129, 964), (134, 1000),

Gene: Maureen\_69 Start: 45432, Stop: 45731, Start Num: 93

Candidate Starts for Maureen\_69:

(Start: 93 @45432 has 252 MA's), (104, 45498), (105, 45501), (123, 45618), (137, 45723),

Gene: McFly\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for McFly\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: McGuire\_2 Start: 749, Stop: 1045, Start Num: 96

Candidate Starts for McGuire\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (124, 926), (129, 962), (134, 998),

Gene: MetalQZJ\_2 Start: 751, Stop: 1047, Start Num: 96

Candidate Starts for MetalQZJ\_2:

(Start: 96 @751 has 217 MA's), (118, 874), (129, 964), (134, 1000),

Gene: Methuselah\_1 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for Methuselah\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Michley\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for Michley\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Microwolf\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Microwolf\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: MiculUcigas\_5 Start: 2624, Stop: 2920, Start Num: 94  
Candidate Starts for MiculUcigas\_5:  
(32, 2423), (Start: 94 @2624 has 111 MA's),

Gene: Midas2\_1 Start: 503, Stop: 802, Start Num: 82  
Candidate Starts for Midas2\_1:  
(27, 368), (Start: 82 @503 has 25 MA's), (114, 611), (122, 683), (131, 752), (138, 797),

Gene: Miko\_5 Start: 2518, Stop: 2814, Start Num: 94  
Candidate Starts for Miko\_5:  
(Start: 94 @2518 has 111 MA's),

Gene: Milcery\_1 Start: 534, Stop: 833, Start Num: 82  
Candidate Starts for Milcery\_1:  
(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: MinecraftSteve\_5 Start: 2425, Stop: 2721, Start Num: 93  
Candidate Starts for MinecraftSteve\_5:  
(Start: 93 @2425 has 252 MA's), (108, 2515),

Gene: MiniMommy\_73 Start: 43251, Stop: 43613, Start Num: 89  
Candidate Starts for MiniMommy\_73:  
(53, 43134), (Start: 89 @43251 has 2 MA's), (103, 43320), (104, 43326), (135, 43521), (138, 43554),  
(140, 43563),

Gene: MissSwiss\_70 Start: 42246, Stop: 42548, Start Num: 93  
Candidate Starts for MissSwiss\_70:  
(Start: 93 @42246 has 252 MA's), (116, 42363), (122, 42429), (137, 42537),

Gene: MissWhite\_4 Start: 2314, Stop: 2610, Start Num: 93  
Candidate Starts for MissWhite\_4:  
(Start: 93 @2314 has 252 MA's),

Gene: Molly\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for Molly\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Monet\_2 Start: 750, Stop: 1046, Start Num: 96  
Candidate Starts for Monet\_2:  
(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: MoneyMay\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for MoneyMay\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Moose\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for Moose\_1:

(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (124, 773), (129, 809), (134, 845),

Gene: MrGordo\_1 Start: 570, Stop: 905, Start Num: 78

Candidate Starts for MrGordo\_1:

(71, 534), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Mryolo\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Mryolo\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Mulciber\_4 Start: 2359, Stop: 2655, Start Num: 93

Candidate Starts for Mulciber\_4:

(Start: 93 @2359 has 252 MA's), (Start: 99 @2392 has 3 MA's), (108, 2449), (138, 2650),

Gene: Mule\_1 Start: 595, Stop: 891, Start Num: 96

Candidate Starts for Mule\_1:

(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 94 @592 has 111 MA's), (Start: 96 @595 has 217 MA's), (118, 718), (129, 808), (134, 844),

Gene: Munch\_4 Start: 2356, Stop: 2652, Start Num: 93

Candidate Starts for Munch\_4:

(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Museum\_3 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Museum\_3:

(Start: 96 @748 has 217 MA's), (129, 961), (134, 997),

Gene: MyraDee\_1 Start: 377, Stop: 667, Start Num: 95

Candidate Starts for MyraDee\_1:

(Start: 95 @377 has 1 MA's), (105, 440), (119, 506), (131, 617),

Gene: Myxus\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for Myxus\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: NEHalo\_2 Start: 747, Stop: 1043, Start Num: 96

Candidate Starts for NEHalo\_2:

(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: NaSiaTalie\_5 Start: 2624, Stop: 2920, Start Num: 94

Candidate Starts for NaSiaTalie\_5:

(32, 2423), (Start: 94 @2624 has 111 MA's),

Gene: Nabi\_2 Start: 726, Stop: 1037, Start Num: 93

Candidate Starts for Nabi\_2:

(Start: 38 @591 has 2 MA's), (Start: 93 @726 has 252 MA's), (105, 798), (110, 828), (120, 879),

Gene: Naca\_1 Start: 505, Stop: 804, Start Num: 82

Candidate Starts for Naca\_1:

(Start: 82 @505 has 25 MA's), (Start: 97 @520 has 1 MA's), (114, 613), (131, 754), (138, 799),

Gene: Naira\_1 Start: 606, Stop: 902, Start Num: 96

Candidate Starts for Naira\_1:

(Start: 70 @543 has 4 MA's), (Start: 78 @579 has 3 MA's), (Start: 85 @588 has 1 MA's), (Start: 96 @606 has 217 MA's), (118, 729), (124, 783), (129, 819), (134, 855),

Gene: Naji\_4 Start: 2345, Stop: 2641, Start Num: 93

Candidate Starts for Naji\_4:

(Start: 93 @2345 has 252 MA's),

Gene: Nanodon\_3 Start: 713, Stop: 1027, Start Num: 93

Candidate Starts for Nanodon\_3:

(47, 602), (64, 632), (Start: 93 @713 has 252 MA's), (105, 785), (120, 869),

Gene: NearlyHeadless\_1 Start: 505, Stop: 798, Start Num: 96

Candidate Starts for NearlyHeadless\_1:

(Start: 96 @505 has 217 MA's), (122, 679), (134, 757), (138, 793),

Gene: Nebulosus\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for Nebulosus\_4:

(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Nedarya\_4 Start: 2247, Stop: 2543, Start Num: 93

Candidate Starts for Nedarya\_4:

(Start: 93 @2247 has 252 MA's),

Gene: Neeharika16\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Neeharika16\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Nerdos\_2 Start: 740, Stop: 1054, Start Num: 93

Candidate Starts for Nerdos\_2:

(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Nerujay\_1 Start: 598, Stop: 906, Start Num: 96

Candidate Starts for Nerujay\_1:

(71, 535), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Newrala\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Newrala\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Nhonho\_2 Start: 746, Stop: 1042, Start Num: 96

Candidate Starts for Nhonho\_2:

(Start: 96 @746 has 217 MA's), (129, 959), (134, 995),

Gene: NicoleTera\_4 Start: 2315, Stop: 2611, Start Num: 94

Candidate Starts for NicoleTera\_4:

(Start: 94 @2315 has 111 MA's),

Gene: Niobe\_69 Start: 43234, Stop: 43536, Start Num: 93

Candidate Starts for Niobe\_69:

(Start: 93 @43234 has 252 MA's), (101, 43285), (104, 43300), (116, 43351), (125, 43426), (137, 43525),

Gene: Nishikigoi\_2 Start: 652, Stop: 966, Start Num: 94

Candidate Starts for Nishikigoi\_2:

(Start: 88 @643 has 1 MA's), (Start: 94 @652 has 111 MA's), (119, 796), (121, 829),

Gene: Nitro\_70 Start: 44009, Stop: 44311, Start Num: 93

Candidate Starts for Nitro\_70:

(Start: 93 @44009 has 252 MA's), (104, 44075), (116, 44126), (125, 44201), (137, 44300),

Gene: Niza\_3 Start: 1297, Stop: 1593, Start Num: 96

Candidate Starts for Niza\_3:

(Start: 73 @1249 has 1 MA's), (Start: 96 @1297 has 217 MA's), (118, 1420), (134, 1546),

Gene: Noella\_1 Start: 445, Stop: 741, Start Num: 96

Candidate Starts for Noella\_1:

(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Norz\_2 Start: 745, Stop: 1041, Start Num: 96

Candidate Starts for Norz\_2:

(Start: 96 @745 has 217 MA's), (118, 868), (129, 958), (134, 994),

Gene: OKCentral2016\_1 Start: 464, Stop: 760, Start Num: 84

Candidate Starts for OKCentral2016\_1:

(59, 377), (Start: 84 @464 has 61 MA's),

Gene: ObiToo\_74 Start: 43593, Stop: 43895, Start Num: 93

Candidate Starts for ObiToo\_74:

(Start: 93 @43593 has 252 MA's), (125, 43785), (137, 43884),

Gene: Odin\_3 Start: 2153, Stop: 2449, Start Num: 93

Candidate Starts for Odin\_3:

(Start: 93 @2153 has 252 MA's), (126, 2348),

Gene: Ohno789\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for Ohno789\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: OlanP\_1 Start: 710, Stop: 1003, Start Num: 84

Candidate Starts for OlanP\_1:

(Start: 84 @710 has 61 MA's), (105, 776),

Gene: Oliynyk\_2 Start: 746, Stop: 1060, Start Num: 93

Candidate Starts for Oliynyk\_2:

(64, 668), (Start: 93 @746 has 252 MA's), (120, 902),

Gene: Ollie\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Ollie\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Omar\_2 Start: 651, Stop: 965, Start Num: 94

Candidate Starts for Omar\_2:

(Start: 88 @642 has 1 MA's), (Start: 94 @651 has 111 MA's), (119, 795), (121, 828),

Gene: Oogway\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Oogway\_1:

(Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (134, 847),

Gene: Orange\_4 Start: 2389, Stop: 2652, Start Num: 99

Candidate Starts for Orange\_4:

(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Ozzie\_2 Start: 739, Stop: 1053, Start Num: 93

Candidate Starts for Ozzie\_2:

(Start: 93 @739 has 252 MA's), (120, 895),

Gene: OzzyJ\_3 Start: 730, Stop: 1041, Start Num: 93

Candidate Starts for OzzyJ\_3:

(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: P28Green\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for P28Green\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: PGHhamlin\_3 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for PGHhamlin\_3:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: PSullivan\_2 Start: 834, Stop: 1130, Start Num: 96

Candidate Starts for PSullivan\_2:

(Start: 73 @786 has 1 MA's), (Start: 96 @834 has 217 MA's), (118, 957), (129, 1047), (134, 1083),

Gene: Pablito\_2 Start: 689, Stop: 1003, Start Num: 94

Candidate Starts for Pablito\_2:

(Start: 94 @689 has 111 MA's), (119, 833), (120, 845), (121, 866),

Gene: PacerPaul\_2 Start: 835, Stop: 1131, Start Num: 96

Candidate Starts for PacerPaul\_2:

(Start: 73 @787 has 1 MA's), (Start: 96 @835 has 217 MA's), (118, 958), (129, 1048), (134, 1084),

Gene: PackMan\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for PackMan\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Paedore\_3 Start: 682, Stop: 996, Start Num: 94

Candidate Starts for Paedore\_3:

(Start: 67 @604 has 1 MA's), (Start: 88 @673 has 1 MA's), (Start: 94 @682 has 111 MA's), (119, 826), (120, 838),

Gene: PainterBoy\_4 Start: 2125, Stop: 2418, Start Num: 93

Candidate Starts for PainterBoy\_4:

(Start: 93 @2125 has 252 MA's), (105, 2191), (114, 2227), (118, 2245), (119, 2257),

Gene: Papez\_2 Start: 785, Stop: 1129, Start Num: 73  
Candidate Starts for Papez\_2:  
(Start: 73 @785 has 1 MA's), (Start: 96 @833 has 217 MA's), (106, 908), (118, 956), (129, 1046),  
(134, 1082),

Gene: Paphu\_1 Start: 597, Stop: 893, Start Num: 96  
Candidate Starts for Paphu\_1:  
(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96  
@597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Paraselene\_1 Start: 597, Stop: 893, Start Num: 96  
Candidate Starts for Paraselene\_1:  
(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96  
@597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Pari\_2 Start: 735, Stop: 1031, Start Num: 96  
Candidate Starts for Pari\_2:  
(Start: 96 @735 has 217 MA's), (118, 858), (129, 948), (134, 984),

Gene: Parliament\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Parliament\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96  
@598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: PascalRango\_2 Start: 747, Stop: 1043, Start Num: 96  
Candidate Starts for PascalRango\_2:  
(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: PattyP\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for PattyP\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Payneful\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for Payneful\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: PeaceMeal1\_1 Start: 474, Stop: 770, Start Num: 84  
Candidate Starts for PeaceMeal1\_1:  
(22, 270), (Start: 84 @474 has 61 MA's), (119, 609),

Gene: Pembroke\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for Pembroke\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Penny1\_1 Start: 526, Stop: 819, Start Num: 84  
Candidate Starts for Penny1\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Pepe\_2 Start: 860, Stop: 1165, Start Num: 96  
Candidate Starts for Pepe\_2:  
(Start: 73 @812 has 1 MA's), (Start: 96 @860 has 217 MA's), (118, 983), (129, 1073), (134, 1109),

Gene: Percival\_75 Start: 46934, Stop: 47236, Start Num: 93



Candidate Starts for Percival\_75:

(Start: 93 @46934 has 252 MA's), (104, 47000), (116, 47051), (119, 47075),

Gene: Perseus\_1 Start: 595, Stop: 891, Start Num: 96

Candidate Starts for Perseus\_1:

(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 94 @592 has 111 MA's), (Start: 96 @595 has 217 MA's), (118, 718), (129, 808), (134, 844),

Gene: Peterson\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Peterson\_1:

(Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Petp2012\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Petp2012\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Petruchio\_2 Start: 749, Stop: 1045, Start Num: 96

Candidate Starts for Petruchio\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: PetterN\_1 Start: 502, Stop: 801, Start Num: 82

Candidate Starts for PetterN\_1:

(Start: 82 @502 has 25 MA's), (Start: 97 @517 has 1 MA's), (114, 610), (131, 751), (138, 796),

Gene: Ph8s\_4 Start: 2160, Stop: 2456, Start Num: 93

Candidate Starts for Ph8s\_4:

(66, 2076), (Start: 93 @2160 has 252 MA's), (121, 2328),

Gene: Phaded\_4 Start: 2109, Stop: 2405, Start Num: 93

Candidate Starts for Phaded\_4:

(Start: 93 @2109 has 252 MA's), (111, 2208), (126, 2304),

Gene: Phaeder\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for Phaeder\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Phantastic\_1 Start: 425, Stop: 721, Start Num: 83

Candidate Starts for Phantastic\_1:

(81, 422), (Start: 83 @425 has 3 MA's), (119, 560),

Gene: Pharaoh\_4 Start: 2218, Stop: 2514, Start Num: 91

Candidate Starts for Pharaoh\_4:

(Start: 91 @2218 has 5 MA's), (117, 2335),

Gene: PherrisBueller\_2 Start: 863, Stop: 1171, Start Num: 96

Candidate Starts for PherrisBueller\_2:

(Start: 73 @815 has 1 MA's), (Start: 96 @863 has 217 MA's), (118, 986), (129, 1076), (134, 1112),

Gene: Phettuccine\_2 Start: 740, Stop: 1054, Start Num: 93

Candidate Starts for Phettuccine\_2:

(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Phillis\_1 Start: 505, Stop: 798, Start Num: 96  
Candidate Starts for Phillis\_1:  
(Start: 96 @505 has 217 MA's), (108, 592), (122, 679), (134, 757), (138, 793),

Gene: PhishRPhriends\_1 Start: 531, Stop: 824, Start Num: 84  
Candidate Starts for PhishRPhriends\_1:  
(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Phives\_70 Start: 43835, Stop: 44137, Start Num: 93  
Candidate Starts for Phives\_70:  
(Start: 93 @43835 has 252 MA's), (104, 43901), (116, 43952), (125, 44027), (137, 44126),

Gene: Phlorence\_1 Start: 534, Stop: 833, Start Num: 82  
Candidate Starts for Phlorence\_1:  
(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: Phoebe\_1 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for Phoebe\_1:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Phonnegut\_4 Start: 2335, Stop: 2628, Start Num: 93  
Candidate Starts for Phonnegut\_4:  
(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Phoxy\_1 Start: 527, Stop: 820, Start Num: 84  
Candidate Starts for Phoxy\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Phranny\_2 Start: 531, Stop: 824, Start Num: 84  
Candidate Starts for Phranny\_2:  
(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: PhrostyMug\_1 Start: 532, Stop: 891, Start Num: 70  
Candidate Starts for PhrostyMug\_1:  
(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 94 @592 has 111 MA's), (Start: 96 @595 has 217 MA's), (118, 718), (129, 808), (134, 844),

Gene: PickleBack\_1 Start: 535, Stop: 834, Start Num: 82  
Candidate Starts for PickleBack\_1:  
(Start: 82 @535 has 25 MA's), (114, 643), (122, 715), (131, 784), (138, 829),

Gene: PinkPlastic\_1 Start: 597, Stop: 893, Start Num: 96  
Candidate Starts for PinkPlastic\_1:  
(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (124, 774), (129, 810), (134, 846),

Gene: Pinto\_1 Start: 535, Stop: 894, Start Num: 70  
Candidate Starts for Pinto\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Pioneer\_4 Start: 2335, Stop: 2628, Start Num: 93  
Candidate Starts for Pioneer\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Pippin\_2 Start: 749, Stop: 1057, Start Num: 96  
Candidate Starts for Pippin\_2:  
(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: Piro94\_4 Start: 2628, Stop: 2924, Start Num: 94  
Candidate Starts for Piro94\_4:  
(32, 2427), (Start: 94 @2628 has 111 MA's),

Gene: Pistachio\_1 Start: 420, Stop: 716, Start Num: 96  
Candidate Starts for Pistachio\_1:  
(Start: 96 @420 has 217 MA's), (119, 555),

Gene: Pita2\_2 Start: 834, Stop: 1130, Start Num: 96  
Candidate Starts for Pita2\_2:  
(Start: 73 @786 has 1 MA's), (Start: 96 @834 has 217 MA's), (118, 957), (129, 1047), (134, 1083),

Gene: Pixelle\_69 Start: 43980, Stop: 44282, Start Num: 93  
Candidate Starts for Pixelle\_69:  
(Start: 93 @43980 has 252 MA's), (104, 44046), (116, 44097), (125, 44172), (137, 44271),

Gene: Pmask\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Pmask\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Pocahontas\_1 Start: 445, Stop: 741, Start Num: 96  
Candidate Starts for Pocahontas\_1:  
(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Pomar16\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for Pomar16\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: Poompha\_1 Start: 472, Stop: 768, Start Num: 84  
Candidate Starts for Poompha\_1:  
(20, 247), (Start: 84 @472 has 61 MA's), (119, 607),

Gene: PotatoSplit\_2 Start: 517, Stop: 819, Start Num: 77  
Candidate Starts for PotatoSplit\_2:  
(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Poushou\_54 Start: 39982, Stop: 40287, Start Num: 96  
Candidate Starts for Poushou\_54:  
(Start: 96 @39982 has 217 MA's), (106, 40057), (111, 40078), (121, 40159),

Gene: Power\_5 Start: 2567, Stop: 2863, Start Num: 94  
Candidate Starts for Power\_5:  
(Start: 94 @2567 has 111 MA's), (118, 2690),

Gene: Powerpuff\_71 Start: 44281, Stop: 44583, Start Num: 93  
Candidate Starts for Powerpuff\_71:

(Start: 93 @44281 has 252 MA's), (101, 44332), (104, 44347), (116, 44398), (125, 44473), (137, 44572),

Gene: Priamo\_4 Start: 2158, Stop: 2454, Start Num: 93

Candidate Starts for Priamo\_4:

(Start: 93 @2158 has 252 MA's), (119, 2293),

Gene: Priya\_4 Start: 2332, Stop: 2625, Start Num: 93

Candidate Starts for Priya\_4:

(Start: 74 @2305 has 3 MA's), (Start: 93 @2332 has 252 MA's), (114, 2434), (118, 2452),

Gene: Provolone\_4 Start: 978, Stop: 1292, Start Num: 94

Candidate Starts for Provolone\_4:

(37, 825), (50, 858), (55, 864), (58, 870), (Start: 88 @972 has 1 MA's), (Start: 94 @978 has 111 MA's), (104, 1047), (119, 1122), (121, 1155),

Gene: Pukovnik\_4 Start: 2088, Stop: 2384, Start Num: 93

Candidate Starts for Pukovnik\_4:

(Start: 93 @2088 has 252 MA's), (126, 2283),

Gene: Puppy\_1 Start: 420, Stop: 716, Start Num: 96

Candidate Starts for Puppy\_1:

(Start: 96 @420 has 217 MA's), (119, 555),

Gene: PurpleHaze\_1 Start: 522, Stop: 824, Start Num: 77

Candidate Starts for PurpleHaze\_1:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: QTRlifeCrisis\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for QTRlifeCrisis\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Qobbit\_4 Start: 2305, Stop: 2625, Start Num: 74

Candidate Starts for Qobbit\_4:

(Start: 74 @2305 has 3 MA's), (Start: 93 @2332 has 252 MA's), (114, 2434), (118, 2452),

Gene: QueenB2\_5 Start: 2671, Stop: 2967, Start Num: 94

Candidate Starts for QueenB2\_5:

(Start: 94 @2671 has 111 MA's), (118, 2794),

Gene: QueenBeesly\_5 Start: 2568, Stop: 2864, Start Num: 94

Candidate Starts for QueenBeesly\_5:

(Start: 94 @2568 has 111 MA's), (118, 2691),

Gene: R4\_1 Start: 671, Stop: 985, Start Num: 94

Candidate Starts for R4\_1:

(30, 464), (Start: 67 @593 has 1 MA's), (Start: 88 @662 has 1 MA's), (Start: 94 @671 has 111 MA's), (119, 815), (120, 827),

Gene: Rachaly\_5 Start: 2538, Stop: 2834, Start Num: 94

Candidate Starts for Rachaly\_5:

(Start: 94 @2538 has 111 MA's),

Gene: Rahalelujah\_4 Start: 2102, Stop: 2395, Start Num: 93

Candidate Starts for Rahalelujah\_4:

(Start: 93 @2102 has 252 MA's), (114, 2204), (118, 2222),

Gene: Rajelicia\_2 Start: 750, Stop: 1046, Start Num: 96

Candidate Starts for Rajelicia\_2:

(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: Rana\_2 Start: 726, Stop: 1037, Start Num: 93

Candidate Starts for Rana\_2:

(Start: 38 @591 has 2 MA's), (Start: 93 @726 has 252 MA's), (105, 798), (110, 828), (120, 879),

Gene: ReMo\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for ReMo\_4:

(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: Reba\_2 Start: 531, Stop: 824, Start Num: 84

Candidate Starts for Reba\_2:

(Start: 77 @522 has 30 MA's), (Start: 84 @531 has 61 MA's), (105, 597),

Gene: Rebeuca\_2 Start: 549, Stop: 926, Start Num: 61

Candidate Starts for Rebeuca\_2:

(Start: 61 @549 has 2 MA's), (Start: 84 @630 has 61 MA's),

Gene: RedBear\_3 Start: 726, Stop: 1040, Start Num: 93

Candidate Starts for RedBear\_3:

(36, 582), (Start: 93 @726 has 252 MA's), (105, 798), (120, 882),

Gene: RedRock\_4 Start: 2278, Stop: 2574, Start Num: 94

Candidate Starts for RedRock\_4:

(Start: 94 @2278 has 111 MA's), (118, 2401),

Gene: Reedo\_68 Start: 41440, Stop: 41742, Start Num: 93

Candidate Starts for Reedo\_68:

(Start: 93 @41440 has 252 MA's), (103, 41500), (104, 41506), (116, 41557), (125, 41632), (137, 41731), (138, 41734),

Gene: Refuge\_4 Start: 2250, Stop: 2546, Start Num: 94

Candidate Starts for Refuge\_4:

(Start: 94 @2250 has 111 MA's),

Gene: Remus\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for Remus\_4:

(Start: 93 @2278 has 252 MA's),

Gene: Retro23\_5 Start: 2671, Stop: 2967, Start Num: 94

Candidate Starts for Retro23\_5:

(Start: 94 @2671 has 111 MA's), (118, 2794),

Gene: RhynO\_1 Start: 474, Stop: 770, Start Num: 84

Candidate Starts for RhynO\_1:

(Start: 84 @474 has 61 MA's), (119, 609),

Gene: Rhynn\_1 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for Rhynn\_1:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: RidgeCB\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for RidgeCB\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Rifter\_4 Start: 2132, Stop: 2428, Start Num: 93  
Candidate Starts for Rifter\_4:  
(Start: 93 @2132 has 252 MA's), (119, 2267),

Gene: Ringer\_1 Start: 597, Stop: 893, Start Num: 96  
Candidate Starts for Ringer\_1:  
(Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 94 @594 has 111 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Roary\_1 Start: 505, Stop: 798, Start Num: 96  
Candidate Starts for Roary\_1:  
(Start: 96 @505 has 217 MA's), (108, 592), (122, 679), (134, 757), (138, 793),

Gene: Rohr\_2 Start: 832, Stop: 1128, Start Num: 96  
Candidate Starts for Rohr\_2:  
(Start: 73 @784 has 1 MA's), (Start: 96 @832 has 217 MA's), (118, 955), (129, 1045), (134, 1081),

Gene: Roksolana\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Roksolana\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Rosalind\_4 Start: 2425, Stop: 2721, Start Num: 93  
Candidate Starts for Rosalind\_4:  
(Start: 93 @2425 has 252 MA's), (108, 2515),

Gene: Rubeus\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for Rubeus\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Rufus\_2 Start: 747, Stop: 1043, Start Num: 96  
Candidate Starts for Rufus\_2:  
(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: Rummer\_1 Start: 518, Stop: 820, Start Num: 77  
Candidate Starts for Rummer\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Ruotula\_2 Start: 1335, Stop: 1625, Start Num: 98  
Candidate Starts for Ruotula\_2:  
(9, 900), (16, 1008), (17, 1017), (52, 1173), (56, 1182), (57, 1185), (Start: 98 @1335 has 3 MA's), (100, 1362), (129, 1542), (134, 1578),

Gene: Rusticus\_2 Start: 746, Stop: 1060, Start Num: 93  
Candidate Starts for Rusticus\_2:

(64, 668), (Start: 93 @746 has 252 MA's), (120, 902),

Gene: Rutherferd\_1 Start: 597, Stop: 893, Start Num: 96

Candidate Starts for Rutherferd\_1:

(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: SPB78\_77 Start: 49993, Stop: 50292, Start Num: 91

Candidate Starts for SPB78\_77:

(Start: 91 @49993 has 5 MA's), (102, 50050), (115, 50110),

Gene: STLscum\_2 Start: 861, Stop: 1166, Start Num: 96

Candidate Starts for STLscum\_2:

(Start: 73 @813 has 1 MA's), (Start: 96 @861 has 217 MA's), (118, 984), (129, 1074), (134, 1110),

Gene: Sabia\_1 Start: 518, Stop: 820, Start Num: 77

Candidate Starts for Sabia\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Sabinator\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Sabinator\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Saftant\_2 Start: 978, Stop: 1292, Start Num: 94

Candidate Starts for Saftant\_2:

(43, 831), (54, 855), (58, 864), (Start: 88 @969 has 1 MA's), (90, 972), (Start: 94 @978 has 111 MA's), (119, 1122),

Gene: Sagefire\_2 Start: 699, Stop: 995, Start Num: 96

Candidate Starts for Sagefire\_2:

(Start: 96 @699 has 217 MA's), (118, 822), (129, 912), (134, 948),

Gene: Saintus\_1 Start: 505, Stop: 798, Start Num: 96

Candidate Starts for Saintus\_1:

(Start: 96 @505 has 217 MA's), (108, 592), (122, 679), (134, 757), (138, 793),

Gene: Salz\_4 Start: 2356, Stop: 2652, Start Num: 93

Candidate Starts for Salz\_4:

(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Samy\_101 Start: 60454, Stop: 60759, Start Num: 93

Candidate Starts for Samy\_101:

(Start: 93 @60454 has 252 MA's), (109, 60550), (116, 60571), (119, 60595), (121, 60628), (132, 60712), (133, 60718),

Gene: Sanya\_1 Start: 1334, Stop: 1624, Start Num: 98

Candidate Starts for Sanya\_1:

(9, 899), (17, 1016), (52, 1172), (56, 1181), (57, 1184), (Start: 98 @1334 has 3 MA's), (100, 1361), (129, 1541), (134, 1577),

Gene: SarFire\_2 Start: 757, Stop: 1053, Start Num: 96

Candidate Starts for SarFire\_2:

(Start: 96 @757 has 217 MA's), (118, 880), (129, 970), (134, 1006),

Gene: SarahRose\_2 Start: 729, Stop: 1040, Start Num: 93

Candidate Starts for SarahRose\_2:

(Start: 38 @588 has 2 MA's), (53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (120, 882),

Gene: Scherzo\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for Scherzo\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Scorpia\_1 Start: 502, Stop: 801, Start Num: 82

Candidate Starts for Scorpia\_1:

(Start: 82 @502 has 25 MA's), (Start: 97 @517 has 1 MA's), (114, 610), (131, 751), (138, 796),

Gene: Scout\_1 Start: 416, Stop: 712, Start Num: 83

Candidate Starts for Scout\_1:

(Start: 42 @293 has 2 MA's), (Start: 78 @410 has 3 MA's), (Start: 83 @416 has 3 MA's), (119, 551),

Gene: Scowl\_2 Start: 986, Stop: 1294, Start Num: 96

Candidate Starts for Scowl\_2:

(Start: 96 @986 has 217 MA's), (118, 1109), (129, 1199), (134, 1235),

Gene: Seabiscuit\_2 Start: 749, Stop: 1045, Start Num: 96

Candidate Starts for Seabiscuit\_2:

(Start: 96 @749 has 217 MA's), (118, 872), (124, 926), (129, 962), (134, 998),

Gene: Seanderson\_1 Start: 600, Stop: 896, Start Num: 96

Candidate Starts for Seanderson\_1:

(Start: 70 @537 has 4 MA's), (Start: 78 @573 has 3 MA's), (Start: 85 @582 has 1 MA's), (Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: SemperFi\_5 Start: 2562, Stop: 2858, Start Num: 94

Candidate Starts for SemperFi\_5:

(Start: 94 @2562 has 111 MA's), (118, 2685),

Gene: Serenity\_4 Start: 2328, Stop: 2624, Start Num: 93

Candidate Starts for Serenity\_4:

(Start: 93 @2328 has 252 MA's),

Gene: Severus\_1 Start: 472, Stop: 768, Start Num: 84

Candidate Starts for Severus\_1:

(20, 247), (Start: 84 @472 has 61 MA's), (119, 607),

Gene: ShakeltOph\_72 Start: 43243, Stop: 43605, Start Num: 89

Candidate Starts for ShakeltOph\_72:

(53, 43126), (Start: 89 @43243 has 2 MA's), (103, 43312), (104, 43318), (135, 43513), (140, 43555),

Gene: Sham4\_4 Start: 2359, Stop: 2655, Start Num: 93

Candidate Starts for Sham4\_4:

(Start: 93 @2359 has 252 MA's), (Start: 99 @2392 has 3 MA's), (108, 2449), (138, 2650),

Gene: ShayRa\_5 Start: 2425, Stop: 2721, Start Num: 93

Candidate Starts for ShayRa\_5:

(Start: 93 @2425 has 252 MA's), (108, 2515),



Gene: SheaKeira\_4 Start: 2123, Stop: 2416, Start Num: 93  
Candidate Starts for SheaKeira\_4:  
(Start: 93 @2123 has 252 MA's), (108, 2210), (114, 2225), (118, 2243),

Gene: Sheen\_1 Start: 397, Stop: 693, Start Num: 86  
Candidate Starts for Sheen\_1:  
(Start: 60 @301 has 2 MA's), (Start: 86 @397 has 1 MA's), (131, 643),

Gene: ShortQueendom\_1 Start: 599, Stop: 895, Start Num: 96  
Candidate Starts for ShortQueendom\_1:  
(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Sibs6\_2 Start: 748, Stop: 1044, Start Num: 96  
Candidate Starts for Sibs6\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: SkiPole\_2 Start: 861, Stop: 1166, Start Num: 96  
Candidate Starts for SkiPole\_2:  
(Start: 73 @813 has 1 MA's), (Start: 96 @861 has 217 MA's), (118, 984), (129, 1074), (134, 1110),

Gene: Slagathor\_2 Start: 750, Stop: 1046, Start Num: 96  
Candidate Starts for Slagathor\_2:  
(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: Smairt\_1 Start: 595, Stop: 891, Start Num: 96  
Candidate Starts for Smairt\_1:  
(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 94 @592 has 111 MA's), (Start: 96 @595 has 217 MA's), (118, 718), (129, 808), (134, 844),

Gene: Smeadley\_1 Start: 505, Stop: 798, Start Num: 96  
Candidate Starts for Smeadley\_1:  
(Start: 96 @505 has 217 MA's), (108, 592), (122, 679), (134, 757), (138, 793),

Gene: Smeagan\_5 Start: 2550, Stop: 2846, Start Num: 94  
Candidate Starts for Smeagan\_5:  
(Start: 94 @2550 has 111 MA's), (118, 2673),

Gene: Smeagol\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for Smeagol\_1:  
(Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: SmellyB\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for SmellyB\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: SnapTap\_5 Start: 2567, Stop: 2863, Start Num: 94  
Candidate Starts for SnapTap\_5:  
(Start: 94 @2567 has 111 MA's), (118, 2690),

Gene: Snape\_4 Start: 2362, Stop: 2658, Start Num: 93

Candidate Starts for Snape\_4:

(Start: 93 @2362 has 252 MA's), (Start: 99 @2395 has 3 MA's), (108, 2452), (138, 2653),

Gene: Snazzy\_1 Start: 595, Stop: 891, Start Num: 96

Candidate Starts for Snazzy\_1:

(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 96 @595 has 217 MA's), (118, 718), (129, 808), (134, 844),

Gene: Snek\_68 Start: 40495, Stop: 40800, Start Num: 93

Candidate Starts for Snek\_68:

(Start: 93 @40495 has 252 MA's), (103, 40555), (104, 40561), (116, 40612), (137, 40786),

Gene: Snorlax\_2 Start: 729, Stop: 1040, Start Num: 93

Candidate Starts for Snorlax\_2:

(Start: 38 @588 has 2 MA's), (53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (120, 882),

Gene: SoilDragon\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for SoilDragon\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Solon\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Solon\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Soondubu\_62 Start: 44779, Stop: 45078, Start Num: 93

Candidate Starts for Soondubu\_62:

(50, 44641), (Start: 93 @44779 has 252 MA's), (104, 44845), (116, 44896), (137, 45070),

Gene: SororFago\_4 Start: 2399, Stop: 2695, Start Num: 94

Candidate Starts for SororFago\_4:

(Start: 94 @2399 has 111 MA's), (116, 2510),

Gene: Sorpresa\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Sorpresa\_1:

(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 96 @599 has 217 MA's), (Start: 99 @632 has 3 MA's), (118, 722), (129, 812), (134, 848),

Gene: Soshari\_3 Start: 518, Stop: 820, Start Num: 77

Candidate Starts for Soshari\_3:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Soups\_4 Start: 2425, Stop: 2721, Start Num: 93

Candidate Starts for Soups\_4:

(Start: 93 @2425 has 252 MA's),

Gene: South40\_2 Start: 726, Stop: 1040, Start Num: 93

Candidate Starts for South40\_2:

(36, 582), (Start: 93 @726 has 252 MA's), (105, 798), (120, 882),

Gene: Spike509\_1 Start: 527, Stop: 820, Start Num: 84

Candidate Starts for Spike509\_1:

(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: SpikeBT\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for SpikeBT\_1:  
(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: Spouty\_3 Start: 2332, Stop: 2625, Start Num: 93  
Candidate Starts for Spouty\_3:  
(Start: 74 @2305 has 3 MA's), (Start: 93 @2332 has 252 MA's), (114, 2434), (118, 2452),

Gene: SqueakyClean\_3 Start: 1027, Stop: 1341, Start Num: 94  
Candidate Starts for SqueakyClean\_3:  
(Start: 94 @1027 has 111 MA's), (104, 1096), (119, 1171),

Gene: Squee\_1 Start: 606, Stop: 902, Start Num: 96  
Candidate Starts for Squee\_1:  
(Start: 70 @543 has 4 MA's), (Start: 78 @579 has 3 MA's), (Start: 85 @588 has 1 MA's), (Start: 96 @606 has 217 MA's), (118, 729), (129, 819), (134, 855),

Gene: Stagni\_1 Start: 527, Stop: 820, Start Num: 84  
Candidate Starts for Stagni\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: StarStuff\_4 Start: 2345, Stop: 2641, Start Num: 93  
Candidate Starts for StarStuff\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: Steamy\_4 Start: 2222, Stop: 2518, Start Num: 94  
Candidate Starts for Steamy\_4:  
(Start: 94 @2222 has 111 MA's), (105, 2288),

Gene: StepMih\_1 Start: 527, Stop: 820, Start Num: 84  
Candidate Starts for StepMih\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Stephig9\_1 Start: 506, Stop: 799, Start Num: 96  
Candidate Starts for Stephig9\_1:  
(Start: 96 @506 has 217 MA's), (108, 593), (122, 680), (134, 758), (138, 794),

Gene: StewieG\_1 Start: 597, Stop: 893, Start Num: 96  
Candidate Starts for StewieG\_1:  
(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: Stink\_1 Start: 356, Stop: 763, Start Num: 60  
Candidate Starts for Stink\_1:  
(Start: 60 @356 has 2 MA's), (105, 536), (134, 722),

Gene: StrongArm\_1 Start: 599, Stop: 895, Start Num: 96  
Candidate Starts for StrongArm\_1:  
(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 94 @596 has 111 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Strosahl\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for Strosahl\_4:  
(Start: 93 @2278 has 252 MA's),

Gene: SuMoo\_85 Start: 48762, Stop: 49061, Start Num: 93

Candidate Starts for SuMoo\_85:  
(11, 48399), (13, 48429), (18, 48498), (Start: 93 @48762 has 252 MA's), (104, 48828), (116, 48879),  
(125, 48954),

Gene: Sue2\_69 Start: 41870, Stop: 42175, Start Num: 93

Candidate Starts for Sue2\_69:  
(75, 41837), (Start: 93 @41870 has 252 MA's), (104, 41936), (116, 41987), (137, 42161),

Gene: Sujidade\_2 Start: 723, Stop: 1034, Start Num: 93

Candidate Starts for Sujidade\_2:  
(Start: 38 @588 has 2 MA's), (Start: 93 @723 has 252 MA's), (105, 795), (118, 852),

Gene: Sumter\_1 Start: 599, Stop: 895, Start Num: 96

Candidate Starts for Sumter\_1:  
(Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: SunsetPointe\_2 Start: 739, Stop: 1053, Start Num: 93

Candidate Starts for SunsetPointe\_2:  
(Start: 93 @739 has 252 MA's), (120, 895),

Gene: Sunshine924\_1 Start: 595, Stop: 891, Start Num: 96

Candidate Starts for Sunshine924\_1:  
(Start: 70 @532 has 4 MA's), (Start: 78 @568 has 3 MA's), (Start: 85 @577 has 1 MA's), (Start: 96  
@595 has 217 MA's), (118, 718), (129, 808), (134, 844),

Gene: SuperAwesome\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for SuperAwesome\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: SuperCallie99\_4 Start: 2144, Stop: 2440, Start Num: 93

Candidate Starts for SuperCallie99\_4:  
(Start: 93 @2144 has 252 MA's), (119, 2279),

Gene: Superchunk\_4 Start: 2154, Stop: 2450, Start Num: 93

Candidate Starts for Superchunk\_4:  
(Start: 93 @2154 has 252 MA's), (126, 2349),

Gene: SweetiePie\_5 Start: 2568, Stop: 2864, Start Num: 94

Candidate Starts for SweetiePie\_5:  
(Start: 94 @2568 has 111 MA's), (118, 2691),

Gene: SwissCheese\_1 Start: 596, Stop: 892, Start Num: 96

Candidate Starts for SwissCheese\_1:  
(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96  
@596 has 217 MA's), (118, 719), (124, 773), (129, 809), (134, 845),

Gene: Switzer\_2 Start: 747, Stop: 1043, Start Num: 96

Candidate Starts for Switzer\_2:

(Start: 96 @747 has 217 MA's), (118, 870), (129, 960), (134, 996),

Gene: Switzerland\_4 Start: 2425, Stop: 2721, Start Num: 93

Candidate Starts for Switzerland\_4:

(Start: 93 @2425 has 252 MA's), (108, 2515),

Gene: TNguyen7\_1 Start: 418, Stop: 714, Start Num: 96

Candidate Starts for TNguyen7\_1:

(Start: 96 @418 has 217 MA's), (119, 553),

Gene: TagePhighter\_3 Start: 730, Stop: 1041, Start Num: 93

Candidate Starts for TagePhighter\_3:

(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: Tallboi\_69 Start: 43220, Stop: 43522, Start Num: 93

Candidate Starts for Tallboi\_69:

(Start: 93 @43220 has 252 MA's), (122, 43403), (137, 43511),

Gene: Target\_2 Start: 851, Stop: 1147, Start Num: 96

Candidate Starts for Target\_2:

(Start: 73 @803 has 1 MA's), (Start: 96 @851 has 217 MA's), (118, 974), (129, 1064), (134, 1100),

Gene: TarsusIV\_5 Start: 2568, Stop: 2864, Start Num: 94

Candidate Starts for TarsusIV\_5:

(Start: 94 @2568 has 111 MA's),

Gene: Tasp14\_2 Start: 770, Stop: 1066, Start Num: 96

Candidate Starts for Tasp14\_2:

(87, 755), (Start: 96 @770 has 217 MA's), (118, 893), (129, 983), (134, 1019),

Gene: Taurus\_1 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for Taurus\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: Tbone\_69 Start: 43742, Stop: 44044, Start Num: 93

Candidate Starts for Tbone\_69:

(Start: 93 @43742 has 252 MA's), (101, 43793), (104, 43808), (116, 43859), (125, 43934), (137, 44033),

Gene: Tefunt\_2 Start: 643, Stop: 966, Start Num: 88

Candidate Starts for Tefunt\_2:

(Start: 88 @643 has 1 MA's), (Start: 94 @652 has 111 MA's), (119, 796), (121, 829),

Gene: Teodoridan\_1 Start: 600, Stop: 896, Start Num: 96

Candidate Starts for Teodoridan\_1:

(Start: 70 @537 has 4 MA's), (Start: 78 @573 has 3 MA's), (Start: 85 @582 has 1 MA's), (Start: 96 @600 has 217 MA's), (118, 723), (129, 813), (134, 849),

Gene: TforTroy\_69 Start: 43283, Stop: 43591, Start Num: 93

Candidate Starts for TforTroy\_69:

(24, 43070), (Start: 93 @43283 has 252 MA's), (122, 43466), (125, 43475), (137, 43574),

Gene: TheloniousMonk\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for TheloniousMonk\_2:  
(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Thestral\_2 Start: 639, Stop: 953, Start Num: 94  
Candidate Starts for Thestral\_2:  
(Start: 94 @639 has 111 MA's), (119, 783),

Gene: Thor\_2 Start: 757, Stop: 1053, Start Num: 96  
Candidate Starts for Thor\_2:  
(Start: 96 @757 has 217 MA's), (118, 880), (129, 970), (134, 1006),

Gene: Tian\_67 Start: 43915, Stop: 44217, Start Num: 93  
Candidate Starts for Tian\_67:  
(Start: 93 @43915 has 252 MA's), (104, 43981), (116, 44032), (122, 44098), (137, 44206),

Gene: Tiffany\_1 Start: 527, Stop: 820, Start Num: 84  
Candidate Starts for Tiffany\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Tiger\_1 Start: 534, Stop: 833, Start Num: 82  
Candidate Starts for Tiger\_1:  
(29, 372), (Start: 82 @534 has 25 MA's), (114, 642), (122, 714), (131, 783), (138, 828),

Gene: Timothy\_4 Start: 2356, Stop: 2652, Start Num: 93  
Candidate Starts for Timothy\_4:  
(Start: 93 @2356 has 252 MA's), (Start: 99 @2389 has 3 MA's), (108, 2446), (138, 2647),

Gene: Timshel\_1 Start: 408, Stop: 704, Start Num: 96  
Candidate Starts for Timshel\_1:  
(59, 297), (Start: 96 @408 has 217 MA's), (131, 654), (136, 672),

Gene: TinaBelcher\_2 Start: 639, Stop: 953, Start Num: 94  
Candidate Starts for TinaBelcher\_2:  
(Start: 94 @639 has 111 MA's), (119, 783),

Gene: TipsytheTRex\_4 Start: 2326, Stop: 2622, Start Num: 93  
Candidate Starts for TipsytheTRex\_4:  
(Start: 93 @2326 has 252 MA's),

Gene: Toaka\_4 Start: 2356, Stop: 2682, Start Num: 74  
Candidate Starts for Toaka\_4:  
(Start: 74 @2356 has 3 MA's), (Start: 96 @2389 has 217 MA's), (114, 2491), (118, 2509),

Gene: Todacoro\_1 Start: 445, Stop: 741, Start Num: 96  
Candidate Starts for Todacoro\_1:  
(Start: 96 @445 has 217 MA's), (119, 580),

Gene: Toma\_2 Start: 723, Stop: 1034, Start Num: 93  
Candidate Starts for Toma\_2:  
(Start: 38 @588 has 2 MA's), (Start: 93 @723 has 252 MA's), (105, 795), (110, 825), (118, 852), (125, 915),

Gene: Tomathan\_4 Start: 2345, Stop: 2641, Start Num: 93

Candidate Starts for Tomathan\_4:  
(Start: 93 @2345 has 252 MA's),

Gene: Topanga\_1 Start: 517, Stop: 813, Start Num: 84  
Candidate Starts for Topanga\_1:  
(Start: 84 @517 has 61 MA's),

Gene: Topgun\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Topgun\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Tote\_2 Start: 834, Stop: 1130, Start Num: 96  
Candidate Starts for Tote\_2:  
(Start: 73 @786 has 1 MA's), (Start: 96 @834 has 217 MA's), (118, 957), (129, 1047), (134, 1083),

Gene: TouchMeNot\_54 Start: 40155, Stop: 40460, Start Num: 96  
Candidate Starts for TouchMeNot\_54:  
(Start: 96 @40155 has 217 MA's), (106, 40230), (111, 40251), (121, 40332),

Gene: Traft412\_3 Start: 1245, Stop: 1541, Start Num: 96  
Candidate Starts for Traft412\_3:  
(Start: 96 @1245 has 217 MA's), (118, 1368), (129, 1458), (134, 1494),

Gene: Treddle\_2 Start: 750, Stop: 1046, Start Num: 96  
Candidate Starts for Treddle\_2:  
(Start: 96 @750 has 217 MA's), (118, 873), (129, 963), (134, 999),

Gene: Tripl3t\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Tripl3t\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Triste\_2 Start: 730, Stop: 1041, Start Num: 93  
Candidate Starts for Triste\_2:  
(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: Triumph\_3 Start: 679, Stop: 993, Start Num: 94  
Candidate Starts for Triumph\_3:  
(Start: 94 @679 has 111 MA's), (119, 823),

Gene: Trixie\_4 Start: 2424, Stop: 2720, Start Num: 94  
Candidate Starts for Trixie\_4:  
(Start: 94 @2424 has 111 MA's),

Gene: Trooper\_5 Start: 2370, Stop: 2666, Start Num: 94  
Candidate Starts for Trooper\_5:  
(Start: 94 @2370 has 111 MA's),

Gene: Trouble\_1 Start: 534, Stop: 893, Start Num: 70  
Candidate Starts for Trouble\_1:  
(Start: 70 @534 has 4 MA's), (Start: 78 @570 has 3 MA's), (Start: 85 @579 has 1 MA's), (Start: 96 @597 has 217 MA's), (118, 720), (129, 810), (134, 846),

Gene: TrvxScott\_2 Start: 639, Stop: 953, Start Num: 94

Candidate Starts for TrvxScott\_2:

(Start: 94 @639 has 111 MA's), (119, 783),

Gene: TuanPN\_2 Start: 730, Stop: 1041, Start Num: 93

Candidate Starts for TuanPN\_2:

(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (110, 832), (118, 859), (125, 922),

Gene: Tubs\_4 Start: 2335, Stop: 2628, Start Num: 93

Candidate Starts for Tubs\_4:

(Start: 74 @2308 has 3 MA's), (Start: 93 @2335 has 252 MA's), (114, 2437), (118, 2455),

Gene: Tuck\_69 Start: 43623, Stop: 43925, Start Num: 93

Candidate Starts for Tuck\_69:

(Start: 93 @43623 has 252 MA's), (104, 43689), (116, 43740), (125, 43815), (137, 43914),

Gene: Tucker\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Tucker\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Turab\_68 Start: 42750, Stop: 43052, Start Num: 93

Candidate Starts for Turab\_68:

(Start: 93 @42750 has 252 MA's), (101, 42801), (104, 42816), (116, 42867), (125, 42942), (137, 43041),

Gene: Turbido\_5 Start: 2551, Stop: 2847, Start Num: 94

Candidate Starts for Turbido\_5:

(Start: 94 @2551 has 111 MA's), (118, 2674),

Gene: Turj99\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Turj99\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Tutumahutu\_71 Start: 43324, Stop: 43626, Start Num: 93

Candidate Starts for Tutumahutu\_71:

(Start: 93 @43324 has 252 MA's), (101, 43375), (104, 43390), (116, 43441), (125, 43516), (137, 43615),

Gene: Tweety19\_69 Start: 40496, Stop: 40801, Start Num: 93

Candidate Starts for Tweety19\_69:

(Start: 93 @40496 has 252 MA's), (103, 40556), (104, 40562), (116, 40613), (137, 40787),

Gene: Twister\_1 Start: 463, Stop: 759, Start Num: 84

Candidate Starts for Twister\_1:

(Start: 84 @463 has 61 MA's),

Gene: TwoPeat\_2 Start: 834, Stop: 1130, Start Num: 96

Candidate Starts for TwoPeat\_2:

(Start: 73 @786 has 1 MA's), (Start: 96 @834 has 217 MA's), (118, 957), (129, 1047), (134, 1083),



Gene: U2\_2 Start: 749, Stop: 1045, Start Num: 96  
Candidate Starts for U2\_2:  
(Start: 96 @749 has 217 MA's), (118, 872), (129, 962), (134, 998),

Gene: UnionJack\_87 Start: 500, Stop: 799, Start Num: 82  
Candidate Starts for UnionJack\_87:  
(Start: 82 @500 has 25 MA's), (Start: 97 @515 has 1 MA's), (114, 608), (122, 680), (131, 749), (138, 794),

Gene: Unstoppable\_2 Start: 740, Stop: 1054, Start Num: 93  
Candidate Starts for Unstoppable\_2:  
(41, 629), (Start: 61 @656 has 2 MA's), (Start: 93 @740 has 252 MA's), (120, 896),

Gene: Updawg\_5 Start: 2624, Stop: 2920, Start Num: 94  
Candidate Starts for Updawg\_5:  
(32, 2423), (Start: 94 @2624 has 111 MA's),

Gene: Urza\_2 Start: 744, Stop: 1058, Start Num: 94  
Candidate Starts for Urza\_2:  
(Start: 94 @744 has 111 MA's), (119, 888),

Gene: UtzChips\_77 Start: 46396, Stop: 46695, Start Num: 93  
Candidate Starts for UtzChips\_77:  
(Start: 73 @46351 has 1 MA's), (Start: 93 @46396 has 252 MA's), (112, 46504), (116, 46513),

Gene: VA6\_4 Start: 2464, Stop: 2760, Start Num: 94  
Candidate Starts for VA6\_4:  
(Start: 94 @2464 has 111 MA's), (118, 2587),

Gene: VC3\_4 Start: 2344, Stop: 2640, Start Num: 93  
Candidate Starts for VC3\_4:  
(Start: 93 @2344 has 252 MA's),

Gene: VResidence\_72 Start: 41784, Stop: 42086, Start Num: 93  
Candidate Starts for VResidence\_72:  
(29, 41574), (Start: 93 @41784 has 252 MA's), (104, 41850), (116, 41901), (137, 42075),

Gene: VWB\_70 Start: 47259, Stop: 47567, Start Num: 91  
Candidate Starts for VWB\_70:  
(10, 46878), (Start: 91 @47259 has 5 MA's), (128, 47478),

Gene: Vanisoa\_4 Start: 2102, Stop: 2395, Start Num: 93  
Candidate Starts for Vanisoa\_4:  
(Start: 93 @2102 has 252 MA's), (105, 2168), (114, 2204), (118, 2222),

Gene: Verabelle\_3 Start: 950, Stop: 1264, Start Num: 94  
Candidate Starts for Verabelle\_3:  
(Start: 88 @944 has 1 MA's), (Start: 94 @950 has 111 MA's), (104, 1019), (119, 1094),

Gene: Verse\_2 Start: 955, Stop: 1269, Start Num: 94  
Candidate Starts for Verse\_2:  
(26, 751), (27, 754), (63, 856), (Start: 88 @949 has 1 MA's), (Start: 94 @955 has 111 MA's), (104, 1024), (119, 1099), (121, 1132),

Gene: VieEnRose\_2 Start: 744, Stop: 1058, Start Num: 94

Candidate Starts for VieEnRose\_2:

(Start: 94 @744 has 111 MA's), (119, 888),

Gene: Violet\_2 Start: 748, Stop: 1044, Start Num: 96

Candidate Starts for Violet\_2:

(Start: 96 @748 has 217 MA's), (118, 871), (129, 961), (134, 997),

Gene: Vix\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Vix\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: VohminGhazi\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for VohminGhazi\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: VroomVroom\_67 Start: 42799, Stop: 43164, Start Num: 89

Candidate Starts for VroomVroom\_67:

(49, 42664), (53, 42673), (Start: 89 @42799 has 2 MA's), (103, 42868), (104, 42874), (135, 43069), (137, 43099), (140, 43111),

Gene: Waits\_4 Start: 2278, Stop: 2574, Start Num: 93

Candidate Starts for Waits\_4:

(Start: 93 @2278 has 252 MA's), (108, 2368),

Gene: WalterMcMickey\_1 Start: 463, Stop: 759, Start Num: 84

Candidate Starts for WalterMcMickey\_1:

(Start: 84 @463 has 61 MA's),

Gene: Warda\_70 Start: 43423, Stop: 43725, Start Num: 93

Candidate Starts for Warda\_70:

(Start: 93 @43423 has 252 MA's), (101, 43474), (104, 43489), (116, 43540), (125, 43615), (137, 43714),

Gene: Watermelon\_2 Start: 736, Stop: 1044, Start Num: 96

Candidate Starts for Watermelon\_2:

(Start: 96 @736 has 217 MA's), (118, 859), (129, 949), (134, 985),

Gene: Watson\_1 Start: 526, Stop: 819, Start Num: 84

Candidate Starts for Watson\_1:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: WeiHuaDA\_5 Start: 2558, Stop: 2854, Start Num: 94

Candidate Starts for WeiHuaDA\_5:

(Start: 94 @2558 has 111 MA's), (118, 2681),

Gene: Werner\_2 Start: 730, Stop: 1041, Start Num: 93

Candidate Starts for Werner\_2:

(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: Whabigail7\_5 Start: 2548, Stop: 2844, Start Num: 94

Candidate Starts for Whabigail7\_5:

(Start: 94 @2548 has 111 MA's), (118, 2671),

Gene: Whatever\_2 Start: 589, Stop: 1041, Start Num: 38

Candidate Starts for Whatever\_2:

(Start: 38 @589 has 2 MA's), (53, 628), (Start: 93 @730 has 252 MA's), (105, 802), (120, 883),

Gene: Wheeler\_2 Start: 833, Stop: 1129, Start Num: 96

Candidate Starts for Wheeler\_2:

(Start: 73 @785 has 1 MA's), (Start: 96 @833 has 217 MA's), (118, 956), (129, 1046), (134, 1082),

Gene: WideWale\_5 Start: 2624, Stop: 2920, Start Num: 94

Candidate Starts for WideWale\_5:

(32, 2423), (Start: 94 @2624 has 111 MA's),

Gene: Wiks\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for Wiks\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Wildwest\_65 Start: 43282, Stop: 43584, Start Num: 93

Candidate Starts for Wildwest\_65:

(Start: 93 @43282 has 252 MA's), (103, 43342), (116, 43399), (125, 43474), (137, 43573),

Gene: Wilkins\_1 Start: 598, Stop: 894, Start Num: 96

Candidate Starts for Wilkins\_1:

(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Wooldri\_3 Start: 517, Stop: 819, Start Num: 77

Candidate Starts for Wooldri\_3:

(Start: 77 @517 has 30 MA's), (Start: 84 @526 has 61 MA's), (105, 592),

Gene: WunderPhul\_4 Start: 2143, Stop: 2439, Start Num: 93

Candidate Starts for WunderPhul\_4:

(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: XianYue\_4 Start: 2391, Stop: 2687, Start Num: 94

Candidate Starts for XianYue\_4:

(Start: 94 @2391 has 111 MA's), (117, 2508),

Gene: Yang\_68 Start: 42836, Stop: 43144, Start Num: 93

Candidate Starts for Yang\_68:

(Start: 93 @42836 has 252 MA's), (104, 42902), (125, 43028), (137, 43127),

Gene: Yasdnii\_2 Start: 729, Stop: 1040, Start Num: 93

Candidate Starts for Yasdnii\_2:

(53, 627), (Start: 93 @729 has 252 MA's), (105, 801), (110, 831), (118, 858), (125, 921),

Gene: Yecey3\_4 Start: 2101, Stop: 2394, Start Num: 94

Candidate Starts for Yecey3\_4:

(Start: 94 @2101 has 111 MA's),

Gene: YesChef\_69 Start: 43140, Stop: 43442, Start Num: 93

Candidate Starts for YesChef\_69:

(Start: 93 @43140 has 252 MA's), (101, 43191), (104, 43206), (116, 43257), (125, 43332), (137, 43431),

Gene: Yokurt\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Yokurt\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Yosif\_3 Start: 954, Stop: 1265, Start Num: 94  
Candidate Starts for Yosif\_3:  
(40, 816), (69, 888), (72, 906), (Start: 94 @954 has 111 MA's), (121, 1128),

Gene: Zaka\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Zaka\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: Zeeculate\_1 Start: 596, Stop: 892, Start Num: 96  
Candidate Starts for Zeeculate\_1:  
(Start: 70 @533 has 4 MA's), (Start: 78 @569 has 3 MA's), (Start: 85 @578 has 1 MA's), (Start: 96 @596 has 217 MA's), (118, 719), (129, 809), (134, 845),

Gene: Zemlya\_2 Start: 703, Stop: 1014, Start Num: 93  
Candidate Starts for Zemlya\_2:  
(1, 34), (2, 40), (3, 43), (4, 70), (6, 142), (15, 406), (21, 463), (23, 487), (25, 496), (71, 652), (Start: 76 @682 has 1 MA's), (Start: 93 @703 has 252 MA's), (108, 799), (110, 805), (118, 832),

Gene: Zephyr\_1 Start: 598, Stop: 894, Start Num: 96  
Candidate Starts for Zephyr\_1:  
(Start: 70 @535 has 4 MA's), (Start: 78 @571 has 3 MA's), (Start: 85 @580 has 1 MA's), (Start: 96 @598 has 217 MA's), (118, 721), (129, 811), (134, 847),

Gene: Zeta1847\_76 Start: 47529, Stop: 47834, Start Num: 93  
Candidate Starts for Zeta1847\_76:  
(44, 47376), (45, 47379), (48, 47382), (Start: 93 @47529 has 252 MA's), (139, 47829),

Gene: Zetzy\_1 Start: 518, Stop: 820, Start Num: 77  
Candidate Starts for Zetzy\_1:  
(Start: 77 @518 has 30 MA's), (Start: 84 @527 has 61 MA's), (105, 593),

Gene: Zeuska\_1 Start: 599, Stop: 895, Start Num: 96  
Candidate Starts for Zeuska\_1:  
(Start: 70 @536 has 4 MA's), (Start: 78 @572 has 3 MA's), (Start: 85 @581 has 1 MA's), (Start: 94 @596 has 111 MA's), (Start: 96 @599 has 217 MA's), (118, 722), (129, 812), (134, 848),

Gene: Zimmer\_4 Start: 2256, Stop: 2552, Start Num: 91  
Candidate Starts for Zimmer\_4:  
(19, 1998), (28, 2043), (40, 2094), (Start: 91 @2256 has 5 MA's),

Gene: Zulu\_4 Start: 2143, Stop: 2439, Start Num: 93  
Candidate Starts for Zulu\_4:  
(Start: 93 @2143 has 252 MA's), (119, 2278),

Gene: phiHau3\_1 Start: 591, Stop: 905, Start Num: 94  
Candidate Starts for phiHau3\_1:

(Start: 94 @591 has 111 MA's), (115, 708), (119, 735), (130, 837), (138, 900),