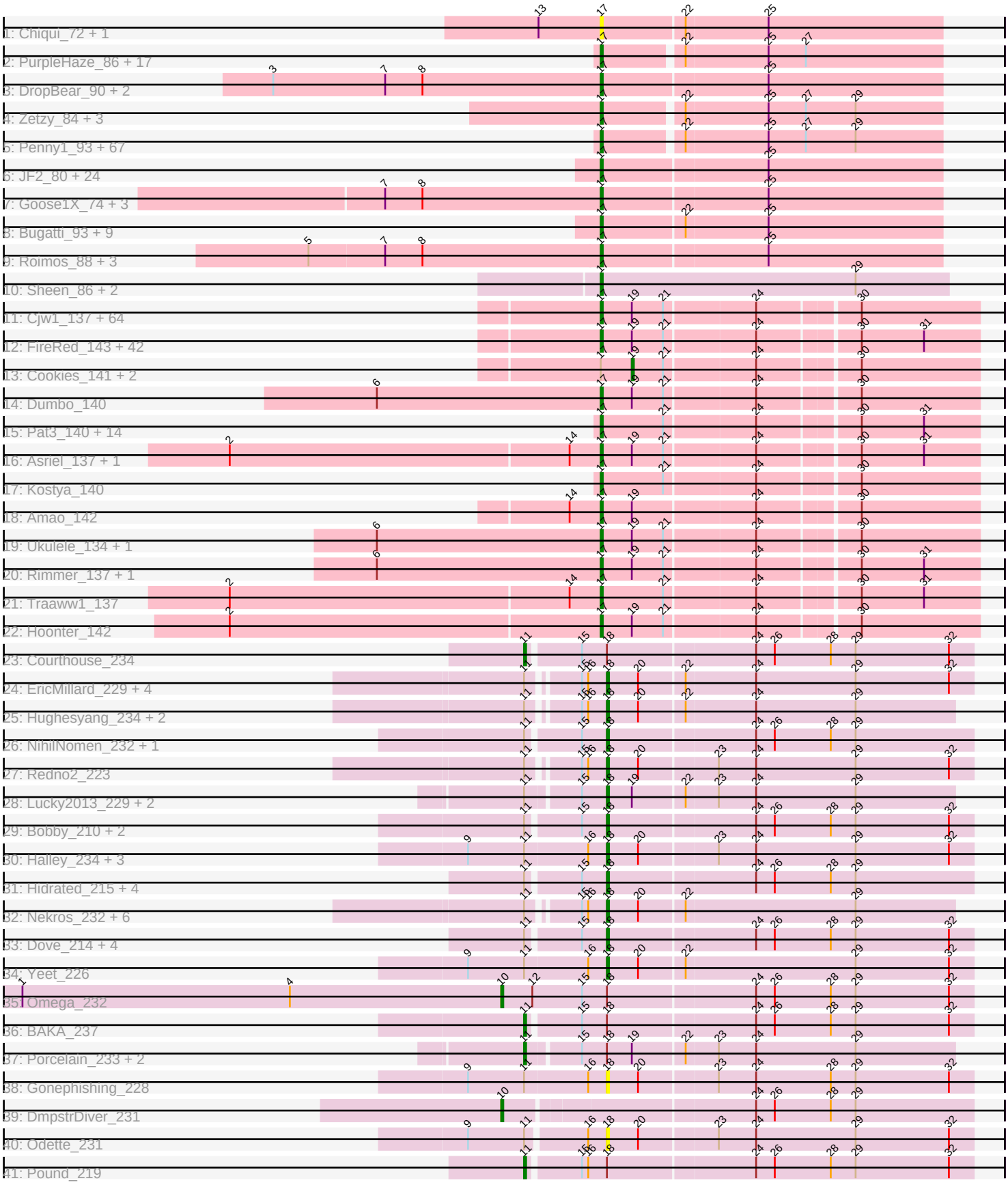
# Pham 343534


1: Chiqui_72 + 1
2: PurpleHaze_86 + 17
3: DropBear_90 + 2
4: Zetzy_84 + 3
5: Penny1_93 + 67
6: JF2_80 + 24
7: Goose1X_74 + 3
8: Bugatti_93 + 9
9: Roimos_88 + 3
10: Sheen_86 + 2
11: Cjw1_137 + 64
12: FireRed_143 + 42
13: Cookies_141 + 2
14: Dumbo_140
15: Pat3_140 + 14
16: Asriel_137 + 1
17: Kostya_140
18: Amao_142
19: Ukulele_134 + 1
20: Rimmer_137 + 1
21: Traaww1_137
22: Hoonter_142
23: Courthouse_234
24: EricMillard_229 + 4
25: Hughesyang_234 + 2
26: NihilNomen_232 + 1
27: Redno2_223
28: Lucky2013_229 + 2
29: Bobby_210 + 2
30: Halley_234 + 3
31: Hidrated_215 + 4
32: Nekros_232 + 6
33: Dove_214 + 4
34: Yeet_226
35: Omega_232
36: BAKA_237
37: Porcelain_233 + 2
38: Gonephishing_228
39: DmpstrDiver_231
40: Odette_231
41: Pound_219

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 343534 Report

This analysis was run 11/14/26 on database version 672.

Pham number 343534 has 327 members, 33 are drafts.

Phages represented in each track:
• Track 1 : Chiqui_72, BabyJohn_72
• Track 2 : PurpleHaze_86, Groupthink_92, Gemma_89, Calvinny_91, Manu_91, PhishRPhriends_88, Kalb97_92, ClownCar_91, JeppNRM_92, Kalnoky_92, Heliosoles_89, OlanP_90, ACFishhook_80, Pawn_90, Phranny_84, Marius_92, HaveUMetTed_91, Reba_87
• Track 3 : DropBear_90, Fred313_87, Marchesa_89
• Track 4 : Zetzy_84, Jobu08_88, SoilDragon_93, Bigflo_90
• Track 5 : Penny1_93, Grub_90, Grum1_93, Anubis_98, BreSam8_93, LBerry_95, Beauxregard13_92, Snickers_93, Bxz2_88, Gwennie_93, Daishi_92, LugYA_96, MadMarie_90, KADY_90, MoneyMay_93, Grif_91, GtownJaz_93, EpicPhail_94, JenCasNa_94, Montavir_88, Stagni_89, Mainiac_92, PotatoSplit_94, Lowa_93, Phoxy_88, Sabia_90, MarQuardt_93, Ollie_93, Cullens_94, Farber_87, Rummer_92, Microwolf_88, Malinsilva_96, LarryKay_93, Hercules11_93, Watson_92, Aglet_94, Lilith_90, Pembroke_93, Wooldri_95, Croquant_90, TinyPebbles_92, PGHhamlin_95, Louie6_92, MuchMore_90, JHC117_88, AugsMagnumOpus_90, Sabinator_91, Soshari_95, Spike509_94, SoYo_90, P28Green_93, Fernando_94, StepMih_93, AgronaGT15_85, BuzzBuzz_86, GingkoMaracino_92, DaHudson_92, Taurus_94, Vix_88, Phoebe_94, Colbster_89, HashRod_94, Tiffany_92, Misomonster_89, Dieselweasel_93, Methuselah_86, Marie_91
• Track 6 : JF2_80, Lambert1_89, Todacoro_89, Veracruz_86, EtoileNova_86, Caviar_78, JF4_80, Isca_87, BabyRay_91, Hookmount_89, ResDef_87, Cat_78, Noella_90, B1_73, Rockstar_79, QuinnKiro_88, Panamaxus_85, Pocahontas_88, Margo_89, MK4_78, Popcicle_89, Phantastic_91, Norbert_85, MA5_84, Texage_87
• Track 7 : Goose1X_74, HelDan_89, Goose1D_82, Shep_77
• Track 8 : Bugatti_93, Clammy_92, Pistachio_90, SaturnRing_91, BlueBird_92, TNguyen7_91, Puppy_91, Idleandcovert_86, Zarafa_87, Giroux_93
• Track 9 : Roimos_88, Scout_89, Heathen_89, Kachowdy_91
• Track 10 : Sheen_86, FlyCatcher_89, Toro_87
• Track 11 : Cjw1_137, BigBubba_142, FoghornLeghorn_136, BilboSwaggins_137, Pumpkin_139, Dusk_140, Sotrice96_144, ABCat_140, Misfit_139, FairyPath_141, CrystalP_139, Cactus_147, Willez_137, Nala_141, Paperbeatsrock_137, ShereKhan_139, Livelaughbron_138, Tuco_145, Contagion_135, BadStone_140, Mosby_136, IHOP_143, Myrale_141, Henry_141, Tomaszewski_133, Highbury_135, Teaspoon_124, Miniwave_133, Lilpickle_139, TeardropMSU_140, Bruin_136, Greep_143, Bogg_140, DrDrey_142, PaddyBaddy_136, Harella_145, Toto_136, Tarkin_138, ChosenOne_140, Rakim_141, Pharsalus_137, 244_140, SophKB_137, BugsBunny_138, Phaja_143, Maxxinista_141, SirDuracell_142, MollyToe_133,

Icee_141, ShamWow_138, Bask21_143, Saints25_135, StormChicken_141, StellaBean_136, MPhalcon_140, Quallification_140, Manda_140, Kanye_135, Terminus_142, Brewer_135, NelitzaMV_134, xkcd_144, Stark_137, Hopey_137, Elite2014_139
• Track 12 : FireRed_143, OrionPax_136, Moldemort_141, Goldilocks_145, StolenFromERC_141, YassJohnny_136, AmericanBeauty_142, DoctorDiddles_138, NonchalantPear_139, MISSy_142, HufflyPuff_142, Filch_142, Gator_141, Holt_145, Budgie_143, GooberAzure_142, Murphy_139, Phaux_141, Kimchi_144, Petra64142_141, GoldenSpark_143, Bench_142, Thimble_131, TBrady12_144, Eureka_140, Marshmallow_141, PhatBacter_143, Adnama_143, Murica_144, Xandras_139, RiverMonster_139, Easy2Say_141, Simpliphy_139, MadamMonkfish_140, Glexan_143, Lilizi_139, Stank_143, Nimrod_139, Wiggin_142, Policronamos_139, Argent26_143, Gemini_144, Goku_139
• Track 13 : Cookies_141, Youngblood_143, Sassay_134
• Track 14 : Dumbo_140
• Track 15 : Pat3_140, Phrux_136, Czyszczon1_140, JeTaime_138, Elph10_138, BaboJay_140, Thresher_142, Inca_139, Porky_142, Emmina_141, Command613_143, HanKaySha_139, NoSleep_138, Mindy_144, ChotaBhai_144
• Track 16 : Asriel_137, Flypotenuse_135
• Track 17 : Kostya_140
• Track 18 : Amao_142
• Track 19 : Ukulele_134, Buck_140
• Track 20 : Rimmer_137, TeamEdward_140
• Track 21 : Traaww1_137
• Track 22 : Hoonter_142
• Track 23 : Courthouse_234
• Track 24 : EricMillard_229, Beem_235, ThreeRngTarjay_231, Bagrid_237, JuicyJay_227
• Track 25 : Hughesyang_234, Ejimix_223, Zelink_225
• Track 26 : NihilNomen_232, Minerva_230
• Track 27 : Redno2_223
• Track 28 : Lucky2013_229, Klein_239, Squint_230
• Track 29 : Bobby_210, Bombitas_216, Rearden_231
• Track 30 : Halley_234, Phoebus_230, HokkenD_224, Dallas_230
• Track 31 : Hidrated_215, Thibault_205, Constella_221, Marleymoo_212, Xiaokay_217
• Track 32 : Nekros_232, Hannaconda_222, Schatzie_224, Nibley_222, BronnyJames_223, KashFlow_224, Shaboozey_229
• Track 33 : Dove_214, Ariel_238, Duke13_232, Optimus_226, Superphikiman_230
• Track 34 : Yeet_226
• Track 35 : Omega_232
• Track 36 : BAKA_237
• Track 37 : Porcelain_233, Wanda_231, MiaZeal_242
• Track 38 : Gonephishing_228
• Track 39 : DmpstrDiver_231
• Track 40 : Odette_231
• Track 41 : Pound_219

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

The start number called the most often in the published annotations is 17, it was called in 252 of the 294 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• 244_140, ABCat_140, ACFishhook_80, Adnama_143, Aglet_94, AgronaGT15_85, Amao_142, AmericanBeauty_142, Anubis_98, Argent26_143, Asriel_137, AugsMagnumOpus_90, B1_73, BaboJay_140, BabyJohn_72, BabyRay_91, BadStone_140, Bask21_143, Beauxregard13_92, Bench_142, BigBubba_142, Bigflo_90, BilboSwaggins_137, BlueBird_92, Bogg_140, BreSam8_93, Brewer_135, Bruin_136, Buck_140, Budgie_143, Bugatti_93, BugsBunny_138, BuzzBuzz_86, Bxz2_88, Cactus_147, Calvinny_91, Cat_78, Caviar_78, Chiqui_72, ChosenOne_140, ChotaBhai_144, Cjw1_137, Clammy_92, ClownCar_91, Colbster_89, Command613_143, Contagion_135, Croquant_90, CrystalP_139, Cullens_94, Czyszczon1_140, DaHudson_92, Daishi_92, DieselweaseI_93, DoctorDiddles_138, DrDrey_142, DropBear_90, Dumbo_140, Dusk_140, Easy2Say_141, Elite2014_139, Elph10_138, Emmina_141, EpicPhail_94, EtoileNova_86, Eureka_140, FairyPath_141, Farber_87, Fernando_94, Filch_142, FireRed_143, FlyCatcher_89, Flypotenuse_135, FoghornLeghorn_136, Fred313_87, Gator_141, Gemini_144, Gemma_89, GingkoMaracino_92, Giroux_93, Glexan_143, Goku_139, GoldenSpark_143, Goldilocks_145, GooberAzure_142, Goose1D_82, Goose1X_74, Greep_143, Grif_91, Groupthink_92, Grub_90, Grum1_93, GtownJaz_93, Gwennie_93, HanKaySha_139, Harella_145, HashRod_94, HaveUMetTed_91, Heathen_89, HelDan_89, Heliosoles_89, Henry_141, Hercules11_93, Highbury_135, Holt_145, Hookmount_89, Hoonter_142, Hopey_137, HufflyPuff_142, IHOP_143, Icee_141, Idleandcovert_86, Inca_139, Isca_87, JF2_80, JF4_80, JHC117_88, JeTaime_138, JenCasNa_94, JeppNRM_92, Jobu08_88, KADY_90, Kachowdy_91, Kalb97_92, Kalnoky_92, Kanye_135, Kimchi_144, Kostya_140, LBerry_95, Lambert1_89, LarryKay_93, Lilith_90, Lilizi_139, Lilpickle_139, Livelaughbron_138, Louie6_92, Lowa_93, LugYA_96, MA5_84, MISSy_142, MK4_78, MPhalcon_140, MadMarie_90, MadamMonkfish_140, Mainiac_92, Malinsilva_96, Manda_140, Manu_91, MarQuardt_93, Marchesa_89, Margo_89, Marie_91, Marius_92, Marshmallow_141, Maxxinista_141, Methuselah_86, Microwolf_88, Mindy_144, Miniwave_133, Misfit_139, Misomonster_89, Moldemort_141, MollyToe_133, MoneyMay_93, Montavir_88, Mosby_136, MuchMore_90, Murica_144, Murphy_139, Myrale_141, Nala_141, NelitzaMV_134, Nimrod_139, NoSleep_138, Noella_90, NonchalantPear_139, Norbert_85, OlanP_90, Ollie_93, OrionPax_136, P28Green_93, PGHhamlin_95, PaddyBaddy_136, Panamaxus_85, Paperbeatsrock_137, Pat3_140, Pawn_90, Pembroke_93, Penny1_93, Petra64142_141, Phaja_143, Phantastic_91, Pharsalus_137, PhatBacter_143, Phaux_141, PhishRPhriends_88, Phoebe_94, Phoxy_88, Phranny_84, Phrux_136, Pistachio_90, Pocahontas_88, Policronamos_139, Popcicle_89, Porky_142, PotatoSplit_94, Pumpkin_139, Puppy_91, PurpleHaze_86, Quallification_140, QuinnKiro_88, Rakim_141, Reba_87, ResDef_87, Rimmer_137, RiverMonster_139, Rockstar_79, Roimos_88, Rummer_92, Sabia_90, Sabinator_91, Saints25_135, SaturnRing_91, Scout_89, ShamWow_138, Sheen_86, Shep_77, ShereKhan_139, Simpliphy_139, SirDuracell_142, Snickers_93, SoYo_90, SoilDragon_93, SophKB_137, Soshari_95, Sotrice96_144, Spike509_94, Stagni_89, Stank_143, Stark_137, StellaBean_136, StepMih_93, StolenFromERC_141, StormChicken_141, TBrady12_144, TNguyen7_91, Tarkin_138, Taurus_94, TeamEdward_140, TeardropMSU_140, Teaspoon_124, Terminus_142, Texage_87, Thimble_131, Thresher_142, Tiffany_92, TinyPebbles_92, Todacoro_89, Tomaszewski_133, Toro_87, Toto_136, Traaww1_137, Tuco_145, Ukulele_134, Veracruz_86, Vix_88, Watson_92,

Wiggin_142, Willez_137, Wooldri_95, Xandras_139, YassJohnny_136, Zarafa_87, Zetzy_84, xkcd_144,

Genes that have the "Most Annotated" start but do not call it:
• Cookies_141, Sassay_134, Youngblood_143,

Genes that do not have the "Most Annotated" start:
• Ariel_238, BAKA_237, Bagrid_237, Beem_235, Bobby_210, Bombitas_216, BronnyJames_223, Constella_221, Courthouse_234, Dallas_230, DmpstrDiver_231, Dove_214, Duke13_232, Ejimix_223, EricMillard_229, Gonephishing_228, Halley_234, Hannaconda_222, Hidrated_215, HokkenD_224, Hughesyang_234, JuicyJay_227, KashFlow_224, Klein_239, Lucky2013_229, Marleymoo_212, MiaZeal_242, Minerva_230, Nekros_232, Nibley_222, NihilNomen_232, Odette_231, Omega_232, Optimus_226, Phoebus_230, Porcelain_233, Pound_219, Rearden_231, Redno2_223, Schatzie_224, Shaboozey_229, Squint_230, Superphikiman_230, Thibault_205, ThreeRngTarjay_231, Wanda_231, Xiaokay_217, Yeet_226, Zelink_225,

**Summary by start number:**

Start 10:
• Found in 2 of 327 ( 0.6% ) of genes in pham
• Manual Annotations of this start: 2 of 294
• Called 100.0% of time when present
• Phage (with cluster) where this start called: DmpstrDiver_231 (J), Omega_232 (J),

Start 11:
• Found in 47 of 327 ( 14.4% ) of genes in pham
• Manual Annotations of this start: 6 of 294
• Called 12.8% of time when present
• Phage (with cluster) where this start called: BAKA_237 (J), Courthouse_234 (J), MiaZeal_242 (J), Porcelain_233 (J), Pound_219 (J), Wanda_231 (J),

Start 17:
• Found in 278 of 327 ( 85.0% ) of genes in pham
• Manual Annotations of this start: 252 of 294
• Called 98.9% of time when present
• Phage (with cluster) where this start called: 244_140 (E), ABCat_140 (E), ACFishhook_80 (A3), Adnama_143 (E), Aglet_94 (A3), AgronaGT15_85 (A3), Amao_142 (E), AmericanBeauty_142 (E), Anubis_98 (A3), Argent26_143 (E), Asriel_137 (E), AugsMagnumOpus_90 (A3), B1_73 (A3), BaboJay_140 (E), BabyJohn_72 (A3), BabyRay_91 (A3), BadStone_140 (E), Bask21_143 (E), Beauxregard13_92 (A3), Bench_142 (E), BigBubba_142 (E), Bigflo_90 (A3), BilboSwaggins_137 (E), BlueBird_92 (A3), Bogg_140 (E), BreSam8_93 (A3), Brewer_135 (E), Bruin_136 (E), Buck_140 (E), Budgie_143 (E), Bugatti_93 (A3), BugsBunny_138 (E), BuzzBuzz_86 (A3), Bxz2_88 (A3), Cactus_147 (E), Calvinny_91 (A3), Cat_78 (A3), Caviar_78 (A3), Chiqui_72 (A3), ChosenOne_140 (E), ChotaBhai_144 (E), Cjw1_137 (E), Clammy_92 (A3), ClownCar_91 (A3), Colbster_89 (A3), Command613_143 (E), Contagion_135 (E), Croquant_90 (A3), CrystalP_139 (E), Cullens_94 (A3), Czyszczon1_140 (E), DaHudson_92 (A3), Daishi_92 (A3), Dieselweasel_93 (A3), DoctorDiddles_138 (E), DrDrey_142 (E), DropBear_90 (A3), Dumbo_140 (E), Dusk_140 (E), Easy2Say_141 (E), Elite2014_139 (E), Elph10_138 (E), Emmina_141 (E), EpicPhail_94 (A3), EtoileNova_86 (A3), Eureka_140 (E),

FairyPath_141 (E), Farber_87 (A3), Fernando_94 (A3), Filch_142 (E), FireRed_143 (E), FlyCatcher_89 (A7), Flypotenuse_135 (E), FoghornLeghorn_136 (E), Fred313_87 (A3), Gator_141 (E), Gemini_144 (E), Gemma_89 (A3), GingkoMaracino_92 (A3), Giroux_93 (A3), Glexan_143 (E), Goku_139 (E), GoldenSpark_143 (E), Goldilocks_145 (E), GooberAzure_142 (E), Goose1D_82 (A3), Goose1X_74 (A3), Greep_143 (E), Grif_91 (A3), Groupthink_92 (A3), Grub_90 (A3), Grum1_93 (A3), GtownJaz_93 (A3), Gwennie_93 (A3), HanKaySha_139 (E), Harella_145 (E), HashRod_94 (A3), HaveUMetTed_91 (A3), Heathen_89 (A3), HelDan_89 (A3), Heliosoles_89 (A3), Henry_141 (E), Hercules11_93 (A3), Highbury_135 (E), Holt_145 (E), Hookmount_89 (A3), Hoonter_142 (E), Hopey_137 (E), HufflyPuff_142 (E), IHOP_143 (E), Icee_141 (E), Idleandcovert_86 (A3), Inca_139 (E), Isca_87 (A3), JF2_80 (A3), JF4_80 (A3), JHC117_88 (A3), JeTaime_138 (E), JenCasNa_94 (A3), JeppNRM_92 (A3), Jobu08_88 (A3), KADY_90 (A3), Kachowdy_91 (A3), Kalb97_92 (A3), Kalnoky_92 (A3), Kanye_135 (E), Kimchi_144 (E), Kostya_140 (E), LBerry_95 (A3), Lambert1_89 (A3), LarryKay_93 (A3), Lilith_90 (A3), Lilizi_139 (E), Lilpickle_139 (E), Livelaughbron_138 (E), Louie6_92 (A3), Lowa_93 (A3), LugYA_96 (A3), MA5_84 (A3), MISSy_142 (E), MK4_78 (A3), MPhalcon_140 (E), MadMarie_90 (A3), MadamMonkfish_140 (E), Mainiac_92 (A3), Malinsilva_96 (A3), Manda_140 (E), Manu_91 (A3), MarQuardt_93 (A3), Marchesa_89 (A3), Margo_89 (A3), Marie_91 (A3), Marius_92 (A3), Marshmallow_141 (E), Maxxinista_141 (E), Methuselah_86 (A3), Microwolf_88 (A3), Mindy_144 (E), Miniwave_133 (E), Misfit_139 (E), Misomonster_89 (A3), Moldemort_141 (E), MollyToe_133 (E), MoneyMay_93 (A3), Montavir_88 (A3), Mosby_136 (E), MuchMore_90 (A3), Murica_144 (E), Murphy_139 (E), Myrale_141 (E), Nala_141 (E), NelitzaMV_134 (E), Nimrod_139 (E), NoSleep_138 (E), Noella_90 (A3), NonchalantPear_139 (E), Norbert_85 (A3), OlanP_90 (A3), Ollie_93 (A3), OrionPax_136 (E), P28Green_93 (A3), PGHhamlin_95 (A3), PaddyBaddy_136 (E), Panamaxus_85 (A3), Paperbeatsrock_137 (E), Pat3_140 (E), Pawn_90 (A3), Pembroke_93 (A3), Penny1_93 (A3), Petra64142_141 (E), Phaja_143 (E), Phantastic_91 (A3), Pharsalus_137 (E), PhatBacter_143 (E), Phaux_141 (E), PhishRPhriends_88 (A3), Phoebe_94 (A3), Phoxy_88 (A3), Phranny_84 (A3), Phrux_136 (E), Pistachio_90 (A3), Pocahontas_88 (A3), Policronamos_139 (E), Popcicle_89 (A3), Porky_142 (E), PotatoSplit_94 (A3), Pumpkin_139 (E), Puppy_91 (A3), PurpleHaze_86 (A3), Quallification_140 (E), QuinnKiro_88 (A3), Rakim_141 (E), Reba_87 (A3), ResDef_87 (A3), Rimmer_137 (E), RiverMonster_139 (E), Rockstar_79 (A3), Roimos_88 (A3), Rummer_92 (A3), Sabia_90 (A3), Sabinator_91 (A3), Saints25_135 (E), SaturnRing_91 (A3), Scout_89 (A3), ShamWow_138 (E), Sheen_86 (A7), Shep_77 (A3), ShereKhan_139 (E), Simpliphy_139 (E), SirDuracell_142 (E), Snickers_93 (A3), SoYo_90 (A3), SoilDragon_93 (A3), SophKB_137 (E), Soshari_95 (A3), Sotrice96_144 (E), Spike509_94 (A3), Stagni_89 (A3), Stank_143 (E), Stark_137 (E), StellaBean_136 (E), StepMih_93 (A3), StolenFromERC_141 (E), StormChicken_141 (E), TBrady12_144 (E), TNguyen7_91 (A3), Tarkin_138 (E), Taurus_94 (A3), TeamEdward_140 (E), TeardropMSU_140 (E), Teaspoon_124 (E), Terminus_142 (E), Texage_87 (A3), Thimble_131 (E), Thresher_142 (E), Tiffany_92 (A3), TinyPebbles_92 (A3), Todacoro_89 (A3), Tomaszewski_133 (E), Toro_87 (A7), Toto_136 (E), Traaww1_137 (E), Tuco_145 (E), Ukulele_134 (E), Veracruz_86 (A3), Vix_88 (A3), Watson_92 (A3), Wiggin_142 (E), Willez_137 (E), Wooldri_95 (A3), Xandras_139 (E), YassJohnny_136 (E), Zarafa_87 (A3), Zetzy_84 (A3), xkcd_144 (E),

Start 18:
• Found in 48 of 327 ( 14.7% ) of genes in pham
• Manual Annotations of this start: 31 of 294

• Called 85.4% of time when present
• Phage (with cluster) where this start called: Ariel_238 (J), Bagrid_237 (J), Beem_235 (J), Bobby_210 (J), Bombitas_216 (J), BronnyJames_223 (J), Constella_221 (J), Dallas_230 (J), Dove_214 (J), Duke13_232 (J), Ejimix_223 (J), EricMillard_229 (J), Gonephishing_228 (J), Halley_234 (J), Hannaconda_222 (J), Hidrated_215 (J), HokkenD_224 (J), Hughesyang_234 (J), JuicyJay_227 (J), KashFlow_224 (J), Klein_239 (J), Lucky2013_229 (J), Marleymoo_212 (J), Minerva_230 (J), Nekros_232 (J), Nibley_222 (J), NihilNomen_232 (J), Odette_231 (J), Optimus_226 (J), Phoebus_230 (J), Rearden_231 (J), Redno2_223 (J), Schatzie_224 (J), Shaboozey_229 (J), Squint_230 (J), Superphikiman_230 (J), Thibault_205 (J), ThreeRngTarjay_231 (J), Xiaokay_217 (J), Yeet_226 (J), Zelink_225 (J),

Start 19:
• Found in 126 of 327 ( 38.5% ) of genes in pham
• Manual Annotations of this start: 3 of 294
• Called 2.4% of time when present
• Phage (with cluster) where this start called: Cookies_141 (E), Sassay_134 (E), Youngblood_143 (E),

**Summary by clusters:**

There are 4 clusters represented in this pham: A3, J, E, A7,

Info for manual annotations of cluster A3:
•Start number 17 was manually annotated 125 times for cluster A3.

Info for manual annotations of cluster A7:
•Start number 17 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster E:
•Start number 17 was manually annotated 126 times for cluster E.
•Start number 19 was manually annotated 3 times for cluster E.

Info for manual annotations of cluster J:
•Start number 10 was manually annotated 2 times for cluster J.
•Start number 11 was manually annotated 6 times for cluster J.
•Start number 18 was manually annotated 31 times for cluster J.

***Gene Information:***

Gene: 244_140 Start: 72710, Stop: 72537, Start Num: 17
Candidate Starts for 244_140:
(Start: 17 @72710 has 252 MA's), (Start: 19 @72695 has 3 MA's), (21, 72680), (24, 72638), (30, 72593),

Gene: ABCat_140 Start: 74358, Stop: 74185, Start Num: 17
Candidate Starts for ABCat_140:
(Start: 17 @74358 has 252 MA's), (Start: 19 @74343 has 3 MA's), (21, 74328), (24, 74286), (30, 74241),

Gene: ACFishhook_80 Start: 46151, Stop: 45993, Start Num: 17

Candidate Starts for ACFishhook_80:
(Start: 17 @46151 has 252 MA's), (22, 46115), (25, 46076), (27, 46058),

Gene: Adnama_143 Start: 73101, Stop: 72928, Start Num: 17
Candidate Starts for Adnama_143:
(Start: 17 @73101 has 252 MA's), (Start: 19 @73086 has 3 MA's), (21, 73071), (24, 73029), (30, 72984), (31, 72954),

Gene: Aglet_94 Start: 49671, Stop: 49513, Start Num: 17
Candidate Starts for Aglet_94:
(Start: 17 @49671 has 252 MA's), (22, 49635), (25, 49596), (27, 49578), (29, 49554),

Gene: AgronaGT15_85 Start: 47648, Stop: 47490, Start Num: 17
Candidate Starts for AgronaGT15_85:
(Start: 17 @47648 has 252 MA's), (22, 47612), (25, 47573), (27, 47555), (29, 47531),

Gene: Amao_142 Start: 73964, Stop: 73791, Start Num: 17
Candidate Starts for Amao_142:
(14, 73979), (Start: 17 @73964 has 252 MA's), (Start: 19 @73949 has 3 MA's), (24, 73892), (30, 73847),

Gene: AmericanBeauty_142 Start: 73143, Stop: 72970, Start Num: 17
Candidate Starts for AmericanBeauty_142:
(Start: 17 @73143 has 252 MA's), (Start: 19 @73128 has 3 MA's), (21, 73113), (24, 73071), (30, 73026), (31, 72996),

Gene: Anubis_98 Start: 49648, Stop: 49490, Start Num: 17
Candidate Starts for Anubis_98:
(Start: 17 @49648 has 252 MA's), (22, 49612), (25, 49573), (27, 49555), (29, 49531),

Gene: Argent26_143 Start: 73025, Stop: 72852, Start Num: 17
Candidate Starts for Argent26_143:
(Start: 17 @73025 has 252 MA's), (Start: 19 @73010 has 3 MA's), (21, 72995), (24, 72953), (30, 72908), (31, 72878),

Gene: Ariel_238 Start: 106930, Stop: 106757, Start Num: 18
Candidate Starts for Ariel_238:
(Start: 11 @106966 has 6 MA's), (15, 106942), (Start: 18 @106930 has 31 MA's), (24, 106861), (26, 106852), (28, 106825), (29, 106813), (32, 106768),

Gene: Asriel_137 Start: 72370, Stop: 72197, Start Num: 17
Candidate Starts for Asriel_137:
(2, 72547), (14, 72385), (Start: 17 @72370 has 252 MA's), (Start: 19 @72355 has 3 MA's), (21, 72340), (24, 72298), (30, 72253), (31, 72223),

Gene: AugsMagnumOpus_90 Start: 47343, Stop: 47185, Start Num: 17
Candidate Starts for AugsMagnumOpus_90:
(Start: 17 @47343 has 252 MA's), (22, 47307), (25, 47268), (27, 47250), (29, 47226),

Gene: B1_73 Start: 44721, Stop: 44560, Start Num: 17
Candidate Starts for B1_73:
(Start: 17 @44721 has 252 MA's), (25, 44643),

Gene: BAKA_237 Start: 109575, Stop: 109366, Start Num: 11
Candidate Starts for BAKA_237:
(Start: 11 @109575 has 6 MA's), (15, 109551), (Start: 18 @109539 has 31 MA's), (24, 109470), (26, 109461), (28, 109434), (29, 109422), (32, 109377),

Gene: BaboJay_140 Start: 74477, Stop: 74304, Start Num: 17
Candidate Starts for BaboJay_140:
(Start: 17 @74477 has 252 MA's), (21, 74447), (24, 74405), (30, 74360), (31, 74330),

Gene: BabyJohn_72 Start: 45603, Stop: 45442, Start Num: 17
Candidate Starts for BabyJohn_72:
(13, 45633), (Start: 17 @45603 has 252 MA's), (22, 45564), (25, 45525),

Gene: BabyRay_91 Start: 49429, Stop: 49268, Start Num: 17
Candidate Starts for BabyRay_91:
(Start: 17 @49429 has 252 MA's), (25, 49351),

Gene: BadStone_140 Start: 73906, Stop: 73733, Start Num: 17
Candidate Starts for BadStone_140:
(Start: 17 @73906 has 252 MA's), (Start: 19 @73891 has 3 MA's), (21, 73876), (24, 73834), (30, 73789),

Gene: Bagrid_237 Start: 110936, Stop: 110748, Start Num: 18
Candidate Starts for Bagrid_237:
(Start: 11 @110969 has 6 MA's), (15, 110948), (16, 110945), (Start: 18 @110936 has 31 MA's), (20, 110921), (22, 110900), (24, 110867), (29, 110819), (32, 110774),

Gene: Bask21_143 Start: 72813, Stop: 72640, Start Num: 17
Candidate Starts for Bask21_143:
(Start: 17 @72813 has 252 MA's), (Start: 19 @72798 has 3 MA's), (21, 72783), (24, 72741), (30, 72696),

Gene: Beauxregard13_92 Start: 49679, Stop: 49521, Start Num: 17
Candidate Starts for Beauxregard13_92:
(Start: 17 @49679 has 252 MA's), (22, 49643), (25, 49604), (27, 49586), (29, 49562),

Gene: Beem_235 Start: 110055, Stop: 109882, Start Num: 18
Candidate Starts for Beem_235:
(Start: 11 @110088 has 6 MA's), (15, 110067), (16, 110064), (Start: 18 @110055 has 31 MA's), (20, 110040), (22, 110019), (24, 109986), (29, 109938), (32, 109893),

Gene: Bench_142 Start: 73985, Stop: 73812, Start Num: 17
Candidate Starts for Bench_142:
(Start: 17 @73985 has 252 MA's), (Start: 19 @73970 has 3 MA's), (21, 73955), (24, 73913), (30, 73868), (31, 73838),

Gene: BigBubba_142 Start: 72826, Stop: 72653, Start Num: 17
Candidate Starts for BigBubba_142:
(Start: 17 @72826 has 252 MA's), (Start: 19 @72811 has 3 MA's), (21, 72796), (24, 72754), (30, 72709),

Gene: Bigflo_90 Start: 49621, Stop: 49463, Start Num: 17
Candidate Starts for Bigflo_90:

(Start: 17 @49621 has 252 MA's), (22, 49585), (25, 49546), (27, 49528), (29, 49504),

Gene: BilboSwaggins_137 Start: 74394, Stop: 74221, Start Num: 17
Candidate Starts for BilboSwaggins_137:
(Start: 17 @74394 has 252 MA's), (Start: 19 @74379 has 3 MA's), (21, 74364), (24, 74322), (30, 74277),

Gene: BlueBird_92 Start: 49221, Stop: 49060, Start Num: 17
Candidate Starts for BlueBird_92:
(Start: 17 @49221 has 252 MA's), (22, 49182), (25, 49143),

Gene: Bobby_210 Start: 107461, Stop: 107288, Start Num: 18
Candidate Starts for Bobby_210:
(Start: 11 @107497 has 6 MA's), (15, 107473), (Start: 18 @107461 has 31 MA's), (24, 107392), (26, 107383), (28, 107356), (29, 107344), (32, 107299),

Gene: Bogg_140 Start: 73417, Stop: 73244, Start Num: 17
Candidate Starts for Bogg_140:
(Start: 17 @73417 has 252 MA's), (Start: 19 @73402 has 3 MA's), (21, 73387), (24, 73345), (30, 73300),

Gene: Bombitas_216 Start: 106352, Stop: 106179, Start Num: 18
Candidate Starts for Bombitas_216:
(Start: 11 @106388 has 6 MA's), (15, 106364), (Start: 18 @106352 has 31 MA's), (24, 106283), (26, 106274), (28, 106247), (29, 106235), (32, 106190),

Gene: BreSam8_93 Start: 49615, Stop: 49457, Start Num: 17
Candidate Starts for BreSam8_93:
(Start: 17 @49615 has 252 MA's), (22, 49579), (25, 49540), (27, 49522), (29, 49498),

Gene: Brewer_135 Start: 71761, Stop: 71588, Start Num: 17
Candidate Starts for Brewer_135:
(Start: 17 @71761 has 252 MA's), (Start: 19 @71746 has 3 MA's), (21, 71731), (24, 71689), (30, 71644),

Gene: BronnyJames_223 Start: 104724, Stop: 104560, Start Num: 18
Candidate Starts for BronnyJames_223:
(Start: 11 @104757 has 6 MA's), (15, 104736), (16, 104733), (Start: 18 @104724 has 31 MA's), (20, 104709), (22, 104688), (29, 104607),

Gene: Bruin_136 Start: 72026, Stop: 71853, Start Num: 17
Candidate Starts for Bruin_136:
(Start: 17 @72026 has 252 MA's), (Start: 19 @72011 has 3 MA's), (21, 71996), (24, 71954), (30, 71909),

Gene: Buck_140 Start: 74271, Stop: 74098, Start Num: 17
Candidate Starts for Buck_140:
(6, 74379), (Start: 17 @74271 has 252 MA's), (Start: 19 @74256 has 3 MA's), (21, 74241), (24, 74199), (30, 74154),

Gene: Budgie_143 Start: 74117, Stop: 73944, Start Num: 17
Candidate Starts for Budgie_143:

(Start: 17 @74117 has 252 MA's), (Start: 19 @74102 has 3 MA's), (21, 74087), (24, 74045), (30, 74000), (31, 73970),

Gene: Bugatti_93 Start: 49221, Stop: 49060, Start Num: 17
Candidate Starts for Bugatti_93:
(Start: 17 @49221 has 252 MA's), (22, 49182), (25, 49143),

Gene: BugsBunny_138 Start: 73302, Stop: 73129, Start Num: 17
Candidate Starts for BugsBunny_138:
(Start: 17 @73302 has 252 MA's), (Start: 19 @73287 has 3 MA's), (21, 73272), (24, 73230), (30, 73185),

Gene: BuzzBuzz_86 Start: 49705, Stop: 49547, Start Num: 17
Candidate Starts for BuzzBuzz_86:
(Start: 17 @49705 has 252 MA's), (22, 49669), (25, 49630), (27, 49612), (29, 49588),

Gene: Bxz2_88 Start: 49711, Stop: 49553, Start Num: 17
Candidate Starts for Bxz2_88:
(Start: 17 @49711 has 252 MA's), (22, 49675), (25, 49636), (27, 49618), (29, 49594),

Gene: Cactus_147 Start: 73496, Stop: 73323, Start Num: 17
Candidate Starts for Cactus_147:
(Start: 17 @73496 has 252 MA's), (Start: 19 @73481 has 3 MA's), (21, 73466), (24, 73424), (30, 73379),

Gene: Calvinny_91 Start: 49382, Stop: 49224, Start Num: 17
Candidate Starts for Calvinny_91:
(Start: 17 @49382 has 252 MA's), (22, 49346), (25, 49307), (27, 49289),

Gene: Cat_78 Start: 47161, Stop: 47000, Start Num: 17
Candidate Starts for Cat_78:
(Start: 17 @47161 has 252 MA's), (25, 47083),

Gene: Caviar_78 Start: 45849, Stop: 45688, Start Num: 17
Candidate Starts for Caviar_78:
(Start: 17 @45849 has 252 MA's), (25, 45771),

Gene: Chiqui_72 Start: 45612, Stop: 45451, Start Num: 17
Candidate Starts for Chiqui_72:
(13, 45642), (Start: 17 @45612 has 252 MA's), (22, 45573), (25, 45534),

Gene: ChosenOne_140 Start: 72798, Stop: 72625, Start Num: 17
Candidate Starts for ChosenOne_140:
(Start: 17 @72798 has 252 MA's), (Start: 19 @72783 has 3 MA's), (21, 72768), (24, 72726), (30, 72681),

Gene: ChotaBhai_144 Start: 73947, Stop: 73774, Start Num: 17
Candidate Starts for ChotaBhai_144:
(Start: 17 @73947 has 252 MA's), (21, 73917), (24, 73875), (30, 73830), (31, 73800),

Gene: Cjw1_137 Start: 73981, Stop: 73808, Start Num: 17
Candidate Starts for Cjw1_137:

(Start: 17 @73981 has 252 MA's), (Start: 19 @73966 has 3 MA's), (21, 73951), (24, 73909), (30, 73864),

Gene: Clammy_92 Start: 49221, Stop: 49060, Start Num: 17
Candidate Starts for Clammy_92:
(Start: 17 @49221 has 252 MA's), (22, 49182), (25, 49143),

Gene: ClownCar_91 Start: 49374, Stop: 49216, Start Num: 17
Candidate Starts for ClownCar_91:
(Start: 17 @49374 has 252 MA's), (22, 49338), (25, 49299), (27, 49281),

Gene: Colbster_89 Start: 49679, Stop: 49521, Start Num: 17
Candidate Starts for Colbster_89:
(Start: 17 @49679 has 252 MA's), (22, 49643), (25, 49604), (27, 49586), (29, 49562),

Gene: Command613_143 Start: 74138, Stop: 73965, Start Num: 17
Candidate Starts for Command613_143:
(Start: 17 @74138 has 252 MA's), (21, 74108), (24, 74066), (30, 74021), (31, 73991),

Gene: Constella_221 Start: 107404, Stop: 107231, Start Num: 18
Candidate Starts for Constella_221:
(Start: 11 @107440 has 6 MA's), (15, 107416), (Start: 18 @107404 has 31 MA's), (24, 107335), (26, 107326), (28, 107299), (29, 107287),

Gene: Contagion_135 Start: 72349, Stop: 72176, Start Num: 17
Candidate Starts for Contagion_135:
(Start: 17 @72349 has 252 MA's), (Start: 19 @72334 has 3 MA's), (21, 72319), (24, 72277), (30, 72232),

Gene: Cookies_141 Start: 74141, Stop: 73983, Start Num: 19
Candidate Starts for Cookies_141:
(Start: 17 @74156 has 252 MA's), (Start: 19 @74141 has 3 MA's), (21, 74126), (24, 74084), (30, 74039),

Gene: Courthouse_234 Start: 107730, Stop: 107521, Start Num: 11
Candidate Starts for Courthouse_234:
(Start: 11 @107730 has 6 MA's), (15, 107706), (Start: 18 @107694 has 31 MA's), (24, 107625), (26, 107616), (28, 107589), (29, 107577), (32, 107532),

Gene: Croquant_90 Start: 49676, Stop: 49518, Start Num: 17
Candidate Starts for Croquant_90:
(Start: 17 @49676 has 252 MA's), (22, 49640), (25, 49601), (27, 49583), (29, 49559),

Gene: CrystalP_139 Start: 74394, Stop: 74221, Start Num: 17
Candidate Starts for CrystalP_139:
(Start: 17 @74394 has 252 MA's), (Start: 19 @74379 has 3 MA's), (21, 74364), (24, 74322), (30, 74277),

Gene: Cullens_94 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for Cullens_94:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: Czyszczon1_140 Start: 73176, Stop: 73003, Start Num: 17

Candidate Starts for Czyszczon1_140:
(Start: 17 @73176 has 252 MA's), (21, 73146), (24, 73104), (30, 73059), (31, 73029),

Gene: DaHudson_92 Start: 49614, Stop: 49456, Start Num: 17
Candidate Starts for DaHudson_92:
(Start: 17 @49614 has 252 MA's), (22, 49578), (25, 49539), (27, 49521), (29, 49497),

Gene: Daishi_92 Start: 48545, Stop: 48387, Start Num: 17
Candidate Starts for Daishi_92:
(Start: 17 @48545 has 252 MA's), (22, 48509), (25, 48470), (27, 48452), (29, 48428),

Gene: Dallas_230 Start: 108352, Stop: 108179, Start Num: 18
Candidate Starts for Dallas_230:
(9, 108418), (Start: 11 @108391 has 6 MA's), (16, 108361), (Start: 18 @108352 has 31 MA's), (20, 108337), (23, 108301), (24, 108283), (29, 108235), (32, 108190),

Gene: Dieselweasel_93 Start: 49542, Stop: 49384, Start Num: 17
Candidate Starts for Dieselweasel_93:
(Start: 17 @49542 has 252 MA's), (22, 49506), (25, 49467), (27, 49449), (29, 49425),

Gene: DmpstrDiver_231 Start: 108426, Stop: 108208, Start Num: 10
Candidate Starts for DmpstrDiver_231:
(Start: 10 @108426 has 2 MA's), (24, 108312), (26, 108303), (28, 108276), (29, 108264),

Gene: DoctorDiddles_138 Start: 72684, Stop: 72511, Start Num: 17
Candidate Starts for DoctorDiddles_138:
(Start: 17 @72684 has 252 MA's), (Start: 19 @72669 has 3 MA's), (21, 72654), (24, 72612), (30, 72567), (31, 72537),

Gene: Dove_214 Start: 104830, Stop: 104657, Start Num: 18
Candidate Starts for Dove_214:
(Start: 11 @104866 has 6 MA's), (15, 104842), (Start: 18 @104830 has 31 MA's), (24, 104761), (26, 104752), (28, 104725), (29, 104713), (32, 104668),

Gene: DrDrey_142 Start: 75595, Stop: 75422, Start Num: 17
Candidate Starts for DrDrey_142:
(Start: 17 @75595 has 252 MA's), (Start: 19 @75580 has 3 MA's), (21, 75565), (24, 75523), (30, 75478),

Gene: DropBear_90 Start: 49032, Stop: 48871, Start Num: 17
Candidate Starts for DropBear_90:
(3, 49185), (7, 49131), (8, 49113), (Start: 17 @49032 has 252 MA's), (25, 48954),

Gene: Duke13_232 Start: 109101, Stop: 108928, Start Num: 18
Candidate Starts for Duke13_232:
(Start: 11 @109137 has 6 MA's), (15, 109113), (Start: 18 @109101 has 31 MA's), (24, 109032), (26, 109023), (28, 108996), (29, 108984), (32, 108939),

Gene: Dumbo_140 Start: 73029, Stop: 72856, Start Num: 17
Candidate Starts for Dumbo_140:
(6, 73137), (Start: 17 @73029 has 252 MA's), (Start: 19 @73014 has 3 MA's), (21, 72999), (24, 72957), (30, 72912),

Gene: Dusk_140 Start: 73566, Stop: 73393, Start Num: 17
Candidate Starts for Dusk_140:
(Start: 17 @73566 has 252 MA's), (Start: 19 @73551 has 3 MA's), (21, 73536), (24, 73494), (30, 73449),

Gene: Easy2Say_141 Start: 73491, Stop: 73318, Start Num: 17
Candidate Starts for Easy2Say_141:
(Start: 17 @73491 has 252 MA's), (Start: 19 @73476 has 3 MA's), (21, 73461), (24, 73419), (30, 73374), (31, 73344),

Gene: Ejimix_223 Start: 108298, Stop: 108134, Start Num: 18
Candidate Starts for Ejimix_223:
(Start: 11 @108331 has 6 MA's), (15, 108310), (16, 108307), (Start: 18 @108298 has 31 MA's), (20, 108283), (22, 108262), (24, 108229), (29, 108181),

Gene: Elite2014_139 Start: 72797, Stop: 72624, Start Num: 17
Candidate Starts for Elite2014_139:
(Start: 17 @72797 has 252 MA's), (Start: 19 @72782 has 3 MA's), (21, 72767), (24, 72725), (30, 72680),

Gene: Elph10_138 Start: 72478, Stop: 72305, Start Num: 17
Candidate Starts for Elph10_138:
(Start: 17 @72478 has 252 MA's), (21, 72448), (24, 72406), (30, 72361), (31, 72331),

Gene: Emmina_141 Start: 73098, Stop: 72925, Start Num: 17
Candidate Starts for Emmina_141:
(Start: 17 @73098 has 252 MA's), (21, 73068), (24, 73026), (30, 72981), (31, 72951),

Gene: EpicPhail_94 Start: 49679, Stop: 49521, Start Num: 17
Candidate Starts for EpicPhail_94:
(Start: 17 @49679 has 252 MA's), (22, 49643), (25, 49604), (27, 49586), (29, 49562),

Gene: EricMillard_229 Start: 110142, Stop: 109969, Start Num: 18
Candidate Starts for EricMillard_229:
(Start: 11 @110175 has 6 MA's), (15, 110154), (16, 110151), (Start: 18 @110142 has 31 MA's), (20, 110127), (22, 110106), (24, 110073), (29, 110025), (32, 109980),

Gene: EtoileNova_86 Start: 48856, Stop: 48695, Start Num: 17
Candidate Starts for EtoileNova_86:
(Start: 17 @48856 has 252 MA's), (25, 48778),

Gene: Eureka_140 Start: 74002, Stop: 73829, Start Num: 17
Candidate Starts for Eureka_140:
(Start: 17 @74002 has 252 MA's), (Start: 19 @73987 has 3 MA's), (21, 73972), (24, 73930), (30, 73885), (31, 73855),

Gene: FairyPath_141 Start: 73779, Stop: 73606, Start Num: 17
Candidate Starts for FairyPath_141:
(Start: 17 @73779 has 252 MA's), (Start: 19 @73764 has 3 MA's), (21, 73749), (24, 73707), (30, 73662),

Gene: Farber_87 Start: 47998, Stop: 47840, Start Num: 17
Candidate Starts for Farber_87:

(Start: 17 @47998 has 252 MA's), (22, 47962), (25, 47923), (27, 47905), (29, 47881),

Gene: Fernando_94 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for Fernando_94:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: Filch_142 Start: 73301, Stop: 73128, Start Num: 17
Candidate Starts for Filch_142:
(Start: 17 @73301 has 252 MA's), (Start: 19 @73286 has 3 MA's), (21, 73271), (24, 73229), (30, 73184), (31, 73154),

Gene: FireRed_143 Start: 74033, Stop: 73860, Start Num: 17
Candidate Starts for FireRed_143:
(Start: 17 @74033 has 252 MA's), (Start: 19 @74018 has 3 MA's), (21, 74003), (24, 73961), (30, 73916), (31, 73886),

Gene: FlyCatcher_89 Start: 52654, Stop: 52487, Start Num: 17
Candidate Starts for FlyCatcher_89:
(Start: 17 @52654 has 252 MA's), (29, 52531),

Gene: Flypotenuse_135 Start: 73024, Stop: 72851, Start Num: 17
Candidate Starts for Flypotenuse_135:
(2, 73201), (14, 73039), (Start: 17 @73024 has 252 MA's), (Start: 19 @73009 has 3 MA's), (21, 72994), (24, 72952), (30, 72907), (31, 72877),

Gene: FoghornLeghorn_136 Start: 71867, Stop: 71694, Start Num: 17
Candidate Starts for FoghornLeghorn_136:
(Start: 17 @71867 has 252 MA's), (Start: 19 @71852 has 3 MA's), (21, 71837), (24, 71795), (30, 71750),

Gene: Fred313_87 Start: 48823, Stop: 48662, Start Num: 17
Candidate Starts for Fred313_87:
(3, 48976), (7, 48922), (8, 48904), (Start: 17 @48823 has 252 MA's), (25, 48745),

Gene: Gator_141 Start: 74209, Stop: 74036, Start Num: 17
Candidate Starts for Gator_141:
(Start: 17 @74209 has 252 MA's), (Start: 19 @74194 has 3 MA's), (21, 74179), (24, 74137), (30, 74092), (31, 74062),

Gene: Gemini_144 Start: 73542, Stop: 73369, Start Num: 17
Candidate Starts for Gemini_144:
(Start: 17 @73542 has 252 MA's), (Start: 19 @73527 has 3 MA's), (21, 73512), (24, 73470), (30, 73425), (31, 73395),

Gene: Gemma_89 Start: 49377, Stop: 49219, Start Num: 17
Candidate Starts for Gemma_89:
(Start: 17 @49377 has 252 MA's), (22, 49341), (25, 49302), (27, 49284),

Gene: GingkoMaracino_92 Start: 48810, Stop: 48652, Start Num: 17
Candidate Starts for GingkoMaracino_92:
(Start: 17 @48810 has 252 MA's), (22, 48774), (25, 48735), (27, 48717), (29, 48693),

Gene: Giroux_93 Start: 49220, Stop: 49059, Start Num: 17

Candidate Starts for Giroux_93:
(Start: 17 @49220 has 252 MA's), (22, 49181), (25, 49142),

Gene: Glexan_143 Start: 74356, Stop: 74183, Start Num: 17
Candidate Starts for Glexan_143:
(Start: 17 @74356 has 252 MA's), (Start: 19 @74341 has 3 MA's), (21, 74326), (24, 74284), (30, 74239), (31, 74209),

Gene: Goku_139 Start: 74311, Stop: 74138, Start Num: 17
Candidate Starts for Goku_139:
(Start: 17 @74311 has 252 MA's), (Start: 19 @74296 has 3 MA's), (21, 74281), (24, 74239), (30, 74194), (31, 74164),

Gene: GoldenSpark_143 Start: 73025, Stop: 72852, Start Num: 17
Candidate Starts for GoldenSpark_143:
(Start: 17 @73025 has 252 MA's), (Start: 19 @73010 has 3 MA's), (21, 72995), (24, 72953), (30, 72908), (31, 72878),

Gene: Goldilocks_145 Start: 73621, Stop: 73448, Start Num: 17
Candidate Starts for Goldilocks_145:
(Start: 17 @73621 has 252 MA's), (Start: 19 @73606 has 3 MA's), (21, 73591), (24, 73549), (30, 73504), (31, 73474),

Gene: Gonephishing_228 Start: 107716, Stop: 107543, Start Num: 18
Candidate Starts for Gonephishing_228:
(9, 107782), (Start: 11 @107755 has 6 MA's), (16, 107725), (Start: 18 @107716 has 31 MA's), (20, 107701), (23, 107665), (24, 107647), (28, 107611), (29, 107599), (32, 107554),

Gene: GooberAzure_142 Start: 73025, Stop: 72852, Start Num: 17
Candidate Starts for GooberAzure_142:
(Start: 17 @73025 has 252 MA's), (Start: 19 @73010 has 3 MA's), (21, 72995), (24, 72953), (30, 72908), (31, 72878),

Gene: Goose1D_82 Start: 45297, Stop: 45136, Start Num: 17
Candidate Starts for Goose1D_82:
(7, 45396), (8, 45378), (Start: 17 @45297 has 252 MA's), (25, 45219),

Gene: Goose1X_74 Start: 44412, Stop: 44251, Start Num: 17
Candidate Starts for Goose1X_74:
(7, 44511), (8, 44493), (Start: 17 @44412 has 252 MA's), (25, 44334),

Gene: Greep_143 Start: 74119, Stop: 73946, Start Num: 17
Candidate Starts for Greep_143:
(Start: 17 @74119 has 252 MA's), (Start: 19 @74104 has 3 MA's), (21, 74089), (24, 74047), (30, 74002),

Gene: Grif_91 Start: 49752, Stop: 49594, Start Num: 17
Candidate Starts for Grif_91:
(Start: 17 @49752 has 252 MA's), (22, 49716), (25, 49677), (27, 49659), (29, 49635),

Gene: Groupthink_92 Start: 49381, Stop: 49223, Start Num: 17
Candidate Starts for Groupthink_92:
(Start: 17 @49381 has 252 MA's), (22, 49345), (25, 49306), (27, 49288),

Gene: Grub_90 Start: 49614, Stop: 49456, Start Num: 17
Candidate Starts for Grub_90:
(Start: 17 @49614 has 252 MA's), (22, 49578), (25, 49539), (27, 49521), (29, 49497),

Gene: Grum1_93 Start: 49678, Stop: 49520, Start Num: 17
Candidate Starts for Grum1_93:
(Start: 17 @49678 has 252 MA's), (22, 49642), (25, 49603), (27, 49585), (29, 49561),

Gene: GtownJaz_93 Start: 49622, Stop: 49464, Start Num: 17
Candidate Starts for GtownJaz_93:
(Start: 17 @49622 has 252 MA's), (22, 49586), (25, 49547), (27, 49529), (29, 49505),

Gene: Gwennie_93 Start: 49679, Stop: 49521, Start Num: 17
Candidate Starts for Gwennie_93:
(Start: 17 @49679 has 252 MA's), (22, 49643), (25, 49604), (27, 49586), (29, 49562),

Gene: Halley_234 Start: 108839, Stop: 108666, Start Num: 18
Candidate Starts for Halley_234:
(9, 108905), (Start: 11 @108878 has 6 MA's), (16, 108848), (Start: 18 @108839 has 31 MA's), (20, 108824), (23, 108788), (24, 108770), (29, 108722), (32, 108677),

Gene: HanKaySha_139 Start: 73634, Stop: 73461, Start Num: 17
Candidate Starts for HanKaySha_139:
(Start: 17 @73634 has 252 MA's), (21, 73604), (24, 73562), (30, 73517), (31, 73487),

Gene: Hannaconda_222 Start: 108347, Stop: 108183, Start Num: 18
Candidate Starts for Hannaconda_222:
(Start: 11 @108380 has 6 MA's), (15, 108359), (16, 108356), (Start: 18 @108347 has 31 MA's), (20, 108332), (22, 108311), (29, 108230),

Gene: Harella_145 Start: 74511, Stop: 74338, Start Num: 17
Candidate Starts for Harella_145:
(Start: 17 @74511 has 252 MA's), (Start: 19 @74496 has 3 MA's), (21, 74481), (24, 74439), (30, 74394),

Gene: HashRod_94 Start: 49700, Stop: 49542, Start Num: 17
Candidate Starts for HashRod_94:
(Start: 17 @49700 has 252 MA's), (22, 49664), (25, 49625), (27, 49607), (29, 49583),

Gene: HaveUMetTed_91 Start: 48608, Stop: 48450, Start Num: 17
Candidate Starts for HaveUMetTed_91:
(Start: 17 @48608 has 252 MA's), (22, 48572), (25, 48533), (27, 48515),

Gene: Heathen_89 Start: 48911, Stop: 48750, Start Num: 17
Candidate Starts for Heathen_89:
(5, 49046), (7, 49010), (8, 48992), (Start: 17 @48911 has 252 MA's), (25, 48833),

Gene: HelDan_89 Start: 49134, Stop: 48973, Start Num: 17
Candidate Starts for HelDan_89:
(7, 49233), (8, 49215), (Start: 17 @49134 has 252 MA's), (25, 49056),

Gene: Heliosoles_89 Start: 49385, Stop: 49227, Start Num: 17

Candidate Starts for Heliosoles_89:
(Start: 17 @49385 has 252 MA's), (22, 49349), (25, 49310), (27, 49292),

Gene: Henry_141 Start: 74265, Stop: 74092, Start Num: 17
Candidate Starts for Henry_141:
(Start: 17 @74265 has 252 MA's), (Start: 19 @74250 has 3 MA's), (21, 74235), (24, 74193), (30, 74148),

Gene: Hercules11_93 Start: 49687, Stop: 49529, Start Num: 17
Candidate Starts for Hercules11_93:
(Start: 17 @49687 has 252 MA's), (22, 49651), (25, 49612), (27, 49594), (29, 49570),

Gene: Hidrated_215 Start: 108911, Stop: 108738, Start Num: 18
Candidate Starts for Hidrated_215:
(Start: 11 @108947 has 6 MA's), (15, 108923), (Start: 18 @108911 has 31 MA's), (24, 108842), (26, 108833), (28, 108806), (29, 108794),

Gene: Highbury_135 Start: 71231, Stop: 71058, Start Num: 17
Candidate Starts for Highbury_135:
(Start: 17 @71231 has 252 MA's), (Start: 19 @71216 has 3 MA's), (21, 71201), (24, 71159), (30, 71114),

Gene: HokkenD_224 Start: 109979, Stop: 109806, Start Num: 18
Candidate Starts for HokkenD_224:
(9, 110045), (Start: 11 @110018 has 6 MA's), (16, 109988), (Start: 18 @109979 has 31 MA's), (20, 109964), (23, 109928), (24, 109910), (29, 109862), (32, 109817),

Gene: Holt_145 Start: 73808, Stop: 73635, Start Num: 17
Candidate Starts for Holt_145:
(Start: 17 @73808 has 252 MA's), (Start: 19 @73793 has 3 MA's), (21, 73778), (24, 73736), (30, 73691), (31, 73661),

Gene: Hookmount_89 Start: 48852, Stop: 48691, Start Num: 17
Candidate Starts for Hookmount_89:
(Start: 17 @48852 has 252 MA's), (25, 48774),

Gene: Hoonter_142 Start: 73363, Stop: 73190, Start Num: 17
Candidate Starts for Hoonter_142:
(2, 73540), (Start: 17 @73363 has 252 MA's), (Start: 19 @73348 has 3 MA's), (21, 73333), (24, 73291), (30, 73246),

Gene: Hopey_137 Start: 73346, Stop: 73173, Start Num: 17
Candidate Starts for Hopey_137:
(Start: 17 @73346 has 252 MA's), (Start: 19 @73331 has 3 MA's), (21, 73316), (24, 73274), (30, 73229),

Gene: HufflyPuff_142 Start: 74259, Stop: 74086, Start Num: 17
Candidate Starts for HufflyPuff_142:
(Start: 17 @74259 has 252 MA's), (Start: 19 @74244 has 3 MA's), (21, 74229), (24, 74187), (30, 74142), (31, 74112),

Gene: Hughesyang_234 Start: 110029, Stop: 109865, Start Num: 18
Candidate Starts for Hughesyang_234:

(Start: 11 @110062 has 6 MA's), (15, 110041), (16, 110038), (Start: 18 @110029 has 31 MA's), (20, 110014), (22, 109993), (24, 109960), (29, 109912),

Gene: IHOP_143 Start: 73282, Stop: 73109, Start Num: 17
Candidate Starts for IHOP_143:
(Start: 17 @73282 has 252 MA's), (Start: 19 @73267 has 3 MA's), (21, 73252), (24, 73210), (30, 73165),

Gene: Icee_141 Start: 72396, Stop: 72223, Start Num: 17
Candidate Starts for Icee_141:
(Start: 17 @72396 has 252 MA's), (Start: 19 @72381 has 3 MA's), (21, 72366), (24, 72324), (30, 72279),

Gene: Idleandcovert_86 Start: 47921, Stop: 47760, Start Num: 17
Candidate Starts for Idleandcovert_86:
(Start: 17 @47921 has 252 MA's), (22, 47882), (25, 47843),

Gene: Inca_139 Start: 71684, Stop: 71511, Start Num: 17
Candidate Starts for Inca_139:
(Start: 17 @71684 has 252 MA's), (21, 71654), (24, 71612), (30, 71567), (31, 71537),

Gene: Isca_87 Start: 48732, Stop: 48571, Start Num: 17
Candidate Starts for Isca_87:
(Start: 17 @48732 has 252 MA's), (25, 48654),

Gene: JF2_80 Start: 44721, Stop: 44560, Start Num: 17
Candidate Starts for JF2_80:
(Start: 17 @44721 has 252 MA's), (25, 44643),

Gene: JF4_80 Start: 44721, Stop: 44560, Start Num: 17
Candidate Starts for JF4_80:
(Start: 17 @44721 has 252 MA's), (25, 44643),

Gene: JHC117_88 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for JHC117_88:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: JeTaime_138 Start: 73200, Stop: 73027, Start Num: 17
Candidate Starts for JeTaime_138:
(Start: 17 @73200 has 252 MA's), (21, 73170), (24, 73128), (30, 73083), (31, 73053),

Gene: JenCasNa_94 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for JenCasNa_94:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: JeppNRM_92 Start: 49383, Stop: 49225, Start Num: 17
Candidate Starts for JeppNRM_92:
(Start: 17 @49383 has 252 MA's), (22, 49347), (25, 49308), (27, 49290),

Gene: Jobu08_88 Start: 49448, Stop: 49290, Start Num: 17
Candidate Starts for Jobu08_88:
(Start: 17 @49448 has 252 MA's), (22, 49412), (25, 49373), (27, 49355), (29, 49331),

Gene: JuicyJay_227 Start: 110004, Stop: 109831, Start Num: 18
Candidate Starts for JuicyJay_227:
(Start: 11 @110037 has 6 MA's), (15, 110016), (16, 110013), (Start: 18 @110004 has 31 MA's), (20, 109989), (22, 109968), (24, 109935), (29, 109887), (32, 109842),

Gene: KADY_90 Start: 49706, Stop: 49548, Start Num: 17
Candidate Starts for KADY_90:
(Start: 17 @49706 has 252 MA's), (22, 49670), (25, 49631), (27, 49613), (29, 49589),

Gene: Kachowdy_91 Start: 49163, Stop: 49002, Start Num: 17
Candidate Starts for Kachowdy_91:
(5, 49298), (7, 49262), (8, 49244), (Start: 17 @49163 has 252 MA's), (25, 49085),

Gene: Kalb97_92 Start: 48751, Stop: 48593, Start Num: 17
Candidate Starts for Kalb97_92:
(Start: 17 @48751 has 252 MA's), (22, 48715), (25, 48676), (27, 48658),

Gene: Kalnoky_92 Start: 49378, Stop: 49220, Start Num: 17
Candidate Starts for Kalnoky_92:
(Start: 17 @49378 has 252 MA's), (22, 49342), (25, 49303), (27, 49285),

Gene: Kanye_135 Start: 73346, Stop: 73173, Start Num: 17
Candidate Starts for Kanye_135:
(Start: 17 @73346 has 252 MA's), (Start: 19 @73331 has 3 MA's), (21, 73316), (24, 73274), (30, 73229),

Gene: KashFlow_224 Start: 108241, Stop: 108077, Start Num: 18
Candidate Starts for KashFlow_224:
(Start: 11 @108274 has 6 MA's), (15, 108253), (16, 108250), (Start: 18 @108241 has 31 MA's), (20, 108226), (22, 108205), (29, 108124),

Gene: Kimchi_144 Start: 73722, Stop: 73549, Start Num: 17
Candidate Starts for Kimchi_144:
(Start: 17 @73722 has 252 MA's), (Start: 19 @73707 has 3 MA's), (21, 73692), (24, 73650), (30, 73605), (31, 73575),

Gene: Klein_239 Start: 109026, Stop: 108862, Start Num: 18
Candidate Starts for Klein_239:
(Start: 11 @109062 has 6 MA's), (15, 109038), (Start: 18 @109026 has 31 MA's), (Start: 19 @109014 has 3 MA's), (22, 108990), (23, 108975), (24, 108957), (29, 108909),

Gene: Kostya_140 Start: 73924, Stop: 73751, Start Num: 17
Candidate Starts for Kostya_140:
(Start: 17 @73924 has 252 MA's), (21, 73894), (24, 73852), (30, 73807),

Gene: LBerry_95 Start: 49760, Stop: 49602, Start Num: 17
Candidate Starts for LBerry_95:
(Start: 17 @49760 has 252 MA's), (22, 49724), (25, 49685), (27, 49667), (29, 49643),

Gene: Lambert1_89 Start: 48853, Stop: 48692, Start Num: 17
Candidate Starts for Lambert1_89:
(Start: 17 @48853 has 252 MA's), (25, 48775),

Gene: LarryKay_93 Start: 49709, Stop: 49551, Start Num: 17
Candidate Starts for LarryKay_93:
(Start: 17 @49709 has 252 MA's), (22, 49673), (25, 49634), (27, 49616), (29, 49592),

Gene: Lilith_90 Start: 49614, Stop: 49456, Start Num: 17
Candidate Starts for Lilith_90:
(Start: 17 @49614 has 252 MA's), (22, 49578), (25, 49539), (27, 49521), (29, 49497),

Gene: Lilizi_139 Start: 73253, Stop: 73080, Start Num: 17
Candidate Starts for Lilizi_139:
(Start: 17 @73253 has 252 MA's), (Start: 19 @73238 has 3 MA's), (21, 73223), (24, 73181), (30, 73136), (31, 73106),

Gene: Lilpickle_139 Start: 72797, Stop: 72624, Start Num: 17
Candidate Starts for Lilpickle_139:
(Start: 17 @72797 has 252 MA's), (Start: 19 @72782 has 3 MA's), (21, 72767), (24, 72725), (30, 72680),

Gene: Livelaughbron_138 Start: 73788, Stop: 73615, Start Num: 17
Candidate Starts for Livelaughbron_138:
(Start: 17 @73788 has 252 MA's), (Start: 19 @73773 has 3 MA's), (21, 73758), (24, 73716), (30, 73671),

Gene: Louie6_92 Start: 49707, Stop: 49549, Start Num: 17
Candidate Starts for Louie6_92:
(Start: 17 @49707 has 252 MA's), (22, 49671), (25, 49632), (27, 49614), (29, 49590),

Gene: Lowa_93 Start: 49613, Stop: 49455, Start Num: 17
Candidate Starts for Lowa_93:
(Start: 17 @49613 has 252 MA's), (22, 49577), (25, 49538), (27, 49520), (29, 49496),

Gene: Lucky2013_229 Start: 105528, Stop: 105364, Start Num: 18
Candidate Starts for Lucky2013_229:
(Start: 11 @105564 has 6 MA's), (15, 105540), (Start: 18 @105528 has 31 MA's), (Start: 19 @105516 has 3 MA's), (22, 105492), (23, 105477), (24, 105459), (29, 105411),

Gene: LugYA_96 Start: 49674, Stop: 49516, Start Num: 17
Candidate Starts for LugYA_96:
(Start: 17 @49674 has 252 MA's), (22, 49638), (25, 49599), (27, 49581), (29, 49557),

Gene: MA5_84 Start: 46662, Stop: 46501, Start Num: 17
Candidate Starts for MA5_84:
(Start: 17 @46662 has 252 MA's), (25, 46584),

Gene: MISSy_142 Start: 74075, Stop: 73902, Start Num: 17
Candidate Starts for MISSy_142:
(Start: 17 @74075 has 252 MA's), (Start: 19 @74060 has 3 MA's), (21, 74045), (24, 74003), (30, 73958), (31, 73928),

Gene: MK4_78 Start: 45294, Stop: 45133, Start Num: 17
Candidate Starts for MK4_78:
(Start: 17 @45294 has 252 MA's), (25, 45216),

Gene: MPhalcon_140 Start: 73111, Stop: 72938, Start Num: 17
Candidate Starts for MPhalcon_140:
(Start: 17 @73111 has 252 MA's), (Start: 19 @73096 has 3 MA's), (21, 73081), (24, 73039), (30, 72994),

Gene: MadMarie_90 Start: 49622, Stop: 49464, Start Num: 17
Candidate Starts for MadMarie_90:
(Start: 17 @49622 has 252 MA's), (22, 49586), (25, 49547), (27, 49529), (29, 49505),

Gene: MadamMonkfish_140 Start: 73169, Stop: 72996, Start Num: 17
Candidate Starts for MadamMonkfish_140:
(Start: 17 @73169 has 252 MA's), (Start: 19 @73154 has 3 MA's), (21, 73139), (24, 73097), (30, 73052), (31, 73022),

Gene: Mainiac_92 Start: 49614, Stop: 49456, Start Num: 17
Candidate Starts for Mainiac_92:
(Start: 17 @49614 has 252 MA's), (22, 49578), (25, 49539), (27, 49521), (29, 49497),

Gene: Malinsilva_96 Start: 49613, Stop: 49455, Start Num: 17
Candidate Starts for Malinsilva_96:
(Start: 17 @49613 has 252 MA's), (22, 49577), (25, 49538), (27, 49520), (29, 49496),

Gene: Manda_140 Start: 73347, Stop: 73174, Start Num: 17
Candidate Starts for Manda_140:
(Start: 17 @73347 has 252 MA's), (Start: 19 @73332 has 3 MA's), (21, 73317), (24, 73275), (30, 73230),

Gene: Manu_91 Start: 49385, Stop: 49227, Start Num: 17
Candidate Starts for Manu_91:
(Start: 17 @49385 has 252 MA's), (22, 49349), (25, 49310), (27, 49292),

Gene: MarQuardt_93 Start: 49677, Stop: 49519, Start Num: 17
Candidate Starts for MarQuardt_93:
(Start: 17 @49677 has 252 MA's), (22, 49641), (25, 49602), (27, 49584), (29, 49560),

Gene: Marchesa_89 Start: 49025, Stop: 48864, Start Num: 17
Candidate Starts for Marchesa_89:
(3, 49178), (7, 49124), (8, 49106), (Start: 17 @49025 has 252 MA's), (25, 48947),

Gene: Margo_89 Start: 48878, Stop: 48717, Start Num: 17
Candidate Starts for Margo_89:
(Start: 17 @48878 has 252 MA's), (25, 48800),

Gene: Marie_91 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for Marie_91:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: Marius_92 Start: 49378, Stop: 49220, Start Num: 17
Candidate Starts for Marius_92:
(Start: 17 @49378 has 252 MA's), (22, 49342), (25, 49303), (27, 49285),

Gene: Marleymoo_212 Start: 105592, Stop: 105419, Start Num: 18
Candidate Starts for Marleymoo_212:

(Start: 11 @105628 has 6 MA's), (15, 105604), (Start: 18 @105592 has 31 MA's), (24, 105523), (26, 105514), (28, 105487), (29, 105475),

Gene: Marshmallow_141 Start: 74354, Stop: 74181, Start Num: 17
Candidate Starts for Marshmallow_141:
(Start: 17 @74354 has 252 MA's), (Start: 19 @74339 has 3 MA's), (21, 74324), (24, 74282), (30, 74237), (31, 74207),

Gene: Maxxinista_141 Start: 72740, Stop: 72567, Start Num: 17
Candidate Starts for Maxxinista_141:
(Start: 17 @72740 has 252 MA's), (Start: 19 @72725 has 3 MA's), (21, 72710), (24, 72668), (30, 72623),

Gene: Methuselah_86 Start: 49699, Stop: 49541, Start Num: 17
Candidate Starts for Methuselah_86:
(Start: 17 @49699 has 252 MA's), (22, 49663), (25, 49624), (27, 49606), (29, 49582),

Gene: MiaZeal_242 Start: 107703, Stop: 107503, Start Num: 11
Candidate Starts for MiaZeal_242:
(Start: 11 @107703 has 6 MA's), (15, 107679), (Start: 18 @107667 has 31 MA's), (Start: 19 @107655 has 3 MA's), (22, 107631), (23, 107616), (24, 107598), (29, 107550),

Gene: Microwolf_88 Start: 49637, Stop: 49479, Start Num: 17
Candidate Starts for Microwolf_88:
(Start: 17 @49637 has 252 MA's), (22, 49601), (25, 49562), (27, 49544), (29, 49520),

Gene: Mindy_144 Start: 73909, Stop: 73736, Start Num: 17
Candidate Starts for Mindy_144:
(Start: 17 @73909 has 252 MA's), (21, 73879), (24, 73837), (30, 73792), (31, 73762),

Gene: Minerva_230 Start: 107086, Stop: 106913, Start Num: 18
Candidate Starts for Minerva_230:
(Start: 11 @107122 has 6 MA's), (15, 107098), (Start: 18 @107086 has 31 MA's), (24, 107017), (26, 107008), (28, 106981), (29, 106969),

Gene: Miniwave_133 Start: 72857, Stop: 72684, Start Num: 17
Candidate Starts for Miniwave_133:
(Start: 17 @72857 has 252 MA's), (Start: 19 @72842 has 3 MA's), (21, 72827), (24, 72785), (30, 72740),

Gene: Misfit_139 Start: 73985, Stop: 73812, Start Num: 17
Candidate Starts for Misfit_139:
(Start: 17 @73985 has 252 MA's), (Start: 19 @73970 has 3 MA's), (21, 73955), (24, 73913), (30, 73868),

Gene: Misomonster_89 Start: 47312, Stop: 47154, Start Num: 17
Candidate Starts for Misomonster_89:
(Start: 17 @47312 has 252 MA's), (22, 47276), (25, 47237), (27, 47219), (29, 47195),

Gene: Moldemort_141 Start: 73133, Stop: 72960, Start Num: 17
Candidate Starts for Moldemort_141:
(Start: 17 @73133 has 252 MA's), (Start: 19 @73118 has 3 MA's), (21, 73103), (24, 73061), (30, 73016), (31, 72986),

Gene: MollyToe_133 Start: 70994, Stop: 70821, Start Num: 17
Candidate Starts for MollyToe_133:
(Start: 17 @70994 has 252 MA's), (Start: 19 @70979 has 3 MA's), (21, 70964), (24, 70922), (30, 70877),

Gene: MoneyMay_93 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for MoneyMay_93:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: Montavir_88 Start: 49675, Stop: 49517, Start Num: 17
Candidate Starts for Montavir_88:
(Start: 17 @49675 has 252 MA's), (22, 49639), (25, 49600), (27, 49582), (29, 49558),

Gene: Mosby_136 Start: 72349, Stop: 72176, Start Num: 17
Candidate Starts for Mosby_136:
(Start: 17 @72349 has 252 MA's), (Start: 19 @72334 has 3 MA's), (21, 72319), (24, 72277), (30, 72232),

Gene: MuchMore_90 Start: 47343, Stop: 47185, Start Num: 17
Candidate Starts for MuchMore_90:
(Start: 17 @47343 has 252 MA's), (22, 47307), (25, 47268), (27, 47250), (29, 47226),

Gene: Murica_144 Start: 75299, Stop: 75126, Start Num: 17
Candidate Starts for Murica_144:
(Start: 17 @75299 has 252 MA's), (Start: 19 @75284 has 3 MA's), (21, 75269), (24, 75227), (30, 75182), (31, 75152),

Gene: Murphy_139 Start: 73496, Stop: 73323, Start Num: 17
Candidate Starts for Murphy_139:
(Start: 17 @73496 has 252 MA's), (Start: 19 @73481 has 3 MA's), (21, 73466), (24, 73424), (30, 73379), (31, 73349),

Gene: Myrale_141 Start: 74635, Stop: 74462, Start Num: 17
Candidate Starts for Myrale_141:
(Start: 17 @74635 has 252 MA's), (Start: 19 @74620 has 3 MA's), (21, 74605), (24, 74563), (30, 74518),

Gene: Nala_141 Start: 73400, Stop: 73227, Start Num: 17
Candidate Starts for Nala_141:
(Start: 17 @73400 has 252 MA's), (Start: 19 @73385 has 3 MA's), (21, 73370), (24, 73328), (30, 73283),

Gene: Nekros_232 Start: 109008, Stop: 108844, Start Num: 18
Candidate Starts for Nekros_232:
(Start: 11 @109041 has 6 MA's), (15, 109020), (16, 109017), (Start: 18 @109008 has 31 MA's), (20, 108993), (22, 108972), (29, 108891),

Gene: NelitzaMV_134 Start: 70683, Stop: 70510, Start Num: 17
Candidate Starts for NelitzaMV_134:
(Start: 17 @70683 has 252 MA's), (Start: 19 @70668 has 3 MA's), (21, 70653), (24, 70611), (30, 70566),

Gene: Nibley_222 Start: 104301, Stop: 104137, Start Num: 18
Candidate Starts for Nibley_222:
(Start: 11 @104334 has 6 MA's), (15, 104313), (16, 104310), (Start: 18 @104301 has 31 MA's), (20, 104286), (22, 104265), (29, 104184),

Gene: NihilNomen_232 Start: 107605, Stop: 107432, Start Num: 18
Candidate Starts for NihilNomen_232:
(Start: 11 @107641 has 6 MA's), (15, 107617), (Start: 18 @107605 has 31 MA's), (24, 107536), (26, 107527), (28, 107500), (29, 107488),

Gene: Nimrod_139 Start: 74260, Stop: 74087, Start Num: 17
Candidate Starts for Nimrod_139:
(Start: 17 @74260 has 252 MA's), (Start: 19 @74245 has 3 MA's), (21, 74230), (24, 74188), (30, 74143), (31, 74113),

Gene: NoSleep_138 Start: 72458, Stop: 72285, Start Num: 17
Candidate Starts for NoSleep_138:
(Start: 17 @72458 has 252 MA's), (21, 72428), (24, 72386), (30, 72341), (31, 72311),

Gene: Noella_90 Start: 48854, Stop: 48693, Start Num: 17
Candidate Starts for Noella_90:
(Start: 17 @48854 has 252 MA's), (25, 48776),

Gene: NonchalantPear_139 Start: 72118, Stop: 71945, Start Num: 17
Candidate Starts for NonchalantPear_139:
(Start: 17 @72118 has 252 MA's), (Start: 19 @72103 has 3 MA's), (21, 72088), (24, 72046), (30, 72001), (31, 71971),

Gene: Norbert_85 Start: 48851, Stop: 48690, Start Num: 17
Candidate Starts for Norbert_85:
(Start: 17 @48851 has 252 MA's), (25, 48773),

Gene: Odette_231 Start: 109194, Stop: 109021, Start Num: 18
Candidate Starts for Odette_231:
(9, 109257), (Start: 11 @109230 has 6 MA's), (16, 109203), (Start: 18 @109194 has 31 MA's), (20, 109179), (23, 109143), (24, 109125), (29, 109077), (32, 109032),

Gene: OlanP_90 Start: 49554, Stop: 49396, Start Num: 17
Candidate Starts for OlanP_90:
(Start: 17 @49554 has 252 MA's), (22, 49518), (25, 49479), (27, 49461),

Gene: Ollie_93 Start: 49492, Stop: 49334, Start Num: 17
Candidate Starts for Ollie_93:
(Start: 17 @49492 has 252 MA's), (22, 49456), (25, 49417), (27, 49399), (29, 49375),

Gene: Omega_232 Start: 109067, Stop: 108843, Start Num: 10
Candidate Starts for Omega_232:
(1, 109298), (4, 109169), (Start: 10 @109067 has 2 MA's), (12, 109052), (15, 109028), (Start: 18 @109016 has 31 MA's), (24, 108947), (26, 108938), (28, 108911), (29, 108899), (32, 108854),

Gene: Optimus_226 Start: 107455, Stop: 107282, Start Num: 18
Candidate Starts for Optimus_226:

(Start: 11 @107491 has 6 MA's), (15, 107467), (Start: 18 @107455 has 31 MA's), (24, 107386), (26, 107377), (28, 107350), (29, 107338), (32, 107293),

Gene: OrionPax_136 Start: 72727, Stop: 72554, Start Num: 17
Candidate Starts for OrionPax_136:
(Start: 17 @72727 has 252 MA's), (Start: 19 @72712 has 3 MA's), (21, 72697), (24, 72655), (30, 72610), (31, 72580),

Gene: P28Green_93 Start: 49681, Stop: 49523, Start Num: 17
Candidate Starts for P28Green_93:
(Start: 17 @49681 has 252 MA's), (22, 49645), (25, 49606), (27, 49588), (29, 49564),

Gene: PGHhamlin_95 Start: 49613, Stop: 49455, Start Num: 17
Candidate Starts for PGHhamlin_95:
(Start: 17 @49613 has 252 MA's), (22, 49577), (25, 49538), (27, 49520), (29, 49496),

Gene: PaddyBaddy_136 Start: 72382, Stop: 72209, Start Num: 17
Candidate Starts for PaddyBaddy_136:
(Start: 17 @72382 has 252 MA's), (Start: 19 @72367 has 3 MA's), (21, 72352), (24, 72310), (30, 72265),

Gene: Panamaxus_85 Start: 48853, Stop: 48692, Start Num: 17
Candidate Starts for Panamaxus_85:
(Start: 17 @48853 has 252 MA's), (25, 48775),

Gene: Paperbeatsrock_137 Start: 73535, Stop: 73362, Start Num: 17
Candidate Starts for Paperbeatsrock_137:
(Start: 17 @73535 has 252 MA's), (Start: 19 @73520 has 3 MA's), (21, 73505), (24, 73463), (30, 73418),

Gene: Pat3_140 Start: 73512, Stop: 73339, Start Num: 17
Candidate Starts for Pat3_140:
(Start: 17 @73512 has 252 MA's), (21, 73482), (24, 73440), (30, 73395), (31, 73365),

Gene: Pawn_90 Start: 49385, Stop: 49227, Start Num: 17
Candidate Starts for Pawn_90:
(Start: 17 @49385 has 252 MA's), (22, 49349), (25, 49310), (27, 49292),

Gene: Pembroke_93 Start: 49622, Stop: 49464, Start Num: 17
Candidate Starts for Pembroke_93:
(Start: 17 @49622 has 252 MA's), (22, 49586), (25, 49547), (27, 49529), (29, 49505),

Gene: Penny1_93 Start: 49679, Stop: 49521, Start Num: 17
Candidate Starts for Penny1_93:
(Start: 17 @49679 has 252 MA's), (22, 49643), (25, 49604), (27, 49586), (29, 49562),

Gene: Petra64142_141 Start: 73959, Stop: 73786, Start Num: 17
Candidate Starts for Petra64142_141:
(Start: 17 @73959 has 252 MA's), (Start: 19 @73944 has 3 MA's), (21, 73929), (24, 73887), (30, 73842), (31, 73812),

Gene: Phaja_143 Start: 73287, Stop: 73114, Start Num: 17
Candidate Starts for Phaja_143:

(Start: 17 @73287 has 252 MA's), (Start: 19 @73272 has 3 MA's), (21, 73257), (24, 73215), (30, 73170),

Gene: Phantastic_91 Start: 48850, Stop: 48689, Start Num: 17
Candidate Starts for Phantastic_91:
(Start: 17 @48850 has 252 MA's), (25, 48772),

Gene: Pharsalus_137 Start: 73675, Stop: 73502, Start Num: 17
Candidate Starts for Pharsalus_137:
(Start: 17 @73675 has 252 MA's), (Start: 19 @73660 has 3 MA's), (21, 73645), (24, 73603), (30, 73558),

Gene: PhatBacter_143 Start: 74033, Stop: 73860, Start Num: 17
Candidate Starts for PhatBacter_143:
(Start: 17 @74033 has 252 MA's), (Start: 19 @74018 has 3 MA's), (21, 74003), (24, 73961), (30, 73916), (31, 73886),

Gene: Phaux_141 Start: 74307, Stop: 74134, Start Num: 17
Candidate Starts for Phaux_141:
(Start: 17 @74307 has 252 MA's), (Start: 19 @74292 has 3 MA's), (21, 74277), (24, 74235), (30, 74190), (31, 74160),

Gene: PhishRPhriends_88 Start: 48565, Stop: 48407, Start Num: 17
Candidate Starts for PhishRPhriends_88:
(Start: 17 @48565 has 252 MA's), (22, 48529), (25, 48490), (27, 48472),

Gene: Phoebe_94 Start: 49671, Stop: 49513, Start Num: 17
Candidate Starts for Phoebe_94:
(Start: 17 @49671 has 252 MA's), (22, 49635), (25, 49596), (27, 49578), (29, 49554),

Gene: Phoebus_230 Start: 111293, Stop: 111120, Start Num: 18
Candidate Starts for Phoebus_230:
(9, 111359), (Start: 11 @111332 has 6 MA's), (16, 111302), (Start: 18 @111293 has 31 MA's), (20, 111278), (23, 111242), (24, 111224), (29, 111176), (32, 111131),

Gene: Phoxy_88 Start: 48059, Stop: 47901, Start Num: 17
Candidate Starts for Phoxy_88:
(Start: 17 @48059 has 252 MA's), (22, 48023), (25, 47984), (27, 47966), (29, 47942),

Gene: Phranny_84 Start: 46833, Stop: 46675, Start Num: 17
Candidate Starts for Phranny_84:
(Start: 17 @46833 has 252 MA's), (22, 46797), (25, 46758), (27, 46740),

Gene: Phrux_136 Start: 72514, Stop: 72341, Start Num: 17
Candidate Starts for Phrux_136:
(Start: 17 @72514 has 252 MA's), (21, 72484), (24, 72442), (30, 72397), (31, 72367),

Gene: Pistachio_90 Start: 48771, Stop: 48610, Start Num: 17
Candidate Starts for Pistachio_90:
(Start: 17 @48771 has 252 MA's), (22, 48732), (25, 48693),

Gene: Pocahontas_88 Start: 48849, Stop: 48688, Start Num: 17
Candidate Starts for Pocahontas_88:

(Start: 17 @48849 has 252 MA's), (25, 48771),

Gene: Policronamos_139 Start: 74011, Stop: 73838, Start Num: 17
Candidate Starts for Policronamos_139:
(Start: 17 @74011 has 252 MA's), (Start: 19 @73996 has 3 MA's), (21, 73981), (24, 73939), (30, 73894), (31, 73864),

Gene: Popcicle_89 Start: 48849, Stop: 48688, Start Num: 17
Candidate Starts for Popcicle_89:
(Start: 17 @48849 has 252 MA's), (25, 48771),

Gene: Porcelain_233 Start: 106511, Stop: 106311, Start Num: 11
Candidate Starts for Porcelain_233:
(Start: 11 @106511 has 6 MA's), (15, 106487), (Start: 18 @106475 has 31 MA's), (Start: 19 @106463 has 3 MA's), (22, 106439), (23, 106424), (24, 106406), (29, 106358),

Gene: Porky_142 Start: 74115, Stop: 73942, Start Num: 17
Candidate Starts for Porky_142:
(Start: 17 @74115 has 252 MA's), (21, 74085), (24, 74043), (30, 73998), (31, 73968),

Gene: PotatoSplit_94 Start: 49679, Stop: 49521, Start Num: 17
Candidate Starts for PotatoSplit_94:
(Start: 17 @49679 has 252 MA's), (22, 49643), (25, 49604), (27, 49586), (29, 49562),

Gene: Pound_219 Start: 106928, Stop: 106719, Start Num: 11
Candidate Starts for Pound_219:
(Start: 11 @106928 has 6 MA's), (15, 106904), (16, 106901), (Start: 18 @106892 has 31 MA's), (24, 106823), (26, 106814), (28, 106787), (29, 106775), (32, 106730),

Gene: Pumpkin_139 Start: 72408, Stop: 72235, Start Num: 17
Candidate Starts for Pumpkin_139:
(Start: 17 @72408 has 252 MA's), (Start: 19 @72393 has 3 MA's), (21, 72378), (24, 72336), (30, 72291),

Gene: Puppy_91 Start: 48838, Stop: 48677, Start Num: 17
Candidate Starts for Puppy_91:
(Start: 17 @48838 has 252 MA's), (22, 48799), (25, 48760),

Gene: PurpleHaze_86 Start: 47404, Stop: 47246, Start Num: 17
Candidate Starts for PurpleHaze_86:
(Start: 17 @47404 has 252 MA's), (22, 47368), (25, 47329), (27, 47311),

Gene: Quallification_140 Start: 74010, Stop: 73837, Start Num: 17
Candidate Starts for Quallification_140:
(Start: 17 @74010 has 252 MA's), (Start: 19 @73995 has 3 MA's), (21, 73980), (24, 73938), (30, 73893),

Gene: QuinnKiro_88 Start: 48852, Stop: 48691, Start Num: 17
Candidate Starts for QuinnKiro_88:
(Start: 17 @48852 has 252 MA's), (25, 48774),

Gene: Rakim_141 Start: 73522, Stop: 73349, Start Num: 17
Candidate Starts for Rakim_141:

(Start: 17 @73522 has 252 MA's), (Start: 19 @73507 has 3 MA's), (21, 73492), (24, 73450), (30, 73405),

Gene: Rearden_231 Start: 106965, Stop: 106792, Start Num: 18
Candidate Starts for Rearden_231:
(Start: 11 @107001 has 6 MA's), (15, 106977), (Start: 18 @106965 has 31 MA's), (24, 106896), (26, 106887), (28, 106860), (29, 106848), (32, 106803),

Gene: Reba_87 Start: 48221, Stop: 48063, Start Num: 17
Candidate Starts for Reba_87:
(Start: 17 @48221 has 252 MA's), (22, 48185), (25, 48146), (27, 48128),

Gene: Redno2_223 Start: 105347, Stop: 105174, Start Num: 18
Candidate Starts for Redno2_223:
(Start: 11 @105380 has 6 MA's), (15, 105359), (16, 105356), (Start: 18 @105347 has 31 MA's), (20, 105332), (23, 105296), (24, 105278), (29, 105230), (32, 105185),

Gene: ResDef_87 Start: 48855, Stop: 48694, Start Num: 17
Candidate Starts for ResDef_87:
(Start: 17 @48855 has 252 MA's), (25, 48777),

Gene: Rimmer_137 Start: 73249, Stop: 73076, Start Num: 17
Candidate Starts for Rimmer_137:
(6, 73357), (Start: 17 @73249 has 252 MA's), (Start: 19 @73234 has 3 MA's), (21, 73219), (24, 73177), (30, 73132), (31, 73102),

Gene: RiverMonster_139 Start: 73409, Stop: 73236, Start Num: 17
Candidate Starts for RiverMonster_139:
(Start: 17 @73409 has 252 MA's), (Start: 19 @73394 has 3 MA's), (21, 73379), (24, 73337), (30, 73292), (31, 73262),

Gene: Rockstar_79 Start: 46540, Stop: 46379, Start Num: 17
Candidate Starts for Rockstar_79:
(Start: 17 @46540 has 252 MA's), (25, 46462),

Gene: Roimos_88 Start: 49049, Stop: 48888, Start Num: 17
Candidate Starts for Roimos_88:
(5, 49184), (7, 49148), (8, 49130), (Start: 17 @49049 has 252 MA's), (25, 48971),

Gene: Rummer_92 Start: 49703, Stop: 49545, Start Num: 17
Candidate Starts for Rummer_92:
(Start: 17 @49703 has 252 MA's), (22, 49667), (25, 49628), (27, 49610), (29, 49586),

Gene: Sabia_90 Start: 49629, Stop: 49471, Start Num: 17
Candidate Starts for Sabia_90:
(Start: 17 @49629 has 252 MA's), (22, 49593), (25, 49554), (27, 49536), (29, 49512),

Gene: Sabinator_91 Start: 49677, Stop: 49519, Start Num: 17
Candidate Starts for Sabinator_91:
(Start: 17 @49677 has 252 MA's), (22, 49641), (25, 49602), (27, 49584), (29, 49560),

Gene: Saints25_135 Start: 71231, Stop: 71058, Start Num: 17
Candidate Starts for Saints25_135:

(Start: 17 @71231 has 252 MA's), (Start: 19 @71216 has 3 MA's), (21, 71201), (24, 71159), (30, 71114),

Gene: Sassay_134 Start: 71296, Stop: 71138, Start Num: 19
Candidate Starts for Sassay_134:
(Start: 17 @71311 has 252 MA's), (Start: 19 @71296 has 3 MA's), (21, 71281), (24, 71239), (30, 71194),

Gene: SaturnRing_91 Start: 49221, Stop: 49060, Start Num: 17
Candidate Starts for SaturnRing_91:
(Start: 17 @49221 has 252 MA's), (22, 49182), (25, 49143),

Gene: Schatzie_224 Start: 108268, Stop: 108104, Start Num: 18
Candidate Starts for Schatzie_224:
(Start: 11 @108301 has 6 MA's), (15, 108280), (16, 108277), (Start: 18 @108268 has 31 MA's), (20, 108253), (22, 108232), (29, 108151),

Gene: Scout_89 Start: 48374, Stop: 48213, Start Num: 17
Candidate Starts for Scout_89:
(5, 48509), (7, 48473), (8, 48455), (Start: 17 @48374 has 252 MA's), (25, 48296),

Gene: Shaboozey_229 Start: 105573, Stop: 105409, Start Num: 18
Candidate Starts for Shaboozey_229:
(Start: 11 @105606 has 6 MA's), (15, 105585), (16, 105582), (Start: 18 @105573 has 31 MA's), (20, 105558), (22, 105537), (29, 105456),

Gene: ShamWow_138 Start: 73844, Stop: 73671, Start Num: 17
Candidate Starts for ShamWow_138:
(Start: 17 @73844 has 252 MA's), (Start: 19 @73829 has 3 MA's), (21, 73814), (24, 73772), (30, 73727),

Gene: Sheen_86 Start: 51991, Stop: 51824, Start Num: 17
Candidate Starts for Sheen_86:
(Start: 17 @51991 has 252 MA's), (29, 51868),

Gene: Shep_77 Start: 45584, Stop: 45423, Start Num: 17
Candidate Starts for Shep_77:
(7, 45683), (8, 45665), (Start: 17 @45584 has 252 MA's), (25, 45506),

Gene: ShereKhan_139 Start: 74235, Stop: 74062, Start Num: 17
Candidate Starts for ShereKhan_139:
(Start: 17 @74235 has 252 MA's), (Start: 19 @74220 has 3 MA's), (21, 74205), (24, 74163), (30, 74118),

Gene: Simpliphy_139 Start: 72980, Stop: 72807, Start Num: 17
Candidate Starts for Simpliphy_139:
(Start: 17 @72980 has 252 MA's), (Start: 19 @72965 has 3 MA's), (21, 72950), (24, 72908), (30, 72863), (31, 72833),

Gene: SirDuracell_142 Start: 74023, Stop: 73850, Start Num: 17
Candidate Starts for SirDuracell_142:
(Start: 17 @74023 has 252 MA's), (Start: 19 @74008 has 3 MA's), (21, 73993), (24, 73951), (30, 73906),

Gene: Snickers_93 Start: 49594, Stop: 49436, Start Num: 17
Candidate Starts for Snickers_93:
(Start: 17 @49594 has 252 MA's), (22, 49558), (25, 49519), (27, 49501), (29, 49477),

Gene: SoYo_90 Start: 49591, Stop: 49433, Start Num: 17
Candidate Starts for SoYo_90:
(Start: 17 @49591 has 252 MA's), (22, 49555), (25, 49516), (27, 49498), (29, 49474),

Gene: SoilDragon_93 Start: 49064, Stop: 48906, Start Num: 17
Candidate Starts for SoilDragon_93:
(Start: 17 @49064 has 252 MA's), (22, 49028), (25, 48989), (27, 48971), (29, 48947),

Gene: SophKB_137 Start: 73478, Stop: 73305, Start Num: 17
Candidate Starts for SophKB_137:
(Start: 17 @73478 has 252 MA's), (Start: 19 @73463 has 3 MA's), (21, 73448), (24, 73406), (30, 73361),

Gene: Soshari_95 Start: 49699, Stop: 49541, Start Num: 17
Candidate Starts for Soshari_95:
(Start: 17 @49699 has 252 MA's), (22, 49663), (25, 49624), (27, 49606), (29, 49582),

Gene: Sotrice96_144 Start: 74192, Stop: 74019, Start Num: 17
Candidate Starts for Sotrice96_144:
(Start: 17 @74192 has 252 MA's), (Start: 19 @74177 has 3 MA's), (21, 74162), (24, 74120), (30, 74075),

Gene: Spike509_94 Start: 49781, Stop: 49623, Start Num: 17
Candidate Starts for Spike509_94:
(Start: 17 @49781 has 252 MA's), (22, 49745), (25, 49706), (27, 49688), (29, 49664),

Gene: Squint_230 Start: 107281, Stop: 107117, Start Num: 18
Candidate Starts for Squint_230:
(Start: 11 @107317 has 6 MA's), (15, 107293), (Start: 18 @107281 has 31 MA's), (Start: 19 @107269 has 3 MA's), (22, 107245), (23, 107230), (24, 107212), (29, 107164),

Gene: Stagni_89 Start: 49624, Stop: 49466, Start Num: 17
Candidate Starts for Stagni_89:
(Start: 17 @49624 has 252 MA's), (22, 49588), (25, 49549), (27, 49531), (29, 49507),

Gene: Stank_143 Start: 73818, Stop: 73645, Start Num: 17
Candidate Starts for Stank_143:
(Start: 17 @73818 has 252 MA's), (Start: 19 @73803 has 3 MA's), (21, 73788), (24, 73746), (30, 73701), (31, 73671),

Gene: Stark_137 Start: 72846, Stop: 72673, Start Num: 17
Candidate Starts for Stark_137:
(Start: 17 @72846 has 252 MA's), (Start: 19 @72831 has 3 MA's), (21, 72816), (24, 72774), (30, 72729),

Gene: StellaBean_136 Start: 73617, Stop: 73444, Start Num: 17
Candidate Starts for StellaBean_136:

(Start: 17 @73617 has 252 MA's), (Start: 19 @73602 has 3 MA's), (21, 73587), (24, 73545), (30, 73500),

Gene: StepMih_93 Start: 49615, Stop: 49457, Start Num: 17
Candidate Starts for StepMih_93:
(Start: 17 @49615 has 252 MA's), (22, 49579), (25, 49540), (27, 49522), (29, 49498),

Gene: StolenFromERC_141 Start: 73163, Stop: 72990, Start Num: 17
Candidate Starts for StolenFromERC_141:
(Start: 17 @73163 has 252 MA's), (Start: 19 @73148 has 3 MA's), (21, 73133), (24, 73091), (30, 73046), (31, 73016),

Gene: StormChicken_141 Start: 74061, Stop: 73888, Start Num: 17
Candidate Starts for StormChicken_141:
(Start: 17 @74061 has 252 MA's), (Start: 19 @74046 has 3 MA's), (21, 74031), (24, 73989), (30, 73944),

Gene: Superphikiman_230 Start: 106490, Stop: 106317, Start Num: 18
Candidate Starts for Superphikiman_230:
(Start: 11 @106526 has 6 MA's), (15, 106502), (Start: 18 @106490 has 31 MA's), (24, 106421), (26, 106412), (28, 106385), (29, 106373), (32, 106328),

Gene: TBrady12_144 Start: 73255, Stop: 73082, Start Num: 17
Candidate Starts for TBrady12_144:
(Start: 17 @73255 has 252 MA's), (Start: 19 @73240 has 3 MA's), (21, 73225), (24, 73183), (30, 73138), (31, 73108),

Gene: TNguyen7_91 Start: 49179, Stop: 49018, Start Num: 17
Candidate Starts for TNguyen7_91:
(Start: 17 @49179 has 252 MA's), (22, 49140), (25, 49101),

Gene: Tarkin_138 Start: 74100, Stop: 73927, Start Num: 17
Candidate Starts for Tarkin_138:
(Start: 17 @74100 has 252 MA's), (Start: 19 @74085 has 3 MA's), (21, 74070), (24, 74028), (30, 73983),

Gene: Taurus_94 Start: 49673, Stop: 49515, Start Num: 17
Candidate Starts for Taurus_94:
(Start: 17 @49673 has 252 MA's), (22, 49637), (25, 49598), (27, 49580), (29, 49556),

Gene: TeamEdward_140 Start: 74040, Stop: 73867, Start Num: 17
Candidate Starts for TeamEdward_140:
(6, 74148), (Start: 17 @74040 has 252 MA's), (Start: 19 @74025 has 3 MA's), (21, 74010), (24, 73968), (30, 73923), (31, 73893),

Gene: TeardropMSU_140 Start: 73112, Stop: 72939, Start Num: 17
Candidate Starts for TeardropMSU_140:
(Start: 17 @73112 has 252 MA's), (Start: 19 @73097 has 3 MA's), (21, 73082), (24, 73040), (30, 72995),

Gene: Teaspoon_124 Start: 69041, Stop: 68868, Start Num: 17
Candidate Starts for Teaspoon_124:

(Start: 17 @69041 has 252 MA's), (Start: 19 @69026 has 3 MA's), (21, 69011), (24, 68969), (30, 68924),

Gene: Terminus_142 Start: 73985, Stop: 73812, Start Num: 17
Candidate Starts for Terminus_142:
(Start: 17 @73985 has 252 MA's), (Start: 19 @73970 has 3 MA's), (21, 73955), (24, 73913), (30, 73868),

Gene: Texage_87 Start: 48853, Stop: 48692, Start Num: 17
Candidate Starts for Texage_87:
(Start: 17 @48853 has 252 MA's), (25, 48775),

Gene: Thibault_205 Start: 103183, Stop: 103010, Start Num: 18
Candidate Starts for Thibault_205:
(Start: 11 @103219 has 6 MA's), (15, 103195), (Start: 18 @103183 has 31 MA's), (24, 103114), (26, 103105), (28, 103078), (29, 103066),

Gene: Thimble_131 Start: 69362, Stop: 69189, Start Num: 17
Candidate Starts for Thimble_131:
(Start: 17 @69362 has 252 MA's), (Start: 19 @69347 has 3 MA's), (21, 69332), (24, 69290), (30, 69245), (31, 69215),

Gene: ThreeRngTarjay_231 Start: 110453, Stop: 110280, Start Num: 18
Candidate Starts for ThreeRngTarjay_231:
(Start: 11 @110486 has 6 MA's), (15, 110465), (16, 110462), (Start: 18 @110453 has 31 MA's), (20, 110438), (22, 110417), (24, 110384), (29, 110336), (32, 110291),

Gene: Thresher_142 Start: 74293, Stop: 74120, Start Num: 17
Candidate Starts for Thresher_142:
(Start: 17 @74293 has 252 MA's), (21, 74263), (24, 74221), (30, 74176), (31, 74146),

Gene: Tiffany_92 Start: 49563, Stop: 49405, Start Num: 17
Candidate Starts for Tiffany_92:
(Start: 17 @49563 has 252 MA's), (22, 49527), (25, 49488), (27, 49470), (29, 49446),

Gene: TinyPebbles_92 Start: 49708, Stop: 49550, Start Num: 17
Candidate Starts for TinyPebbles_92:
(Start: 17 @49708 has 252 MA's), (22, 49672), (25, 49633), (27, 49615), (29, 49591),

Gene: Todacoro_89 Start: 48852, Stop: 48691, Start Num: 17
Candidate Starts for Todacoro_89:
(Start: 17 @48852 has 252 MA's), (25, 48774),

Gene: Tomaszewski_133 Start: 72523, Stop: 72350, Start Num: 17
Candidate Starts for Tomaszewski_133:
(Start: 17 @72523 has 252 MA's), (Start: 19 @72508 has 3 MA's), (21, 72493), (24, 72451), (30, 72406),

Gene: Toro_87 Start: 52654, Stop: 52487, Start Num: 17
Candidate Starts for Toro_87:
(Start: 17 @52654 has 252 MA's), (29, 52531),

Gene: Toto_136 Start: 73844, Stop: 73671, Start Num: 17

Candidate Starts for Toto_136:
(Start: 17 @73844 has 252 MA's), (Start: 19 @73829 has 3 MA's), (21, 73814), (24, 73772), (30, 73727),

Gene: Traaww1_137 Start: 73199, Stop: 73026, Start Num: 17
Candidate Starts for Traaww1_137:
(2, 73376), (14, 73214), (Start: 17 @73199 has 252 MA's), (21, 73169), (24, 73127), (30, 73082), (31, 73052),

Gene: Tuco_145 Start: 75171, Stop: 74998, Start Num: 17
Candidate Starts for Tuco_145:
(Start: 17 @75171 has 252 MA's), (Start: 19 @75156 has 3 MA's), (21, 75141), (24, 75099), (30, 75054),

Gene: Ukulele_134 Start: 72407, Stop: 72234, Start Num: 17
Candidate Starts for Ukulele_134:
(6, 72515), (Start: 17 @72407 has 252 MA's), (Start: 19 @72392 has 3 MA's), (21, 72377), (24, 72335), (30, 72290),

Gene: Veracruz_86 Start: 48853, Stop: 48692, Start Num: 17
Candidate Starts for Veracruz_86:
(Start: 17 @48853 has 252 MA's), (25, 48775),

Gene: Vix_88 Start: 49758, Stop: 49600, Start Num: 17
Candidate Starts for Vix_88:
(Start: 17 @49758 has 252 MA's), (22, 49722), (25, 49683), (27, 49665), (29, 49641),

Gene: Wanda_231 Start: 106692, Stop: 106492, Start Num: 11
Candidate Starts for Wanda_231:
(Start: 11 @106692 has 6 MA's), (15, 106668), (Start: 18 @106656 has 31 MA's), (Start: 19 @106644 has 3 MA's), (22, 106620), (23, 106605), (24, 106587), (29, 106539),

Gene: Watson_92 Start: 49613, Stop: 49455, Start Num: 17
Candidate Starts for Watson_92:
(Start: 17 @49613 has 252 MA's), (22, 49577), (25, 49538), (27, 49520), (29, 49496),

Gene: Wiggin_142 Start: 72796, Stop: 72623, Start Num: 17
Candidate Starts for Wiggin_142:
(Start: 17 @72796 has 252 MA's), (Start: 19 @72781 has 3 MA's), (21, 72766), (24, 72724), (30, 72679), (31, 72649),

Gene: Willez_137 Start: 72392, Stop: 72219, Start Num: 17
Candidate Starts for Willez_137:
(Start: 17 @72392 has 252 MA's), (Start: 19 @72377 has 3 MA's), (21, 72362), (24, 72320), (30, 72275),

Gene: Wooldri_95 Start: 49584, Stop: 49426, Start Num: 17
Candidate Starts for Wooldri_95:
(Start: 17 @49584 has 252 MA's), (22, 49548), (25, 49509), (27, 49491), (29, 49467),

Gene: Xandras_139 Start: 73072, Stop: 72899, Start Num: 17
Candidate Starts for Xandras_139:

(Start: 17 @73072 has 252 MA's), (Start: 19 @73057 has 3 MA's), (21, 73042), (24, 73000), (30, 72955), (31, 72925),

Gene: Xiaokay_217 Start: 107505, Stop: 107332, Start Num: 18
Candidate Starts for Xiaokay_217:
(Start: 11 @107541 has 6 MA's), (15, 107517), (Start: 18 @107505 has 31 MA's), (24, 107436), (26, 107427), (28, 107400), (29, 107388),

Gene: YassJohnny_136 Start: 71943, Stop: 71770, Start Num: 17
Candidate Starts for YassJohnny_136:
(Start: 17 @71943 has 252 MA's), (Start: 19 @71928 has 3 MA's), (21, 71913), (24, 71871), (30, 71826), (31, 71796),

Gene: Yeet_226 Start: 108370, Stop: 108197, Start Num: 18
Candidate Starts for Yeet_226:
(9, 108436), (Start: 11 @108409 has 6 MA's), (16, 108379), (Start: 18 @108370 has 31 MA's), (20, 108355), (22, 108334), (29, 108253), (32, 108208),

Gene: Youngblood_143 Start: 73697, Stop: 73539, Start Num: 19
Candidate Starts for Youngblood_143:
(Start: 17 @73712 has 252 MA's), (Start: 19 @73697 has 3 MA's), (21, 73682), (24, 73640), (30, 73595),

Gene: Zarafa_87 Start: 49040, Stop: 48879, Start Num: 17
Candidate Starts for Zarafa_87:
(Start: 17 @49040 has 252 MA's), (22, 49001), (25, 48962),

Gene: Zelink_225 Start: 107954, Stop: 107790, Start Num: 18
Candidate Starts for Zelink_225:
(Start: 11 @107987 has 6 MA's), (15, 107966), (16, 107963), (Start: 18 @107954 has 31 MA's), (20, 107939), (22, 107918), (24, 107885), (29, 107837),

Gene: Zetzy_84 Start: 47003, Stop: 46845, Start Num: 17
Candidate Starts for Zetzy_84:
(Start: 17 @47003 has 252 MA's), (22, 46967), (25, 46928), (27, 46910), (29, 46886),

Gene: xkcd_144 Start: 74731, Stop: 74558, Start Num: 17
Candidate Starts for xkcd_144:
(Start: 17 @74731 has 252 MA's), (Start: 19 @74716 has 3 MA's), (21, 74701), (24, 74659), (30, 74614),