





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 208309 Report

This analysis was run 02/22/25 on database version 588.

Pham number 208309 has 306 members, 50 are drafts.

Phages represented in each track:

- Track 1 : GoCrazy_88, Hankly_93, Dynamite_92, Bowling_93, Xenomorph_88, Kardesai_91, KeaneyLin_90, Mooshroom_93, Benllo_91, NapoleonB_93
- Track 2 : Elsa_90, Arcadia_90, Nason_90, Correa_88
- Track 3 : Heisenberger_91, BenitoAntonio_90, Tribby_94, Mudcat_87, Cheesy_93, JEGGS_91
- Track 4 : Circum_93
- Track 5 : Wilde_14
- Track 6 : Tank_14
- Track 7 : Rizwana_13
- Track 8 : Renaldo_80
- Track 9 : Navi1117_76
- Track 10 : BarbieDoll_76, Biscute_75, Kinny_76
- Track 11 : GantcherGoblin_70
- Track 12 : Leathea_72
- Track 13 : Uzumaki_69
- Track 14 : Tenney120_75
- Track 15 : TrixiePhattel_74
- Track 16 : Lewando_76
- Track 17 : Phaila_74
- Track 18 : Zeina_75
- Track 19 : Argan_69, KevinMinion_71
- Track 20 : Jasmine_8
- Track 21 : Westy_65, Comrade_67, Karp_65, Stigma_66, Belfort_69
- Track 22 : Phredrick_67, Kenrey_69
- Track 23 : Emma1919_69, Forrest_69, Jada_67, Gilson_68
- Track 24 : Moab_67, Patelgo_67
- Track 25 : MeganTheeKilla_66, Francob_66
- Track 26 : SparkleGoddess_67
- Track 27 : Satis_11
- Track 28 : JustBecause_9, Kela_9
- Track 29 : Nirvana_15
- Track 30 : Frankenweenie_15
- Track 31 : Quantum_11, Kradal_11, EhyElimayoE_11
- Track 32 : GiJojo_106
- Track 33 : BeanWater_237, ValleyTerrace_245, Gamgam_246, Bxz1_230, Wally_242, Matsumoto_242, Pivoine_245, JulietS_236, Atlantean_244, DTDevon_245, Lukilu_233, Asterius_244, Grasshills_251, Ghost_244, Guwapp_240,

JPickles_241, Ablatia_241, LRRHood_236, QBert_236, Phlegm_249, RoMag_239,
 Naija_245, Jessibeth14_244, IkeLoa_238, Kboogie_248, Blackbrain_242, Darko_243,
 Phusco_243, Momo_246, Jaygup_241, LifeSavor_245, Quasimodo_247,
 ChaylaJr_243, Chargie21_241, Shnickers_243, Ading_246, Amataga_245,
 Audrick_247, ArcherS7_245, Catera_233, Basquiat_241, Teardrop_242,
 Napoleon13_241, SVoro_240, EggyFarm_252, Sauce_241, Ngannou_239,
 EmmaElysia_249, Turret_235, Belieber_236, ShiaLabeouf_242, Spud_236,
 InigoMontoya_248, EasyJones_245, Adlitam_244, Sprinklers_242, Cali_234,
 Burrough_245, McGee_245, SmallFry_245, Jedediah_246, BananaFence_241,
 Dietrick_233, Trinitium_240, Rahel_246, ChickenPhender_240, Latch_244,
 Specks_248, Shaqato_235, Derek_240, Astraea_239, Demodog_250,
 Drazdys_241, Gabriel_247, Pio_251, StubbySaigey_250, Khaleesi_243, Fludd_244,
 Cactojaque_238, CharlieB_239, JustHall_238, PurduePete_244, BadAgartude_238,
 ErnieJ_237, BackyardAgain_239, Bangla1971_245, McWolfish_241, CindyLou_245,
 StephanieG_238, Littleton_248, Concombre_249, Fongie_244, NoodleTree_240,
 BigCity_252, Morizzled23_241, SilverDipper_249, Melpomini_239, Janiyra_247,
 Domi_238, Blackdragon_239, EmToTheThree_244, Chomp_243, Babyland_247,
 Jemmno_244, Rizal_233, Primadonna_238
 • Track 34 : Tainan_244, InterFolia_246, Mikro_238, ScottMcG_236, LinStu_241,
 Koguma_243, Breeniome_244, LordLeafolot_246, Spec_238, LolaVinca_240,
 Lethe_245, Bigswole_249, Nappy_243, YoungMoneyMata_244, Dandelion_250,
 Patter_246, NuevoMundo_246, FrayBell_247, Halldule_236, Tyke_241, Grungle_226
 • Track 35 : Naval22_249, TinyTim_242, Maby2021_244, Pleione_248, Bread_240,
 Delylah_246, Gizmo_249, Erdmann_245, MoMoMixon_240, Iota_241, Yucca_244,
 JigglyPuff_250, Caravan_234, FoxtrotP1_242, Shrimp_246
 • Track 36 : Colt_234, Blubba_231, Cane17_233
 • Track 37 : Pier_243, Ewok_243, Issimir_237, ET08_230, Roots515_247,
 Zalkecks_243, DrPhinkDaddy_241, Shelob_245, Loanshark_241, NedWong_243,
 Capablanca_249, Megamind_241, Bipolarisk_242, Daffodil_250, MikeLiesIn_245,
 Yassified_240, ParkTD_243, Ronan_240, Jezreel_240, ZygoTaiga_240,
 Nidhogg_245, Norm_244, Bonray_246, FudgeTart_239, Delilah_242, Salacia_245,
 YemiJoy2021_245, Ava3_241, SrishMeg2525_241, Lee7_243, Izajani_240,
 Phox_245, Zeenon_245, Willis_245
 • Track 38 : DeejaClivia_231, JayJay_244, DirtMonster_233, Sebata_244
 • Track 39 : Kamryn_243
 • Track 40 : Tonenili_266
 • Track 41 : Mangeria_244
 • Track 42 : Essence_242
 • Track 43 : l3_254
 • Track 44 : GlutenPhree_243, Tortoise16_242
 • Track 45 : PinkCoffee_74, Danyall_73
 • Track 46 : KimmyK_72, Bakery_77, Valary_73, Gezellig_72, CherryCola_73,
 Wizard_69
 • Track 47 : Barb_74, ClamChowder_74, Fugax_75
 • Track 48 : Phlop_70, PullumCavea_71
 • Track 49 : CoveyB_73, Arri_73, VanDeWege_74, Portcullis_73, Nubi_72
 • Track 50 : Salvador_72, Evamon_72, Mutzi_71, YungMoney_72
 • Track 51 : Togo_72, SmokingBunny_73
 • Track 52 : Twister6_73
 • Track 53 : RogerDodger_76
 • Track 54 : Halo3_70
 • Track 55 : Talon44_73, Avazak_71, Captrips_69, NoPickles_69, Petit_72
 • Track 56 : Fazel_71

- Track 57 : Conley_69
- Track 58 : Pherobrine_70
- Track 59 : Artorias_70, FortCran_70, Dancer_72
- Track 60 : Hortihabitatio_70
- Track 61 : Secretariat_68
- Track 62 : Mysticmoon_71
- Track 63 : JulesRay_72
- Track 64 : Schwartz33_69
- Track 65 : Skog_75
- Track 66 : Cafasso_55, Aleemily_54, ModicumRichard_55
- Track 67 : Morgana_55
- Track 68 : ObLaDi_55
- Track 69 : E3_gp177
- Track 70 : Cantare_122

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

The start number called the most often in the published annotations is 26, it was called in 161 of the 256 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_241, Ading_246, Adlitam_244, Amataga_245, ArcherS7_245, Asterius_244, Astraea_239, Atlantean_244, Audrick_247, Ava3_241, Babyland_247, BackyardAgain_239, BadAgartude_238, BananaFence_241, Bangla1971_245, Basquiat_241, BeanWater_237, Belieber_236, BigCity_252, Bigswole_249, Bipolarisk_242, Blackbrain_242, Blackdragon_239, Blubba_231, Bonray_246, Bread_240, Breeniome_244, Burrough_245, Bxz1_230, Cactojaque_238, Cali_234, Cane17_233, Capablanca_249, Caravan_234, Catera_233, Chargie21_241, CharlieB_239, ChaylaJr_243, ChickenPhender_240, Chomp_243, CindyLou_245, Colt_234, Concombre_249, DTDevon_245, Daffodil_250, Dandelion_250, Darko_243, Delilah_242, Delylah_246, Demodog_250, Derek_240, Dietrick_233, Domi_238, DrPhinkDaddy_241, Drazdys_241, ET08_230, EasyJones_245, EggyFarm_252, EmToTheThree_244, EmmaElysia_249, Erdmann_245, ErnieJ_237, Essence_242, Ewok_243, Fludd_244, Fongie_244, FoxtrotP1_242, FrayBell_247, FudgeTart_239, Gabriel_247, Gangam_246, Ghost_244, Gizmo_249, Grasshills_251, Grungle_226, Guwapp_240, Halldule_236, I3_254, IkeLoa_238, InigoMontoya_248, InterFolia_246, Iota_241, Issimir_237, Izajani_240, JPickles_241, Janiyra_247, Jaygup_241, Jedediah_246, Jemmno_244, Jessibeth14_244, Jezreel_240, JigglyPuff_250, JulietS_236, JustHall_238, Kamryn_243, Kboogie_248, Khaleesi_243, Koguma_243, LRRHood_236, Latch_244, Lee7_243, Lethe_245, LifeSavor_245, LinStu_241, Littleton_248, Loanshark_241, LolaVinca_240, LordLeafolot_246, Lukilu_233, Maby2021_244, Mangeria_244, Matsumoto_242, McGee_245, McWolfish_241, Megamind_241, Melpomini_239, MikeLiesIn_245, Mikro_238, MoMoMixon_240, Momo_246, Morizzled23_241, Naija_245, Napoleon13_241, Nappy_243, Naval22_249, NedWong_243, Ngannou_239, Nidhogg_245, NoodleTree_240, Norm_244, NuevoMundo_246, ParkTD_243, Patter_246, Phlegm_249, Phox_245, Phusco_243, Pier_243, Pio_251, Pivoine_245, Pleione_248, Primadonna_238, PurduePete_244, QBert_236, Quasimodo_247, Rahel_246, Rizal_233, RoMag_239, Ronan_240, Roots515_247, SVoro_240, Salacia_245, Sauce_241, ScottMcG_236, Shaqnato_235, Shelob_245,

ShiaLabeouf_242, Shnickers_243, Shrimp_246, SilverDipper_249, SmallFry_245, Spec_238, Specks_248, Sprinklers_242, Spud_236, SrishMeg2525_241, StephanieG_238, StubbySaigey_250, Tainan_244, Teardrop_242, TinyTim_242, Tonenili_266, Trinitium_240, Turret_235, Tyke_241, ValleyTerrace_245, Wally_242, Willis_245, Yassified_240, YemiJoy2021_245, YoungMoneyMata_244, Yucca_244, Zalkecks_243, Zeenon_245, ZygoTaiga_240,

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

- GlutenPhree_243, Tortoise16_242, TrixiePhattel_74,

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

- Aleemily_54, Arcadia_90, Argan_69, Arri_73, Artorias_70, Avazak_71, Bakery_77, Barb_74, BarbieDoll_76, Belfort_69, BenitoAntonio_90, Benllo_91, Biscute_75, Bowling_93, Cafasso_55, Cantare_122, Captrips_69, Cheesy_93, CherryCola_73, Circum_93, ClamChowder_74, Comrade_67, Conley_69, Correa_88, CoveyB_73, Dancer_72, Danyall_73, DeejaClivia_231, DirtMonster_233, Dynamite_92, E3_gp177, EhyElimayoE_11, Elsa_90, Emma1919_69, Evamon_72, Fazel_71, Forrest_69, FortCran_70, Francob_66, Frankenweenie_15, Fugax_75, GantcherGoblin_70, Gezellig_72, GiJojo_106, Gilson_68, GoCrazy_88, Halo3_70, Hankly_93, Heisenberger_91, Hortihabitatio_70, JEGGS_91, Jada_67, Jasmine_8, JayJay_244, JulesRay_72, JustBecause_9, Kardesai_91, Karp_65, KeaneyLin_90, Kela_9, Kenrey_69, KevinMinion_71, KimmyK_72, Kinny_76, Kradal_11, Leatea_72, Lewando_76, MeganTheeKilla_66, Moab_67, ModicumRichard_55, Mooshroom_93, Morgana_55, Mudcat_87, Mutzi_71, Mysticmoon_71, NapoleonB_93, Nason_90, Navi1117_76, Nirvana_15, NoPickles_69, Nubi_72, ObLaDi_55, Patelgo_67, Petite_72, Phaila_74, Pherobrine_70, Phlop_70, Phredrick_67, PinkCoffee_74, Portcullis_73, PullumCavea_71, Quantum_11, Renaldo_80, Rizwana_13, RogerDodger_76, Salvador_72, Satis_11, Schwartz33_69, Sebata_244, Secretariat_68, Skog_75, SmokingBunny_73, SparkleGoddess_67, Stigma_66, Talon44_73, Tank_14, Tenney120_75, Togo_72, Tribby_94, Twister6_73, Uzumaki_69, Valary_73, VanDeWege_74, Westy_65, Wilde_14, Wizard_69, Xenomorph_88, YungMoney_72, Zeina_75,

Summary by start number:

Start 21:

- Found in 12 of 306 (3.9%) of genes in pham
- Manual Annotations of this start: 3 of 256
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rizwana_13 (AP1), Tank_14 (AP1), Wilde_14 (AP1),

Start 23:

- Found in 5 of 306 (1.6%) of genes in pham
- Manual Annotations of this start: 4 of 256
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aleemily_54 (DZ), Cafasso_55 (DZ), ModicumRichard_55 (DZ), Morgana_55 (DZ), ObLaDi_55 (DZ),

Start 24:

- Found in 21 of 306 (6.9%) of genes in pham
- Manual Annotations of this start: 19 of 256
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Arcadia_90 (AM), BenitoAntonio_90 (AM), Benllo_91 (AM), Bowling_93 (AM), Cheesy_93 (AM), Circum_93 (AM), Correa_88 (AM), Dynamite_92 (AM), Elsa_90 (AM), GoCrazy_88 (AM), Hankly_93 (AM), Heisenberger_91 (AM), JEGGS_91 (AM), Kardesai_91 (AM), KeaneyLin_90 (AM), Mooshroom_93 (AM), Mudcat_87 (AM), NapoleonB_93 (AM), Nason_90 (AM), Tribby_94 (AM), Xenomorph_88 (AM),

Start 25:

- Found in 4 of 306 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 256
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DeejaClivia_231 (C1), DirtMonster_233 (C1), JayJay_244 (C1), Sebata_244 (C1),

Start 26:

- Found in 187 of 306 (61.1%) of genes in pham
- Manual Annotations of this start: 161 of 256
- Called 98.4% of time when present
- Phage (with cluster) where this start called: Ablatia_241 (C1), Ading_246 (C1), Adlitam_244 (C1), Amataga_245 (C1), ArcherS7_245 (C1), Asterius_244 (C1), Astraea_239 (C1), Atlantean_244 (C1), Audrick_247 (C1), Ava3_241 (C1), Babyland_247 (C1), BackyardAgain_239 (C1), BadAgartude_238 (C1), BananaFence_241 (C1), Bangla1971_245 (C1), Basquiat_241 (C1), BeanWater_237 (C1), Belieber_236 (C1), BigCity_252 (C1), Bigswole_249 (C1), Bipolarisk_242 (C1), Blackbrain_242 (C1), Blackdragon_239 (C1), Blubba_231 (C1), Bonray_246 (C1), Bread_240 (C1), Breeniome_244 (C1), Burrough_245 (C1), Bxz1_230 (C1), Cactojaque_238 (C1), Cali_234 (C1), Cane17_233 (C1), Capablanca_249 (C1), Caravan_234 (C1), Catera_233 (C1), Chargie21_241 (C1), CharlieB_239 (C1), ChaylaJr_243 (C1), ChickenPhender_240 (C1), Chomp_243 (C1), CindyLou_245 (C1), Colt_234 (C1), Concombre_249 (C1), DTDevon_245 (C1), Daffodil_250 (C1), Dandelion_250 (C1), Darko_243 (C1), Delilah_242 (C1), Delylah_246 (C1), Demodog_250 (C1), Derek_240 (C1), Dietrick_233 (C1), Domi_238 (C1), DrPhinkDaddy_241 (C1), Drazdys_241 (C1), ET08_230 (C1), EasyJones_245 (C1), EggyFarm_252 (C1), EmToTheThree_244 (C1), EmmaElysia_249 (C1), Erdmann_245 (C1), ErnieJ_237 (C1), Essence_242 (C1), Ewok_243 (C1), Fludd_244 (C1), Fongie_244 (C1), FoxtrotP1_242 (C1), FrayBell_247 (C1), FudgeTart_239 (C1), Gabriel_247 (C1), Gamgam_246 (C1), Ghost_244 (C1), Gizmo_249 (C1), Grasshills_251 (C1), Grungle_226 (C1), Guwapp_240 (C1), Halldule_236 (C1), I3_254 (C1), IkeLoa_238 (C1), InigoMontoya_248 (C1), InterFolia_246 (C1), Iota_241 (C1), Issimir_237 (C1), Izajani_240 (C1), JPickles_241 (C1), Janiyra_247 (C1), Jaygup_241 (C1), Jedediah_246 (C1), Jemmno_244 (C1), Jessibeth14_244 (C1), Jezreel_240 (C1), JigglyPuff_250 (C1), JulietS_236 (C1), JustHall_238 (C1), Kamryn_243 (C1), Kboogie_248 (C1), Khaleesi_243 (C1), Koguma_243 (C1), LRRHood_236 (C1), Latch_244 (C1), Lee7_243 (C1), Lethe_245 (C1), LifeSavor_245 (C1), LinStu_241 (C1), Littleton_248 (C1), Loanshark_241 (C1), LolaVinca_240 (C1), LordLeafolot_246 (C1), Lukilu_233 (C1), Maby2021_244 (C1), Mangeria_244 (C1), Matsumoto_242 (C1), McGee_245 (C1), McWolfish_241 (C1), Megamind_241 (C1), Melpomini_239 (C1), MikeLiesIn_245 (C1), Mikro_238 (C1), MoMoMixon_240 (C1), Momo_246 (C1), Morizzled23_241 (C1), Naija_245 (C1), Napoleon13_241 (C1), Nappy_243 (C1), Naval22_249 (C1), NedWong_243 (C1), Ngannou_239 (C1), Nidhogg_245 (C1), NoodleTree_240 (C1), Norm_244 (C1), NuevoMundo_246 (C1), ParkTD_243 (C1), Patter_246 (C1), Phlegm_249 (C1), Phox_245 (C1), Phusco_243 (C1), Pier_243 (C1), Pio_251 (C1), Pivoine_245 (C1), Pleione_248 (C1),

Primadonna_238 (C1), PurduePete_244 (C1), QBert_236 (C1), Quasimodo_247 (C1), Rahel_246 (C1), Rizal_233 (C1), RoMag_239 (C1), Ronan_240 (C1), Roots515_247 (C1), SVoro_240 (C1), Salacia_245 (C1), Sauce_241 (C1), ScottMcG_236 (C1), Shaqnato_235 (C1), Shelob_245 (C1), ShiaLabeouf_242 (C1), Shnickers_243 (C1), Shrimp_246 (C1), SilverDipper_249 (C1), SmallFry_245 (C1), Spec_238 (C1), Specks_248 (C1), Sprinklers_242 (C1), Spud_236 (C1), SrishMeg2525_241 (C1), StephanieG_238 (C1), StubbySaigey_250 (C1), Tainan_244 (C1), Teardrop_242 (C1), TinyTim_242 (C1), Tonenili_266 (C1), Trinitium_240 (C1), Turret_235 (C1), Tyke_241 (C1), ValleyTerrace_245 (C1), Wally_242 (C1), Willis_245 (C1), Yassified_240 (C1), YemiJoy2021_245 (C1), YoungMoneyMata_244 (C1), Yucca_244 (C1), Zalkecks_243 (C1), Zeenon_245 (C1), ZygoTaiga_240 (C1),

Start 27:

- Found in 1 of 306 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 256
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schwartz33_69 (DJ),

Start 28:

- Found in 15 of 306 (4.9%) of genes in pham
- Manual Annotations of this start: 5 of 256
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Argan_69 (AU6), BarbieDoll_76 (AU6), Biscute_75 (AU6), GantcherGoblin_70 (AU6), KevinMinion_71 (AU6), Kinny_76 (AU6), Leathea_72 (AU6), Lewando_76 (AU6), Navi1117_76 (AU6), Phaila_74 (AU6), Renaldo_80 (AU6), Tenney120_75 (AU6), TrixiePhattel_74 (AU6), Uzumaki_69 (AU6), Zeina_75 (AU6),

Start 29:

- Found in 30 of 306 (9.8%) of genes in pham
- Manual Annotations of this start: 25 of 256
- Called 96.7% of time when present
- Phage (with cluster) where this start called: Arri_73 (DC1), Bakery_77 (DC1), Barb_74 (DC1), CherryCola_73 (DC1), ClamChowder_74 (DC1), CoveyB_73 (DC1), Danyall_73 (DC1), E3_gp177 (singleton), Evamon_72 (DC1), Fugax_75 (DC1), Gezellig_72 (DC1), Halo3_70 (DC1), KimmyK_72 (DC1), Mutzi_71 (DC1), Nubi_72 (DC1), Phlop_70 (DC1), PinkCoffee_74 (DC1), Portcullis_73 (DC1), PullumCavea_71 (DC1), RogerDodger_76 (DC1), Salvador_72 (DC1), Skog_75 (DO), SmokingBunny_73 (DC1), Togo_72 (DC1), Twister6_73 (DC1), Valary_73 (DC1), VanDeWege_74 (DC1), Wizard_69 (DC1), YungMoney_72 (DC1),

Start 31:

- Found in 1 of 306 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 256
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GiJojo_106 (BS),

Start 32:

- Found in 14 of 306 (4.6%) of genes in pham
- Manual Annotations of this start: 8 of 256
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Artorias_70 (DJ), Avazak_71 (DJ), Captrips_69 (DJ), Conley_69 (DJ), Dancer_72 (DJ), Fazel_71 (DJ), FortCran_70 (DJ), Hortihabitatio_70 (DJ), JulesRay_72 (DJ), Mysticmoon_71 (DJ), NoPickles_69 (DJ), Petite_72 (DJ), Pherobrine_70 (DJ), Talon44_73 (DJ),

Start 33:

- Found in 8 of 306 (2.6%) of genes in pham
- Manual Annotations of this start: 6 of 256
- Called 75.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_11 (BM), JustBecause_9 (BM), Kela_9 (BM), Kradal_11 (BM), Quantum_11 (BM), Satis_11 (BM),

Start 34:

- Found in 1 of 306 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 256
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_122 (singleton),

Start 35:

- Found in 18 of 306 (5.9%) of genes in pham
- Manual Annotations of this start: 16 of 256
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Belfort_69 (BK1), Comrade_67 (BK1), Emma1919_69 (BK1), Forrest_69 (BK1), Francob_66 (BK1), Gilson_68 (BK1), Jada_67 (BK1), Jasmine_8 (AV), Karp_65 (BK1), Kenrey_69 (BK1), MeganTheeKilla_66 (BK1), Moab_67 (BK1), Patelgo_67 (BK1), Phredrick_67 (BK1), Secretariat_68 (DJ), Stigma_66 (BK1), Westy_65 (BK1),

Start 38:

- Found in 5 of 306 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 256
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Frankenweenie_15 (BM), Nirvana_15 (BM),

Start 39:

- Found in 142 of 306 (46.4%) of genes in pham
- Manual Annotations of this start: 2 of 256
- Called 2.1% of time when present
- Phage (with cluster) where this start called: GlutenPhree_243 (C1), SparkleGoddess_67 (BK1), Tortoise16_242 (C1),

Summary by clusters:

There are 13 clusters represented in this pham: DO, singleton, AP1, DJ, BM, BS, AM, DZ, BK1, AV, AU6, C1, DC1,

Info for manual annotations of cluster AM:

- Start number 24 was manually annotated 19 times for cluster AM.

Info for manual annotations of cluster AP1:

- Start number 21 was manually annotated 3 times for cluster AP1.

Info for manual annotations of cluster AU6:

- Start number 28 was manually annotated 5 times for cluster AU6.

Info for manual annotations of cluster AV:

- Start number 35 was manually annotated 1 time for cluster AV.

Info for manual annotations of cluster BK1:

- Start number 35 was manually annotated 14 times for cluster BK1.
- Start number 39 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BM:

- Start number 33 was manually annotated 6 times for cluster BM.
- Start number 38 was manually annotated 1 time for cluster BM.

Info for manual annotations of cluster BS:

- Start number 31 was manually annotated 1 time for cluster BS.

Info for manual annotations of cluster C1:

- Start number 25 was manually annotated 3 times for cluster C1.
- Start number 26 was manually annotated 161 times for cluster C1.
- Start number 39 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster DC1:

- Start number 29 was manually annotated 24 times for cluster DC1.

Info for manual annotations of cluster DJ:

- Start number 27 was manually annotated 1 time for cluster DJ.
- Start number 32 was manually annotated 8 times for cluster DJ.
- Start number 35 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster DO:

- Start number 29 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DZ:

- Start number 23 was manually annotated 4 times for cluster DZ.

Gene Information:

Gene: Ablatia_241 Start: 134421, Stop: 134723, Start Num: 26

Candidate Starts for Ablatia_241:

(16, 134379), (Start: 26 @134421 has 161 MA's), (Start: 39 @134448 has 2 MA's), (49, 134517), (59, 134583), (63, 134601), (66, 134616), (73, 134655),

Gene: Ading_246 Start: 136854, Stop: 137156, Start Num: 26

Candidate Starts for Ading_246:

(16, 136812), (Start: 26 @136854 has 161 MA's), (Start: 39 @136881 has 2 MA's), (49, 136950), (59, 137016), (63, 137034), (66, 137049), (73, 137088),

Gene: Adlitam_244 Start: 135458, Stop: 135760, Start Num: 26

Candidate Starts for Adlitam_244:

(16, 135416), (Start: 26 @135458 has 161 MA's), (Start: 39 @135485 has 2 MA's), (49, 135554), (59, 135620), (63, 135638), (66, 135653), (73, 135692),

Gene: Aleemily_54 Start: 39648, Stop: 39905, Start Num: 23

Candidate Starts for Aleemily_54:

(5, 39462), (9, 39543), (Start: 23 @39648 has 4 MA's), (49, 39753), (66, 39852),

Gene: Amataga_245 Start: 134457, Stop: 134759, Start Num: 26

Candidate Starts for Amataga_245:

(16, 134415), (Start: 26 @134457 has 161 MA's), (Start: 39 @134484 has 2 MA's), (49, 134553), (59, 134619), (63, 134637), (66, 134652), (73, 134691),

Gene: Arcadia_90 Start: 52556, Stop: 52813, Start Num: 24

Candidate Starts for Arcadia_90:

(Start: 24 @52556 has 19 MA's), (42, 52601),

Gene: ArcherS7_245 Start: 136202, Stop: 136504, Start Num: 26

Candidate Starts for ArcherS7_245:

(16, 136160), (Start: 26 @136202 has 161 MA's), (Start: 39 @136229 has 2 MA's), (49, 136298), (59, 136364), (63, 136382), (66, 136397), (73, 136436),

Gene: Argan_69 Start: 44132, Stop: 44419, Start Num: 28

Candidate Starts for Argan_69:

(Start: 28 @44132 has 5 MA's), (53, 44240), (56, 44261), (73, 44363),

Gene: Arri_73 Start: 50476, Stop: 50718, Start Num: 29

Candidate Starts for Arri_73:

(14, 50419), (Start: 29 @50476 has 25 MA's), (45, 50536), (50, 50581), (53, 50593), (55, 50611), (61, 50650),

Gene: Artorias_70 Start: 48379, Stop: 48633, Start Num: 32

Candidate Starts for Artorias_70:

(Start: 32 @48379 has 8 MA's), (42, 48415), (46, 48445), (67, 48571), (72, 48604),

Gene: Asterius_244 Start: 134866, Stop: 135168, Start Num: 26

Candidate Starts for Asterius_244:

(16, 134824), (Start: 26 @134866 has 161 MA's), (Start: 39 @134893 has 2 MA's), (49, 134962), (59, 135028), (63, 135046), (66, 135061), (73, 135100),

Gene: Astraea_239 Start: 134061, Stop: 134363, Start Num: 26

Candidate Starts for Astraea_239:

(16, 134019), (Start: 26 @134061 has 161 MA's), (Start: 39 @134088 has 2 MA's), (49, 134157), (59, 134223), (63, 134241), (66, 134256), (73, 134295),

Gene: Atlantean_244 Start: 134457, Stop: 134759, Start Num: 26

Candidate Starts for Atlantean_244:

(16, 134415), (Start: 26 @134457 has 161 MA's), (Start: 39 @134484 has 2 MA's), (49, 134553), (59, 134619), (63, 134637), (66, 134652), (73, 134691),

Gene: Audrick_247 Start: 134347, Stop: 134649, Start Num: 26

Candidate Starts for Audrick_247:

(16, 134305), (Start: 26 @134347 has 161 MA's), (Start: 39 @134374 has 2 MA's), (49, 134443), (59, 134509), (63, 134527), (66, 134542), (73, 134581),

Gene: Ava3_241 Start: 134917, Stop: 135219, Start Num: 26

Candidate Starts for Ava3_241:

(16, 134875), (Start: 26 @134917 has 161 MA's), (41, 134953), (42, 134959), (59, 135079), (63, 135097), (66, 135112), (73, 135151),

Gene: Avazak_71 Start: 48706, Stop: 48960, Start Num: 32

Candidate Starts for Avazak_71:

(Start: 32 @48706 has 8 MA's), (42, 48742), (46, 48772), (67, 48898), (72, 48931),

Gene: Babyland_247 Start: 135234, Stop: 135536, Start Num: 26

Candidate Starts for Babyland_247:

(16, 135192), (Start: 26 @135234 has 161 MA's), (Start: 39 @135261 has 2 MA's), (49, 135330), (59, 135396), (63, 135414), (66, 135429), (73, 135468),

Gene: BackyardAgain_239 Start: 132607, Stop: 132909, Start Num: 26

Candidate Starts for BackyardAgain_239:

(16, 132565), (Start: 26 @132607 has 161 MA's), (Start: 39 @132634 has 2 MA's), (49, 132703), (59, 132769), (63, 132787), (66, 132802), (73, 132841),

Gene: BadAgartude_238 Start: 134559, Stop: 134861, Start Num: 26

Candidate Starts for BadAgartude_238:

(16, 134517), (Start: 26 @134559 has 161 MA's), (Start: 39 @134586 has 2 MA's), (49, 134655), (59, 134721), (63, 134739), (66, 134754), (73, 134793),

Gene: Bakery_77 Start: 52745, Stop: 52987, Start Num: 29

Candidate Starts for Bakery_77:

(8, 52613), (22, 52733), (Start: 29 @52745 has 25 MA's), (45, 52805), (50, 52850), (53, 52862), (61, 52919),

Gene: BananaFence_241 Start: 134690, Stop: 134992, Start Num: 26

Candidate Starts for BananaFence_241:

(16, 134648), (Start: 26 @134690 has 161 MA's), (Start: 39 @134717 has 2 MA's), (49, 134786), (59, 134852), (63, 134870), (66, 134885), (73, 134924),

Gene: Bangla1971_245 Start: 135166, Stop: 135468, Start Num: 26

Candidate Starts for Bangla1971_245:

(16, 135124), (Start: 26 @135166 has 161 MA's), (Start: 39 @135193 has 2 MA's), (49, 135262), (59, 135328), (63, 135346), (66, 135361), (73, 135400),

Gene: Barb_74 Start: 50409, Stop: 50657, Start Num: 29

Candidate Starts for Barb_74:

(1, 49578), (7, 50259), (Start: 21 @50394 has 3 MA's), (Start: 29 @50409 has 25 MA's), (45, 50469), (50, 50514), (53, 50526), (61, 50583),

Gene: BarbieDoll_76 Start: 45845, Stop: 46132, Start Num: 28

Candidate Starts for BarbieDoll_76:

(Start: 28 @45845 has 5 MA's), (53, 45953), (73, 46076),

Gene: Basquiat_241 Start: 132976, Stop: 133278, Start Num: 26

Candidate Starts for Basquiat_241:

(16, 132934), (Start: 26 @132976 has 161 MA's), (Start: 39 @133003 has 2 MA's), (49, 133072), (59, 133138), (63, 133156), (66, 133171), (73, 133210),

Gene: BeanWater_237 Start: 134303, Stop: 134605, Start Num: 26

Candidate Starts for BeanWater_237:

(16, 134261), (Start: 26 @134303 has 161 MA's), (Start: 39 @134330 has 2 MA's), (49, 134399), (59, 134465), (63, 134483), (66, 134498), (73, 134537),

Gene: Belfort_69 Start: 55718, Stop: 55945, Start Num: 35

Candidate Starts for Belfort_69:

(Start: 35 @55718 has 16 MA's), (Start: 39 @55736 has 2 MA's), (53, 55820), (63, 55889), (64, 55895),

Gene: Belieber_236 Start: 133103, Stop: 133405, Start Num: 26

Candidate Starts for Belieber_236:

(16, 133061), (Start: 26 @133103 has 161 MA's), (Start: 39 @133130 has 2 MA's), (49, 133199), (59, 133265), (63, 133283), (66, 133298), (73, 133337),

Gene: BenitoAntonio_90 Start: 52281, Stop: 52538, Start Num: 24

Candidate Starts for BenitoAntonio_90:

(Start: 24 @52281 has 19 MA's),

Gene: Benllo_91 Start: 53121, Stop: 53378, Start Num: 24

Candidate Starts for Benllo_91:

(Start: 24 @53121 has 19 MA's),

Gene: BigCity_252 Start: 137063, Stop: 137365, Start Num: 26

Candidate Starts for BigCity_252:

(16, 137021), (Start: 26 @137063 has 161 MA's), (Start: 39 @137090 has 2 MA's), (49, 137159), (59, 137225), (63, 137243), (66, 137258), (73, 137297),

Gene: Bigswole_249 Start: 137037, Stop: 137270, Start Num: 26

Candidate Starts for Bigswole_249:

(16, 136995), (Start: 26 @137037 has 161 MA's), (41, 137073), (42, 137079), (59, 137199), (63, 137217), (66, 137232),

Gene: Bipolarisk_242 Start: 135185, Stop: 135487, Start Num: 26

Candidate Starts for Bipolarisk_242:

(16, 135143), (Start: 26 @135185 has 161 MA's), (41, 135221), (42, 135227), (59, 135347), (63, 135365), (66, 135380), (73, 135419),

Gene: Biscute_75 Start: 45497, Stop: 45784, Start Num: 28

Candidate Starts for Biscute_75:

(Start: 28 @45497 has 5 MA's), (53, 45605), (73, 45728),

Gene: Blackbrain_242 Start: 134753, Stop: 135055, Start Num: 26

Candidate Starts for Blackbrain_242:

(16, 134711), (Start: 26 @134753 has 161 MA's), (Start: 39 @134780 has 2 MA's), (49, 134849), (59, 134915), (63, 134933), (66, 134948), (73, 134987),

Gene: Blackdragon_239 Start: 134790, Stop: 135092, Start Num: 26

Candidate Starts for Blackdragon_239:

(16, 134748), (Start: 26 @134790 has 161 MA's), (Start: 39 @134817 has 2 MA's), (49, 134886), (59, 134952), (63, 134970), (66, 134985), (73, 135024),

Gene: Blubba_231 Start: 137996, Stop: 138229, Start Num: 26

Candidate Starts for Blubba_231:

(16, 137954), (Start: 26 @137996 has 161 MA's), (41, 138032), (42, 138038), (59, 138158), (63, 138176),

Gene: Bonray_246 Start: 136553, Stop: 136855, Start Num: 26

Candidate Starts for Bonray_246:

(16, 136511), (Start: 26 @136553 has 161 MA's), (41, 136589), (42, 136595), (59, 136715), (63, 136733), (66, 136748), (73, 136787),

Gene: Bowling_93 Start: 53654, Stop: 53911, Start Num: 24

Candidate Starts for Bowling_93:

(Start: 24 @53654 has 19 MA's),

Gene: Bread_240 Start: 134560, Stop: 134862, Start Num: 26

Candidate Starts for Bread_240:

(16, 134518), (Start: 26 @134560 has 161 MA's), (Start: 39 @134587 has 2 MA's), (49, 134656), (63, 134740), (66, 134755), (73, 134794),

Gene: Breeniome_244 Start: 134026, Stop: 134259, Start Num: 26

Candidate Starts for Breeniome_244:

(16, 133984), (Start: 26 @134026 has 161 MA's), (41, 134062), (42, 134068), (59, 134188), (63, 134206), (66, 134221),

Gene: Burrough_245 Start: 136330, Stop: 136632, Start Num: 26

Candidate Starts for Burrough_245:

(16, 136288), (Start: 26 @136330 has 161 MA's), (Start: 39 @136357 has 2 MA's), (49, 136426), (59, 136492), (63, 136510), (66, 136525), (73, 136564),

Gene: Bxz1_230 Start: 136535, Stop: 136837, Start Num: 26

Candidate Starts for Bxz1_230:

(16, 136493), (Start: 26 @136535 has 161 MA's), (Start: 39 @136562 has 2 MA's), (49, 136631), (59, 136697), (63, 136715), (66, 136730), (73, 136769),

Gene: Cactojaque_238 Start: 133699, Stop: 134001, Start Num: 26

Candidate Starts for Cactojaque_238:

(16, 133657), (Start: 26 @133699 has 161 MA's), (Start: 39 @133726 has 2 MA's), (49, 133795), (59, 133861), (63, 133879), (66, 133894), (73, 133933),

Gene: Cafasso_55 Start: 40222, Stop: 40476, Start Num: 23

Candidate Starts for Cafasso_55:

(5, 40036), (9, 40117), (Start: 23 @40222 has 4 MA's), (49, 40327), (66, 40426),

Gene: Cali_234 Start: 134928, Stop: 135230, Start Num: 26

Candidate Starts for Cali_234:

(16, 134886), (Start: 26 @134928 has 161 MA's), (Start: 39 @134955 has 2 MA's), (49, 135024), (59, 135090), (63, 135108), (66, 135123), (73, 135162),

Gene: Cane17_233 Start: 138405, Stop: 138638, Start Num: 26

Candidate Starts for Cane17_233:

(16, 138363), (Start: 26 @138405 has 161 MA's), (41, 138441), (42, 138447), (59, 138567), (63, 138585),

Gene: Cantare_122 Start: 85748, Stop: 86017, Start Num: 34

Candidate Starts for Cantare_122:

(Start: 34 @85748 has 1 MA's), (Start: 39 @85766 has 2 MA's), (51, 85841),

Gene: Capablanca_249 Start: 137181, Stop: 137483, Start Num: 26

Candidate Starts for Capablanca_249:

(16, 137139), (Start: 26 @137181 has 161 MA's), (41, 137217), (42, 137223), (59, 137343), (63, 137361), (66, 137376), (73, 137415),

Gene: Captrips_69 Start: 47854, Stop: 48108, Start Num: 32

Candidate Starts for Captrips_69:

(Start: 32 @47854 has 8 MA's), (42, 47890), (46, 47920), (67, 48046), (72, 48079),

Gene: Caravan_234 Start: 135268, Stop: 135570, Start Num: 26

Candidate Starts for Caravan_234:

(16, 135226), (Start: 26 @135268 has 161 MA's), (Start: 39 @135295 has 2 MA's), (49, 135364), (63, 135448), (66, 135463), (73, 135502),

Gene: Catera_233 Start: 133670, Stop: 133972, Start Num: 26

Candidate Starts for Catera_233:

(16, 133628), (Start: 26 @133670 has 161 MA's), (Start: 39 @133697 has 2 MA's), (49, 133766), (59, 133832), (63, 133850), (66, 133865), (73, 133904),

Gene: Chargie21_241 Start: 132976, Stop: 133278, Start Num: 26

Candidate Starts for Chargie21_241:

(16, 132934), (Start: 26 @132976 has 161 MA's), (Start: 39 @133003 has 2 MA's), (49, 133072), (59, 133138), (63, 133156), (66, 133171), (73, 133210),

Gene: CharlieB_239 Start: 134694, Stop: 134996, Start Num: 26

Candidate Starts for CharlieB_239:

(16, 134652), (Start: 26 @134694 has 161 MA's), (Start: 39 @134721 has 2 MA's), (49, 134790), (59, 134856), (63, 134874), (66, 134889), (73, 134928),

Gene: ChaylaJr_243 Start: 134367, Stop: 134669, Start Num: 26

Candidate Starts for ChaylaJr_243:

(16, 134325), (Start: 26 @134367 has 161 MA's), (Start: 39 @134394 has 2 MA's), (49, 134463), (59, 134529), (63, 134547), (66, 134562), (73, 134601),

Gene: Cheesy_93 Start: 53026, Stop: 53283, Start Num: 24

Candidate Starts for Cheesy_93:

(Start: 24 @53026 has 19 MA's),

Gene: CherryCola_73 Start: 50799, Stop: 51047, Start Num: 29

Candidate Starts for CherryCola_73:

(8, 50667), (22, 50787), (Start: 29 @50799 has 25 MA's), (45, 50859), (50, 50904), (53, 50916), (61, 50973),

Gene: ChickenPhender_240 Start: 133123, Stop: 133425, Start Num: 26

Candidate Starts for ChickenPhender_240:

(16, 133081), (Start: 26 @133123 has 161 MA's), (Start: 39 @133150 has 2 MA's), (49, 133219), (59, 133285), (63, 133303), (66, 133318), (73, 133357),

Gene: Chomp_243 Start: 136559, Stop: 136861, Start Num: 26

Candidate Starts for Chomp_243:

(16, 136517), (Start: 26 @136559 has 161 MA's), (Start: 39 @136586 has 2 MA's), (49, 136655), (59, 136721), (63, 136739), (66, 136754), (73, 136793),

Gene: CindyLou_245 Start: 136819, Stop: 137121, Start Num: 26

Candidate Starts for CindyLou_245:

(16, 136777), (Start: 26 @136819 has 161 MA's), (Start: 39 @136846 has 2 MA's), (49, 136915), (59, 136981), (63, 136999), (66, 137014), (73, 137053),

Gene: Circum_93 Start: 53360, Stop: 53617, Start Num: 24

Candidate Starts for Circum_93:

(Start: 24 @53360 has 19 MA's), (56, 53495),

Gene: ClamChowder_74 Start: 50409, Stop: 50657, Start Num: 29

Candidate Starts for ClamChowder_74:

(1, 49578), (7, 50259), (Start: 21 @50394 has 3 MA's), (Start: 29 @50409 has 25 MA's), (45, 50469), (50, 50514), (53, 50526), (61, 50583),

Gene: Colt_234 Start: 137636, Stop: 137869, Start Num: 26

Candidate Starts for Colt_234:

(16, 137594), (Start: 26 @137636 has 161 MA's), (41, 137672), (42, 137678), (59, 137798), (63, 137816),

Gene: Comrade_67 Start: 55334, Stop: 55561, Start Num: 35

Candidate Starts for Comrade_67:

(Start: 35 @55334 has 16 MA's), (Start: 39 @55352 has 2 MA's), (53, 55436), (63, 55505), (64, 55511),

Gene: Concombres_249 Start: 136715, Stop: 137017, Start Num: 26

Candidate Starts for Concombres_249:

(16, 136673), (Start: 26 @136715 has 161 MA's), (Start: 39 @136742 has 2 MA's), (49, 136811), (59, 136877), (63, 136895), (66, 136910), (73, 136949),

Gene: Conley_69 Start: 48997, Stop: 49233, Start Num: 32

Candidate Starts for Conley_69:

(Start: 32 @48997 has 8 MA's), (42, 49033), (46, 49063),

Gene: Correa_88 Start: 51905, Stop: 52162, Start Num: 24

Candidate Starts for Correa_88:

(Start: 24 @51905 has 19 MA's), (42, 51950),

Gene: CoveyB_73 Start: 50292, Stop: 50540, Start Num: 29

Candidate Starts for CoveyB_73:

(14, 50235), (Start: 29 @50292 has 25 MA's), (45, 50352), (50, 50397), (53, 50409), (55, 50427), (61, 50466),

Gene: DTDevon_245 Start: 137198, Stop: 137500, Start Num: 26

Candidate Starts for DTDevon_245:

(16, 137156), (Start: 26 @137198 has 161 MA's), (Start: 39 @137225 has 2 MA's), (49, 137294), (59, 137360), (63, 137378), (66, 137393), (73, 137432),

Gene: Daffodil_250 Start: 135485, Stop: 135787, Start Num: 26

Candidate Starts for Daffodil_250:

(16, 135443), (Start: 26 @135485 has 161 MA's), (41, 135521), (42, 135527), (59, 135647), (63, 135665), (66, 135680), (73, 135719),

Gene: Dancer_72 Start: 48116, Stop: 48370, Start Num: 32

Candidate Starts for Dancer_72:

(Start: 32 @48116 has 8 MA's), (42, 48152), (46, 48182), (67, 48308), (72, 48341),

Gene: Dandelion_250 Start: 138088, Stop: 138321, Start Num: 26

Candidate Starts for Dandelion_250:

(16, 138046), (Start: 26 @138088 has 161 MA's), (41, 138124), (42, 138130), (59, 138250), (63, 138268), (66, 138283),

Gene: Danyall_73 Start: 50390, Stop: 50638, Start Num: 29

Candidate Starts for Danyall_73:

(7, 50240), (Start: 21 @50375 has 3 MA's), (Start: 29 @50390 has 25 MA's), (45, 50450), (50, 50495), (53, 50507), (61, 50564),

Gene: Darko_243 Start: 134694, Stop: 134996, Start Num: 26

Candidate Starts for Darko_243:

(16, 134652), (Start: 26 @134694 has 161 MA's), (Start: 39 @134721 has 2 MA's), (49, 134790), (59, 134856), (63, 134874), (66, 134889), (73, 134928),

Gene: DeejaClivia_231 Start: 132995, Stop: 133228, Start Num: 25

Candidate Starts for DeejaClivia_231:

(16, 132956), (Start: 25 @132995 has 3 MA's), (41, 133031), (42, 133037), (59, 133157), (63, 133175),

Gene: Delilah_242 Start: 135578, Stop: 135880, Start Num: 26

Candidate Starts for Delilah_242:

(16, 135536), (Start: 26 @135578 has 161 MA's), (41, 135614), (42, 135620), (59, 135740), (63, 135758), (66, 135773), (73, 135812),

Gene: Delylah_246 Start: 135892, Stop: 136194, Start Num: 26

Candidate Starts for Delylah_246:

(16, 135850), (Start: 26 @135892 has 161 MA's), (Start: 39 @135919 has 2 MA's), (49, 135988), (63, 136072), (66, 136087), (73, 136126),

Gene: Demodog_250 Start: 136725, Stop: 137027, Start Num: 26

Candidate Starts for Demodog_250:

(16, 136683), (Start: 26 @136725 has 161 MA's), (Start: 39 @136752 has 2 MA's), (49, 136821), (59, 136887), (63, 136905), (66, 136920), (73, 136959),

Gene: Derek_240 Start: 135836, Stop: 136138, Start Num: 26

Candidate Starts for Derek_240:

(16, 135794), (Start: 26 @135836 has 161 MA's), (Start: 39 @135863 has 2 MA's), (49, 135932), (59, 135998), (63, 136016), (66, 136031), (73, 136070),

Gene: Dietrick_233 Start: 133699, Stop: 134001, Start Num: 26

Candidate Starts for Dietrick_233:

(16, 133657), (Start: 26 @133699 has 161 MA's), (Start: 39 @133726 has 2 MA's), (49, 133795), (59, 133861), (63, 133879), (66, 133894), (73, 133933),

Gene: DirtMonster_233 Start: 134501, Stop: 134734, Start Num: 25

Candidate Starts for DirtMonster_233:

(16, 134462), (Start: 25 @134501 has 3 MA's), (41, 134537), (42, 134543), (59, 134663), (63, 134681),

Gene: Domi_238 Start: 135038, Stop: 135340, Start Num: 26

Candidate Starts for Domi_238:

(16, 134996), (Start: 26 @135038 has 161 MA's), (Start: 39 @135065 has 2 MA's), (49, 135134), (59, 135200), (63, 135218), (66, 135233), (73, 135272),

Gene: DrPhinkDaddy_241 Start: 136263, Stop: 136565, Start Num: 26

Candidate Starts for DrPhinkDaddy_241:

(16, 136221), (Start: 26 @136263 has 161 MA's), (41, 136299), (42, 136305), (59, 136425), (63, 136443), (66, 136458), (73, 136497),

Gene: Drazdys_241 Start: 135843, Stop: 136145, Start Num: 26

Candidate Starts for Drazdys_241:

(16, 135801), (Start: 26 @135843 has 161 MA's), (Start: 39 @135870 has 2 MA's), (49, 135939), (59, 136005), (63, 136023), (66, 136038), (73, 136077),

Gene: Dynamite_92 Start: 52622, Stop: 52879, Start Num: 24

Candidate Starts for Dynamite_92:

(Start: 24 @52622 has 19 MA's),

Gene: E3_gp177 Start: 119674, Stop: 119916, Start Num: 29

Candidate Starts for E3_gp177:

(10, 119563), (12, 119596), (Start: 29 @119674 has 25 MA's), (45, 119734), (51, 119782), (68, 119881),

Gene: ET08_230 Start: 134178, Stop: 134480, Start Num: 26

Candidate Starts for ET08_230:

(16, 134136), (Start: 26 @134178 has 161 MA's), (41, 134214), (42, 134220), (59, 134340), (63, 134358), (66, 134373), (73, 134412),

Gene: EasyJones_245 Start: 134219, Stop: 134521, Start Num: 26

Candidate Starts for EasyJones_245:

(16, 134177), (Start: 26 @134219 has 161 MA's), (Start: 39 @134246 has 2 MA's), (49, 134315), (59, 134381), (63, 134399), (66, 134414), (73, 134453),

Gene: EggyFarm_252 Start: 137064, Stop: 137366, Start Num: 26

Candidate Starts for EggyFarm_252:

(16, 137022), (Start: 26 @137064 has 161 MA's), (Start: 39 @137091 has 2 MA's), (49, 137160), (59, 137226), (63, 137244), (66, 137259), (73, 137298),

Gene: EhyElimayoE_11 Start: 6341, Stop: 6610, Start Num: 33

Candidate Starts for EhyElimayoE_11:

(3, 5894), (4, 6011), (6, 6146), (13, 6257), (19, 6299), (Start: 33 @6341 has 6 MA's), (63, 6515), (65, 6524), (73, 6566),

Gene: Elsa_90 Start: 52556, Stop: 52813, Start Num: 24

Candidate Starts for Elsa_90:

(Start: 24 @52556 has 19 MA's), (42, 52601),

Gene: EmToTheThree_244 Start: 135602, Stop: 135904, Start Num: 26

Candidate Starts for EmToTheThree_244:

(16, 135560), (Start: 26 @135602 has 161 MA's), (Start: 39 @135629 has 2 MA's), (49, 135698), (59, 135764), (63, 135782), (66, 135797), (73, 135836),

Gene: Emma1919_69 Start: 54046, Stop: 54273, Start Num: 35

Candidate Starts for Emma1919_69:

(Start: 35 @54046 has 16 MA's), (Start: 39 @54064 has 2 MA's), (42, 54079), (53, 54148),

Gene: EmmaElysia_249 Start: 136714, Stop: 137016, Start Num: 26

Candidate Starts for EmmaElysia_249:

(16, 136672), (Start: 26 @136714 has 161 MA's), (Start: 39 @136741 has 2 MA's), (49, 136810), (59, 136876), (63, 136894), (66, 136909), (73, 136948),

Gene: Erdmann_245 Start: 135570, Stop: 135872, Start Num: 26

Candidate Starts for Erdmann_245:

(16, 135528), (Start: 26 @135570 has 161 MA's), (Start: 39 @135597 has 2 MA's), (49, 135666), (63, 135750), (66, 135765), (73, 135804),

Gene: ErnieJ_237 Start: 132398, Stop: 132700, Start Num: 26

Candidate Starts for ErnieJ_237:

(16, 132356), (Start: 26 @132398 has 161 MA's), (Start: 39 @132425 has 2 MA's), (49, 132494), (59, 132560), (63, 132578), (66, 132593), (73, 132632),

Gene: Essence_242 Start: 135055, Stop: 135357, Start Num: 26

Candidate Starts for Essence_242:

(15, 134989), (16, 135013), (Start: 26 @135055 has 161 MA's), (Start: 39 @135082 has 2 MA's), (49, 135151), (59, 135217), (63, 135235), (66, 135250), (73, 135289),

Gene: Evamon_72 Start: 50173, Stop: 50421, Start Num: 29

Candidate Starts for Evamon_72:

(7, 50023), (Start: 21 @50158 has 3 MA's), (Start: 29 @50173 has 25 MA's), (45, 50233), (50, 50278), (53, 50290), (55, 50308), (61, 50347),

Gene: Ewok_243 Start: 135513, Stop: 135815, Start Num: 26

Candidate Starts for Ewok_243:

(16, 135471), (Start: 26 @135513 has 161 MA's), (41, 135549), (42, 135555), (59, 135675), (63, 135693), (66, 135708), (73, 135747),

Gene: Fazel_71 Start: 48619, Stop: 48870, Start Num: 32

Candidate Starts for Fazel_71:

(Start: 32 @48619 has 8 MA's), (42, 48655), (44, 48670), (56, 48745), (64, 48799), (70, 48838),

Gene: Fludd_244 Start: 133931, Stop: 134233, Start Num: 26

Candidate Starts for Fludd_244:

(16, 133889), (Start: 26 @133931 has 161 MA's), (Start: 39 @133958 has 2 MA's), (49, 134027), (59, 134093), (63, 134111), (66, 134126), (73, 134165),

Gene: Fongie_244 Start: 135511, Stop: 135813, Start Num: 26

Candidate Starts for Fongie_244:

(16, 135469), (Start: 26 @135511 has 161 MA's), (Start: 39 @135538 has 2 MA's), (49, 135607), (59, 135673), (63, 135691), (66, 135706), (73, 135745),

Gene: Forrest_69 Start: 54752, Stop: 54979, Start Num: 35

Candidate Starts for Forrest_69:

(Start: 35 @54752 has 16 MA's), (Start: 39 @54770 has 2 MA's), (42, 54785), (53, 54854),

Gene: FortCran_70 Start: 48379, Stop: 48633, Start Num: 32

Candidate Starts for FortCran_70:

(Start: 32 @48379 has 8 MA's), (42, 48415), (46, 48445), (67, 48571), (72, 48604),

Gene: FoxtrotP1_242 Start: 136156, Stop: 136458, Start Num: 26

Candidate Starts for FoxtrotP1_242:

(16, 136114), (Start: 26 @136156 has 161 MA's), (Start: 39 @136183 has 2 MA's), (49, 136252), (63, 136336), (66, 136351), (73, 136390),

Gene: Francob_66 Start: 54109, Stop: 54336, Start Num: 35

Candidate Starts for Francob_66:

(Start: 35 @54109 has 16 MA's), (Start: 39 @54127 has 2 MA's), (42, 54142), (53, 54211), (64, 54286),

Gene: Frankenweenie_15 Start: 7328, Stop: 7591, Start Num: 38

Candidate Starts for Frankenweenie_15:

(Start: 33 @7310 has 6 MA's), (Start: 38 @7328 has 1 MA's), (41, 7340), (48, 7394),

Gene: FrayBell_247 Start: 134131, Stop: 134364, Start Num: 26

Candidate Starts for FrayBell_247:

(16, 134089), (Start: 26 @134131 has 161 MA's), (41, 134167), (42, 134173), (59, 134293), (63, 134311), (66, 134326),

Gene: FudgeTart_239 Start: 134660, Stop: 134962, Start Num: 26

Candidate Starts for FudgeTart_239:

(16, 134618), (Start: 26 @134660 has 161 MA's), (41, 134696), (42, 134702), (59, 134822), (63, 134840), (66, 134855), (73, 134894),

Gene: Fugax_75 Start: 50401, Stop: 50649, Start Num: 29

Candidate Starts for Fugax_75:

(1, 49570), (7, 50251), (Start: 21 @50386 has 3 MA's), (Start: 29 @50401 has 25 MA's), (45, 50461), (50, 50506), (53, 50518), (61, 50575),

Gene: Gabriel_247 Start: 134090, Stop: 134392, Start Num: 26

Candidate Starts for Gabriel_247:

(16, 134048), (Start: 26 @134090 has 161 MA's), (Start: 39 @134117 has 2 MA's), (49, 134186), (59, 134252), (63, 134270), (66, 134285), (73, 134324),

Gene: Gamgam_246 Start: 134447, Stop: 134749, Start Num: 26

Candidate Starts for Gamgam_246:

(16, 134405), (Start: 26 @134447 has 161 MA's), (Start: 39 @134474 has 2 MA's), (49, 134543), (59, 134609), (63, 134627), (66, 134642), (73, 134681),

Gene: GantcherGoblin_70 Start: 44191, Stop: 44478, Start Num: 28

Candidate Starts for GantcherGoblin_70:

(Start: 28 @44191 has 5 MA's), (53, 44299), (56, 44320), (69, 44413), (73, 44422),

Gene: Gezellig_72 Start: 50045, Stop: 50293, Start Num: 29

Candidate Starts for Gezellig_72:

(8, 49913), (22, 50033), (Start: 29 @50045 has 25 MA's), (45, 50105), (50, 50150), (53, 50162), (61, 50219),

Gene: Ghost_244 Start: 135071, Stop: 135373, Start Num: 26

Candidate Starts for Ghost_244:

(16, 135029), (Start: 26 @135071 has 161 MA's), (Start: 39 @135098 has 2 MA's), (49, 135167), (59, 135233), (63, 135251), (66, 135266), (73, 135305),

Gene: GiJojo_106 Start: 62792, Stop: 63085, Start Num: 31

Candidate Starts for GiJojo_106:

(Start: 31 @62792 has 1 MA's), (54, 62909), (61, 62957), (63, 62969), (75, 63035),

Gene: Gilson_68 Start: 54008, Stop: 54235, Start Num: 35

Candidate Starts for Gilson_68:

(Start: 35 @54008 has 16 MA's), (Start: 39 @54026 has 2 MA's), (42, 54041), (53, 54110),

Gene: Gizmo_249 Start: 137487, Stop: 137789, Start Num: 26

Candidate Starts for Gizmo_249:

(16, 137445), (Start: 26 @137487 has 161 MA's), (Start: 39 @137514 has 2 MA's), (49, 137583), (63, 137667), (66, 137682), (73, 137721),

Gene: GlutenPhree_243 Start: 134485, Stop: 134760, Start Num: 39

Candidate Starts for GlutenPhree_243:

(16, 134416), (Start: 26 @134458 has 161 MA's), (Start: 39 @134485 has 2 MA's), (49, 134554), (59, 134620), (63, 134638), (66, 134653), (73, 134692),

Gene: GoCrazy_88 Start: 51547, Stop: 51804, Start Num: 24

Candidate Starts for GoCrazy_88:

(Start: 24 @51547 has 19 MA's),

Gene: Grasshills_251 Start: 137063, Stop: 137365, Start Num: 26

Candidate Starts for Grasshills_251:

(16, 137021), (Start: 26 @137063 has 161 MA's), (Start: 39 @137090 has 2 MA's), (49, 137159), (59, 137225), (63, 137243), (66, 137258), (73, 137297),

Gene: Grungle_226 Start: 132405, Stop: 132638, Start Num: 26

Candidate Starts for Grungle_226:

(16, 132363), (Start: 26 @132405 has 161 MA's), (41, 132441), (42, 132447), (59, 132567), (63, 132585), (66, 132600),

Gene: Guwapp_240 Start: 133905, Stop: 134207, Start Num: 26

Candidate Starts for Guwapp_240:

(16, 133863), (Start: 26 @133905 has 161 MA's), (Start: 39 @133932 has 2 MA's), (49, 134001), (59, 134067), (63, 134085), (66, 134100), (73, 134139),

Gene: Halldule_236 Start: 133587, Stop: 133820, Start Num: 26

Candidate Starts for Halldule_236:

(16, 133545), (Start: 26 @133587 has 161 MA's), (41, 133623), (42, 133629), (59, 133749), (63, 133767), (66, 133782),

Gene: Halo3_70 Start: 50630, Stop: 50878, Start Num: 29

Candidate Starts for Halo3_70:

(8, 50498), (22, 50618), (Start: 29 @50630 has 25 MA's), (45, 50690), (50, 50735), (53, 50747), (55, 50765), (61, 50804),

Gene: Hankly_93 Start: 52732, Stop: 52989, Start Num: 24

Candidate Starts for Hankly_93:

(Start: 24 @52732 has 19 MA's),

Gene: Heisenberger_91 Start: 52491, Stop: 52748, Start Num: 24
Candidate Starts for Heisenberger_91:
(Start: 24 @52491 has 19 MA's),

Gene: Hortihabitatio_70 Start: 48995, Stop: 49246, Start Num: 32
Candidate Starts for Hortihabitatio_70:
(30, 48992), (Start: 32 @48995 has 8 MA's), (42, 49031), (44, 49046), (56, 49121), (64, 49175), (70, 49214),

Gene: I3_254 Start: 136279, Stop: 136512, Start Num: 26
Candidate Starts for I3_254:
(16, 136237), (Start: 26 @136279 has 161 MA's), (Start: 39 @136306 has 2 MA's), (40, 136312), (49, 136375), (63, 136459), (66, 136474),

Gene: IkeLoa_238 Start: 134803, Stop: 135105, Start Num: 26
Candidate Starts for IkeLoa_238:
(16, 134761), (Start: 26 @134803 has 161 MA's), (Start: 39 @134830 has 2 MA's), (49, 134899), (59, 134965), (63, 134983), (66, 134998), (73, 135037),

Gene: InigoMontoya_248 Start: 135121, Stop: 135423, Start Num: 26
Candidate Starts for InigoMontoya_248:
(16, 135079), (Start: 26 @135121 has 161 MA's), (Start: 39 @135148 has 2 MA's), (49, 135217), (59, 135283), (63, 135301), (66, 135316), (73, 135355),

Gene: InterFolia_246 Start: 135936, Stop: 136169, Start Num: 26
Candidate Starts for InterFolia_246:
(16, 135894), (Start: 26 @135936 has 161 MA's), (41, 135972), (42, 135978), (59, 136098), (63, 136116), (66, 136131),

Gene: Iota_241 Start: 134833, Stop: 135135, Start Num: 26
Candidate Starts for Iota_241:
(16, 134791), (Start: 26 @134833 has 161 MA's), (Start: 39 @134860 has 2 MA's), (49, 134929), (63, 135013), (66, 135028), (73, 135067),

Gene: Issimir_237 Start: 134759, Stop: 135061, Start Num: 26
Candidate Starts for Issimir_237:
(16, 134717), (Start: 26 @134759 has 161 MA's), (41, 134795), (42, 134801), (59, 134921), (63, 134939), (66, 134954), (73, 134993),

Gene: Izajani_240 Start: 135653, Stop: 135955, Start Num: 26
Candidate Starts for Izajani_240:
(16, 135611), (Start: 26 @135653 has 161 MA's), (41, 135689), (42, 135695), (59, 135815), (63, 135833), (66, 135848), (73, 135887),

Gene: JEGGS_91 Start: 52570, Stop: 52827, Start Num: 24
Candidate Starts for JEGGS_91:
(Start: 24 @52570 has 19 MA's),

Gene: JPickles_241 Start: 133809, Stop: 134111, Start Num: 26
Candidate Starts for JPickles_241:
(16, 133767), (Start: 26 @133809 has 161 MA's), (Start: 39 @133836 has 2 MA's), (49, 133905), (59, 133971), (63, 133989), (66, 134004), (73, 134043),

Gene: Jada_67 Start: 53934, Stop: 54161, Start Num: 35

Candidate Starts for Jada_67:

(Start: 35 @53934 has 16 MA's), (Start: 39 @53952 has 2 MA's), (42, 53967), (53, 54036),

Gene: Janiyra_247 Start: 135346, Stop: 135648, Start Num: 26

Candidate Starts for Janiyra_247:

(16, 135304), (Start: 26 @135346 has 161 MA's), (Start: 39 @135373 has 2 MA's), (49, 135442), (59, 135508), (63, 135526), (66, 135541), (73, 135580),

Gene: Jasmine_8 Start: 3920, Stop: 4156, Start Num: 35

Candidate Starts for Jasmine_8:

(Start: 35 @3920 has 16 MA's), (64, 4097),

Gene: JayJay_244 Start: 134700, Stop: 134933, Start Num: 25

Candidate Starts for JayJay_244:

(16, 134661), (Start: 25 @134700 has 3 MA's), (41, 134736), (42, 134742), (59, 134862), (63, 134880),

Gene: Jaygup_241 Start: 134980, Stop: 135282, Start Num: 26

Candidate Starts for Jaygup_241:

(16, 134938), (Start: 26 @134980 has 161 MA's), (Start: 39 @135007 has 2 MA's), (49, 135076), (59, 135142), (63, 135160), (66, 135175), (73, 135214),

Gene: Jedediah_246 Start: 136033, Stop: 136335, Start Num: 26

Candidate Starts for Jedediah_246:

(16, 135991), (Start: 26 @136033 has 161 MA's), (Start: 39 @136060 has 2 MA's), (49, 136129), (59, 136195), (63, 136213), (66, 136228), (73, 136267),

Gene: Jemmno_244 Start: 134752, Stop: 135054, Start Num: 26

Candidate Starts for Jemmno_244:

(16, 134710), (Start: 26 @134752 has 161 MA's), (Start: 39 @134779 has 2 MA's), (49, 134848), (59, 134914), (63, 134932), (66, 134947), (73, 134986),

Gene: Jessibeth14_244 Start: 136228, Stop: 136530, Start Num: 26

Candidate Starts for Jessibeth14_244:

(16, 136186), (Start: 26 @136228 has 161 MA's), (Start: 39 @136255 has 2 MA's), (49, 136324), (59, 136390), (63, 136408), (66, 136423), (73, 136462),

Gene: Jezreel_240 Start: 135297, Stop: 135599, Start Num: 26

Candidate Starts for Jezreel_240:

(16, 135255), (Start: 26 @135297 has 161 MA's), (41, 135333), (42, 135339), (59, 135459), (63, 135477), (66, 135492), (73, 135531),

Gene: JigglyPuff_250 Start: 136723, Stop: 137025, Start Num: 26

Candidate Starts for JigglyPuff_250:

(16, 136681), (Start: 26 @136723 has 161 MA's), (Start: 39 @136750 has 2 MA's), (49, 136819), (63, 136903), (66, 136918), (73, 136957),

Gene: JulesRay_72 Start: 48372, Stop: 48626, Start Num: 32

Candidate Starts for JulesRay_72:

(Start: 32 @48372 has 8 MA's), (37, 48378), (42, 48408), (46, 48438), (67, 48564), (72, 48597),

Gene: JulietS_236 Start: 132332, Stop: 132634, Start Num: 26

Candidate Starts for JulietS_236:

(16, 132290), (Start: 26 @132332 has 161 MA's), (Start: 39 @132359 has 2 MA's), (49, 132428), (59, 132494), (63, 132512), (66, 132527), (73, 132566),

Gene: JustBecause_9 Start: 5308, Stop: 5589, Start Num: 33

Candidate Starts for JustBecause_9:

(Start: 33 @5308 has 6 MA's), (Start: 38 @5326 has 1 MA's), (48, 5392), (52, 5410), (63, 5482),

Gene: JustHall_238 Start: 134282, Stop: 134584, Start Num: 26

Candidate Starts for JustHall_238:

(16, 134240), (Start: 26 @134282 has 161 MA's), (Start: 39 @134309 has 2 MA's), (49, 134378), (59, 134444), (63, 134462), (66, 134477), (73, 134516),

Gene: Kamryn_243 Start: 135872, Stop: 136174, Start Num: 26

Candidate Starts for Kamryn_243:

(16, 135830), (Start: 26 @135872 has 161 MA's), (41, 135908), (42, 135914), (59, 136034), (63, 136052), (65, 136061), (66, 136067), (73, 136106),

Gene: Kardesai_91 Start: 52160, Stop: 52417, Start Num: 24

Candidate Starts for Kardesai_91:

(Start: 24 @52160 has 19 MA's),

Gene: Karp_65 Start: 54933, Stop: 55160, Start Num: 35

Candidate Starts for Karp_65:

(Start: 35 @54933 has 16 MA's), (Start: 39 @54951 has 2 MA's), (53, 55035), (63, 55104), (64, 55110),

Gene: Kboogie_248 Start: 134911, Stop: 135213, Start Num: 26

Candidate Starts for Kboogie_248:

(16, 134869), (Start: 26 @134911 has 161 MA's), (Start: 39 @134938 has 2 MA's), (49, 135007), (59, 135073), (63, 135091), (66, 135106), (73, 135145),

Gene: KeaneyLin_90 Start: 52585, Stop: 52842, Start Num: 24

Candidate Starts for KeaneyLin_90:

(Start: 24 @52585 has 19 MA's),

Gene: Kela_9 Start: 5299, Stop: 5580, Start Num: 33

Candidate Starts for Kela_9:

(Start: 33 @5299 has 6 MA's), (Start: 38 @5317 has 1 MA's), (48, 5383), (52, 5401), (63, 5473),

Gene: Kenrey_69 Start: 54190, Stop: 54417, Start Num: 35

Candidate Starts for Kenrey_69:

(Start: 35 @54190 has 16 MA's), (Start: 39 @54208 has 2 MA's), (42, 54223), (53, 54292), (64, 54367), (67, 54379),

Gene: KevinMinion_71 Start: 45083, Stop: 45370, Start Num: 28

Candidate Starts for KevinMinion_71:

(Start: 28 @45083 has 5 MA's), (53, 45191), (56, 45212), (73, 45314),

Gene: Khaleesi_243 Start: 135695, Stop: 135997, Start Num: 26

Candidate Starts for Khaleesi_243:

(16, 135653), (Start: 26 @135695 has 161 MA's), (Start: 39 @135722 has 2 MA's), (49, 135791), (59, 135857), (63, 135875), (66, 135890), (73, 135929),

Gene: KimmyK_72 Start: 50492, Stop: 50740, Start Num: 29
Candidate Starts for KimmyK_72:
(8, 50360), (22, 50480), (Start: 29 @50492 has 25 MA's), (45, 50552), (50, 50597), (53, 50609), (61, 50666),

Gene: Kinny_76 Start: 46325, Stop: 46612, Start Num: 28
Candidate Starts for Kinny_76:
(Start: 28 @46325 has 5 MA's), (53, 46433), (73, 46556),

Gene: Koguma_243 Start: 134564, Stop: 134797, Start Num: 26
Candidate Starts for Koguma_243:
(16, 134522), (Start: 26 @134564 has 161 MA's), (41, 134600), (42, 134606), (59, 134726), (63, 134744), (66, 134759),

Gene: Kradal_11 Start: 6341, Stop: 6610, Start Num: 33
Candidate Starts for Kradal_11:
(3, 5894), (4, 6011), (6, 6146), (13, 6257), (19, 6299), (Start: 33 @6341 has 6 MA's), (63, 6515), (65, 6524), (73, 6566),

Gene: LRRHood_236 Start: 133904, Stop: 134206, Start Num: 26
Candidate Starts for LRRHood_236:
(16, 133862), (Start: 26 @133904 has 161 MA's), (Start: 39 @133931 has 2 MA's), (49, 134000), (59, 134066), (63, 134084), (66, 134099), (73, 134138),

Gene: Latch_244 Start: 134457, Stop: 134759, Start Num: 26
Candidate Starts for Latch_244:
(16, 134415), (Start: 26 @134457 has 161 MA's), (Start: 39 @134484 has 2 MA's), (49, 134553), (59, 134619), (63, 134637), (66, 134652), (73, 134691),

Gene: Leathea_72 Start: 44099, Stop: 44386, Start Num: 28
Candidate Starts for Leathea_72:
(Start: 28 @44099 has 5 MA's), (58, 44252), (63, 44276), (74, 44333),

Gene: Lee7_243 Start: 137109, Stop: 137411, Start Num: 26
Candidate Starts for Lee7_243:
(16, 137067), (Start: 26 @137109 has 161 MA's), (41, 137145), (42, 137151), (59, 137271), (63, 137289), (66, 137304), (73, 137343),

Gene: Lethe_245 Start: 136348, Stop: 136581, Start Num: 26
Candidate Starts for Lethe_245:
(16, 136306), (Start: 26 @136348 has 161 MA's), (41, 136384), (42, 136390), (59, 136510), (63, 136528), (66, 136543),

Gene: Lewando_76 Start: 46062, Stop: 46349, Start Num: 28
Candidate Starts for Lewando_76:
(Start: 28 @46062 has 5 MA's), (52, 46167), (53, 46170), (73, 46293),

Gene: LifeSavor_245 Start: 135685, Stop: 135987, Start Num: 26
Candidate Starts for LifeSavor_245:
(16, 135643), (Start: 26 @135685 has 161 MA's), (Start: 39 @135712 has 2 MA's), (49, 135781), (59, 135847), (63, 135865), (66, 135880), (73, 135919),

Gene: LinStu_241 Start: 133863, Stop: 134096, Start Num: 26

Candidate Starts for LinStu_241:

(16, 133821), (Start: 26 @133863 has 161 MA's), (41, 133899), (42, 133905), (59, 134025), (63, 134043), (66, 134058),

Gene: Littleton_248 Start: 135694, Stop: 135996, Start Num: 26

Candidate Starts for Littleton_248:

(16, 135652), (Start: 26 @135694 has 161 MA's), (Start: 39 @135721 has 2 MA's), (49, 135790), (59, 135856), (63, 135874), (66, 135889), (73, 135928),

Gene: Loanshark_241 Start: 135044, Stop: 135346, Start Num: 26

Candidate Starts for Loanshark_241:

(16, 135002), (Start: 26 @135044 has 161 MA's), (41, 135080), (42, 135086), (59, 135206), (63, 135224), (66, 135239), (73, 135278),

Gene: LolaVinca_240 Start: 135366, Stop: 135599, Start Num: 26

Candidate Starts for LolaVinca_240:

(16, 135324), (Start: 26 @135366 has 161 MA's), (41, 135402), (42, 135408), (59, 135528), (63, 135546), (66, 135561),

Gene: LordLeafolot_246 Start: 134979, Stop: 135212, Start Num: 26

Candidate Starts for LordLeafolot_246:

(16, 134937), (Start: 26 @134979 has 161 MA's), (41, 135015), (42, 135021), (59, 135141), (63, 135159), (66, 135174),

Gene: Lukilu_233 Start: 135920, Stop: 136222, Start Num: 26

Candidate Starts for Lukilu_233:

(16, 135878), (Start: 26 @135920 has 161 MA's), (Start: 39 @135947 has 2 MA's), (49, 136016), (59, 136082), (63, 136100), (66, 136115), (73, 136154),

Gene: Maby2021_244 Start: 136148, Stop: 136450, Start Num: 26

Candidate Starts for Maby2021_244:

(16, 136106), (Start: 26 @136148 has 161 MA's), (Start: 39 @136175 has 2 MA's), (49, 136244), (63, 136328), (66, 136343), (73, 136382),

Gene: Mangeria_244 Start: 135923, Stop: 136156, Start Num: 26

Candidate Starts for Mangeria_244:

(16, 135881), (17, 135884), (Start: 26 @135923 has 161 MA's), (41, 135959), (42, 135965), (59, 136085), (63, 136103), (66, 136118),

Gene: Matsumoto_242 Start: 134899, Stop: 135201, Start Num: 26

Candidate Starts for Matsumoto_242:

(16, 134857), (Start: 26 @134899 has 161 MA's), (Start: 39 @134926 has 2 MA's), (49, 134995), (59, 135061), (63, 135079), (66, 135094), (73, 135133),

Gene: McGee_245 Start: 134796, Stop: 135098, Start Num: 26

Candidate Starts for McGee_245:

(16, 134754), (Start: 26 @134796 has 161 MA's), (Start: 39 @134823 has 2 MA's), (49, 134892), (59, 134958), (63, 134976), (66, 134991), (73, 135030),

Gene: McWolfish_241 Start: 134906, Stop: 135208, Start Num: 26

Candidate Starts for McWolfish_241:

(16, 134864), (Start: 26 @134906 has 161 MA's), (Start: 39 @134933 has 2 MA's), (49, 135002), (59, 135068), (63, 135086), (66, 135101), (73, 135140),

Gene: Megamind_241 Start: 135231, Stop: 135533, Start Num: 26

Candidate Starts for Megamind_241:

(16, 135189), (Start: 26 @135231 has 161 MA's), (41, 135267), (42, 135273), (59, 135393), (63, 135411), (66, 135426), (73, 135465),

Gene: MeganTheeKilla_66 Start: 53369, Stop: 53596, Start Num: 35

Candidate Starts for MeganTheeKilla_66:

(Start: 35 @53369 has 16 MA's), (Start: 39 @53387 has 2 MA's), (42, 53402), (53, 53471), (64, 53546),

Gene: Melpomini_239 Start: 133991, Stop: 134293, Start Num: 26

Candidate Starts for Melpomini_239:

(16, 133949), (Start: 26 @133991 has 161 MA's), (Start: 39 @134018 has 2 MA's), (49, 134087), (59, 134153), (63, 134171), (66, 134186), (73, 134225),

Gene: MikeLiesIn_245 Start: 136367, Stop: 136669, Start Num: 26

Candidate Starts for MikeLiesIn_245:

(16, 136325), (Start: 26 @136367 has 161 MA's), (41, 136403), (42, 136409), (59, 136529), (63, 136547), (66, 136562), (73, 136601),

Gene: Mikro_238 Start: 136879, Stop: 137112, Start Num: 26

Candidate Starts for Mikro_238:

(16, 136837), (Start: 26 @136879 has 161 MA's), (41, 136915), (42, 136921), (59, 137041), (63, 137059), (66, 137074),

Gene: MoMoMixon_240 Start: 135372, Stop: 135674, Start Num: 26

Candidate Starts for MoMoMixon_240:

(16, 135330), (Start: 26 @135372 has 161 MA's), (Start: 39 @135399 has 2 MA's), (49, 135468), (63, 135552), (66, 135567), (73, 135606),

Gene: Moab_67 Start: 55209, Stop: 55436, Start Num: 35

Candidate Starts for Moab_67:

(Start: 35 @55209 has 16 MA's), (Start: 39 @55227 has 2 MA's),

Gene: ModicumRichard_55 Start: 40221, Stop: 40475, Start Num: 23

Candidate Starts for ModicumRichard_55:

(5, 40035), (9, 40116), (Start: 23 @40221 has 4 MA's), (49, 40326), (66, 40425),

Gene: Momo_246 Start: 134457, Stop: 134759, Start Num: 26

Candidate Starts for Momo_246:

(16, 134415), (Start: 26 @134457 has 161 MA's), (Start: 39 @134484 has 2 MA's), (49, 134553), (59, 134619), (63, 134637), (66, 134652), (73, 134691),

Gene: Mooshroom_93 Start: 52160, Stop: 52417, Start Num: 24

Candidate Starts for Mooshroom_93:

(Start: 24 @52160 has 19 MA's),

Gene: Morgana_55 Start: 40172, Stop: 40429, Start Num: 23

Candidate Starts for Morgana_55:

(9, 40070), (Start: 23 @40172 has 4 MA's), (49, 40277), (66, 40376),

Gene: Morizzled23_241 Start: 133824, Stop: 134126, Start Num: 26

Candidate Starts for Morizzled23_241:

(16, 133782), (Start: 26 @133824 has 161 MA's), (Start: 39 @133851 has 2 MA's), (49, 133920), (59, 133986), (63, 134004), (66, 134019), (73, 134058),

Gene: Mudcat_87 Start: 53725, Stop: 53982, Start Num: 24

Candidate Starts for Mudcat_87:

(Start: 24 @53725 has 19 MA's),

Gene: Mutzi_71 Start: 51265, Stop: 51513, Start Num: 29

Candidate Starts for Mutzi_71:

(7, 51115), (Start: 21 @51250 has 3 MA's), (Start: 29 @51265 has 25 MA's), (45, 51325), (50, 51370), (53, 51382), (55, 51400), (61, 51439),

Gene: Mysticmoon_71 Start: 49282, Stop: 49524, Start Num: 32

Candidate Starts for Mysticmoon_71:

(Start: 32 @49282 has 8 MA's), (37, 49288), (42, 49318), (44, 49333), (56, 49408), (64, 49462),

Gene: Naija_245 Start: 135160, Stop: 135462, Start Num: 26

Candidate Starts for Naija_245:

(16, 135118), (Start: 26 @135160 has 161 MA's), (Start: 39 @135187 has 2 MA's), (49, 135256), (59, 135322), (63, 135340), (66, 135355), (73, 135394),

Gene: Napoleon13_241 Start: 134189, Stop: 134491, Start Num: 26

Candidate Starts for Napoleon13_241:

(16, 134147), (Start: 26 @134189 has 161 MA's), (Start: 39 @134216 has 2 MA's), (49, 134285), (59, 134351), (63, 134369), (66, 134384), (73, 134423),

Gene: NapoleonB_93 Start: 52622, Stop: 52879, Start Num: 24

Candidate Starts for NapoleonB_93:

(Start: 24 @52622 has 19 MA's),

Gene: Nappy_243 Start: 136335, Stop: 136568, Start Num: 26

Candidate Starts for Nappy_243:

(16, 136293), (Start: 26 @136335 has 161 MA's), (41, 136371), (42, 136377), (59, 136497), (63, 136515), (66, 136530),

Gene: Nason_90 Start: 52556, Stop: 52813, Start Num: 24

Candidate Starts for Nason_90:

(Start: 24 @52556 has 19 MA's), (42, 52601),

Gene: Naval22_249 Start: 136940, Stop: 137242, Start Num: 26

Candidate Starts for Naval22_249:

(16, 136898), (Start: 26 @136940 has 161 MA's), (Start: 39 @136967 has 2 MA's), (49, 137036), (63, 137120), (66, 137135), (73, 137174),

Gene: Navi1117_76 Start: 45271, Stop: 45558, Start Num: 28

Candidate Starts for Navi1117_76:

(Start: 28 @45271 has 5 MA's), (53, 45379), (56, 45400), (73, 45502),

Gene: NedWong_243 Start: 135618, Stop: 135920, Start Num: 26

Candidate Starts for NedWong_243:

(16, 135576), (Start: 26 @135618 has 161 MA's), (41, 135654), (42, 135660), (59, 135780), (63, 135798), (66, 135813), (73, 135852),

Gene: Ngannou_239 Start: 134142, Stop: 134444, Start Num: 26
Candidate Starts for Ngannou_239:
(16, 134100), (Start: 26 @134142 has 161 MA's), (Start: 39 @134169 has 2 MA's), (49, 134238), (59, 134304), (63, 134322), (66, 134337), (73, 134376),

Gene: Nidhogg_245 Start: 135986, Stop: 136288, Start Num: 26
Candidate Starts for Nidhogg_245:
(16, 135944), (Start: 26 @135986 has 161 MA's), (41, 136022), (42, 136028), (59, 136148), (63, 136166), (66, 136181), (73, 136220),

Gene: Nirvana_15 Start: 7592, Stop: 7855, Start Num: 38
Candidate Starts for Nirvana_15:
(Start: 33 @7574 has 6 MA's), (Start: 38 @7592 has 1 MA's), (41, 7604), (63, 7748), (64, 7754),

Gene: NoPickles_69 Start: 47540, Stop: 47794, Start Num: 32
Candidate Starts for NoPickles_69:
(Start: 32 @47540 has 8 MA's), (42, 47576), (46, 47606), (67, 47732), (72, 47765),

Gene: NoodleTree_240 Start: 130737, Stop: 131039, Start Num: 26
Candidate Starts for NoodleTree_240:
(16, 130695), (Start: 26 @130737 has 161 MA's), (Start: 39 @130764 has 2 MA's), (49, 130833), (59, 130899), (63, 130917), (66, 130932), (73, 130971),

Gene: Norm_244 Start: 135887, Stop: 136189, Start Num: 26
Candidate Starts for Norm_244:
(16, 135845), (Start: 26 @135887 has 161 MA's), (41, 135923), (42, 135929), (59, 136049), (63, 136067), (66, 136082), (73, 136121),

Gene: Nubi_72 Start: 50104, Stop: 50346, Start Num: 29
Candidate Starts for Nubi_72:
(14, 50047), (Start: 29 @50104 has 25 MA's), (45, 50164), (50, 50209), (53, 50221), (55, 50239), (61, 50278),

Gene: NuevoMundo_246 Start: 136442, Stop: 136675, Start Num: 26
Candidate Starts for NuevoMundo_246:
(16, 136400), (Start: 26 @136442 has 161 MA's), (41, 136478), (42, 136484), (59, 136604), (63, 136622), (66, 136637),

Gene: ObLaDi_55 Start: 40212, Stop: 40466, Start Num: 23
Candidate Starts for ObLaDi_55:
(9, 40107), (Start: 23 @40212 has 4 MA's), (49, 40317), (66, 40416),

Gene: ParkTD_243 Start: 135457, Stop: 135759, Start Num: 26
Candidate Starts for ParkTD_243:
(16, 135415), (Start: 26 @135457 has 161 MA's), (41, 135493), (42, 135499), (59, 135619), (63, 135637), (66, 135652), (73, 135691),

Gene: Patelgo_67 Start: 55396, Stop: 55623, Start Num: 35
Candidate Starts for Patelgo_67:
(Start: 35 @55396 has 16 MA's), (Start: 39 @55414 has 2 MA's),

Gene: Patter_246 Start: 135186, Stop: 135419, Start Num: 26
Candidate Starts for Patter_246:

(16, 135144), (Start: 26 @135186 has 161 MA's), (41, 135222), (42, 135228), (59, 135348), (63, 135366), (66, 135381),

Gene: Petito_72 Start: 49631, Stop: 49885, Start Num: 32

Candidate Starts for Petito_72:

(Start: 32 @49631 has 8 MA's), (42, 49667), (46, 49697), (67, 49823), (72, 49856),

Gene: Phaila_74 Start: 44315, Stop: 44602, Start Num: 28

Candidate Starts for Phaila_74:

(Start: 28 @44315 has 5 MA's), (53, 44423), (56, 44444), (62, 44489), (73, 44546),

Gene: Pherobrine_70 Start: 49341, Stop: 49583, Start Num: 32

Candidate Starts for Pherobrine_70:

(Start: 32 @49341 has 8 MA's), (42, 49377), (44, 49392), (56, 49467), (64, 49521),

Gene: Phlegm_249 Start: 135863, Stop: 136165, Start Num: 26

Candidate Starts for Phlegm_249:

(16, 135821), (Start: 26 @135863 has 161 MA's), (Start: 39 @135890 has 2 MA's), (49, 135959), (59, 136025), (63, 136043), (66, 136058), (73, 136097),

Gene: Phlop_70 Start: 50135, Stop: 50383, Start Num: 29

Candidate Starts for Phlop_70:

(8, 50003), (22, 50123), (Start: 29 @50135 has 25 MA's), (45, 50195), (50, 50240), (51, 50243), (53, 50252), (61, 50309),

Gene: Phox_245 Start: 135112, Stop: 135414, Start Num: 26

Candidate Starts for Phox_245:

(16, 135070), (Start: 26 @135112 has 161 MA's), (41, 135148), (42, 135154), (59, 135274), (63, 135292), (66, 135307), (73, 135346),

Gene: Phredrick_67 Start: 53261, Stop: 53488, Start Num: 35

Candidate Starts for Phredrick_67:

(Start: 35 @53261 has 16 MA's), (Start: 39 @53279 has 2 MA's), (42, 53294), (53, 53363), (64, 53438), (67, 53450),

Gene: Phusco_243 Start: 134695, Stop: 134997, Start Num: 26

Candidate Starts for Phusco_243:

(16, 134653), (Start: 26 @134695 has 161 MA's), (Start: 39 @134722 has 2 MA's), (49, 134791), (59, 134857), (63, 134875), (66, 134890), (73, 134929),

Gene: Pier_243 Start: 135988, Stop: 136290, Start Num: 26

Candidate Starts for Pier_243:

(16, 135946), (Start: 26 @135988 has 161 MA's), (41, 136024), (42, 136030), (59, 136150), (63, 136168), (66, 136183), (73, 136222),

Gene: PinkCoffee_74 Start: 50431, Stop: 50679, Start Num: 29

Candidate Starts for PinkCoffee_74:

(7, 50281), (Start: 21 @50416 has 3 MA's), (Start: 29 @50431 has 25 MA's), (45, 50491), (50, 50536), (53, 50548), (61, 50605),

Gene: Pio_251 Start: 137191, Stop: 137493, Start Num: 26

Candidate Starts for Pio_251:

(16, 137149), (Start: 26 @137191 has 161 MA's), (Start: 39 @137218 has 2 MA's), (49, 137287), (59, 137353), (63, 137371), (66, 137386), (73, 137425),

Gene: Pivoine_245 Start: 135160, Stop: 135462, Start Num: 26

Candidate Starts for Pivoine_245:

(16, 135118), (Start: 26 @135160 has 161 MA's), (Start: 39 @135187 has 2 MA's), (49, 135256), (59, 135322), (63, 135340), (66, 135355), (73, 135394),

Gene: Pleione_248 Start: 135923, Stop: 136225, Start Num: 26

Candidate Starts for Pleione_248:

(16, 135881), (Start: 26 @135923 has 161 MA's), (Start: 39 @135950 has 2 MA's), (49, 136019), (63, 136103), (66, 136118), (73, 136157),

Gene: Portcullis_73 Start: 50182, Stop: 50424, Start Num: 29

Candidate Starts for Portcullis_73:

(14, 50125), (Start: 29 @50182 has 25 MA's), (45, 50242), (50, 50287), (53, 50299), (55, 50317), (61, 50356),

Gene: Primadonna_238 Start: 134823, Stop: 135125, Start Num: 26

Candidate Starts for Primadonna_238:

(16, 134781), (Start: 26 @134823 has 161 MA's), (Start: 39 @134850 has 2 MA's), (49, 134919), (59, 134985), (63, 135003), (66, 135018), (73, 135057),

Gene: PullumCavea_71 Start: 50312, Stop: 50560, Start Num: 29

Candidate Starts for PullumCavea_71:

(8, 50180), (22, 50300), (Start: 29 @50312 has 25 MA's), (45, 50372), (50, 50417), (51, 50420), (53, 50429), (61, 50486),

Gene: PurduePete_244 Start: 136188, Stop: 136490, Start Num: 26

Candidate Starts for PurduePete_244:

(16, 136146), (Start: 26 @136188 has 161 MA's), (Start: 39 @136215 has 2 MA's), (49, 136284), (59, 136350), (63, 136368), (66, 136383), (73, 136422),

Gene: QBert_236 Start: 133511, Stop: 133813, Start Num: 26

Candidate Starts for QBert_236:

(16, 133469), (Start: 26 @133511 has 161 MA's), (Start: 39 @133538 has 2 MA's), (49, 133607), (59, 133673), (63, 133691), (66, 133706), (73, 133745),

Gene: Quantum_11 Start: 6341, Stop: 6610, Start Num: 33

Candidate Starts for Quantum_11:

(3, 5894), (4, 6011), (6, 6146), (13, 6257), (19, 6299), (Start: 33 @6341 has 6 MA's), (63, 6515), (65, 6524), (73, 6566),

Gene: Quasimodo_247 Start: 135496, Stop: 135798, Start Num: 26

Candidate Starts for Quasimodo_247:

(16, 135454), (Start: 26 @135496 has 161 MA's), (Start: 39 @135523 has 2 MA's), (49, 135592), (59, 135658), (63, 135676), (66, 135691), (73, 135730),

Gene: Rahel_246 Start: 135598, Stop: 135900, Start Num: 26

Candidate Starts for Rahel_246:

(16, 135556), (Start: 26 @135598 has 161 MA's), (Start: 39 @135625 has 2 MA's), (49, 135694), (59, 135760), (63, 135778), (66, 135793), (73, 135832),

Gene: Renaldo_80 Start: 46283, Stop: 46570, Start Num: 28

Candidate Starts for Renaldo_80:

(Start: 28 @46283 has 5 MA's), (52, 46388), (53, 46391),

Gene: Rizal_233 Start: 133413, Stop: 133715, Start Num: 26

Candidate Starts for Rizal_233:

(16, 133371), (Start: 26 @133413 has 161 MA's), (Start: 39 @133440 has 2 MA's), (49, 133509), (59, 133575), (63, 133593), (66, 133608), (73, 133647),

Gene: Rizwana_13 Start: 5984, Stop: 6241, Start Num: 21

Candidate Starts for Rizwana_13:

(18, 5963), (Start: 21 @5984 has 3 MA's), (Start: 29 @5999 has 25 MA's), (53, 6110), (63, 6179),

Gene: RoMag_239 Start: 135194, Stop: 135496, Start Num: 26

Candidate Starts for RoMag_239:

(16, 135152), (Start: 26 @135194 has 161 MA's), (Start: 39 @135221 has 2 MA's), (49, 135290), (59, 135356), (63, 135374), (66, 135389), (73, 135428),

Gene: RogerDodger_76 Start: 51380, Stop: 51628, Start Num: 29

Candidate Starts for RogerDodger_76:

(Start: 29 @51380 has 25 MA's), (45, 51440), (50, 51485), (53, 51497), (55, 51515), (61, 51554), (66, 51581),

Gene: Ronan_240 Start: 133586, Stop: 133888, Start Num: 26

Candidate Starts for Ronan_240:

(16, 133544), (Start: 26 @133586 has 161 MA's), (41, 133622), (42, 133628), (59, 133748), (63, 133766), (66, 133781), (73, 133820),

Gene: Roots515_247 Start: 136739, Stop: 137041, Start Num: 26

Candidate Starts for Roots515_247:

(16, 136697), (Start: 26 @136739 has 161 MA's), (41, 136775), (42, 136781), (59, 136901), (63, 136919), (66, 136934), (73, 136973),

Gene: SVoro_240 Start: 135496, Stop: 135798, Start Num: 26

Candidate Starts for SVoro_240:

(16, 135454), (Start: 26 @135496 has 161 MA's), (Start: 39 @135523 has 2 MA's), (49, 135592), (59, 135658), (63, 135676), (66, 135691), (73, 135730),

Gene: Salacia_245 Start: 136614, Stop: 136916, Start Num: 26

Candidate Starts for Salacia_245:

(16, 136572), (Start: 26 @136614 has 161 MA's), (41, 136650), (42, 136656), (59, 136776), (63, 136794), (66, 136809), (73, 136848),

Gene: Salvador_72 Start: 50171, Stop: 50419, Start Num: 29

Candidate Starts for Salvador_72:

(7, 50021), (Start: 21 @50156 has 3 MA's), (Start: 29 @50171 has 25 MA's), (45, 50231), (50, 50276), (53, 50288), (55, 50306), (61, 50345),

Gene: Satis_11 Start: 6337, Stop: 6606, Start Num: 33

Candidate Starts for Satis_11:

(2, 5710), (4, 6007), (6, 6142), (13, 6253), (19, 6295), (Start: 33 @6337 has 6 MA's), (41, 6367), (63, 6511), (65, 6520), (73, 6562),

Gene: Sauce_241 Start: 134922, Stop: 135224, Start Num: 26

Candidate Starts for Sauce_241:

(16, 134880), (Start: 26 @134922 has 161 MA's), (Start: 39 @134949 has 2 MA's), (49, 135018), (59, 135084), (63, 135102), (66, 135117), (73, 135156),

Gene: Schwartz33_69 Start: 48060, Stop: 48317, Start Num: 27

Candidate Starts for Schwartz33_69:

(Start: 27 @48060 has 1 MA's), (42, 48102), (44, 48117), (60, 48225), (62, 48237), (70, 48285),

Gene: ScottMcG_236 Start: 134192, Stop: 134425, Start Num: 26

Candidate Starts for ScottMcG_236:

(16, 134150), (Start: 26 @134192 has 161 MA's), (41, 134228), (42, 134234), (59, 134354), (63, 134372), (66, 134387),

Gene: Sebata_244 Start: 135891, Stop: 136124, Start Num: 25

Candidate Starts for Sebata_244:

(16, 135852), (Start: 25 @135891 has 3 MA's), (41, 135927), (42, 135933), (59, 136053), (63, 136071),

Gene: Secretariat_68 Start: 47409, Stop: 47657, Start Num: 35

Candidate Starts for Secretariat_68:

(20, 47385), (Start: 35 @47409 has 16 MA's), (42, 47442), (44, 47457), (62, 47577), (65, 47589), (70, 47625),

Gene: Shaqnato_235 Start: 134332, Stop: 134634, Start Num: 26

Candidate Starts for Shaqnato_235:

(16, 134290), (Start: 26 @134332 has 161 MA's), (Start: 39 @134359 has 2 MA's), (49, 134428), (59, 134494), (63, 134512), (66, 134527), (73, 134566),

Gene: Shelob_245 Start: 137057, Stop: 137359, Start Num: 26

Candidate Starts for Shelob_245:

(16, 137015), (Start: 26 @137057 has 161 MA's), (41, 137093), (42, 137099), (59, 137219), (63, 137237), (66, 137252), (73, 137291),

Gene: ShiaLabeouf_242 Start: 134916, Stop: 135218, Start Num: 26

Candidate Starts for ShiaLabeouf_242:

(16, 134874), (Start: 26 @134916 has 161 MA's), (Start: 39 @134943 has 2 MA's), (49, 135012), (59, 135078), (63, 135096), (66, 135111), (73, 135150),

Gene: Shnickers_243 Start: 134980, Stop: 135282, Start Num: 26

Candidate Starts for Shnickers_243:

(16, 134938), (Start: 26 @134980 has 161 MA's), (Start: 39 @135007 has 2 MA's), (49, 135076), (59, 135142), (63, 135160), (66, 135175), (73, 135214),

Gene: Shrimp_246 Start: 136225, Stop: 136527, Start Num: 26

Candidate Starts for Shrimp_246:

(16, 136183), (Start: 26 @136225 has 161 MA's), (Start: 39 @136252 has 2 MA's), (49, 136321), (63, 136405), (66, 136420), (73, 136459),

Gene: SilverDipper_249 Start: 135716, Stop: 136018, Start Num: 26

Candidate Starts for SilverDipper_249:

(16, 135674), (Start: 26 @135716 has 161 MA's), (Start: 39 @135743 has 2 MA's), (49, 135812), (59, 135878), (63, 135896), (66, 135911), (73, 135950),

Gene: Skog_75 Start: 30969, Stop: 31244, Start Num: 29

Candidate Starts for Skog_75:

(11, 30897), (Start: 29 @30969 has 25 MA's), (40, 31002), (43, 31023), (45, 31029), (50, 31074), (51, 31077), (53, 31086), (57, 31113), (61, 31143), (71, 31206),

Gene: SmallFry_245 Start: 135074, Stop: 135376, Start Num: 26

Candidate Starts for SmallFry_245:

(16, 135032), (Start: 26 @135074 has 161 MA's), (Start: 39 @135101 has 2 MA's), (49, 135170), (59, 135236), (63, 135254), (66, 135269), (73, 135308),

Gene: SmokingBunny_73 Start: 51218, Stop: 51466, Start Num: 29

Candidate Starts for SmokingBunny_73:

(Start: 29 @51218 has 25 MA's), (40, 51251), (45, 51278), (50, 51323), (53, 51335), (55, 51353), (61, 51392), (66, 51419),

Gene: SparkleGoddess_67 Start: 55353, Stop: 55562, Start Num: 39

Candidate Starts for SparkleGoddess_67:

(Start: 35 @55335 has 16 MA's), (Start: 39 @55353 has 2 MA's), (53, 55437), (63, 55506), (64, 55512),

Gene: Spec_238 Start: 135155, Stop: 135388, Start Num: 26

Candidate Starts for Spec_238:

(16, 135113), (Start: 26 @135155 has 161 MA's), (41, 135191), (42, 135197), (59, 135317), (63, 135335), (66, 135350),

Gene: Specks_248 Start: 135565, Stop: 135867, Start Num: 26

Candidate Starts for Specks_248:

(16, 135523), (Start: 26 @135565 has 161 MA's), (Start: 39 @135592 has 2 MA's), (49, 135661), (59, 135727), (63, 135745), (66, 135760), (73, 135799),

Gene: Sprinklers_242 Start: 134822, Stop: 135124, Start Num: 26

Candidate Starts for Sprinklers_242:

(16, 134780), (Start: 26 @134822 has 161 MA's), (Start: 39 @134849 has 2 MA's), (49, 134918), (59, 134984), (63, 135002), (66, 135017), (73, 135056),

Gene: Spud_236 Start: 134531, Stop: 134833, Start Num: 26

Candidate Starts for Spud_236:

(16, 134489), (Start: 26 @134531 has 161 MA's), (Start: 39 @134558 has 2 MA's), (49, 134627), (59, 134693), (63, 134711), (66, 134726), (73, 134765),

Gene: SrishMeg2525_241 Start: 135720, Stop: 136022, Start Num: 26

Candidate Starts for SrishMeg2525_241:

(16, 135678), (Start: 26 @135720 has 161 MA's), (41, 135756), (42, 135762), (59, 135882), (63, 135900), (66, 135915), (73, 135954),

Gene: StephanieG_238 Start: 135717, Stop: 136019, Start Num: 26

Candidate Starts for StephanieG_238:

(16, 135675), (Start: 26 @135717 has 161 MA's), (Start: 39 @135744 has 2 MA's), (49, 135813), (59, 135879), (63, 135897), (66, 135912), (73, 135951),

Gene: Stigma_66 Start: 55349, Stop: 55576, Start Num: 35

Candidate Starts for Stigma_66:

(Start: 35 @55349 has 16 MA's), (Start: 39 @55367 has 2 MA's), (53, 55451), (63, 55520), (64, 55526),

Gene: StubbySaigey_250 Start: 135250, Stop: 135552, Start Num: 26

Candidate Starts for StubbySaigey_250:

(16, 135208), (Start: 26 @135250 has 161 MA's), (Start: 39 @135277 has 2 MA's), (49, 135346), (59, 135412), (63, 135430), (66, 135445), (73, 135484),

Gene: Tainan_244 Start: 134706, Stop: 134939, Start Num: 26

Candidate Starts for Tainan_244:

(16, 134664), (Start: 26 @134706 has 161 MA's), (41, 134742), (42, 134748), (59, 134868), (63, 134886), (66, 134901),

Gene: Talon44_73 Start: 48492, Stop: 48746, Start Num: 32

Candidate Starts for Talon44_73:

(Start: 32 @48492 has 8 MA's), (42, 48528), (46, 48558), (67, 48684), (72, 48717),

Gene: Tank_14 Start: 5999, Stop: 6256, Start Num: 21

Candidate Starts for Tank_14:

(Start: 21 @5999 has 3 MA's), (36, 6023), (47, 6092), (63, 6194),

Gene: Teardrop_242 Start: 134577, Stop: 134879, Start Num: 26

Candidate Starts for Teardrop_242:

(16, 134535), (Start: 26 @134577 has 161 MA's), (Start: 39 @134604 has 2 MA's), (49, 134673), (59, 134739), (63, 134757), (66, 134772), (73, 134811),

Gene: Tenney120_75 Start: 44851, Stop: 45138, Start Num: 28

Candidate Starts for Tenney120_75:

(Start: 28 @44851 has 5 MA's), (53, 44959), (56, 44980), (73, 45082),

Gene: TinyTim_242 Start: 134544, Stop: 134846, Start Num: 26

Candidate Starts for TinyTim_242:

(16, 134502), (Start: 26 @134544 has 161 MA's), (Start: 39 @134571 has 2 MA's), (49, 134640), (63, 134724), (66, 134739), (73, 134778),

Gene: Togo_72 Start: 51218, Stop: 51466, Start Num: 29

Candidate Starts for Togo_72:

(Start: 29 @51218 has 25 MA's), (40, 51251), (45, 51278), (50, 51323), (53, 51335), (55, 51353), (61, 51392), (66, 51419),

Gene: Tonenili_266 Start: 140370, Stop: 140672, Start Num: 26

Candidate Starts for Tonenili_266:

(16, 140328), (Start: 26 @140370 has 161 MA's), (41, 140406), (42, 140412), (49, 140466), (59, 140532), (63, 140550), (66, 140565), (73, 140604),

Gene: Tortoise16_242 Start: 135033, Stop: 135308, Start Num: 39

Candidate Starts for Tortoise16_242:

(16, 134964), (Start: 26 @135006 has 161 MA's), (Start: 39 @135033 has 2 MA's), (49, 135102), (59, 135168), (63, 135186), (66, 135201), (73, 135240),

Gene: Tribby_94 Start: 53361, Stop: 53618, Start Num: 24

Candidate Starts for Tribby_94:

(Start: 24 @53361 has 19 MA's),

Gene: Trinitium_240 Start: 133298, Stop: 133600, Start Num: 26

Candidate Starts for Trinitium_240:

(16, 133256), (Start: 26 @133298 has 161 MA's), (Start: 39 @133325 has 2 MA's), (49, 133394), (59, 133460), (63, 133478), (66, 133493), (73, 133532),

Gene: TrixiePhattel_74 Start: 44473, Stop: 44778, Start Num: 28

Candidate Starts for TrixiePhattel_74:

(Start: 26 @44470 has 161 MA's), (Start: 28 @44473 has 5 MA's), (Start: 38 @44494 has 1 MA's), (53, 44581), (56, 44602), (62, 44647), (73, 44704),

Gene: Turret_235 Start: 132880, Stop: 133182, Start Num: 26

Candidate Starts for Turret_235:

(16, 132838), (Start: 26 @132880 has 161 MA's), (Start: 39 @132907 has 2 MA's), (49, 132976), (59, 133042), (63, 133060), (66, 133075), (73, 133114),

Gene: Twister6_73 Start: 49567, Stop: 49815, Start Num: 29

Candidate Starts for Twister6_73:

(22, 49555), (Start: 29 @49567 has 25 MA's), (45, 49627), (50, 49672), (53, 49684), (61, 49741),

Gene: Tyke_241 Start: 137198, Stop: 137431, Start Num: 26

Candidate Starts for Tyke_241:

(16, 137156), (Start: 26 @137198 has 161 MA's), (41, 137234), (42, 137240), (59, 137360), (63, 137378), (66, 137393),

Gene: Uzumaki_69 Start: 44292, Stop: 44579, Start Num: 28

Candidate Starts for Uzumaki_69:

(Start: 28 @44292 has 5 MA's), (53, 44400), (56, 44421), (62, 44466), (73, 44523),

Gene: Valary_73 Start: 50867, Stop: 51115, Start Num: 29

Candidate Starts for Valary_73:

(8, 50735), (22, 50855), (Start: 29 @50867 has 25 MA's), (45, 50927), (50, 50972), (53, 50984), (61, 51041),

Gene: ValleyTerrace_245 Start: 134457, Stop: 134759, Start Num: 26

Candidate Starts for ValleyTerrace_245:

(16, 134415), (Start: 26 @134457 has 161 MA's), (Start: 39 @134484 has 2 MA's), (49, 134553), (59, 134619), (63, 134637), (66, 134652), (73, 134691),

Gene: VanDeWege_74 Start: 50539, Stop: 50781, Start Num: 29

Candidate Starts for VanDeWege_74:

(14, 50482), (Start: 29 @50539 has 25 MA's), (45, 50599), (50, 50644), (53, 50656), (55, 50674), (61, 50713),

Gene: Wally_242 Start: 134441, Stop: 134743, Start Num: 26

Candidate Starts for Wally_242:

(16, 134399), (Start: 26 @134441 has 161 MA's), (Start: 39 @134468 has 2 MA's), (49, 134537), (59, 134603), (63, 134621), (66, 134636), (73, 134675),

Gene: Westy_65 Start: 55335, Stop: 55562, Start Num: 35

Candidate Starts for Westy_65:

(Start: 35 @55335 has 16 MA's), (Start: 39 @55353 has 2 MA's), (53, 55437), (63, 55506), (64, 55512),

Gene: Wilde_14 Start: 5927, Stop: 6184, Start Num: 21

Candidate Starts for Wilde_14:

(Start: 21 @5927 has 3 MA's), (36, 5951), (37, 5954), (47, 6020), (63, 6122),

Gene: Willis_245 Start: 135380, Stop: 135682, Start Num: 26

Candidate Starts for Willis_245:

(16, 135338), (Start: 26 @135380 has 161 MA's), (41, 135416), (42, 135422), (59, 135542), (63, 135560), (66, 135575), (73, 135614),

Gene: Wizard_69 Start: 50045, Stop: 50293, Start Num: 29

Candidate Starts for Wizard_69:

(8, 49913), (22, 50033), (Start: 29 @50045 has 25 MA's), (45, 50105), (50, 50150), (53, 50162), (61, 50219),

Gene: Xenomorph_88 Start: 53193, Stop: 53450, Start Num: 24

Candidate Starts for Xenomorph_88:

(Start: 24 @53193 has 19 MA's),

Gene: Yassified_240 Start: 134587, Stop: 134889, Start Num: 26

Candidate Starts for Yassified_240:

(16, 134545), (Start: 26 @134587 has 161 MA's), (41, 134623), (42, 134629), (59, 134749), (63, 134767), (66, 134782), (73, 134821),

Gene: YemiJoy2021_245 Start: 136111, Stop: 136413, Start Num: 26

Candidate Starts for YemiJoy2021_245:

(16, 136069), (Start: 26 @136111 has 161 MA's), (41, 136147), (42, 136153), (59, 136273), (63, 136291), (66, 136306), (73, 136345),

Gene: YoungMoneyMata_244 Start: 135641, Stop: 135874, Start Num: 26

Candidate Starts for YoungMoneyMata_244:

(16, 135599), (Start: 26 @135641 has 161 MA's), (41, 135677), (42, 135683), (59, 135803), (63, 135821), (66, 135836),

Gene: Yucca_244 Start: 136103, Stop: 136405, Start Num: 26

Candidate Starts for Yucca_244:

(16, 136061), (Start: 26 @136103 has 161 MA's), (Start: 39 @136130 has 2 MA's), (49, 136199), (63, 136283), (66, 136298), (73, 136337),

Gene: YungMoney_72 Start: 52105, Stop: 52353, Start Num: 29

Candidate Starts for YungMoney_72:

(7, 51955), (Start: 21 @52090 has 3 MA's), (Start: 29 @52105 has 25 MA's), (45, 52165), (50, 52210), (53, 52222), (55, 52240), (61, 52279),

Gene: Zalkecks_243 Start: 135209, Stop: 135511, Start Num: 26

Candidate Starts for Zalkecks_243:

(16, 135167), (Start: 26 @135209 has 161 MA's), (41, 135245), (42, 135251), (59, 135371), (63, 135389), (66, 135404), (73, 135443),

Gene: Zeenon_245 Start: 135743, Stop: 136045, Start Num: 26

Candidate Starts for Zeenon_245:

(16, 135701), (Start: 26 @135743 has 161 MA's), (41, 135779), (42, 135785), (59, 135905), (63, 135923), (66, 135938), (73, 135977),

Gene: Zeina_75 Start: 45147, Stop: 45434, Start Num: 28

Candidate Starts for Zeina_75:

(Start: 28 @45147 has 5 MA's), (53, 45255), (56, 45276), (62, 45321), (73, 45378),

Gene: ZygoTaiga_240 Start: 136400, Stop: 136702, Start Num: 26

Candidate Starts for ZygoTaiga_240:

(16, 136358), (Start: 26 @136400 has 161 MA's), (41, 136436), (42, 136442), (59, 136562), (63, 136580), (66, 136595), (73, 136634),