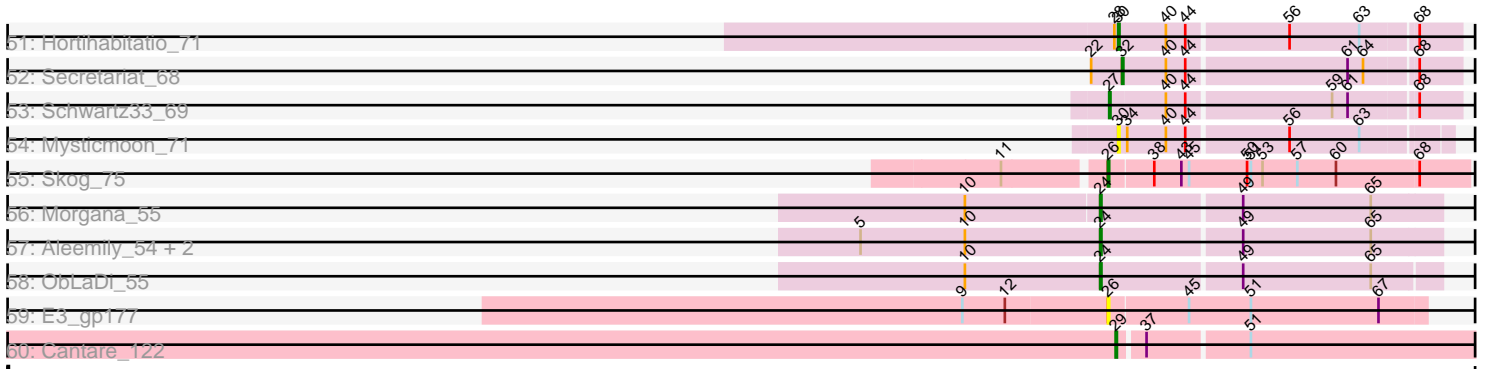


Pham 294367



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 294367 Report

This analysis was run 04/18/26 on database version 643.

Pham number 294367 has 319 members, 46 are drafts.

Phages represented in each track:

- Track 1 : GoCrazy_88, Hankly_93, Xenomorph_88, Kardesai_91, NapoleonB_93, Dynamite_92, Bowling_94, KeaneyLin_90, Benllo_88, Mooshroom_93
- Track 2 : Elsa_90, Arcadia_90, Nason_90, Correa_88, YoshiYama_91
- Track 3 : Heisenberger_91, Tribby_94, Mudcat_87, Cheesy_93, JEGGS_91, BenitoAntonio_90
- Track 4 : Circum_93
- Track 5 : Wilde_14
- Track 6 : Rizwana_13
- Track 7 : Tank_14
- Track 8 : RIPWilbur_17
- Track 9 : GalaxyEater_10
- Track 10 : Jasmine_8
- Track 11 : Westy_68, Karp_65, Stigma_66, Belfort_69, Comrade_67
- Track 12 : DeluluLabubu_67, Gilson_68, Forrest_69, Jada_67, Maupel_67, Emma1919_69
- Track 13 : Phredrick_67, Kenrey_69
- Track 14 : Moab_67, Patelgo_67
- Track 15 : MeganTheeKilla_66, Francob_66
- Track 16 : SparkleGoddess_67
- Track 17 : Sarkar_12, Quantum_11, Kradal_11, EhyElimayoE_11
- Track 18 : Satis_11
- Track 19 : Frankenweenie_15
- Track 20 : JustBecause_9, Kela_9
- Track 21 : Nirvana_15
- Track 22 : GiJojo_106
- Track 23 : BeanWater_237, ValleyTerrace_245, ChickenPhender_240, Gamgam_246, Bxz1_230, Wally_242, Matsumoto_242, Duckfeet_238, Pivoine_245, ChaylaJr_243, JulietS_233, Atlantean_244, DTDevon_245, BigCity_252, Lukilu_233, Asterius_244, Grasshills_251, Ghost_244, Guwapp_240, JPickles_241, LRRHood_236, QBert_236, Phlegm_249, Naija_245, Jessibeth14_244, IkeLoa_238, Kboogie_248, Adlitam_244, Blackbrain_242, Darko_243, Dietrick_233, Phusco_243, Momo_246, BobaPhatt_235, Jaygup_241, LifeSavor_245, Ablatia_243, Quasimodo_247, Chargie21_241, Basquiat_241, Shnickers_243, Ading_246, Pupusa_247, Amataga_245, Audrick_247, ArcherS7_245, Catera_233, Teardrop_242, Concombre_249, Napoleon13_241, EggyFarm_252, Sauce_241, Rocha_240, Ngannou_239, EmmaElysia_249, Turret_235, Belieber_236, ShiaLabeouf_242, InigoMontoya_248, EasyJones_245, Sprinklers_242, Cali_234,

Spud_236, McGee_245, SmallFry_245, Rahel_246, Jedediah_246, BananaFence_241, Trinitium_240, LookingGlass_242, Bezza_232, Dessert_241, Latch_244, Specks_248, SVoro_239, RoMag_239, Bowman_241, Shaqnato_235, Derek_240, Melpomini_239, Labradorite_241, Astraea_239, Demodog_250, Drazdys_241, Gabriel_247, Pio_251, CharlieB_239, ErnieJ_237, StubbySaigey_250, Fixie_243, Substance289_240, Khaleesi_243, Fludd_244, Cactojaque_238, JustHall_238, PurduePete_244, BadAgartude_238, BackyardAgain_239, Bangla1971_245, McWolfish_241, CindyLou_245, StephanieG_238, Primadonna_238, GlutenPhree_245, Littleton_248, NoodleTree_240, Burrough_245, Morizzled23_241, SilverDipper_249, Janiyra_247, Domi_238, Blackdragon_239, EmToTheThree_244, Chomp_243, Babyland_247, Jemmno_244, Rizal_233, Fongie_244

- Track 24 : Tainan_244, InterFolia_246, ScottMcG_236, LinStu_241, Koguma_243, Breeniome_244, LordLeafolot_245, Spec_238, PharkleMinkus_246, LolaVinca_240, Bigswole_249, Letha_242, Mikro_238, Nappy_243, YoungMoneyMata_244, Patter_246, NuevoMundo_246, FrayBell_247, Dandelion_250, Halldule_236, Tyke_241, Grungle_226

- Track 25 : 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 26 : Colt_234, Cane17_233, Blubba_231

- Track 27 : Pier_243, Ewok_243, Issimir_237, ET08_230, Roots515_247, Zalkecks_243, DrPhinkDaddy_241, NedWong_243, Capablanca_249, Megamind_241, Bipolarisk_242, Daffodil_250, MikeLiesIn_245, Yassified_240, ParkTD_243, YemiJoy2021_245, Ronan_240, Jezreel_241, ZygoTaiga_240, Nidhogg_245, Cleatunium_236, Bonray_246, Zeenon_245, FudgeTart_239, Delilah_242, Salacia_245, Ava3_241, SrishMeg2525_241, Norm_244, Lee7_243, Shelob_245, Izajani_240, Phox_245, OrediggerDelux_239, Willis_245, Loanshark_241

- Track 28 : Sebata_244, DeejaClivia_231, JayJay_244, Lunareta_241, Maturis_238, DirtMonster_233, Montpel_241

- Track 29 : Mangeria_244

- Track 30 : Kamryn_243

- Track 31 : Tortoise16_242

- Track 32 : Vortrix_262, Tonenili_266

- Track 33 : Essence_242

- Track 34 : I3_254

- Track 35 : Halo3_70

- Track 36 : PinkCoffee_74, Danyall_73

- Track 37 : KimmyK_72, Bakery_77, Valary_73, CherryCola_72, Gezellig_69, Wizard_69

- Track 38 : Barb_74, ClamChowder_74, Fugax_75

- Track 39 : Phlop_70, PullumCavea_71

- Track 40 : CoveyB_73, Arri_73, VanDeWege_74, Portcullis_73, Nubi_72

- Track 41 : Twister6_73

- Track 42 : Salvador_72, Evamon_72, Mutzi_71, YungMoney_72

- Track 43 : Togo_72, SmokingBunny_73

- Track 44 : RogerDodger_76

- Track 45 : Talon44_72, Avazak_71, Captrips_69, NoPickles_69, Petit_72, Football_72, Tairn4Wing_72

- Track 46 : Bugg_73, Artorias_70, FortCran_70, Dancer_70

- Track 47 : ChickyNuggy_73, JulesRay_70

- Track 48 : Conley_69

- Track 49 : Pherobrine_70
- Track 50 : Fazel_71
- Track 51 : Hortihabitatio_71
- Track 52 : Secretariat_68
- Track 53 : Schwartz33_69
- Track 54 : Mysticmoon_71
- Track 55 : Skog_75
- Track 56 : Morgana_55
- Track 57 : Aleemily_54, Cafasso_55, ModicumRichard_55
- Track 58 : ObLaDi_55
- Track 59 : E3_gp177
- Track 60 : 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 197 of the 273 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ablatia_243, Ading_246, Adlitam_244, Amataga_245, ArcherS7_245, Arri_73, Asterius_244, Astraea_239, Atlantean_244, Audrick_247, Ava3_241, Babyland_247, BackyardAgain_239, BadAgartude_238, Bakery_77, BananaFence_241, Bangla1971_245, Barb_74, Basquiat_241, BeanWater_237, Belieber_236, Bezza_232, BigCity_252, Bigswole_249, Bipolarisk_242, Blackbrain_242, Blackdragon_239, Blubba_231, BobaPhatt_235, Bonray_246, Bowman_241, Bread_240, Breeniome_244, Burrough_245, Bxz1_230, Cactojaque_238, Cali_234, Cane17_233, Capablanca_249, Caravan_234, Catera_233, Charge21_241, CharlieB_239, ChaylaJr_243, CherryCola_72, ChickenPhender_240, Chomp_243, CindyLou_245, ClamChowder_74, Cleatunium_236, Colt_234, Concombre_249, CoveyB_73, DTDevon_245, Daffodil_250, Dandelion_250, Danyall_73, Darko_243, Delilah_242, Delylah_246, Demodog_250, Derek_240, Dessert_241, Dietrick_233, Domi_238, DrPhinkDaddy_241, Drazdys_241, Duckfeet_238, E3_gp177, ET08_230, EasyJones_245, EggyFarm_252, EmToTheThree_244, EmmaElysia_249, Erdmann_245, ErnieJ_237, Essence_242, Evamon_72, Ewok_243, Fixie_243, Fludd_244, Fongie_244, FoxtrotP1_242, FrayBell_247, FudgeTart_239, Fugax_75, Gabriel_247, Gangam_246, Gezellig_69, Ghost_244, Gizmo_249, GlutenPhree_245, Grasshills_251, Grungle_226, Guwapp_240, Halldule_236, Halo3_70, 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_241, JigglyPuff_250, JulietS_233, JustHall_238, Kamryn_243, Kboogie_248, Khaleesi_243, KimmyK_72, Koguma_243, LRRHood_236, Labradorite_241, Latch_244, Lee7_243, Lethe_242, LifeSavor_245, LinStu_241, Littleton_248, Loanshark_241, LolaVinca_240, LookingGlass_242, LordLeafolot_245, 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, Mutzi_71, Naija_245, Napoleon13_241, Nappy_243, Naval22_249, NedWong_243, Ngannou_239, Nidhogg_245, NoodleTree_240, Norm_244, Nubi_72, NuevoMundo_246, OrediggerDelux_239, ParkTD_243, Patter_246, PharkleMinkus_246, Phlegm_249, Phlop_70, Phox_245, Phusco_243, Pier_243, PinkCoffee_74, Pio_251, Pivoine_245,

Pleione_248, Portcullis_73, Primadonna_238, PullumCavea_71, Pupusa_247, PurduePete_244, QBert_236, Quasimodo_247, RIPWilbur_17, Rahel_246, Rizal_233, RoMag_239, Rocha_240, RogerDodger_76, Ronan_240, Roots515_247, SVoro_239, Salacia_245, Salvador_72, Sauce_241, ScottMcG_236, Shaqnato_235, Shelob_245, ShiaLabeouf_242, Shnickers_243, Shrimp_246, SilverDipper_249, Skog_75, SmallFry_245, SmokingBunny_73, Spec_238, Specks_248, Sprinklers_242, Spud_236, SrishMeg2525_241, StephanieG_238, StubbySaigey_250, Substance289_240, Tainan_244, Teardrop_242, TinyTim_242, Togo_72, Tonenili_266, Trinitium_240, Turret_235, Twister6_73, Tyke_241, Valary_73, ValleyTerrace_245, VanDeWege_74, Vortrix_262, Wally_242, Willis_245, Wizard_69, Yassified_240, YemiJoy2021_245, YoungMoneyMata_244, Yucca_244, YungMoney_72, Zalkecks_243, Zeenon_245, ZygoTaiga_240,

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

- Rizwana_13, Tortoise16_242,

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

- Aleemily_54, Arcadia_90, Artorias_70, Avazak_71, Belfort_69, BenitoAntonio_90, Benllo_88, Bowling_94, Bugg_73, Cafasso_55, Cantare_122, Captrips_69, Cheesy_93, ChickyNuggy_73, Circum_93, Comrade_67, Conley_69, Correa_88, Dancer_70, DeejaClivia_231, DeluluLabubu_67, DirtMonster_233, Dynamite_92, EhyElimayoE_11, Elsa_90, Emma1919_69, Fazel_71, Football_72, Forrest_69, FortCran_70, Francob_66, Frankenweenie_15, GalaxyEater_10, GiJojo_106, Gilson_68, GoCrazy_88, Hankly_93, Heisenberger_91, Hortihabitatio_71, JEGGS_91, Jada_67, Jasmine_8, JayJay_244, JulesRay_70, JustBecause_9, Kardesai_91, Karp_65, KeaneyLin_90, Kela_9, Kenrey_69, Kradal_11, Lunareta_241, Maturis_238, Maupel_67, MeganTheeKilla_66, Moab_67, ModicumRichard_55, Montpel_241, Mooshroom_93, Morgana_55, Mudcat_87, Mysticmoon_71, NapoleonB_93, Nason_90, Nirvana_15, NoPickles_69, ObLaDi_55, Patelgo_67, Petite_72, Pherobrine_70, Phredrick_67, Quantum_11, Sarkar_12, Satis_11, Schwartz33_69, Sebata_244, Secretariat_68, SparkleGoddess_67, Stigma_66, Tairn4Wing_72, Talon44_72, Tank_14, Tribby_94, Westy_68, Wilde_14, Xenomorph_88, YoshiYama_91,

Summary by start number:

Start 21:

- Found in 3 of 319 (0.9%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rizwana_13 (AP1), Tank_14 (AP1), Wilde_14 (AP1),

Start 23:

- Found in 22 of 319 (6.9%) of genes in pham
- Manual Annotations of this start: 21 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arcadia_90 (AM), BenitoAntonio_90 (AM), Benllo_88 (AM), Bowling_94 (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), YoshiYama_91 (AM),

Start 24:

- Found in 5 of 319 (1.6%) of genes in pham
- Manual Annotations of this start: 5 of 273
- 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 25:

- Found in 7 of 319 (2.2%) of genes in pham
- Manual Annotations of this start: 3 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DeejaClivia_231 (C1), DirtMonster_233 (C1), JayJay_244 (C1), Lunareta_241 (C1), Maturis_238 (C1), Montpel_241 (C1), Sebata_244 (C1),

Start 26:

- Found in 232 of 319 (72.7%) of genes in pham
- Manual Annotations of this start: 197 of 273
- Called 99.1% of time when present
- Phage (with cluster) where this start called: Ablatia_243 (C1), Ading_246 (C1), Adlitam_244 (C1), Amataga_245 (C1), ArcherS7_245 (C1), Arri_73 (DC1), Asterius_244 (C1), Astraea_239 (C1), Atlantean_244 (C1), Audrick_247 (C1), Ava3_241 (C1), Babyland_247 (C1), BackyardAgain_239 (C1), BadAgartude_238 (C1), Bakery_77 (DC1), BananaFence_241 (C1), Bangla1971_245 (C1), Barb_74 (DC1), Basquiat_241 (C1), BeanWater_237 (C1), Belieber_236 (C1), Bezza_232 (C1), BigCity_252 (C1), Bigswole_249 (C1), Bipolarisk_242 (C1), Blackbrain_242 (C1), Blackdragon_239 (C1), Blubba_231 (C1), BobaPhatt_235 (C1), Bonray_246 (C1), Bowman_241 (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), CherryCola_72 (DC1), ChickenPhender_240 (C1), Chomp_243 (C1), CindyLou_245 (C1), ClamChowder_74 (DC1), Cleatunium_236 (C1), Colt_234 (C1), Concombre_249 (C1), CoveyB_73 (DC1), DTDevon_245 (C1), Daffodil_250 (C1), Dandelion_250 (C1), Danyall_73 (DC1), Darko_243 (C1), Delilah_242 (C1), Delylah_246 (C1), Demodog_250 (C1), Derek_240 (C1), Dessert_241 (C1), Dietrick_233 (C1), Domi_238 (C1), DrPhinkDaddy_241 (C1), Drazdys_241 (C1), Duckfeet_238 (C1), E3_gp177 (singleton), ET08_230 (C1), EasyJones_245 (C1), EggyFarm_252 (C1), EmToTheThree_244 (C1), EmmaElysia_249 (C1), Erdmann_245 (C1), ErnieJ_237 (C1), Essence_242 (C1), Evamon_72 (DC1), Ewok_243 (C1), Fixie_243 (C1), Fludd_244 (C1), Fongie_244 (C1), FoxtrotP1_242 (C1), FrayBell_247 (C1), FudgeTart_239 (C1), Fugax_75 (DC1), Gabriel_247 (C1), Gamgam_246 (C1), Gezellig_69 (DC1), Ghost_244 (C1), Gizmo_249 (C1), GlutenPhree_245 (C1), Grasshills_251 (C1), Grungle_226 (C1), Guwapp_240 (C1), Halldule_236 (C1), Halo3_70 (DC1), I3_254 (C1), IkeLoa_238 (C1), InigoMontoya_248 (C1), InterFolia_246 (C1), Iota_241 (C1), Issimir_237 (C1), Izajani_240 (C1), JPickles_241 (C1), Janiyr_247 (C1), Jaygup_241 (C1), Jedediah_246 (C1), Jemmno_244 (C1), Jessibeth14_244 (C1), Jezreel_241 (C1), JigglyPuff_250 (C1), JulietS_233 (C1), JustHall_238 (C1), Kamryn_243 (C1), Kboogie_248 (C1), Khaleesi_243 (C1), KimmyK_72 (DC1), Koguma_243 (C1), LRRHood_236 (C1), Labradorite_241 (C1), Latch_244 (C1), Lee7_243 (C1), Lethe_242 (C1), LifeSavor_245 (C1), LinStu_241 (C1), Littleton_248 (C1), Loanshark_241 (C1), LolaVinca_240 (C1),

LookingGlass_242 (C1), LordLeafolot_245 (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), Mutzi_71 (DC1), 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), Nubi_72 (DC1), NuevoMundo_246 (C1), OrediggerDelux_239 (C1), ParkTD_243 (C1), Patter_246 (C1), PharkleMinkus_246 (C1), Phlegm_249 (C1), Phlop_70 (DC1), Phox_245 (C1), Phusco_243 (C1), Pier_243 (C1), PinkCoffee_74 (DC1), Pio_251 (C1), Pivoine_245 (C1), Pleione_248 (C1), Portcullis_73 (DC1), Primadonna_238 (C1), PullumCavea_71 (DC1), Pupusa_247 (C1), PurduePete_244 (C1), QBert_236 (C1), Quasimodo_247 (C1), RIPWilbur_17 (AP2), Rahel_246 (C1), Rizal_233 (C1), RoMag_239 (C1), Rocha_240 (C1), RogerDodger_76 (DC1), Ronan_240 (C1), Roots515_247 (C1), SVoro_239 (C1), Salacia_245 (C1), Salvador_72 (DC1), Sauce_241 (C1), ScottMcG_236 (C1), Shaqnato_235 (C1), Shelob_245 (C1), ShiaLabeouf_242 (C1), Shnickers_243 (C1), Shrimp_246 (C1), SilverDipper_249 (C1), Skog_75 (DO), SmallFry_245 (C1), SmokingBunny_73 (DC1), Spec_238 (C1), Specks_248 (C1), Sprinklers_242 (C1), Spud_236 (C1), SrishMeg2525_241 (C1), StephanieG_238 (C1), StubbySaigey_250 (C1), Substance289_240 (C1), Tainan_244 (C1), Teardrop_242 (C1), TinyTim_242 (C1), Togo_72 (DC1), Tonenili_266 (C1), Trinitium_240 (C1), Turret_235 (C1), Twister6_73 (DC1), Tyke_241 (C1), Valary_73 (DC1), ValleyTerrace_245 (C1), VanDeWege_74 (DC1), Vortrix_262 (C1), Wally_242 (C1), Willis_245 (C1), Wizard_69 (DC1), Yassified_240 (C1), YemiJoy2021_245 (C1), YoungMoneyMata_244 (C1), Yucca_244 (C1), YungMoney_72 (DC1), Zalkecks_243 (C1), Zeenon_245 (C1), ZygoTaiga_240 (C1),

Start 27:

- Found in 1 of 319 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schwartz33_69 (DJ),

Start 29:

- Found in 2 of 319 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cantare_122 (singleton), GiJojo_106 (BS),

Start 30:

- Found in 18 of 319 (5.6%) of genes in pham
- Manual Annotations of this start: 13 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Artorias_70 (DJ), Avazak_71 (DJ), Bugg_73 (DJ), Captrips_69 (DJ), ChickyNuggy_73 (DJ), Conley_69 (DJ), Dancer_70 (DJ), Fazel_71 (DJ), Football_72 (DJ), FortCran_70 (DJ), Hortihabitatio_71 (DJ), JulesRay_70 (DJ), Mysticmoon_71 (DJ), NoPickles_69 (DJ), Petito_72 (DJ), Pherobrine_70 (DJ), Tairn4Wing_72 (DJ), Talon44_72 (DJ),

Start 31:

- Found in 12 of 319 (3.8%) of genes in pham
- Manual Annotations of this start: 6 of 273

- Called 66.7% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_11 (BM), GalaxyEater_10 (AV), JustBecause_9 (BM), Kela_9 (BM), Kradal_11 (BM), Quantum_11 (BM), Sarkar_12 (BM), Satis_11 (BM),

Start 32:

- Found in 1 of 319 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 273
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Secretariat_68 (DJ),

Start 33:

- Found in 19 of 319 (6.0%) of genes in pham
- Manual Annotations of this start: 17 of 273
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Belfort_69 (BK1), Comrade_67 (BK1), DeluluLabubu_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), MaupeI_67 (BK1), MeganTheeKilla_66 (BK1), Moab_67 (BK1), Patelgo_67 (BK1), Phredrick_67 (BK1), Stigma_66 (BK1), Westy_68 (BK1),

Start 36:

- Found in 4 of 319 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 273
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Frankenweenie_15 (BM), Nirvana_15 (BM),

Start 37:

- Found in 155 of 319 (48.6%) of genes in pham
- Manual Annotations of this start: 2 of 273
- Called 1.3% of time when present
- Phage (with cluster) where this start called: SparkleGoddess_67 (BK1), Tortoise16_242 (C1),

Summary by clusters:

There are 13 clusters represented in this pham: DO, singleton, DJ, AP2, BM, AP1, AM, DZ, BK1, AV, BS, C1, DC1,

Info for manual annotations of cluster AM:

- Start number 23 was manually annotated 21 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 AV:

- Start number 33 was manually annotated 1 time for cluster AV.

Info for manual annotations of cluster BK1:

- Start number 33 was manually annotated 16 times for cluster BK1.
- Start number 37 was manually annotated 1 time for cluster BK1.

Info for manual annotations of cluster BM:

- Start number 31 was manually annotated 6 times for cluster BM.
- Start number 36 was manually annotated 2 times for cluster BM.

Info for manual annotations of cluster BS:

- Start number 29 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 169 times for cluster C1.
- Start number 37 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster DC1:

- Start number 26 was manually annotated 27 times for cluster DC1.

Info for manual annotations of cluster DJ:

- Start number 27 was manually annotated 1 time for cluster DJ.
- Start number 30 was manually annotated 13 times for cluster DJ.
- Start number 32 was manually annotated 1 time for cluster DJ.

Info for manual annotations of cluster DO:

- Start number 26 was manually annotated 1 time for cluster DO.

Info for manual annotations of cluster DZ:

- Start number 24 was manually annotated 5 times for cluster DZ.

Gene Information:

Gene: Ablatia_243 Start: 134421, Stop: 134723, Start Num: 26

Candidate Starts for Ablatia_243:

(16, 134379), (Start: 26 @134421 has 197 MA's), (Start: 37 @134448 has 2 MA's), (49, 134517), (58, 134583), (62, 134601), (65, 134616), (70, 134655),

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

Candidate Starts for Ading_246:

(16, 136812), (Start: 26 @136854 has 197 MA's), (Start: 37 @136881 has 2 MA's), (49, 136950), (58, 137016), (62, 137034), (65, 137049), (70, 137088),

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

Candidate Starts for Adlitam_244:

(16, 135416), (Start: 26 @135458 has 197 MA's), (Start: 37 @135485 has 2 MA's), (49, 135554), (58, 135620), (62, 135638), (65, 135653), (70, 135692),

Gene: Aleemily_54 Start: 39648, Stop: 39905, Start Num: 24

Candidate Starts for Aleemily_54:

(5, 39462), (10, 39543), (Start: 24 @39648 has 5 MA's), (49, 39753), (65, 39852),

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

Candidate Starts for Amataga_245:

(16, 134415), (Start: 26 @134457 has 197 MA's), (Start: 37 @134484 has 2 MA's), (49, 134553), (58, 134619), (62, 134637), (65, 134652), (70, 134691),

Gene: Arcadia_90 Start: 52556, Stop: 52813, Start Num: 23

Candidate Starts for Arcadia_90:

(Start: 23 @52556 has 21 MA's), (40, 52601),

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

Candidate Starts for ArcherS7_245:

(16, 136160), (Start: 26 @136202 has 197 MA's), (Start: 37 @136229 has 2 MA's), (49, 136298), (58, 136364), (62, 136382), (65, 136397), (70, 136436),

Gene: Arri_73 Start: 50476, Stop: 50718, Start Num: 26

Candidate Starts for Arri_73:

(13, 50419), (Start: 26 @50476 has 197 MA's), (45, 50536), (50, 50581), (53, 50593), (55, 50611), (60, 50650),

Gene: Artorias_70 Start: 48379, Stop: 48633, Start Num: 30

Candidate Starts for Artorias_70:

(Start: 30 @48379 has 13 MA's), (40, 48415), (46, 48445), (66, 48571), (69, 48604),

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

Candidate Starts for Asterius_244:

(16, 134824), (Start: 26 @134866 has 197 MA's), (Start: 37 @134893 has 2 MA's), (49, 134962), (58, 135028), (62, 135046), (65, 135061), (70, 135100),

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

Candidate Starts for Astraea_239:

(16, 134019), (Start: 26 @134061 has 197 MA's), (Start: 37 @134088 has 2 MA's), (49, 134157), (58, 134223), (62, 134241), (65, 134256), (70, 134295),

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

Candidate Starts for Atlantean_244:

(16, 134415), (Start: 26 @134457 has 197 MA's), (Start: 37 @134484 has 2 MA's), (49, 134553), (58, 134619), (62, 134637), (65, 134652), (70, 134691),

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

Candidate Starts for Audrick_247:

(16, 134305), (Start: 26 @134347 has 197 MA's), (Start: 37 @134374 has 2 MA's), (49, 134443), (58, 134509), (62, 134527), (65, 134542), (70, 134581),

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

Candidate Starts for Ava3_241:

(16, 134875), (Start: 26 @134917 has 197 MA's), (39, 134953), (40, 134959), (58, 135079), (62, 135097), (65, 135112), (70, 135151),

Gene: Avazak_71 Start: 48706, Stop: 48960, Start Num: 30

Candidate Starts for Avazak_71:

(Start: 30 @48706 has 13 MA's), (40, 48742), (46, 48772), (66, 48898), (69, 48931),

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

Candidate Starts for Babyland_247:

(16, 135192), (Start: 26 @135234 has 197 MA's), (Start: 37 @135261 has 2 MA's), (49, 135330), (58, 135396), (62, 135414), (65, 135429), (70, 135468),

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

Candidate Starts for BackyardAgain_239:

(16, 132565), (Start: 26 @132607 has 197 MA's), (Start: 37 @132634 has 2 MA's), (49, 132703), (58, 132769), (62, 132787), (65, 132802), (70, 132841),

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

Candidate Starts for BadAgartude_238:

(16, 134517), (Start: 26 @134559 has 197 MA's), (Start: 37 @134586 has 2 MA's), (49, 134655), (58, 134721), (62, 134739), (65, 134754), (70, 134793),

Gene: Bakery_77 Start: 52745, Stop: 52987, Start Num: 26

Candidate Starts for Bakery_77:

(8, 52613), (22, 52733), (Start: 26 @52745 has 197 MA's), (45, 52805), (50, 52850), (53, 52862), (60, 52919),

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

Candidate Starts for BananaFence_241:

(16, 134648), (Start: 26 @134690 has 197 MA's), (Start: 37 @134717 has 2 MA's), (49, 134786), (58, 134852), (62, 134870), (65, 134885), (70, 134924),

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

Candidate Starts for Bangla1971_245:

(16, 135124), (Start: 26 @135166 has 197 MA's), (Start: 37 @135193 has 2 MA's), (49, 135262), (58, 135328), (62, 135346), (65, 135361), (70, 135400),

Gene: Barb_74 Start: 50409, Stop: 50657, Start Num: 26

Candidate Starts for Barb_74:

(1, 49578), (7, 50259), (20, 50394), (Start: 26 @50409 has 197 MA's), (45, 50469), (50, 50514), (53, 50526), (60, 50583),

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

Candidate Starts for Basquiat_241:

(16, 132934), (Start: 26 @132976 has 197 MA's), (Start: 37 @133003 has 2 MA's), (49, 133072), (58, 133138), (62, 133156), (65, 133171), (70, 133210),

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

Candidate Starts for BeanWater_237:

(16, 134261), (Start: 26 @134303 has 197 MA's), (Start: 37 @134330 has 2 MA's), (49, 134399), (58, 134465), (62, 134483), (65, 134498), (70, 134537),

Gene: Belfort_69 Start: 55718, Stop: 55945, Start Num: 33

Candidate Starts for Belfort_69:

(Start: 33 @55718 has 17 MA's), (Start: 37 @55736 has 2 MA's), (53, 55820), (62, 55889), (63, 55895),

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

Candidate Starts for Belieber_236:

(16, 133061), (Start: 26 @133103 has 197 MA's), (Start: 37 @133130 has 2 MA's), (49, 133199), (58, 133265), (62, 133283), (65, 133298), (70, 133337),

Gene: BenitoAntonio_90 Start: 52281, Stop: 52538, Start Num: 23

Candidate Starts for BenitoAntonio_90:

(Start: 23 @52281 has 21 MA's),

Gene: Benllo_88 Start: 53121, Stop: 53378, Start Num: 23

Candidate Starts for Benllo_88:

(Start: 23 @53121 has 21 MA's),

Gene: Bezza_232 Start: 134002, Stop: 134304, Start Num: 26

Candidate Starts for Bezza_232:

(16, 133960), (Start: 26 @134002 has 197 MA's), (Start: 37 @134029 has 2 MA's), (49, 134098), (58, 134164), (62, 134182), (65, 134197), (70, 134236),

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

Candidate Starts for BigCity_252:

(16, 137021), (Start: 26 @137063 has 197 MA's), (Start: 37 @137090 has 2 MA's), (49, 137159), (58, 137225), (62, 137243), (65, 137258), (70, 137297),

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

Candidate Starts for Bigswole_249:

(16, 136995), (Start: 26 @137037 has 197 MA's), (39, 137073), (40, 137079), (58, 137199), (62, 137217), (65, 137232),

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

Candidate Starts for Bipolarisk_242:

(16, 135143), (Start: 26 @135185 has 197 MA's), (39, 135221), (40, 135227), (58, 135347), (62, 135365), (65, 135380), (70, 135419),

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

Candidate Starts for Blackbrain_242:

(16, 134711), (Start: 26 @134753 has 197 MA's), (Start: 37 @134780 has 2 MA's), (49, 134849), (58, 134915), (62, 134933), (65, 134948), (70, 134987),

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

Candidate Starts for Blackdragon_239:

(16, 134748), (Start: 26 @134790 has 197 MA's), (Start: 37 @134817 has 2 MA's), (49, 134886), (58, 134952), (62, 134970), (65, 134985), (70, 135024),

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

Candidate Starts for Blubba_231:

(16, 137954), (Start: 26 @137996 has 197 MA's), (39, 138032), (40, 138038), (58, 138158), (62, 138176),

Gene: BobaPhatt_235 Start: 133871, Stop: 134173, Start Num: 26

Candidate Starts for BobaPhatt_235:

(16, 133829), (Start: 26 @133871 has 197 MA's), (Start: 37 @133898 has 2 MA's), (49, 133967), (58, 134033), (62, 134051), (65, 134066), (70, 134105),

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

Candidate Starts for Bonray_246:

(16, 136511), (Start: 26 @136553 has 197 MA's), (39, 136589), (40, 136595), (58, 136715), (62, 136733), (65, 136748), (70, 136787),

Gene: Bowling_94 Start: 53654, Stop: 53911, Start Num: 23

Candidate Starts for Bowling_94:
(Start: 23 @53654 has 21 MA's),

Gene: Bowman_241 Start: 135668, Stop: 135970, Start Num: 26
Candidate Starts for Bowman_241:

(16, 135626), (Start: 26 @135668 has 197 MA's), (Start: 37 @135695 has 2 MA's), (49, 135764), (58, 135830), (62, 135848), (65, 135863), (70, 135902),

Gene: Bread_240 Start: 134560, Stop: 134862, Start Num: 26
Candidate Starts for Bread_240:

(16, 134518), (Start: 26 @134560 has 197 MA's), (Start: 37 @134587 has 2 MA's), (49, 134656), (62, 134740), (65, 134755), (70, 134794),

Gene: Breeniome_244 Start: 134026, Stop: 134259, Start Num: 26
Candidate Starts for Breeniome_244:

(16, 133984), (Start: 26 @134026 has 197 MA's), (39, 134062), (40, 134068), (58, 134188), (62, 134206), (65, 134221),

Gene: Bugg_73 Start: 48424, Stop: 48678, Start Num: 30
Candidate Starts for Bugg_73:

(Start: 30 @48424 has 13 MA's), (40, 48460), (46, 48490), (66, 48616), (69, 48649),

Gene: Burrough_245 Start: 136330, Stop: 136632, Start Num: 26
Candidate Starts for Burrough_245:

(16, 136288), (Start: 26 @136330 has 197 MA's), (Start: 37 @136357 has 2 MA's), (49, 136426), (58, 136492), (62, 136510), (65, 136525), (70, 136564),

Gene: Bxz1_230 Start: 136535, Stop: 136837, Start Num: 26
Candidate Starts for Bxz1_230:

(16, 136493), (Start: 26 @136535 has 197 MA's), (Start: 37 @136562 has 2 MA's), (49, 136631), (58, 136697), (62, 136715), (65, 136730), (70, 136769),

Gene: Cactojaque_238 Start: 133699, Stop: 134001, Start Num: 26
Candidate Starts for Cactojaque_238:

(16, 133657), (Start: 26 @133699 has 197 MA's), (Start: 37 @133726 has 2 MA's), (49, 133795), (58, 133861), (62, 133879), (65, 133894), (70, 133933),

Gene: Cafasso_55 Start: 40222, Stop: 40476, Start Num: 24
Candidate Starts for Cafasso_55:

(5, 40036), (10, 40117), (Start: 24 @40222 has 5 MA's), (49, 40327), (65, 40426),

Gene: Cali_234 Start: 134928, Stop: 135230, Start Num: 26
Candidate Starts for Cali_234:

(16, 134886), (Start: 26 @134928 has 197 MA's), (Start: 37 @134955 has 2 MA's), (49, 135024), (58, 135090), (62, 135108), (65, 135123), (70, 135162),

Gene: Cane17_233 Start: 138405, Stop: 138638, Start Num: 26
Candidate Starts for Cane17_233:

(16, 138363), (Start: 26 @138405 has 197 MA's), (39, 138441), (40, 138447), (58, 138567), (62, 138585),

Gene: Cantare_122 Start: 85748, Stop: 86017, Start Num: 29
Candidate Starts for Cantare_122:

(Start: 29 @85748 has 2 MA's), (Start: 37 @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 197 MA's), (39, 137217), (40, 137223), (58, 137343), (62, 137361), (65, 137376), (70, 137415),

Gene: Captrips_69 Start: 47854, Stop: 48108, Start Num: 30

Candidate Starts for Captrips_69:

(Start: 30 @47854 has 13 MA's), (40, 47890), (46, 47920), (66, 48046), (69, 48079),

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

Candidate Starts for Caravan_234:

(16, 135226), (Start: 26 @135268 has 197 MA's), (Start: 37 @135295 has 2 MA's), (49, 135364), (62, 135448), (65, 135463), (70, 135502),

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

Candidate Starts for Catera_233:

(16, 133628), (Start: 26 @133670 has 197 MA's), (Start: 37 @133697 has 2 MA's), (49, 133766), (58, 133832), (62, 133850), (65, 133865), (70, 133904),

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

Candidate Starts for Chargie21_241:

(16, 132934), (Start: 26 @132976 has 197 MA's), (Start: 37 @133003 has 2 MA's), (49, 133072), (58, 133138), (62, 133156), (65, 133171), (70, 133210),

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

Candidate Starts for CharlieB_239:

(16, 134652), (Start: 26 @134694 has 197 MA's), (Start: 37 @134721 has 2 MA's), (49, 134790), (58, 134856), (62, 134874), (65, 134889), (70, 134928),

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

Candidate Starts for ChaylaJr_243:

(16, 134325), (Start: 26 @134367 has 197 MA's), (Start: 37 @134394 has 2 MA's), (49, 134463), (58, 134529), (62, 134547), (65, 134562), (70, 134601),

Gene: Cheesy_93 Start: 53026, Stop: 53283, Start Num: 23

Candidate Starts for Cheesy_93:

(Start: 23 @53026 has 21 MA's),

Gene: CherryCola_72 Start: 50799, Stop: 51047, Start Num: 26

Candidate Starts for CherryCola_72:

(8, 50667), (22, 50787), (Start: 26 @50799 has 197 MA's), (45, 50859), (50, 50904), (53, 50916), (60, 50973),

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

Candidate Starts for ChickenPhender_240:

(16, 133081), (Start: 26 @133123 has 197 MA's), (Start: 37 @133150 has 2 MA's), (49, 133219), (58, 133285), (62, 133303), (65, 133318), (70, 133357),

Gene: ChickyNuggy_73 Start: 48447, Stop: 48701, Start Num: 30

Candidate Starts for ChickyNuggy_73:

(Start: 30 @48447 has 13 MA's), (34, 48453), (40, 48483), (46, 48513), (66, 48639), (69, 48672),

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

Candidate Starts for Chomp_243:

(16, 136517), (Start: 26 @136559 has 197 MA's), (Start: 37 @136586 has 2 MA's), (49, 136655), (58, 136721), (62, 136739), (65, 136754), (70, 136793),

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

Candidate Starts for CindyLou_245:

(16, 136777), (Start: 26 @136819 has 197 MA's), (Start: 37 @136846 has 2 MA's), (49, 136915), (58, 136981), (62, 136999), (65, 137014), (70, 137053),

Gene: Circum_93 Start: 53360, Stop: 53617, Start Num: 23

Candidate Starts for Circum_93:

(Start: 23 @53360 has 21 MA's), (56, 53495),

Gene: ClamChowder_74 Start: 50409, Stop: 50657, Start Num: 26

Candidate Starts for ClamChowder_74:

(1, 49578), (7, 50259), (20, 50394), (Start: 26 @50409 has 197 MA's), (45, 50469), (50, 50514), (53, 50526), (60, 50583),

Gene: Cleatunium_236 Start: 134380, Stop: 134682, Start Num: 26

Candidate Starts for Cleatunium_236:

(16, 134338), (Start: 26 @134380 has 197 MA's), (39, 134416), (40, 134422), (58, 134542), (62, 134560), (65, 134575), (70, 134614),

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

Candidate Starts for Colt_234:

(16, 137594), (Start: 26 @137636 has 197 MA's), (39, 137672), (40, 137678), (58, 137798), (62, 137816),

Gene: Comrade_67 Start: 55334, Stop: 55561, Start Num: 33

Candidate Starts for Comrade_67:

(Start: 33 @55334 has 17 MA's), (Start: 37 @55352 has 2 MA's), (53, 55436), (62, 55505), (63, 55511),

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

Candidate Starts for Concombres_249:

(16, 136673), (Start: 26 @136715 has 197 MA's), (Start: 37 @136742 has 2 MA's), (49, 136811), (58, 136877), (62, 136895), (65, 136910), (70, 136949),

Gene: Conley_69 Start: 48997, Stop: 49233, Start Num: 30

Candidate Starts for Conley_69:

(Start: 30 @48997 has 13 MA's), (40, 49033), (46, 49063),

Gene: Correa_88 Start: 51905, Stop: 52162, Start Num: 23

Candidate Starts for Correa_88:

(Start: 23 @51905 has 21 MA's), (40, 51950),

Gene: CoveyB_73 Start: 50292, Stop: 50540, Start Num: 26

Candidate Starts for CoveyB_73:

(13, 50235), (Start: 26 @50292 has 197 MA's), (45, 50352), (50, 50397), (53, 50409), (55, 50427), (60, 50466),

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

Candidate Starts for DTDevon_245:

(16, 137156), (Start: 26 @137198 has 197 MA's), (Start: 37 @137225 has 2 MA's), (49, 137294), (58, 137360), (62, 137378), (65, 137393), (70, 137432),

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

Candidate Starts for Daffodil_250:

(16, 135443), (Start: 26 @135485 has 197 MA's), (39, 135521), (40, 135527), (58, 135647), (62, 135665), (65, 135680), (70, 135719),

Gene: Dancer_70 Start: 48116, Stop: 48370, Start Num: 30

Candidate Starts for Dancer_70:

(Start: 30 @48116 has 13 MA's), (40, 48152), (46, 48182), (66, 48308), (69, 48341),

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

Candidate Starts for Dandelion_250:

(16, 138046), (Start: 26 @138088 has 197 MA's), (39, 138124), (40, 138130), (58, 138250), (62, 138268), (65, 138283),

Gene: Danyall_73 Start: 50390, Stop: 50638, Start Num: 26

Candidate Starts for Danyall_73:

(7, 50240), (20, 50375), (Start: 26 @50390 has 197 MA's), (45, 50450), (50, 50495), (53, 50507), (60, 50564),

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

Candidate Starts for Darko_243:

(16, 134652), (Start: 26 @134694 has 197 MA's), (Start: 37 @134721 has 2 MA's), (49, 134790), (58, 134856), (62, 134874), (65, 134889), (70, 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), (39, 133031), (40, 133037), (58, 133157), (62, 133175),

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

Candidate Starts for Delilah_242:

(16, 135536), (Start: 26 @135578 has 197 MA's), (39, 135614), (40, 135620), (58, 135740), (62, 135758), (65, 135773), (70, 135812),

Gene: DeluluLabubu_67 Start: 53372, Stop: 53599, Start Num: 33

Candidate Starts for DeluluLabubu_67:

(Start: 33 @53372 has 17 MA's), (Start: 37 @53390 has 2 MA's), (40, 53405), (53, 53474),

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

Candidate Starts for Delylah_246:

(16, 135850), (Start: 26 @135892 has 197 MA's), (Start: 37 @135919 has 2 MA's), (49, 135988), (62, 136072), (65, 136087), (70, 136126),

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

Candidate Starts for Demodog_250:

(16, 136683), (Start: 26 @136725 has 197 MA's), (Start: 37 @136752 has 2 MA's), (49, 136821), (58, 136887), (62, 136905), (65, 136920), (70, 136959),

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

Candidate Starts for Derek_240:

(16, 135794), (Start: 26 @135836 has 197 MA's), (Start: 37 @135863 has 2 MA's), (49, 135932), (58, 135998), (62, 136016), (65, 136031), (70, 136070),

Gene: Dessert_241 Start: 134835, Stop: 135137, Start Num: 26

Candidate Starts for Dessert_241:

(16, 134793), (Start: 26 @134835 has 197 MA's), (Start: 37 @134862 has 2 MA's), (49, 134931), (58, 134997), (62, 135015), (65, 135030), (70, 135069),

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

Candidate Starts for Dietrick_233:

(16, 133657), (Start: 26 @133699 has 197 MA's), (Start: 37 @133726 has 2 MA's), (49, 133795), (58, 133861), (62, 133879), (65, 133894), (70, 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), (39, 134537), (40, 134543), (58, 134663), (62, 134681),

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

Candidate Starts for Domi_238:

(16, 134996), (Start: 26 @135038 has 197 MA's), (Start: 37 @135065 has 2 MA's), (49, 135134), (58, 135200), (62, 135218), (65, 135233), (70, 135272),

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

Candidate Starts for DrPhinkDaddy_241:

(16, 136221), (Start: 26 @136263 has 197 MA's), (39, 136299), (40, 136305), (58, 136425), (62, 136443), (65, 136458), (70, 136497),

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

Candidate Starts for Drazdys_241:

(16, 135801), (Start: 26 @135843 has 197 MA's), (Start: 37 @135870 has 2 MA's), (49, 135939), (58, 136005), (62, 136023), (65, 136038), (70, 136077),

Gene: Duckfeet_238 Start: 134651, Stop: 134953, Start Num: 26

Candidate Starts for Duckfeet_238:

(16, 134609), (Start: 26 @134651 has 197 MA's), (Start: 37 @134678 has 2 MA's), (49, 134747), (58, 134813), (62, 134831), (65, 134846), (70, 134885),

Gene: Dynamite_92 Start: 52622, Stop: 52879, Start Num: 23

Candidate Starts for Dynamite_92:

(Start: 23 @52622 has 21 MA's),

Gene: E3_gp177 Start: 119674, Stop: 119916, Start Num: 26

Candidate Starts for E3_gp177:

(9, 119563), (12, 119596), (Start: 26 @119674 has 197 MA's), (45, 119734), (51, 119782), (67, 119881),

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

Candidate Starts for ET08_230:

(16, 134136), (Start: 26 @134178 has 197 MA's), (39, 134214), (40, 134220), (58, 134340), (62, 134358), (65, 134373), (70, 134412),

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

Candidate Starts for EasyJones_245:

(16, 134177), (Start: 26 @134219 has 197 MA's), (Start: 37 @134246 has 2 MA's), (49, 134315), (58, 134381), (62, 134399), (65, 134414), (70, 134453),

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

Candidate Starts for EggyFarm_252:

(16, 137022), (Start: 26 @137064 has 197 MA's), (Start: 37 @137091 has 2 MA's), (49, 137160), (58, 137226), (62, 137244), (65, 137259), (70, 137298),

Gene: EhyElimayoE_11 Start: 6341, Stop: 6610, Start Num: 31

Candidate Starts for EhyElimayoE_11:

(3, 5894), (4, 6011), (6, 6146), (14, 6257), (19, 6299), (Start: 31 @6341 has 6 MA's), (62, 6515), (64, 6524), (69, 6566),

Gene: Elsa_90 Start: 52556, Stop: 52813, Start Num: 23

Candidate Starts for Elsa_90:

(Start: 23 @52556 has 21 MA's), (40, 52601),

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

Candidate Starts for EmToTheThree_244:

(16, 135560), (Start: 26 @135602 has 197 MA's), (Start: 37 @135629 has 2 MA's), (49, 135698), (58, 135764), (62, 135782), (65, 135797), (70, 135836),

Gene: Emma1919_69 Start: 54046, Stop: 54273, Start Num: 33

Candidate Starts for Emma1919_69:

(Start: 33 @54046 has 17 MA's), (Start: 37 @54064 has 2 MA's), (40, 54079), (53, 54148),

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

Candidate Starts for EmmaElysia_249:

(16, 136672), (Start: 26 @136714 has 197 MA's), (Start: 37 @136741 has 2 MA's), (49, 136810), (58, 136876), (62, 136894), (65, 136909), (70, 136948),

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

Candidate Starts for Erdmann_245:

(16, 135528), (Start: 26 @135570 has 197 MA's), (Start: 37 @135597 has 2 MA's), (49, 135666), (62, 135750), (65, 135765), (70, 135804),

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

Candidate Starts for ErnieJ_237:

(16, 132356), (Start: 26 @132398 has 197 MA's), (Start: 37 @132425 has 2 MA's), (49, 132494), (58, 132560), (62, 132578), (65, 132593), (70, 132632),

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

Candidate Starts for Essence_242:

(15, 134989), (16, 135013), (Start: 26 @135055 has 197 MA's), (Start: 37 @135082 has 2 MA's), (49, 135151), (58, 135217), (62, 135235), (65, 135250), (70, 135289),

Gene: Evamon_72 Start: 50173, Stop: 50421, Start Num: 26

Candidate Starts for Evamon_72:

(7, 50023), (20, 50158), (Start: 26 @50173 has 197 MA's), (45, 50233), (50, 50278), (53, 50290), (55, 50308), (60, 50347),

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

Candidate Starts for Ewok_243:

(16, 135471), (Start: 26 @135513 has 197 MA's), (39, 135549), (40, 135555), (58, 135675), (62, 135693), (65, 135708), (70, 135747),

Gene: Fazel_71 Start: 48619, Stop: 48870, Start Num: 30

Candidate Starts for Fazel_71:

(Start: 30 @48619 has 13 MA's), (40, 48655), (44, 48670), (56, 48745), (63, 48799), (68, 48838),

Gene: Fixie_243 Start: 135835, Stop: 136137, Start Num: 26

Candidate Starts for Fixie_243:

(16, 135793), (Start: 26 @135835 has 197 MA's), (Start: 37 @135862 has 2 MA's), (49, 135931), (58, 135997), (62, 136015), (65, 136030), (70, 136069),

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

Candidate Starts for Fludd_244:

(16, 133889), (Start: 26 @133931 has 197 MA's), (Start: 37 @133958 has 2 MA's), (49, 134027), (58, 134093), (62, 134111), (65, 134126), (70, 134165),

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

Candidate Starts for Fongie_244:

(16, 135469), (Start: 26 @135511 has 197 MA's), (Start: 37 @135538 has 2 MA's), (49, 135607), (58, 135673), (62, 135691), (65, 135706), (70, 135745),

Gene: Football_72 Start: 48005, Stop: 48259, Start Num: 30

Candidate Starts for Football_72:

(Start: 30 @48005 has 13 MA's), (40, 48041), (46, 48071), (66, 48197), (69, 48230),

Gene: Forrest_69 Start: 54752, Stop: 54979, Start Num: 33

Candidate Starts for Forrest_69:

(Start: 33 @54752 has 17 MA's), (Start: 37 @54770 has 2 MA's), (40, 54785), (53, 54854),

Gene: FortCran_70 Start: 48379, Stop: 48633, Start Num: 30

Candidate Starts for FortCran_70:

(Start: 30 @48379 has 13 MA's), (40, 48415), (46, 48445), (66, 48571), (69, 48604),

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

Candidate Starts for FoxtrotP1_242:

(16, 136114), (Start: 26 @136156 has 197 MA's), (Start: 37 @136183 has 2 MA's), (49, 136252), (62, 136336), (65, 136351), (70, 136390),

Gene: Francob_66 Start: 54109, Stop: 54336, Start Num: 33

Candidate Starts for Francob_66:

(Start: 33 @54109 has 17 MA's), (Start: 37 @54127 has 2 MA's), (40, 54142), (53, 54211), (63, 54286),

Gene: Frankenweenie_15 Start: 7328, Stop: 7591, Start Num: 36

Candidate Starts for Frankenweenie_15:

(Start: 31 @7310 has 6 MA's), (Start: 36 @7328 has 2 MA's), (39, 7340), (48, 7394),

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

Candidate Starts for FrayBell_247:

(16, 134089), (Start: 26 @134131 has 197 MA's), (39, 134167), (40, 134173), (58, 134293), (62, 134311), (65, 134326),

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

Candidate Starts for FudgeTart_239:

(16, 134618), (Start: 26 @134660 has 197 MA's), (39, 134696), (40, 134702), (58, 134822), (62, 134840), (65, 134855), (70, 134894),

Gene: Fugax_75 Start: 50401, Stop: 50649, Start Num: 26

Candidate Starts for Fugax_75:

(1, 49570), (7, 50251), (20, 50386), (Start: 26 @50401 has 197 MA's), (45, 50461), (50, 50506), (53, 50518), (60, 50575),

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

Candidate Starts for Gabriel_247:

(16, 134048), (Start: 26 @134090 has 197 MA's), (Start: 37 @134117 has 2 MA's), (49, 134186), (58, 134252), (62, 134270), (65, 134285), (70, 134324),

Gene: GalaxyEater_10 Start: 4962, Stop: 5189, Start Num: 31

Candidate Starts for GalaxyEater_10:

(Start: 31 @4962 has 6 MA's),

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

Candidate Starts for Gamgam_246:

(16, 134405), (Start: 26 @134447 has 197 MA's), (Start: 37 @134474 has 2 MA's), (49, 134543), (58, 134609), (62, 134627), (65, 134642), (70, 134681),

Gene: Gezellig_69 Start: 50045, Stop: 50293, Start Num: 26

Candidate Starts for Gezellig_69:

(8, 49913), (22, 50033), (Start: 26 @50045 has 197 MA's), (45, 50105), (50, 50150), (53, 50162), (60, 50219),

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

Candidate Starts for Ghost_244:

(16, 135029), (Start: 26 @135071 has 197 MA's), (Start: 37 @135098 has 2 MA's), (49, 135167), (58, 135233), (62, 135251), (65, 135266), (70, 135305),

Gene: GiJojo_106 Start: 62792, Stop: 63085, Start Num: 29

Candidate Starts for GiJojo_106:

(Start: 29 @62792 has 2 MA's), (54, 62909), (60, 62957), (62, 62969), (71, 63035),

Gene: Gilson_68 Start: 54008, Stop: 54235, Start Num: 33

Candidate Starts for Gilson_68:

(Start: 33 @54008 has 17 MA's), (Start: 37 @54026 has 2 MA's), (40, 54041), (53, 54110),

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

Candidate Starts for Gizmo_249:

(16, 137445), (Start: 26 @137487 has 197 MA's), (Start: 37 @137514 has 2 MA's), (49, 137583), (62, 137667), (65, 137682), (70, 137721),

Gene: GlutenPhree_245 Start: 134458, Stop: 134760, Start Num: 26

Candidate Starts for GlutenPhree_245:

(16, 134416), (Start: 26 @134458 has 197 MA's), (Start: 37 @134485 has 2 MA's), (49, 134554), (58, 134620), (62, 134638), (65, 134653), (70, 134692),

Gene: GoCrazy_88 Start: 51547, Stop: 51804, Start Num: 23

Candidate Starts for GoCrazy_88:

(Start: 23 @51547 has 21 MA's),

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

Candidate Starts for Grasshills_251:

(16, 137021), (Start: 26 @137063 has 197 MA's), (Start: 37 @137090 has 2 MA's), (49, 137159), (58, 137225), (62, 137243), (65, 137258), (70, 137297),

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

Candidate Starts for Grungle_226:

(16, 132363), (Start: 26 @132405 has 197 MA's), (39, 132441), (40, 132447), (58, 132567), (62, 132585), (65, 132600),

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

Candidate Starts for Guwapp_240:

(16, 133863), (Start: 26 @133905 has 197 MA's), (Start: 37 @133932 has 2 MA's), (49, 134001), (58, 134067), (62, 134085), (65, 134100), (70, 134139),

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

Candidate Starts for Halldule_236:

(16, 133545), (Start: 26 @133587 has 197 MA's), (39, 133623), (40, 133629), (58, 133749), (62, 133767), (65, 133782),

Gene: Halo3_70 Start: 50630, Stop: 50878, Start Num: 26

Candidate Starts for Halo3_70:

(8, 50498), (22, 50618), (Start: 26 @50630 has 197 MA's), (45, 50690), (50, 50735), (53, 50747), (55, 50765), (60, 50804),

Gene: Hankly_93 Start: 52732, Stop: 52989, Start Num: 23

Candidate Starts for Hankly_93:

(Start: 23 @52732 has 21 MA's),

Gene: Heisenberger_91 Start: 52491, Stop: 52748, Start Num: 23

Candidate Starts for Heisenberger_91:

(Start: 23 @52491 has 21 MA's),

Gene: Hortihabitatio_71 Start: 48995, Stop: 49246, Start Num: 30

Candidate Starts for Hortihabitatio_71:

(28, 48992), (Start: 30 @48995 has 13 MA's), (40, 49031), (44, 49046), (56, 49121), (63, 49175), (68, 49214),

Gene: I3_254 Start: 136279, Stop: 136512, Start Num: 26

Candidate Starts for I3_254:

(16, 136237), (Start: 26 @136279 has 197 MA's), (Start: 37 @136306 has 2 MA's), (38, 136312), (49, 136375), (62, 136459), (65, 136474),

Gene: IkeLoa_238 Start: 134803, Stop: 135105, Start Num: 26

Candidate Starts for IkeLoa_238:

(16, 134761), (Start: 26 @134803 has 197 MA's), (Start: 37 @134830 has 2 MA's), (49, 134899), (58, 134965), (62, 134983), (65, 134998), (70, 135037),

Gene: InigoMontoya_248 Start: 135121, Stop: 135423, Start Num: 26

Candidate Starts for InigoMontoya_248:

(16, 135079), (Start: 26 @135121 has 197 MA's), (Start: 37 @135148 has 2 MA's), (49, 135217), (58, 135283), (62, 135301), (65, 135316), (70, 135355),

Gene: InterFolia_246 Start: 135936, Stop: 136169, Start Num: 26

Candidate Starts for InterFolia_246:

(16, 135894), (Start: 26 @135936 has 197 MA's), (39, 135972), (40, 135978), (58, 136098), (62, 136116), (65, 136131),

Gene: Iota_241 Start: 134833, Stop: 135135, Start Num: 26

Candidate Starts for Iota_241:

(16, 134791), (Start: 26 @134833 has 197 MA's), (Start: 37 @134860 has 2 MA's), (49, 134929), (62, 135013), (65, 135028), (70, 135067),

Gene: Issimir_237 Start: 134759, Stop: 135061, Start Num: 26

Candidate Starts for Issimir_237:

(16, 134717), (Start: 26 @134759 has 197 MA's), (39, 134795), (40, 134801), (58, 134921), (62, 134939), (65, 134954), (70, 134993),

Gene: Izajani_240 Start: 135653, Stop: 135955, Start Num: 26

Candidate Starts for Izajani_240:

(16, 135611), (Start: 26 @135653 has 197 MA's), (39, 135689), (40, 135695), (58, 135815), (62, 135833), (65, 135848), (70, 135887),

Gene: JEGGS_91 Start: 52570, Stop: 52827, Start Num: 23

Candidate Starts for JEGGS_91:

(Start: 23 @52570 has 21 MA's),

Gene: JPickles_241 Start: 133809, Stop: 134111, Start Num: 26

Candidate Starts for JPickles_241:

(16, 133767), (Start: 26 @133809 has 197 MA's), (Start: 37 @133836 has 2 MA's), (49, 133905), (58, 133971), (62, 133989), (65, 134004), (70, 134043),

Gene: Jada_67 Start: 53934, Stop: 54161, Start Num: 33

Candidate Starts for Jada_67:

(Start: 33 @53934 has 17 MA's), (Start: 37 @53952 has 2 MA's), (40, 53967), (53, 54036),

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

Candidate Starts for Janiyra_247:

(16, 135304), (Start: 26 @135346 has 197 MA's), (Start: 37 @135373 has 2 MA's), (49, 135442), (58, 135508), (62, 135526), (65, 135541), (70, 135580),

Gene: Jasmine_8 Start: 3920, Stop: 4156, Start Num: 33

Candidate Starts for Jasmine_8:

(Start: 33 @3920 has 17 MA's), (63, 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), (39, 134736), (40, 134742), (58, 134862), (62, 134880),

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

Candidate Starts for Jaygup_241:

(16, 134938), (Start: 26 @134980 has 197 MA's), (Start: 37 @135007 has 2 MA's), (49, 135076), (58, 135142), (62, 135160), (65, 135175), (70, 135214),

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

Candidate Starts for Jedediah_246:

(16, 135991), (Start: 26 @136033 has 197 MA's), (Start: 37 @136060 has 2 MA's), (49, 136129), (58, 136195), (62, 136213), (65, 136228), (70, 136267),

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

Candidate Starts for Jemmno_244:

(16, 134710), (Start: 26 @134752 has 197 MA's), (Start: 37 @134779 has 2 MA's), (49, 134848), (58, 134914), (62, 134932), (65, 134947), (70, 134986),

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

Candidate Starts for Jessibeth14_244:

(16, 136186), (Start: 26 @136228 has 197 MA's), (Start: 37 @136255 has 2 MA's), (49, 136324), (58, 136390), (62, 136408), (65, 136423), (70, 136462),

Gene: Jezreel_241 Start: 135297, Stop: 135599, Start Num: 26

Candidate Starts for Jezreel_241:

(16, 135255), (Start: 26 @135297 has 197 MA's), (39, 135333), (40, 135339), (58, 135459), (62, 135477), (65, 135492), (70, 135531),

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

Candidate Starts for JigglyPuff_250:

(16, 136681), (Start: 26 @136723 has 197 MA's), (Start: 37 @136750 has 2 MA's), (49, 136819), (62, 136903), (65, 136918), (70, 136957),

Gene: JulesRay_70 Start: 48372, Stop: 48626, Start Num: 30

Candidate Starts for JulesRay_70:

(Start: 30 @48372 has 13 MA's), (34, 48378), (40, 48408), (46, 48438), (66, 48564), (69, 48597),

Gene: JulietS_233 Start: 132332, Stop: 132634, Start Num: 26

Candidate Starts for JulietS_233:

(16, 132290), (Start: 26 @132332 has 197 MA's), (Start: 37 @132359 has 2 MA's), (49, 132428), (58, 132494), (62, 132512), (65, 132527), (70, 132566),

Gene: JustBecause_9 Start: 5308, Stop: 5589, Start Num: 31

Candidate Starts for JustBecause_9:

(Start: 31 @5308 has 6 MA's), (Start: 36 @5326 has 2 MA's), (48, 5392), (52, 5410), (62, 5482),

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

Candidate Starts for JustHall_238:

(16, 134240), (Start: 26 @134282 has 197 MA's), (Start: 37 @134309 has 2 MA's), (49, 134378), (58, 134444), (62, 134462), (65, 134477), (70, 134516),

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

Candidate Starts for Kamryn_243:

(16, 135830), (Start: 26 @135872 has 197 MA's), (39, 135908), (40, 135914), (58, 136034), (62, 136052), (64, 136061), (65, 136067), (70, 136106),

Gene: Kardesai_91 Start: 52160, Stop: 52417, Start Num: 23

Candidate Starts for Kardesai_91:

(Start: 23 @52160 has 21 MA's),

Gene: Karp_65 Start: 54933, Stop: 55160, Start Num: 33
Candidate Starts for Karp_65:
(Start: 33 @54933 has 17 MA's), (Start: 37 @54951 has 2 MA's), (53, 55035), (62, 55104), (63, 55110),

Gene: Kboogie_248 Start: 134911, Stop: 135213, Start Num: 26
Candidate Starts for Kboogie_248:
(16, 134869), (Start: 26 @134911 has 197 MA's), (Start: 37 @134938 has 2 MA's), (49, 135007), (58, 135073), (62, 135091), (65, 135106), (70, 135145),

Gene: KeaneyLin_90 Start: 52585, Stop: 52842, Start Num: 23
Candidate Starts for KeaneyLin_90:
(Start: 23 @52585 has 21 MA's),

Gene: Kela_9 Start: 5299, Stop: 5580, Start Num: 31
Candidate Starts for Kela_9:
(Start: 31 @5299 has 6 MA's), (Start: 36 @5317 has 2 MA's), (48, 5383), (52, 5401), (62, 5473),

Gene: Kenrey_69 Start: 54190, Stop: 54417, Start Num: 33
Candidate Starts for Kenrey_69:
(Start: 33 @54190 has 17 MA's), (Start: 37 @54208 has 2 MA's), (40, 54223), (53, 54292), (63, 54367), (66, 54379),

Gene: Khaleesi_243 Start: 135695, Stop: 135997, Start Num: 26
Candidate Starts for Khaleesi_243:
(16, 135653), (Start: 26 @135695 has 197 MA's), (Start: 37 @135722 has 2 MA's), (49, 135791), (58, 135857), (62, 135875), (65, 135890), (70, 135929),

Gene: KimmyK_72 Start: 50492, Stop: 50740, Start Num: 26
Candidate Starts for KimmyK_72:
(8, 50360), (22, 50480), (Start: 26 @50492 has 197 MA's), (45, 50552), (50, 50597), (53, 50609), (60, 50666),

Gene: Koguma_243 Start: 134564, Stop: 134797, Start Num: 26
Candidate Starts for Koguma_243:
(16, 134522), (Start: 26 @134564 has 197 MA's), (39, 134600), (40, 134606), (58, 134726), (62, 134744), (65, 134759),

Gene: Kradal_11 Start: 6341, Stop: 6610, Start Num: 31
Candidate Starts for Kradal_11:
(3, 5894), (4, 6011), (6, 6146), (14, 6257), (19, 6299), (Start: 31 @6341 has 6 MA's), (62, 6515), (64, 6524), (69, 6566),

Gene: LRRHood_236 Start: 133904, Stop: 134206, Start Num: 26
Candidate Starts for LRRHood_236:
(16, 133862), (Start: 26 @133904 has 197 MA's), (Start: 37 @133931 has 2 MA's), (49, 134000), (58, 134066), (62, 134084), (65, 134099), (70, 134138),

Gene: Labradorite_241 Start: 134471, Stop: 134773, Start Num: 26
Candidate Starts for Labradorite_241:
(16, 134429), (Start: 26 @134471 has 197 MA's), (Start: 37 @134498 has 2 MA's), (49, 134567), (58, 134633), (62, 134651), (65, 134666), (70, 134705),

Gene: Latch_244 Start: 134457, Stop: 134759, Start Num: 26

Candidate Starts for Latch_244:

(16, 134415), (Start: 26 @134457 has 197 MA's), (Start: 37 @134484 has 2 MA's), (49, 134553), (58, 134619), (62, 134637), (65, 134652), (70, 134691),

Gene: Lee7_243 Start: 137109, Stop: 137411, Start Num: 26

Candidate Starts for Lee7_243:

(16, 137067), (Start: 26 @137109 has 197 MA's), (39, 137145), (40, 137151), (58, 137271), (62, 137289), (65, 137304), (70, 137343),

Gene: Lethe_242 Start: 136348, Stop: 136581, Start Num: 26

Candidate Starts for Lethe_242:

(16, 136306), (Start: 26 @136348 has 197 MA's), (39, 136384), (40, 136390), (58, 136510), (62, 136528), (65, 136543),

Gene: LifeSavor_245 Start: 135685, Stop: 135987, Start Num: 26

Candidate Starts for LifeSavor_245:

(16, 135643), (Start: 26 @135685 has 197 MA's), (Start: 37 @135712 has 2 MA's), (49, 135781), (58, 135847), (62, 135865), (65, 135880), (70, 135919),

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

Candidate Starts for LinStu_241:

(16, 133821), (Start: 26 @133863 has 197 MA's), (39, 133899), (40, 133905), (58, 134025), (62, 134043), (65, 134058),

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

Candidate Starts for Littleton_248:

(16, 135652), (Start: 26 @135694 has 197 MA's), (Start: 37 @135721 has 2 MA's), (49, 135790), (58, 135856), (62, 135874), (65, 135889), (70, 135928),

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

Candidate Starts for Loanshark_241:

(16, 135002), (Start: 26 @135044 has 197 MA's), (39, 135080), (40, 135086), (58, 135206), (62, 135224), (65, 135239), (70, 135278),

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

Candidate Starts for LolaVinca_240:

(16, 135324), (Start: 26 @135366 has 197 MA's), (39, 135402), (40, 135408), (58, 135528), (62, 135546), (65, 135561),

Gene: LookingGlass_242 Start: 135202, Stop: 135504, Start Num: 26

Candidate Starts for LookingGlass_242:

(16, 135160), (Start: 26 @135202 has 197 MA's), (Start: 37 @135229 has 2 MA's), (49, 135298), (58, 135364), (62, 135382), (65, 135397), (70, 135436),

Gene: LordLeafolot_245 Start: 134979, Stop: 135212, Start Num: 26

Candidate Starts for LordLeafolot_245:

(16, 134937), (Start: 26 @134979 has 197 MA's), (39, 135015), (40, 135021), (58, 135141), (62, 135159), (65, 135174),

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

Candidate Starts for Lukilu_233:

(16, 135878), (Start: 26 @135920 has 197 MA's), (Start: 37 @135947 has 2 MA's), (49, 136016), (58, 136082), (62, 136100), (65, 136115), (70, 136154),

Gene: Lunareta_241 Start: 135720, Stop: 135953, Start Num: 25
Candidate Starts for Lunareta_241:
(16, 135681), (Start: 25 @135720 has 3 MA's), (39, 135756), (40, 135762), (58, 135882), (62, 135900),

Gene: Maby2021_244 Start: 136148, Stop: 136450, Start Num: 26
Candidate Starts for Maby2021_244:
(16, 136106), (Start: 26 @136148 has 197 MA's), (Start: 37 @136175 has 2 MA's), (49, 136244), (62, 136328), (65, 136343), (70, 136382),

Gene: Mangeria_244 Start: 135923, Stop: 136156, Start Num: 26
Candidate Starts for Mangeria_244:
(16, 135881), (17, 135884), (Start: 26 @135923 has 197 MA's), (39, 135959), (40, 135965), (58, 136085), (62, 136103), (65, 136118),

Gene: Matsumoto_242 Start: 134899, Stop: 135201, Start Num: 26
Candidate Starts for Matsumoto_242:
(16, 134857), (Start: 26 @134899 has 197 MA's), (Start: 37 @134926 has 2 MA's), (49, 134995), (58, 135061), (62, 135079), (65, 135094), (70, 135133),

Gene: Maturis_238 Start: 134686, Stop: 134919, Start Num: 25
Candidate Starts for Maturis_238:
(16, 134647), (Start: 25 @134686 has 3 MA's), (39, 134722), (40, 134728), (58, 134848), (62, 134866),

Gene: Maupel_67 Start: 54008, Stop: 54235, Start Num: 33
Candidate Starts for Maupel_67:
(Start: 33 @54008 has 17 MA's), (Start: 37 @54026 has 2 MA's), (40, 54041), (53, 54110),

Gene: McGee_245 Start: 134796, Stop: 135098, Start Num: 26
Candidate Starts for McGee_245:
(16, 134754), (Start: 26 @134796 has 197 MA's), (Start: 37 @134823 has 2 MA's), (49, 134892), (58, 134958), (62, 134976), (65, 134991), (70, 135030),

Gene: McWolfish_241 Start: 134906, Stop: 135208, Start Num: 26
Candidate Starts for McWolfish_241:
(16, 134864), (Start: 26 @134906 has 197 MA's), (Start: 37 @134933 has 2 MA's), (49, 135002), (58, 135068), (62, 135086), (65, 135101), (70, 135140),

Gene: Megamind_241 Start: 135231, Stop: 135533, Start Num: 26
Candidate Starts for Megamind_241:
(16, 135189), (Start: 26 @135231 has 197 MA's), (39, 135267), (40, 135273), (58, 135393), (62, 135411), (65, 135426), (70, 135465),

Gene: MeganTheeKilla_66 Start: 53369, Stop: 53596, Start Num: 33
Candidate Starts for MeganTheeKilla_66:
(Start: 33 @53369 has 17 MA's), (Start: 37 @53387 has 2 MA's), (40, 53402), (53, 53471), (63, 53546),

Gene: Melpomini_239 Start: 133991, Stop: 134293, Start Num: 26
Candidate Starts for Melpomini_239:
(16, 133949), (Start: 26 @133991 has 197 MA's), (Start: 37 @134018 has 2 MA's), (49, 134087), (58, 134153), (62, 134171), (65, 134186), (70, 134225),

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

Candidate Starts for MikeLiesIn_245:

(16, 136325), (Start: 26 @136367 has 197 MA's), (39, 136403), (40, 136409), (58, 136529), (62, 136547), (65, 136562), (70, 136601),

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

Candidate Starts for Mikro_238:

(16, 136837), (Start: 26 @136879 has 197 MA's), (39, 136915), (40, 136921), (58, 137041), (62, 137059), (65, 137074),

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

Candidate Starts for MoMoMixon_240:

(16, 135330), (Start: 26 @135372 has 197 MA's), (Start: 37 @135399 has 2 MA's), (49, 135468), (62, 135552), (65, 135567), (70, 135606),

Gene: Moab_67 Start: 55209, Stop: 55436, Start Num: 33

Candidate Starts for Moab_67:

(Start: 33 @55209 has 17 MA's), (Start: 37 @55227 has 2 MA's),

Gene: ModicumRichard_55 Start: 40221, Stop: 40475, Start Num: 24

Candidate Starts for ModicumRichard_55:

(5, 40035), (10, 40116), (Start: 24 @40221 has 5 MA's), (49, 40326), (65, 40425),

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

Candidate Starts for Momo_246:

(16, 134415), (Start: 26 @134457 has 197 MA's), (Start: 37 @134484 has 2 MA's), (49, 134553), (58, 134619), (62, 134637), (65, 134652), (70, 134691),

Gene: Montpel_241 Start: 135718, Stop: 135951, Start Num: 25

Candidate Starts for Montpel_241:

(16, 135679), (Start: 25 @135718 has 3 MA's), (39, 135754), (40, 135760), (58, 135880), (62, 135898),

Gene: Mooshroom_93 Start: 52160, Stop: 52417, Start Num: 23

Candidate Starts for Mooshroom_93:

(Start: 23 @52160 has 21 MA's),

Gene: Morgana_55 Start: 40172, Stop: 40429, Start Num: 24

Candidate Starts for Morgana_55:

(10, 40070), (Start: 24 @40172 has 5 MA's), (49, 40277), (65, 40376),

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

Candidate Starts for Morizzled23_241:

(16, 133782), (Start: 26 @133824 has 197 MA's), (Start: 37 @133851 has 2 MA's), (49, 133920), (58, 133986), (62, 134004), (65, 134019), (70, 134058),

Gene: Mudcat_87 Start: 53725, Stop: 53982, Start Num: 23

Candidate Starts for Mudcat_87:

(Start: 23 @53725 has 21 MA's),

Gene: Mutzi_71 Start: 51265, Stop: 51513, Start Num: 26

Candidate Starts for Mutzi_71:

(7, 51115), (20, 51250), (Start: 26 @51265 has 197 MA's), (45, 51325), (50, 51370), (53, 51382), (55, 51400), (60, 51439),

Gene: Mysticmoon_71 Start: 49282, Stop: 49524, Start Num: 30
Candidate Starts for Mysticmoon_71:
(Start: 30 @49282 has 13 MA's), (34, 49288), (40, 49318), (44, 49333), (56, 49408), (63, 49462),

Gene: Naija_245 Start: 135160, Stop: 135462, Start Num: 26
Candidate Starts for Naija_245:
(16, 135118), (Start: 26 @135160 has 197 MA's), (Start: 37 @135187 has 2 MA's), (49, 135256), (58, 135322), (62, 135340), (65, 135355), (70, 135394),

Gene: Napoleon13_241 Start: 134189, Stop: 134491, Start Num: 26
Candidate Starts for Napoleon13_241:
(16, 134147), (Start: 26 @134189 has 197 MA's), (Start: 37 @134216 has 2 MA's), (49, 134285), (58, 134351), (62, 134369), (65, 134384), (70, 134423),

Gene: NapoleonB_93 Start: 52622, Stop: 52879, Start Num: 23
Candidate Starts for NapoleonB_93:
(Start: 23 @52622 has 21 MA's),

Gene: Nappy_243 Start: 136335, Stop: 136568, Start Num: 26
Candidate Starts for Nappy_243:
(16, 136293), (Start: 26 @136335 has 197 MA's), (39, 136371), (40, 136377), (58, 136497), (62, 136515), (65, 136530),

Gene: Nason_90 Start: 52556, Stop: 52813, Start Num: 23
Candidate Starts for Nason_90:
(Start: 23 @52556 has 21 MA's), (40, 52601),

Gene: Naval22_249 Start: 136940, Stop: 137242, Start Num: 26
Candidate Starts for Naval22_249:
(16, 136898), (Start: 26 @136940 has 197 MA's), (Start: 37 @136967 has 2 MA's), (49, 137036), (62, 137120), (65, 137135), (70, 137174),

Gene: NedWong_243 Start: 135618, Stop: 135920, Start Num: 26
Candidate Starts for NedWong_243:
(16, 135576), (Start: 26 @135618 has 197 MA's), (39, 135654), (40, 135660), (58, 135780), (62, 135798), (65, 135813), (70, 135852),

Gene: Ngannou_239 Start: 134142, Stop: 134444, Start Num: 26
Candidate Starts for Ngannou_239:
(16, 134100), (Start: 26 @134142 has 197 MA's), (Start: 37 @134169 has 2 MA's), (49, 134238), (58, 134304), (62, 134322), (65, 134337), (70, 134376),

Gene: Nidhogg_245 Start: 135986, Stop: 136288, Start Num: 26
Candidate Starts for Nidhogg_245:
(16, 135944), (Start: 26 @135986 has 197 MA's), (39, 136022), (40, 136028), (58, 136148), (62, 136166), (65, 136181), (70, 136220),

Gene: Nirvana_15 Start: 7592, Stop: 7855, Start Num: 36
Candidate Starts for Nirvana_15:
(Start: 31 @7574 has 6 MA's), (Start: 36 @7592 has 2 MA's), (39, 7604), (62, 7748), (63, 7754),

Gene: NoPickles_69 Start: 47540, Stop: 47794, Start Num: 30
Candidate Starts for NoPickles_69:

(Start: 30 @47540 has 13 MA's), (40, 47576), (46, 47606), (66, 47732), (69, 47765),

Gene: NoodleTree_240 Start: 130737, Stop: 131039, Start Num: 26

Candidate Starts for NoodleTree_240:

(16, 130695), (Start: 26 @130737 has 197 MA's), (Start: 37 @130764 has 2 MA's), (49, 130833), (58, 130899), (62, 130917), (65, 130932), (70, 130971),

Gene: Norm_244 Start: 135887, Stop: 136189, Start Num: 26

Candidate Starts for Norm_244:

(16, 135845), (Start: 26 @135887 has 197 MA's), (39, 135923), (40, 135929), (58, 136049), (62, 136067), (65, 136082), (70, 136121),

Gene: Nubi_72 Start: 50104, Stop: 50346, Start Num: 26

Candidate Starts for Nubi_72:

(13, 50047), (Start: 26 @50104 has 197 MA's), (45, 50164), (50, 50209), (53, 50221), (55, 50239), (60, 50278),

Gene: NuevoMundo_246 Start: 136442, Stop: 136675, Start Num: 26

Candidate Starts for NuevoMundo_246:

(16, 136400), (Start: 26 @136442 has 197 MA's), (39, 136478), (40, 136484), (58, 136604), (62, 136622), (65, 136637),

Gene: ObLaDi_55 Start: 40212, Stop: 40466, Start Num: 24

Candidate Starts for ObLaDi_55:

(10, 40107), (Start: 24 @40212 has 5 MA's), (49, 40317), (65, 40416),

Gene: OrediggerDelux_239 Start: 136113, Stop: 136415, Start Num: 26

Candidate Starts for OrediggerDelux_239:

(16, 136071), (Start: 26 @136113 has 197 MA's), (39, 136149), (40, 136155), (58, 136275), (62, 136293), (65, 136308), (70, 136347),

Gene: ParkTD_243 Start: 135457, Stop: 135759, Start Num: 26

Candidate Starts for ParkTD_243:

(16, 135415), (Start: 26 @135457 has 197 MA's), (39, 135493), (40, 135499), (58, 135619), (62, 135637), (65, 135652), (70, 135691),

Gene: Patelgo_67 Start: 55396, Stop: 55623, Start Num: 33

Candidate Starts for Patelgo_67:

(Start: 33 @55396 has 17 MA's), (Start: 37 @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 197 MA's), (39, 135222), (40, 135228), (58, 135348), (62, 135366), (65, 135381),

Gene: Petite_72 Start: 49631, Stop: 49885, Start Num: 30

Candidate Starts for Petite_72:

(Start: 30 @49631 has 13 MA's), (40, 49667), (46, 49697), (66, 49823), (69, 49856),

Gene: PharkleMinkus_246 Start: 134130, Stop: 134363, Start Num: 26

Candidate Starts for PharkleMinkus_246:

(16, 134088), (Start: 26 @134130 has 197 MA's), (39, 134166), (40, 134172), (58, 134292), (62, 134310), (65, 134325),

Gene: Pherobrine_70 Start: 49341, Stop: 49583, Start Num: 30

Candidate Starts for Pherobrine_70:

(Start: 30 @49341 has 13 MA's), (40, 49377), (44, 49392), (56, 49467), (63, 49521),

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

Candidate Starts for Phlegm_249:

(16, 135821), (Start: 26 @135863 has 197 MA's), (Start: 37 @135890 has 2 MA's), (49, 135959), (58, 136025), (62, 136043), (65, 136058), (70, 136097),

Gene: Phlop_70 Start: 50135, Stop: 50383, Start Num: 26

Candidate Starts for Phlop_70:

(8, 50003), (22, 50123), (Start: 26 @50135 has 197 MA's), (45, 50195), (50, 50240), (51, 50243), (53, 50252), (60, 50309),

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

Candidate Starts for Phox_245:

(16, 135070), (Start: 26 @135112 has 197 MA's), (39, 135148), (40, 135154), (58, 135274), (62, 135292), (65, 135307), (70, 135346),

Gene: Phredrick_67 Start: 53261, Stop: 53488, Start Num: 33

Candidate Starts for Phredrick_67:

(Start: 33 @53261 has 17 MA's), (Start: 37 @53279 has 2 MA's), (40, 53294), (53, 53363), (63, 53438), (66, 53450),

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

Candidate Starts for Phusco_243:

(16, 134653), (Start: 26 @134695 has 197 MA's), (Start: 37 @134722 has 2 MA's), (49, 134791), (58, 134857), (62, 134875), (65, 134890), (70, 134929),

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

Candidate Starts for Pier_243:

(16, 135946), (Start: 26 @135988 has 197 MA's), (39, 136024), (40, 136030), (58, 136150), (62, 136168), (65, 136183), (70, 136222),

Gene: PinkCoffee_74 Start: 50431, Stop: 50679, Start Num: 26

Candidate Starts for PinkCoffee_74:

(7, 50281), (20, 50416), (Start: 26 @50431 has 197 MA's), (45, 50491), (50, 50536), (53, 50548), (60, 50605),

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

Candidate Starts for Pio_251:

(16, 137149), (Start: 26 @137191 has 197 MA's), (Start: 37 @137218 has 2 MA's), (49, 137287), (58, 137353), (62, 137371), (65, 137386), (70, 137425),

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

Candidate Starts for Pivoine_245:

(16, 135118), (Start: 26 @135160 has 197 MA's), (Start: 37 @135187 has 2 MA's), (49, 135256), (58, 135322), (62, 135340), (65, 135355), (70, 135394),

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

Candidate Starts for Pleione_248:

(16, 135881), (Start: 26 @135923 has 197 MA's), (Start: 37 @135950 has 2 MA's), (49, 136019), (62, 136103), (65, 136118), (70, 136157),

Gene: Portcullis_73 Start: 50182, Stop: 50424, Start Num: 26

Candidate Starts for Portcullis_73:

(13, 50125), (Start: 26 @50182 has 197 MA's), (45, 50242), (50, 50287), (53, 50299), (55, 50317), (60, 50356),

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

Candidate Starts for Primadonna_238:

(16, 134781), (Start: 26 @134823 has 197 MA's), (Start: 37 @134850 has 2 MA's), (49, 134919), (58, 134985), (62, 135003), (65, 135018), (70, 135057),

Gene: PullumCavea_71 Start: 50312, Stop: 50560, Start Num: 26

Candidate Starts for PullumCavea_71:

(8, 50180), (22, 50300), (Start: 26 @50312 has 197 MA's), (45, 50372), (50, 50417), (51, 50420), (53, 50429), (60, 50486),

Gene: Pupusa_247 Start: 136487, Stop: 136789, Start Num: 26

Candidate Starts for Pupusa_247:

(16, 136445), (Start: 26 @136487 has 197 MA's), (Start: 37 @136514 has 2 MA's), (49, 136583), (58, 136649), (62, 136667), (65, 136682), (70, 136721),

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

Candidate Starts for PurduePete_244:

(16, 136146), (Start: 26 @136188 has 197 MA's), (Start: 37 @136215 has 2 MA's), (49, 136284), (58, 136350), (62, 136368), (65, 136383), (70, 136422),

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

Candidate Starts for QBert_236:

(16, 133469), (Start: 26 @133511 has 197 MA's), (Start: 37 @133538 has 2 MA's), (49, 133607), (58, 133673), (62, 133691), (65, 133706), (70, 133745),

Gene: Quantum_11 Start: 6341, Stop: 6610, Start Num: 31

Candidate Starts for Quantum_11:

(3, 5894), (4, 6011), (6, 6146), (14, 6257), (19, 6299), (Start: 31 @6341 has 6 MA's), (62, 6515), (64, 6524), (69, 6566),

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

Candidate Starts for Quasimodo_247:

(16, 135454), (Start: 26 @135496 has 197 MA's), (Start: 37 @135523 has 2 MA's), (49, 135592), (58, 135658), (62, 135676), (65, 135691), (70, 135730),

Gene: RIPWilbur_17 Start: 6338, Stop: 6580, Start Num: 26

Candidate Starts for RIPWilbur_17:

(Start: 26 @6338 has 197 MA's), (35, 6359), (39, 6374), (41, 6383), (42, 6389), (49, 6434),

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

Candidate Starts for Rahel_246:

(16, 135556), (Start: 26 @135598 has 197 MA's), (Start: 37 @135625 has 2 MA's), (49, 135694), (58, 135760), (62, 135778), (65, 135793), (70, 135832),

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

Candidate Starts for Rizal_233:

(16, 133371), (Start: 26 @133413 has 197 MA's), (Start: 37 @133440 has 2 MA's), (49, 133509), (58, 133575), (62, 133593), (65, 133608), (70, 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: 26 @5999 has 197 MA's), (53, 6110), (62, 6179),

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

Candidate Starts for RoMag_239:

(16, 135152), (Start: 26 @135194 has 197 MA's), (Start: 37 @135221 has 2 MA's), (49, 135290), (58, 135356), (62, 135374), (65, 135389), (70, 135428),

Gene: Rocha_240 Start: 134759, Stop: 135061, Start Num: 26

Candidate Starts for Rocha_240:

(16, 134717), (Start: 26 @134759 has 197 MA's), (Start: 37 @134786 has 2 MA's), (49, 134855), (58, 134921), (62, 134939), (65, 134954), (70, 134993),

Gene: RogerDodger_76 Start: 51380, Stop: 51628, Start Num: 26

Candidate Starts for RogerDodger_76:

(Start: 26 @51380 has 197 MA's), (45, 51440), (50, 51485), (53, 51497), (55, 51515), (60, 51554), (65, 51581),

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

Candidate Starts for Ronan_240:

(16, 133544), (Start: 26 @133586 has 197 MA's), (39, 133622), (40, 133628), (58, 133748), (62, 133766), (65, 133781), (70, 133820),

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

Candidate Starts for Roots515_247:

(16, 136697), (Start: 26 @136739 has 197 MA's), (39, 136775), (40, 136781), (58, 136901), (62, 136919), (65, 136934), (70, 136973),

Gene: SVoro_239 Start: 135496, Stop: 135798, Start Num: 26

Candidate Starts for SVoro_239:

(16, 135454), (Start: 26 @135496 has 197 MA's), (Start: 37 @135523 has 2 MA's), (49, 135592), (58, 135658), (62, 135676), (65, 135691), (70, 135730),

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

Candidate Starts for Salacia_245:

(16, 136572), (Start: 26 @136614 has 197 MA's), (39, 136650), (40, 136656), (58, 136776), (62, 136794), (65, 136809), (70, 136848),

Gene: Salvador_72 Start: 50171, Stop: 50419, Start Num: 26

Candidate Starts for Salvador_72:

(7, 50021), (20, 50156), (Start: 26 @50171 has 197 MA's), (45, 50231), (50, 50276), (53, 50288), (55, 50306), (60, 50345),

Gene: Sarkar_12 Start: 6341, Stop: 6610, Start Num: 31

Candidate Starts for Sarkar_12:

(3, 5894), (4, 6011), (6, 6146), (14, 6257), (19, 6299), (Start: 31 @6341 has 6 MA's), (62, 6515), (64, 6524), (69, 6566),

Gene: Satis_11 Start: 6337, Stop: 6606, Start Num: 31

Candidate Starts for Satis_11:

(2, 5710), (4, 6007), (6, 6142), (14, 6253), (19, 6295), (Start: 31 @6337 has 6 MA's), (39, 6367), (62, 6511), (64, 6520), (69, 6562),

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

Candidate Starts for Sauce_241:

(16, 134880), (Start: 26 @134922 has 197 MA's), (Start: 37 @134949 has 2 MA's), (49, 135018), (58, 135084), (62, 135102), (65, 135117), (70, 135156),

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

Candidate Starts for Schwartz33_69:

(Start: 27 @48060 has 1 MA's), (40, 48102), (44, 48117), (59, 48225), (61, 48237), (68, 48285),

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

Candidate Starts for ScottMcG_236:

(16, 134150), (Start: 26 @134192 has 197 MA's), (39, 134228), (40, 134234), (58, 134354), (62, 134372), (65, 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), (39, 135927), (40, 135933), (58, 136053), (62, 136071),

Gene: Secretariat_68 Start: 47409, Stop: 47657, Start Num: 32

Candidate Starts for Secretariat_68:

(22, 47385), (Start: 32 @47409 has 1 MA's), (40, 47442), (44, 47457), (61, 47577), (64, 47589), (68, 47625),

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

Candidate Starts for Shaqnato_235:

(16, 134290), (Start: 26 @134332 has 197 MA's), (Start: 37 @134359 has 2 MA's), (49, 134428), (58, 134494), (62, 134512), (65, 134527), (70, 134566),

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

Candidate Starts for Shelob_245:

(16, 137015), (Start: 26 @137057 has 197 MA's), (39, 137093), (40, 137099), (58, 137219), (62, 137237), (65, 137252), (70, 137291),

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

Candidate Starts for ShiaLabeouf_242:

(16, 134874), (Start: 26 @134916 has 197 MA's), (Start: 37 @134943 has 2 MA's), (49, 135012), (58, 135078), (62, 135096), (65, 135111), (70, 135150),

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

Candidate Starts for Shnickers_243:

(16, 134938), (Start: 26 @134980 has 197 MA's), (Start: 37 @135007 has 2 MA's), (49, 135076), (58, 135142), (62, 135160), (65, 135175), (70, 135214),

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

Candidate Starts for Shrimp_246:

(16, 136183), (Start: 26 @136225 has 197 MA's), (Start: 37 @136252 has 2 MA's), (49, 136321), (62, 136405), (65, 136420), (70, 136459),

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

Candidate Starts for SilverDipper_249:

(16, 135674), (Start: 26 @135716 has 197 MA's), (Start: 37 @135743 has 2 MA's), (49, 135812), (58, 135878), (62, 135896), (65, 135911), (70, 135950),

Gene: Skog_75 Start: 30969, Stop: 31244, Start Num: 26

Candidate Starts for Skog_75:

(11, 30897), (Start: 26 @30969 has 197 MA's), (38, 31002), (43, 31023), (45, 31029), (50, 31074), (51, 31077), (53, 31086), (57, 31113), (60, 31143), (68, 31206),

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

Candidate Starts for SmallFry_245:

(16, 135032), (Start: 26 @135074 has 197 MA's), (Start: 37 @135101 has 2 MA's), (49, 135170), (58, 135236), (62, 135254), (65, 135269), (70, 135308),

Gene: SmokingBunny_73 Start: 51218, Stop: 51466, Start Num: 26

Candidate Starts for SmokingBunny_73:

(Start: 26 @51218 has 197 MA's), (38, 51251), (45, 51278), (50, 51323), (53, 51335), (55, 51353), (60, 51392), (65, 51419),

Gene: SparkleGoddess_67 Start: 55353, Stop: 55562, Start Num: 37

Candidate Starts for SparkleGoddess_67:

(Start: 33 @55335 has 17 MA's), (Start: 37 @55353 has 2 MA's), (53, 55437), (62, 55506), (63, 55512),

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

Candidate Starts for Spec_238:

(16, 135113), (Start: 26 @135155 has 197 MA's), (39, 135191), (40, 135197), (58, 135317), (62, 135335), (65, 135350),

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

Candidate Starts for Specks_248:

(16, 135523), (Start: 26 @135565 has 197 MA's), (Start: 37 @135592 has 2 MA's), (49, 135661), (58, 135727), (62, 135745), (65, 135760), (70, 135799),

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

Candidate Starts for Sprinklers_242:

(16, 134780), (Start: 26 @134822 has 197 MA's), (Start: 37 @134849 has 2 MA's), (49, 134918), (58, 134984), (62, 135002), (65, 135017), (70, 135056),

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

Candidate Starts for Spud_236:

(16, 134489), (Start: 26 @134531 has 197 MA's), (Start: 37 @134558 has 2 MA's), (49, 134627), (58, 134693), (62, 134711), (65, 134726), (70, 134765),

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

Candidate Starts for SrishMeg2525_241:

(16, 135678), (Start: 26 @135720 has 197 MA's), (39, 135756), (40, 135762), (58, 135882), (62, 135900), (65, 135915), (70, 135954),

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

Candidate Starts for StephanieG_238:

(16, 135675), (Start: 26 @135717 has 197 MA's), (Start: 37 @135744 has 2 MA's), (49, 135813), (58, 135879), (62, 135897), (65, 135912), (70, 135951),

Gene: Stigma_66 Start: 55349, Stop: 55576, Start Num: 33
Candidate Starts for Stigma_66:
(Start: 33 @55349 has 17 MA's), (Start: 37 @55367 has 2 MA's), (53, 55451), (62, 55520), (63, 55526),

Gene: StubbySaigey_250 Start: 135250, Stop: 135552, Start Num: 26
Candidate Starts for StubbySaigey_250:
(16, 135208), (Start: 26 @135250 has 197 MA's), (Start: 37 @135277 has 2 MA's), (49, 135346), (58, 135412), (62, 135430), (65, 135445), (70, 135484),

Gene: Substance289_240 Start: 135122, Stop: 135424, Start Num: 26
Candidate Starts for Substance289_240:
(16, 135080), (Start: 26 @135122 has 197 MA's), (Start: 37 @135149 has 2 MA's), (49, 135218), (58, 135284), (62, 135302), (65, 135317), (70, 135356),

Gene: Tainan_244 Start: 134706, Stop: 134939, Start Num: 26
Candidate Starts for Tainan_244:
(16, 134664), (Start: 26 @134706 has 197 MA's), (39, 134742), (40, 134748), (58, 134868), (62, 134886), (65, 134901),

Gene: Tairn4Wing_72 Start: 48216, Stop: 48470, Start Num: 30
Candidate Starts for Tairn4Wing_72:
(Start: 30 @48216 has 13 MA's), (40, 48252), (46, 48282), (66, 48408), (69, 48441),

Gene: Talon44_72 Start: 48492, Stop: 48746, Start Num: 30
Candidate Starts for Talon44_72:
(Start: 30 @48492 has 13 MA's), (40, 48528), (46, 48558), (66, 48684), (69, 48717),

Gene: Tank_14 Start: 5999, Stop: 6256, Start Num: 21
Candidate Starts for Tank_14:
(Start: 21 @5999 has 3 MA's), (Start: 31 @6023 has 6 MA's), (47, 6092), (62, 6194),

Gene: Teardrop_242 Start: 134577, Stop: 134879, Start Num: 26
Candidate Starts for Teardrop_242:
(16, 134535), (Start: 26 @134577 has 197 MA's), (Start: 37 @134604 has 2 MA's), (49, 134673), (58, 134739), (62, 134757), (65, 134772), (70, 134811),

Gene: TinyTim_242 Start: 134544, Stop: 134846, Start Num: 26
Candidate Starts for TinyTim_242:
(16, 134502), (Start: 26 @134544 has 197 MA's), (Start: 37 @134571 has 2 MA's), (49, 134640), (62, 134724), (65, 134739), (70, 134778),

Gene: Togo_72 Start: 51218, Stop: 51466, Start Num: 26
Candidate Starts for Togo_72:
(Start: 26 @51218 has 197 MA's), (38, 51251), (45, 51278), (50, 51323), (53, 51335), (55, 51353), (60, 51392), (65, 51419),

Gene: Tonenili_266 Start: 140370, Stop: 140672, Start Num: 26
Candidate Starts for Tonenili_266:
(16, 140328), (Start: 26 @140370 has 197 MA's), (39, 140406), (40, 140412), (49, 140466), (58, 140532), (62, 140550), (65, 140565), (70, 140604),

Gene: Tortoise16_242 Start: 135033, Stop: 135308, Start Num: 37

Candidate Starts for Tortoise16_242:

(16, 134964), (Start: 26 @135006 has 197 MA's), (Start: 37 @135033 has 2 MA's), (49, 135102), (58, 135168), (62, 135186), (65, 135201), (70, 135240),

Gene: Tribby_94 Start: 53361, Stop: 53618, Start Num: 23

Candidate Starts for Tribby_94:

(Start: 23 @53361 has 21 MA's),

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

Candidate Starts for Trinitium_240:

(16, 133256), (Start: 26 @133298 has 197 MA's), (Start: 37 @133325 has 2 MA's), (49, 133394), (58, 133460), (62, 133478), (65, 133493), (70, 133532),

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

Candidate Starts for Turret_235:

(16, 132838), (Start: 26 @132880 has 197 MA's), (Start: 37 @132907 has 2 MA's), (49, 132976), (58, 133042), (62, 133060), (65, 133075), (70, 133114),

Gene: Twister6_73 Start: 49567, Stop: 49815, Start Num: 26

Candidate Starts for Twister6_73:

(22, 49555), (Start: 26 @49567 has 197 MA's), (45, 49627), (50, 49672), (53, 49684), (60, 49741),

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

Candidate Starts for Tyke_241:

(16, 137156), (Start: 26 @137198 has 197 MA's), (39, 137234), (40, 137240), (58, 137360), (62, 137378), (65, 137393),

Gene: Valary_73 Start: 50867, Stop: 51115, Start Num: 26

Candidate Starts for Valary_73:

(8, 50735), (22, 50855), (Start: 26 @50867 has 197 MA's), (45, 50927), (50, 50972), (53, 50984), (60, 51041),

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

Candidate Starts for ValleyTerrace_245:

(16, 134415), (Start: 26 @134457 has 197 MA's), (Start: 37 @134484 has 2 MA's), (49, 134553), (58, 134619), (62, 134637), (65, 134652), (70, 134691),

Gene: VanDeWege_74 Start: 50539, Stop: 50781, Start Num: 26

Candidate Starts for VanDeWege_74:

(13, 50482), (Start: 26 @50539 has 197 MA's), (45, 50599), (50, 50644), (53, 50656), (55, 50674), (60, 50713),

Gene: Vortrix_262 Start: 139157, Stop: 139459, Start Num: 26

Candidate Starts for Vortrix_262:

(16, 139115), (Start: 26 @139157 has 197 MA's), (39, 139193), (40, 139199), (49, 139253), (58, 139319), (62, 139337), (65, 139352), (70, 139391),

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

Candidate Starts for Wally_242:

(16, 134399), (Start: 26 @134441 has 197 MA's), (Start: 37 @134468 has 2 MA's), (49, 134537), (58, 134603), (62, 134621), (65, 134636), (70, 134675),

Gene: Westy_68 Start: 55335, Stop: 55562, Start Num: 33

Candidate Starts for Westy_68:

(Start: 33 @55335 has 17 MA's), (Start: 37 @55353 has 2 MA's), (53, 55437), (62, 55506), (63, 55512),

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

Candidate Starts for Wilde_14:

(Start: 21 @5927 has 3 MA's), (Start: 31 @5951 has 6 MA's), (34, 5954), (47, 6020), (62, 6122),

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

Candidate Starts for Willis_245:

(16, 135338), (Start: 26 @135380 has 197 MA's), (39, 135416), (40, 135422), (58, 135542), (62, 135560), (65, 135575), (70, 135614),

Gene: Wizard_69 Start: 50045, Stop: 50293, Start Num: 26

Candidate Starts for Wizard_69:

(8, 49913), (22, 50033), (Start: 26 @50045 has 197 MA's), (45, 50105), (50, 50150), (53, 50162), (60, 50219),

Gene: Xenomorph_88 Start: 53193, Stop: 53450, Start Num: 23

Candidate Starts for Xenomorph_88:

(Start: 23 @53193 has 21 MA's),

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

Candidate Starts for Yassified_240:

(16, 134545), (Start: 26 @134587 has 197 MA's), (39, 134623), (40, 134629), (58, 134749), (62, 134767), (65, 134782), (70, 134821),

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

Candidate Starts for YemiJoy2021_245:

(16, 136069), (Start: 26 @136111 has 197 MA's), (39, 136147), (40, 136153), (58, 136273), (62, 136291), (65, 136306), (70, 136345),

Gene: YoshiYama_91 Start: 53268, Stop: 53525, Start Num: 23

Candidate Starts for YoshiYama_91:

(Start: 23 @53268 has 21 MA's), (40, 53313),

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

Candidate Starts for YoungMoneyMata_244:

(16, 135599), (Start: 26 @135641 has 197 MA's), (39, 135677), (40, 135683), (58, 135803), (62, 135821), (65, 135836),

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

Candidate Starts for Yucca_244:

(16, 136061), (Start: 26 @136103 has 197 MA's), (Start: 37 @136130 has 2 MA's), (49, 136199), (62, 136283), (65, 136298), (70, 136337),

Gene: YungMoney_72 Start: 52105, Stop: 52353, Start Num: 26

Candidate Starts for YungMoney_72:

(7, 51955), (20, 52090), (Start: 26 @52105 has 197 MA's), (45, 52165), (50, 52210), (53, 52222), (55, 52240), (60, 52279),

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

Candidate Starts for Zalkecks_243:

(16, 135167), (Start: 26 @135209 has 197 MA's), (39, 135245), (40, 135251), (58, 135371), (62, 135389), (65, 135404), (70, 135443),

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

Candidate Starts for Zeenon_245:

(16, 135701), (Start: 26 @135743 has 197 MA's), (39, 135779), (40, 135785), (58, 135905), (62, 135923), (65, 135938), (70, 135977),

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

Candidate Starts for ZygoTaiga_240:

(16, 136358), (Start: 26 @136400 has 197 MA's), (39, 136436), (40, 136442), (58, 136562), (62, 136580), (65, 136595), (70, 136634),