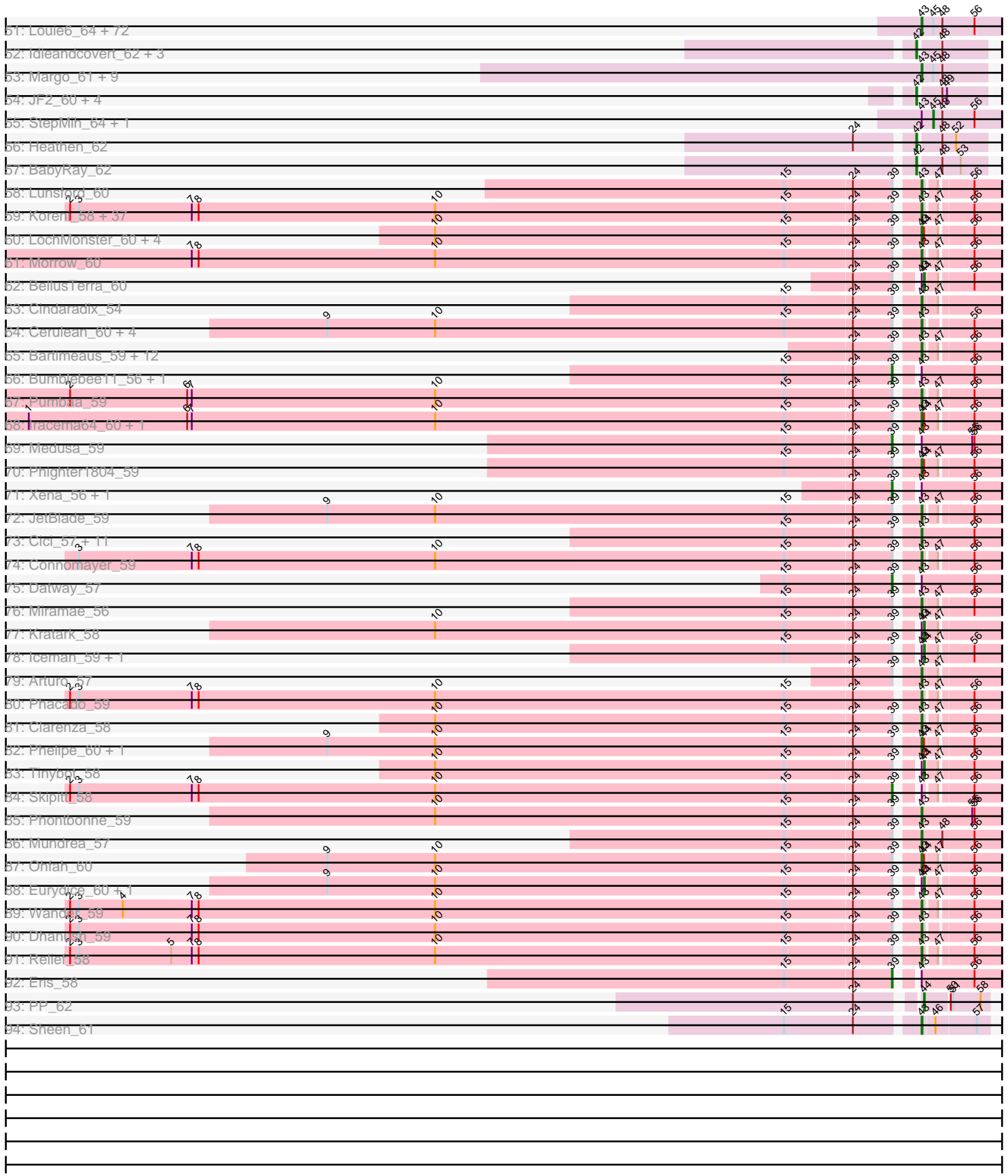


Pham 224204





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 224204 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224204 has 329 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Fushigi_57, PattyP_63, Ciao_59, Abrogate_600, Marcell_57, Sibs6_63, Kanely_62, Briton15_65, Altman_63, PhrostyMug_61, Watermelon_61, HanShotFirst_62, Killigrew_60, Licorice_62, Marchy_55, Aeneas_64, Seabiscuit_64, McGuire_62, Trouble_62, Pippin_61, Zephyr_62
- Track 2 : EnzoK_59
- Track 3 : Ashballer_63
- Track 4 : MrGordo_60, Big3_59
- Track 5 : JuliaChild_62, Sagefire_63, Swole_62, Doom_59, GrecoEtereo_60, QTRlifeCrisis_61, Tote_57, RidgeCB_60
- Track 6 : Pinto_61, Rufus_62
- Track 7 : Ichabod_64, HermioneGrange_62, MPlant7149_60
- Track 8 : PherrisBueller_59, Dreamboat_61, GageAP_61, Graduation_64, Scowl_61, Makemake_62
- Track 9 : Pepe_57, SkiPole_65
- Track 10 : Forsytheast_59, Moose_59, SwissCheese_61, Bruns_59, Seanderson_60
- Track 11 : Buttons_58, Gompeii16_60, Bircsak_60, Crispicous1_58, Papez_63, Snazzy_59, Edtherson_60, Mryolo_57, KSSJEB_61, JackSparrow_63, Traft412_63, Nhonho_59, Ruotula_63
- Track 12 : BeesKnees_63, PacerPaul_60, Gandalf20_63, Zeeculate_58, Marsha_60, Francis47_59, ConceptII_63, Nerujay_63
- Track 13 : DreamCatcher_64
- Track 14 : Pelly_61, Dexes_60
- Track 15 : Niza_62
- Track 16 : IgnatiusPatJac_60, BluSpix_58, Eyeball_62
- Track 17 : Kugel_60
- Track 18 : BPBiebs31_62
- Track 19 : CactusRose_59
- Track 20 : Solon_58, Lesedi_56
- Track 21 : Petp2012_62
- Track 22 : Fajezeel_61, Acme_62, Greg_61
- Track 23 : Tripl3t_63
- Track 24 : KyMonks1A_64
- Track 25 : Bob3_60, Barriga_62
- Track 26 : Magnar_58
- Track 27 : Squee_61, Pari_63
- Track 28 : SarFire_57, Thor_57

- Track 29 : Sunshine924_63
- Track 30 : BarrowTuph_60
- Track 31 : Jorgensen_61
- Track 32 : Petruccio_59
- Track 33 : Alvin_59
- Track 34 : Switzer_61
- Track 35 : Ringer_60
- Track 36 : Turj99_59
- Track 37 : Zeuska_60, Teodoridan_58
- Track 38 : Frogopper_58
- Track 39 : Corvo_61
- Track 40 : Paphu_60, Parliament_62, Tasp14_64
- Track 41 : Applejack_57
- Track 42 : Michley_63
- Track 43 : Gwendoluna_63
- Track 44 : Carlyle_60
- Track 45 : Hope4ever_62
- Track 46 : Dynamix_62
- Track 47 : JC27_63
- Track 48 : TheloniousMonk_61
- Track 49 : Paraselene_58
- Track 50 : Euphoria_58
- Track 51 : Louie6_64, Bxz2_60, AgronaGT15_64, Jobu08_63, Mainiac_65, JeppNRM_66, GingkoMaracino_65, HaveUMetTed_66, Misomonster_66, Grub_65, Cullens_65, Daishi_64, Heliosoles_64, BreSam8_65, Kalb97_66, Wooldri_67, GtownJaz_65, Vix_63, Malinsilva_67, Fernando_65, JenCasNa_66, Marie_63, Grif_65, SoilDragon_65, Gemma_64, OlanP_64, JHC117_63, P28Green_66, Sabia_65, LugYA_68, Phoebe_66, Anubis_68, Ollie_65, Soshari_67, Groupthink_66, Reba_65, MoneyMay_64, HashRod_66, PhishRPhriends_63, Watson_64, Taurus_66, DaHudson_64, MadMarie_65, Methuselah_60, PGHhamlin_67, Hercules11_65, Pawn_65, MuchMore_68, EpicPhail_66, Farber_65, Phranny_66, Phoxy_65, Calvinny_64, Marius_66, LarryKay_65, LBerry_66, Pembroke_65, MarQuardt_65, Rummer_64, TinyPebbles_63, Spike509_65, Kalnoky_66, PurpleHaze_65, Dieselweasel_66, AugsMagnumOpus_68, Manu_65, Zetzy_64, PotatoSplit_66, Bigflo_64, Tiffany_64, Aglet_66, ACFishhook_63, Iowa_64
- Track 52 : Idleandcovert_62, BlueBird_64, TNguyen7_63, MA5_62
- Track 53 : Margo_61, QuinnKiro_60, Panamaxus_59, Caviar_61, Pocahontas_61, Hookmount_61, Todacoro_61, Lambert1_61, Popcicle_61, Noella_61
- Track 54 : JF2_60, Phantastic_63, Rockstar_60, JF4_60, MK4_62
- Track 55 : StepMih_64, Microwolf_63
- Track 56 : Heathen_62
- Track 57 : BabyRay_62
- Track 58 : Lunsford_60
- Track 59 : Koreni_58, TygerBlood_59, JoongJeon_58, Millski_58, Lemur_59, Avle17_59, Chaph_59, KFPoly_58, Alberto7_60, Wilbur_59, Gadost_59, Melvin_61, LittleB_59, LappelDuVide_59, Ruin_59, Bruiser_58, Kingmustik0402_59, TroyPia_60, PeterPeter_59, Maxo_60, Kye_59, Funston_58, Thanksgivukkah_58, Romney_58, LittleGuy_59, Albee_59, Camperdownii_57, Flux_59, Eapen_59, BubbleTrouble_58, Lorenzo_59, Burger_57, Palestino_58, OKaNui_59, Cocoaberry_59, YoSam321_59, Mazhar510_59, Kampy_58
- Track 60 : LochMonster_60, Ulysses_58, Rosa24_57, DirtyDunning_58, Spino_58
- Track 61 : Morrow_60
- Track 62 : BellusTerra_60

- Track 63 : Cindaradix_54
- Track 64 : Cerulean_60, LHTSCC_61, Happiness_58, ChampagnePapi_61, Obama12_60
- Track 65 : Bartimeaus_59, Sparxx_60, Eros_59, Baby16_59, Citius_59, Scamp_59, Holli_58, Sabertooth_59, Florean_59, Polymorphads_60, Broseidon_59, Bombshell_59, CentreCat_59
- Track 66 : Bumblebee11_56, Backyardigan_55
- Track 67 : Pumbaa_59
- Track 68 : Iracema64_60, Cintron_58
- Track 69 : Medusa_59
- Track 70 : Phighter1804_59
- Track 71 : Xena_56, Noelle_58
- Track 72 : JetBlade_59
- Track 73 : Cici_57, Stink_56, Badger_56, Wile_57, AbbysRanger_57, PetiteSangsue_57, Perplexer_57, Katalie136_57, Achebe_56, AvatarAhPeg_56, Morpher26_57, Shygu2_57
- Track 74 : Connomayer_59
- Track 75 : Datway_57
- Track 76 : Miramae_56
- Track 77 : Kratak_58
- Track 78 : Iceman_59, LeoAvram_58
- Track 79 : Arturo_57
- Track 80 : Phacado_59
- Track 81 : Clarenza_58
- Track 82 : Phelipe_60, Abdiel_59
- Track 83 : Tinybot_58
- Track 84 : Skipitt_58
- Track 85 : Phontbonne_59
- Track 86 : Mundrea_57
- Track 87 : Ohfah_60
- Track 88 : Eurydice_60, Nebs_60
- Track 89 : Wander_59
- Track 90 : Dhanush_59
- Track 91 : Relief_58
- Track 92 : Eris_58
- Track 93 : PP_62
- Track 94 : Sheen_61

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

The start number called the most often in the published annotations is 43, it was called in 288 of the 321 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ACFishhook_63, AbbysRanger_57, Abdiel_59, Abrogate_600, Achebe_56, Acme_62, Aeneas_64, Aglet_66, AgronaGT15_64, Albee_59, Alberto7_60, Altman_63, Alvin_59, Anubis_68, Applejack_57, Arturo_57, AugsMagnumOpus_68, AvatarAhPeg_56, Avle17_59, BPIebs31_62, Baby16_59, Badger_56, Barriga_62, Bartimeaus_59, BeesKnees_63, Big3_59, Bigflo_64, Bircsak_60, BluSpix_58, Bob3_60, Bombshell_59, BreSam8_65, Briton15_65, Broseidon_59, Bruiser_58,

Bruns_59, BubbleTrouble_58, Burger_57, Buttons_58, Bxz2_60, CactusRose_59, Calvinny_64, Camperdownii_57, Carlyle_60, Caviar_61, CentreCat_59, Cerulean_60, ChampagnePapi_61, Chaph_59, Ciao_59, Cici_57, Cindaradix_54, Cintron_58, Citius_59, Clarenza_58, Cocoaberry_59, Conceptll_63, Connomayer_59, Corvo_61, Crispicous1_58, Cullens_65, DaHudson_64, Daishi_64, Dexes_60, Dhanush_59, Dieselweasel_66, DirtyDunning_58, Doom_59, DreamCatcher_64, Dreamboat_61, Dynamix_62, Eapen_59, Edtherson_60, EpicPhail_66, Eros_59, Euphoria_58, Eyeball_62, Fajezeel_61, Farber_65, Fernando_65, Florean_59, Flux_59, Forsytheast_59, Francis47_59, Froghopper_58, Funston_58, Fushigi_57, Gadost_59, GageAP_61, Gandalf20_63, Gemma_64, GingkoMaracino_65, Gompeii16_60, Graduation_64, GrecoEtereo_60, Greg_61, Grif_65, Groupthink_66, Grub_65, GtownJaz_65, Gwendoluna_63, HanShotFirst_62, Happiness_58, HashRod_66, HaveUMetTed_66, Heliosoles_64, Hercules11_65, HermioneGrange_62, Holli_58, Hookmount_61, Hope4ever_62, Ichabod_64, IgnatiusPatJac_60, Iracema64_60, JC27_63, JHC117_63, JackSparrow_63, JenCasNa_66, JeppNRM_66, JetBlade_59, Jobu08_63, JoongJeon_58, Jorgensen_61, JuliaChild_62, KFPoly_58, KSSJEB_61, Kalb97_66, Kalnoky_66, Kamy_58, Kanely_62, Katalie136_57, Killigrew_60, Kingmustik0402_59, Koreni_58, Kugel_60, KyMonks1A_64, Kye_59, LBerry_66, LHTSCC_61, Lambert1_61, LappelDuVide_59, LarryKay_65, Lemur_59, Lesedi_56, Licorice_62, LittleB_59, LittleGuy_59, LochMonster_60, Lorenzo_59, Louie6_64, Lova_64, LugYA_68, Lunsford_60, MPlant7149_60, MadMarie_65, Magnar_58, Mainiac_65, Makemake_62, Malinsilva_67, Manu_65, MarQuardt_65, Marcell_57, Marchy_55, Margo_61, Marie_63, Marius_66, Marsha_60, Maxo_60, Mazhar510_59, McGuire_62, Melvin_61, Methuselah_60, Michley_63, Millski_58, Miramae_56, Misomonster_66, MoneyMay_64, Moose_59, Morpher26_57, Morrow_60, MrGordo_60, Mryolo_57, MuchMore_68, Mundrea_57, Nerujay_63, Nhonho_59, Niza_62, Noella_61, OKaNui_59, Obama12_60, Ohfah_60, OlanP_64, Ollie_65, P28Green_66, PGHhamlin_67, PacerPaul_60, Palestino_58, Panamaxus_59, Papez_63, Paphu_60, Paraselene_58, Pari_63, Parliament_62, PattyP_63, Pawn_65, Pelly_61, Pembroke_65, Perplexer_57, PeterPeter_59, PetiteSangsue_57, Petp2012_62, Petruchio_59, Phacado_59, Phelipe_60, PherrisBueller_59, Phighter1804_59, PhishRPhriends_63, Phoebe_66, Phontbonne_59, Phoxy_65, Phranny_66, PhrostyMug_61, Pinto_61, Pippin_61, Pocahontas_61, Polymorphads_60, Popcicle_61, PotatoSplit_66, Pumbaa_59, PurpleHaze_65, QTRLifeCrisis_61, QuinnKiro_60, Reba_65, Relief_58, RidgeCB_60, Ringer_60, Romney_58, Rosa24_57, Rufus_62, Ruin_59, Rummer_64, Ruotula_63, Sabertooth_59, Sabia_65, Sagefire_63, SarFire_57, Scamp_59, Scowl_61, Seabiscuit_64, Seanderson_60, Sheen_61, Shygu2_57, Sibs6_63, Snazzy_59, SoilDragon_65, Solon_58, Soshari_67, Sparxx_60, Spike509_65, Spino_58, Squee_61, Stink_56, Sunshine924_63, SwissCheese_61, Switzer_61, Swole_62, Tasp14_64, Taurus_66, Thanksgivukkah_58, TheloniousMonk_61, Thor_57, Tiffany_64, TinyPebbles_63, Todacoro_61, Tote_57, Traft412_63, Tripl3t_63, Trouble_62, TroyPia_60, Turj99_59, TygerBlood_59, Ulysses_58, Vix_63, Wander_59, Watermelon_61, Watson_64, Wilbur_59, Wile_57, Wooldri_67, YoSam321_59, Zeeculate_58, Zephyr_62, Zetzy_64,

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

- Ashballer_63, Backyardigan_55, BarrowTuph_60, BellusTerra_60, Bumblebee11_56, Datway_57, EnzoK_59, Eris_58, Eurydice_60, Iceman_59, Kratark_58, LeoAvram_58, Medusa_59, Microwolf_63, Nebs_60, Noelle_58, Pepe_57, SkiPole_65, Skipitt_58, StepMih_64, Teodoridan_58, Tinybot_58, Xena_56, Zeuska_60,

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

- BabyRay_62, BlueBird_64, Heathen_62, Idleandcovert_62, JF2_60, JF4_60, MA5_62, MK4_62, PP_62, Phantastic_63, Rockstar_60, TNguyen7_63,

Summary by start number:

Start 39:

- Found in 108 of 329 (32.8%) of genes in pham
- Manual Annotations of this start: 8 of 321
- Called 7.4% of time when present
- Phage (with cluster) where this start called: Backyardigan_55 (A4), Bumblebee11_56 (A4), Datway_57 (A4), Eris_58 (A4), Medusa_59 (A4), Noelle_58 (A4), Skipitt_58 (A4), Xena_56 (A4),

Start 40:

- Found in 20 of 329 (6.1%) of genes in pham
- Manual Annotations of this start: 3 of 321
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BarrowTuph_60 (A1), Pepe_57 (A1), SkiPole_65 (A1), Teodoridan_58 (A1), Zeuska_60 (A1),

Start 41:

- Found in 4 of 329 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 321
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ashballer_63 (A1), EnzoK_59 (A1),

Start 42:

- Found in 11 of 329 (3.3%) of genes in pham
- Manual Annotations of this start: 11 of 321
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyRay_62 (A3), BlueBird_64 (A3), Heathen_62 (A3), Idleandcovert_62 (A3), JF2_60 (A3), JF4_60 (A3), MA5_62 (A3), MK4_62 (A3), Phantastic_63 (A3), Rockstar_60 (A3), TNguyen7_63 (A3),

Start 43:

- Found in 317 of 329 (96.4%) of genes in pham
- Manual Annotations of this start: 288 of 321
- Called 92.4% of time when present
- Phage (with cluster) where this start called: ACFishhook_63 (A3), AbbysRanger_57 (A4), Abdiel_59 (A4), Abrogate_600 (A1), Achebe_56 (A4), Acme_62 (A1), Aeneas_64 (A1), Aglet_66 (A3), AgronaGT15_64 (A3), Albee_59 (A4), Alberto7_60 (A4), Altman_63 (A1), Alvin_59 (A1), Anubis_68 (A3), Applejack_57 (A1), Arturo_57 (A4), AugsMagnumOpus_68 (A3), AvatarAhPeg_56 (A4), Avle17_59 (A4), BPBiabs31_62 (A1), Baby16_59 (A4), Badger_56 (A4), Barriga_62 (A1), Bartimeaus_59 (A4), BeesKnees_63 (A1), Big3_59 (A1), Bigflo_64 (A3), Bircsak_60 (A1), BluSpix_58 (A1), Bob3_60 (A1), Bombshell_59 (A4), BreSam8_65 (A3), Briton15_65 (A1), Broseidon_59 (A4), Bruiser_58 (A4), Bruns_59 (A1), BubbleTrouble_58 (A4), Burger_57 (A4), Buttons_58 (A1), Bxz2_60 (A3), CactusRose_59 (A1), Calvinny_64 (A3), Camperdownii_57 (A4), Carlyle_60 (A1), Caviar_61 (A3), CentreCat_59 (A4), Cerulean_60 (A4), ChampagnePapi_61 (A4), Chaph_59 (A4), Ciao_59 (A1), Cici_57 (A4), Cindaradix_54 (A4), Cintron_58 (A4), Citius_59 (A4), Clarenza_58 (A4), Cocoaberry_59 (A4), ConceptII_63 (A1),

Connomayer_59 (A4), Corvo_61 (A1), Crispicous1_58 (A1), Cullens_65 (A3), DaHudson_64 (A3), Daishi_64 (A3), Dexes_60 (A1), Dhanush_59 (A4), Dieselweasel_66 (A3), DirtyDunning_58 (A4), Doom_59 (A1), DreamCatcher_64 (A1), Dreamboat_61 (A1), Dynamix_62 (A1), Eapen_59 (A4), Edtherson_60 (A1), EpicPhail_66 (A3), Eros_59 (A4), Euphoria_58 (A1), Eyeball_62 (A1), Fajezeel_61 (A1), Farber_65 (A3), Fernando_65 (A3), Floean_59 (A4), Flux_59 (A4), Forsytheast_59 (A1), Francis47_59 (A1), Froghopper_58 (A1), Funston_58 (A4), Fushigi_57 (A1), Gadost_59 (A4), GageAP_61 (A1), Gandalf20_63 (A1), Gemma_64 (A3), GingkoMaracino_65 (A3), Gompeii16_60 (A1), Graduation_64 (A1), GrecoEtereo_60 (A1), Greg_61 (A1), Grif_65 (A3), Groupthink_66 (A3), Grub_65 (A3), GtownJaz_65 (A3), Gwendoluna_63 (A1), HanShotFirst_62 (A1), Happiness_58 (A4), HashRod_66 (A3), HaveUMetTed_66 (A3), Heliosoles_64 (A3), Hercules11_65 (A3), HermioneGrange_62 (A1), Holli_58 (A4), Hookmount_61 (A3), Hope4ever_62 (A1), Ichabod_64 (A1), IgnatiusPatJac_60 (A1), Iracema64_60 (A4), JC27_63 (A1), JHC117_63 (A3), JackSparrow_63 (A1), JenCasNa_66 (A3), JeppNRM_66 (A3), JetBlade_59 (A4), Jobu08_63 (A3), JoongJeon_58 (A4), Jorgensen_61 (A1), JuliaChild_62 (A1), KFPoly_58 (A4), KSSJEB_61 (A1), Kalb97_66 (A3), Kalnoky_66 (A3), Kamy_58 (A4), Kanely_62 (A1), Katalie136_57 (A4), Killigrew_60 (A1), Kingmustik0402_59 (A4), Koreni_58 (A4), Kugel_60 (A1), KyMonks1A_64 (A1), Kyee_59 (A4), LBerry_66 (A3), LHTSCC_61 (A4), Lambert1_61 (A3), LappelDuVide_59 (A4), LarryKay_65 (A3), Lemur_59 (A4), Lesedi_56 (A1), Licorice_62 (A1), LittleB_59 (A4), LittleGuy_59 (A4), LochMonster_60 (A4), Lorenzo_59 (A4), Louie6_64 (A3), Iowa_64 (A3), LugYA_68 (A3), Lunsford_60 (A4), MPlant7149_60 (A1), MadMarie_65 (A3), Magnar_58 (A1), Mainiac_65 (A3), Makemake_62 (A1), Malinsilva_67 (A3), Manu_65 (A3), MarQuardt_65 (A3), Marcell_57 (A1), Marchy_55 (A1), Margo_61 (A3), Marie_63 (A3), Marius_66 (A3), Marsha_60 (A1), Maxo_60 (A4), Mazhar510_59 (A4), McGuire_62 (A1), Melvin_61 (A4), Methuselah_60 (A3), Michley_63 (A1), Millski_58 (A4), Miramae_56 (A4), Misomonster_66 (A3), MoneyMay_64 (A3), Moose_59 (A1), Morpher26_57 (A4), Morrow_60 (A4), MrGordo_60 (A1), Mryolo_57 (A1), MuchMore_68 (A3), Mundrea_57 (A4), Nerujay_63 (A1), Nhonho_59 (A1), Niza_62 (A1), Noella_61 (A3), OKaNui_59 (A4), Obama12_60 (A4), Ohfah_60 (A4), OlanP_64 (A3), Ollie_65 (A3), P28Green_66 (A3), PGHhamlin_67 (A3), PacerPaul_60 (A1), Palestino_58 (A4), Panamaxus_59 (A3), Papez_63 (A1), Paphu_60 (A1), Paraselene_58 (A1), Pari_63 (A1), Parliament_62 (A1), PattyP_63 (A1), Pawn_65 (A3), Pelly_61 (A1), Pembroke_65 (A3), Perplexer_57 (A4), PeterPeter_59 (A4), PetiteSangsue_57 (A4), Petp2012_62 (A1), Petruccio_59 (A1), Phacado_59 (A4), Phelipe_60 (A4), PherrisBueller_59 (A1), Phighter1804_59 (A4), PhishRPhriends_63 (A3), Phoebe_66 (A3), Phontbonne_59 (A4), Phoxy_65 (A3), Phranny_66 (A3), PhrostyMug_61 (A1), Pinto_61 (A1), Pippin_61 (A1), Pocahontas_61 (A3), Polymorphads_60 (A4), Popcicle_61 (A3), PotatoSplit_66 (A3), Pumbaa_59 (A4), PurpleHaze_65 (A3), QTRlifeCrisis_61 (A1), QuinnKiro_60 (A3), Reba_65 (A3), Relief_58 (A4), RidgeCB_60 (A1), Ringer_60 (A1), Romney_58 (A4), Rosa24_57 (A4), Rufus_62 (A1), Ruin_59 (A4), Rummer_64 (A3), Ruotula_63 (A1), Sabertooth_59 (A4), Sabia_65 (A3), Sagefire_63 (A1), SarFire_57 (A1), Scamp_59 (A4), Scowl_61 (A1), Seabiscuit_64 (A1), Seanderson_60 (A1), Sheen_61 (A7), Shygu2_57 (A4), Sibs6_63 (A1), Snazzy_59 (A1), SoilDragon_65 (A3), Solon_58 (A1), Soshari_67 (A3), Sparxx_60 (A4), Spike509_65 (A3), Spino_58 (A4), Squee_61 (A1), Stink_56 (A4), Sunshine924_63 (A1), SwissCheese_61 (A1), Switzer_61 (A1), Swole_62 (A1), Tasp14_64 (A1), Taurus_66 (A3), Thanksgivukkah_58 (A4), TheloniousMonk_61 (A1), Thor_57 (A1), Tiffany_64 (A3), TinyPebbles_63 (A3), Todacoro_61 (A3), Tote_57 (A1), Traft412_63 (A1), Tripl3t_63 (A1), Trouble_62 (A1), TroyPia_60 (A4), Turj99_59 (A1), TygerBlood_59 (A4), Ulysses_58 (A4), Vix_63 (A3), Wander_59 (A4),

Watermelon_61 (A1), Watson_64 (A3), Wilbur_59 (A4), Wile_57 (A4), Wooldri_67 (A3), YoSam321_59 (A4), Zeeculate_58 (A1), Zephyr_62 (A1), Zetzy_64 (A3),

Start 44:

- Found in 19 of 329 (5.8%) of genes in pham
- Manual Annotations of this start: 8 of 321
- Called 42.1% of time when present
- Phage (with cluster) where this start called: BellusTerra_60 (A4), Eurydice_60 (A4), Iceman_59 (A4), Kratark_58 (A4), LeoAvram_58 (A4), Nebs_60 (A4), PP_62 (A7), Tinybot_58 (A4),

Start 45:

- Found in 85 of 329 (25.8%) of genes in pham
- Manual Annotations of this start: 2 of 321
- Called 2.4% of time when present
- Phage (with cluster) where this start called: Microwolf_63 (A3), StepMih_64 (A3),

Summary by clusters:

There are 4 clusters represented in this pham: A1, A3, A4, A7,

Info for manual annotations of cluster A1:

- Start number 40 was manually annotated 3 times for cluster A1.
- Start number 41 was manually annotated 1 time for cluster A1.
- Start number 43 was manually annotated 115 times for cluster A1.

Info for manual annotations of cluster A3:

- Start number 42 was manually annotated 11 times for cluster A3.
- Start number 43 was manually annotated 79 times for cluster A3.
- Start number 45 was manually annotated 2 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 39 was manually annotated 8 times for cluster A4.
- Start number 43 was manually annotated 93 times for cluster A4.
- Start number 44 was manually annotated 7 times for cluster A4.

Info for manual annotations of cluster A7:

- Start number 43 was manually annotated 1 time for cluster A7.
- Start number 44 was manually annotated 1 time for cluster A7.

Gene Information:

Gene: ACFishhook_63 Start: 39664, Stop: 39560, Start Num: 43

Candidate Starts for ACFishhook_63:

(Start: 43 @39664 has 288 MA's), (Start: 45 @39649 has 2 MA's), (48, 39637), (56, 39595),

Gene: AbbysRanger_57 Start: 38899, Stop: 38798, Start Num: 43

Candidate Starts for AbbysRanger_57:

(15, 39052), (24, 38965), (Start: 39 @38914 has 8 MA's), (Start: 43 @38899 has 288 MA's), (56, 38830),

Gene: Abdiel_59 Start: 39049, Stop: 38960, Start Num: 43
Candidate Starts for Abdiel_59:
(9, 39799), (10, 39658), (15, 39202), (24, 39115), (Start: 39 @39064 has 8 MA's), (Start: 43 @39049 has 288 MA's), (Start: 44 @39046 has 8 MA's), (47, 39031), (56, 38992),

Gene: Abrogate_600 Start: 42412, Stop: 42326, Start Num: 43
Candidate Starts for Abrogate_600:
(Start: 43 @42412 has 288 MA's), (56, 42343),

Gene: Achebe_56 Start: 38882, Stop: 38781, Start Num: 43
Candidate Starts for Achebe_56:
(15, 39035), (24, 38948), (Start: 39 @38897 has 8 MA's), (Start: 43 @38882 has 288 MA's), (56, 38813),

Gene: Acme_62 Start: 40967, Stop: 40881, Start Num: 43
Candidate Starts for Acme_62:
(25, 41027), (Start: 43 @40967 has 288 MA's), (54, 40910),

Gene: Aeneas_64 Start: 42831, Stop: 42745, Start Num: 43
Candidate Starts for Aeneas_64:
(Start: 43 @42831 has 288 MA's), (56, 42762),

Gene: Aglet_66 Start: 39707, Stop: 39603, Start Num: 43
Candidate Starts for Aglet_66:
(Start: 43 @39707 has 288 MA's), (Start: 45 @39692 has 2 MA's), (48, 39680), (56, 39638),

Gene: AgronaGT15_64 Start: 39555, Stop: 39451, Start Num: 43
Candidate Starts for AgronaGT15_64:
(Start: 43 @39555 has 288 MA's), (Start: 45 @39540 has 2 MA's), (48, 39528), (56, 39486),

Gene: Albee_59 Start: 39045, Stop: 38959, Start Num: 43
Candidate Starts for Albee_59:
(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Alberto7_60 Start: 39382, Stop: 39296, Start Num: 43
Candidate Starts for Alberto7_60:
(2, 40468), (3, 40456), (7, 40309), (8, 40300), (10, 39991), (15, 39535), (24, 39448), (Start: 39 @39397 has 8 MA's), (Start: 43 @39382 has 288 MA's), (47, 39367), (56, 39328),

Gene: Altman_63 Start: 41128, Stop: 41042, Start Num: 43
Candidate Starts for Altman_63:
(Start: 43 @41128 has 288 MA's), (56, 41059),

Gene: Alvin_59 Start: 40335, Stop: 40249, Start Num: 43
Candidate Starts for Alvin_59:
(Start: 43 @40335 has 288 MA's), (52, 40290),

Gene: Anubis_68 Start: 39593, Stop: 39489, Start Num: 43
Candidate Starts for Anubis_68:
(Start: 43 @39593 has 288 MA's), (Start: 45 @39578 has 2 MA's), (48, 39566), (56, 39524),

Gene: Applejack_57 Start: 38781, Stop: 38695, Start Num: 43

Candidate Starts for Applejack_57:

(Start: 40 @38793 has 3 MA's), (Start: 43 @38781 has 288 MA's), (56, 38712),

Gene: Arturo_57 Start: 39160, Stop: 39071, Start Num: 43

Candidate Starts for Arturo_57:

(24, 39226), (Start: 39 @39175 has 8 MA's), (Start: 43 @39160 has 288 MA's), (47, 39142),

Gene: Ashballer_63 Start: 41368, Stop: 41270, Start Num: 41

Candidate Starts for Ashballer_63:

(Start: 41 @41368 has 1 MA's), (Start: 43 @41356 has 288 MA's), (56, 41287),

Gene: AugsMagnumOpus_68 Start: 39698, Stop: 39594, Start Num: 43

Candidate Starts for AugsMagnumOpus_68:

(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: AvatarAhPeg_56 Start: 38672, Stop: 38583, Start Num: 43

Candidate Starts for AvatarAhPeg_56:

(15, 38825), (24, 38738), (Start: 39 @38687 has 8 MA's), (Start: 43 @38672 has 288 MA's), (56, 38615),

Gene: Avle17_59 Start: 39042, Stop: 38956, Start Num: 43

Candidate Starts for Avle17_59:

(2, 40128), (3, 40116), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: BPBiabs31_62 Start: 41315, Stop: 41229, Start Num: 43

Candidate Starts for BPBiabs31_62:

(25, 41375), (Start: 43 @41315 has 288 MA's), (52, 41270),

Gene: Baby16_59 Start: 39056, Stop: 38970, Start Num: 43

Candidate Starts for Baby16_59:

(24, 39122), (Start: 39 @39071 has 8 MA's), (Start: 43 @39056 has 288 MA's), (47, 39041), (56, 39002),

Gene: BabyRay_62 Start: 39415, Stop: 39332, Start Num: 42

Candidate Starts for BabyRay_62:

(Start: 42 @39415 has 11 MA's), (48, 39388), (53, 39364),

Gene: Backyardigan_55 Start: 38930, Stop: 38814, Start Num: 39

Candidate Starts for Backyardigan_55:

(15, 39068), (24, 38981), (Start: 39 @38930 has 8 MA's), (Start: 43 @38915 has 288 MA's), (56, 38846),

Gene: Badger_56 Start: 38883, Stop: 38782, Start Num: 43

Candidate Starts for Badger_56:

(15, 39036), (24, 38949), (Start: 39 @38898 has 8 MA's), (Start: 43 @38883 has 288 MA's), (56, 38814),

Gene: Barriga_62 Start: 39540, Stop: 39454, Start Num: 43

Candidate Starts for Barriga_62:

(13, 39726), (Start: 43 @39540 has 288 MA's),

Gene: BarrowTuph_60 Start: 40465, Stop: 40367, Start Num: 40

Candidate Starts for BarrowTuph_60:
(Start: 40 @40465 has 3 MA's), (Start: 43 @40453 has 288 MA's), (56, 40384),

Gene: Bartimeaus_59 Start: 39047, Stop: 38961, Start Num: 43
Candidate Starts for Bartimeaus_59:
(24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: BeesKnees_63 Start: 40393, Stop: 40307, Start Num: 43
Candidate Starts for BeesKnees_63:
(Start: 43 @40393 has 288 MA's), (54, 40336), (56, 40324),

Gene: BellusTerra_60 Start: 39046, Stop: 38960, Start Num: 44
Candidate Starts for BellusTerra_60:
(24, 39115), (Start: 39 @39064 has 8 MA's), (Start: 43 @39049 has 288 MA's), (Start: 44 @39046 has 8 MA's), (47, 39031), (56, 38992),

Gene: Big3_59 Start: 41093, Stop: 41007, Start Num: 43
Candidate Starts for Big3_59:
(14, 41264), (Start: 43 @41093 has 288 MA's),

Gene: Bigflo_64 Start: 39706, Stop: 39602, Start Num: 43
Candidate Starts for Bigflo_64:
(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: Bircsak_60 Start: 42546, Stop: 42460, Start Num: 43
Candidate Starts for Bircsak_60:
(Start: 43 @42546 has 288 MA's),

Gene: BluSpix_58 Start: 36376, Stop: 36290, Start Num: 43
Candidate Starts for BluSpix_58:
(Start: 40 @36388 has 3 MA's), (Start: 43 @36376 has 288 MA's),

Gene: BlueBird_64 Start: 39459, Stop: 39376, Start Num: 42
Candidate Starts for BlueBird_64:
(Start: 42 @39459 has 11 MA's), (48, 39432),

Gene: Bob3_60 Start: 40364, Stop: 40278, Start Num: 43
Candidate Starts for Bob3_60:
(13, 40550), (Start: 43 @40364 has 288 MA's),

Gene: Bombshell_59 Start: 39042, Stop: 38956, Start Num: 43
Candidate Starts for Bombshell_59:
(24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: BreSam8_65 Start: 39700, Stop: 39596, Start Num: 43
Candidate Starts for BreSam8_65:
(Start: 43 @39700 has 288 MA's), (Start: 45 @39685 has 2 MA's), (48, 39673), (56, 39631),

Gene: Briton15_65 Start: 42585, Stop: 42499, Start Num: 43
Candidate Starts for Briton15_65:
(Start: 43 @42585 has 288 MA's), (56, 42516),

Gene: Broseidon_59 Start: 39047, Stop: 38961, Start Num: 43

Candidate Starts for Broseidon_59:

(24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: Bruiser_58 Start: 39045, Stop: 38959, Start Num: 43

Candidate Starts for Bruiser_58:

(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Bruns_59 Start: 39510, Stop: 39424, Start Num: 43

Candidate Starts for Bruns_59:

(Start: 40 @39522 has 3 MA's), (Start: 43 @39510 has 288 MA's), (56, 39441),

Gene: BubbleTrouble_58 Start: 39045, Stop: 38959, Start Num: 43

Candidate Starts for BubbleTrouble_58:

(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Bumblebee11_56 Start: 38900, Stop: 38784, Start Num: 39

Candidate Starts for Bumblebee11_56:

(15, 39038), (24, 38951), (Start: 39 @38900 has 8 MA's), (Start: 43 @38885 has 288 MA's), (56, 38816),

Gene: Burger_57 Start: 39045, Stop: 38959, Start Num: 43

Candidate Starts for Burger_57:

(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Buttons_58 Start: 38459, Stop: 38373, Start Num: 43

Candidate Starts for Buttons_58:

(Start: 43 @38459 has 288 MA's),

Gene: Bxz2_60 Start: 39741, Stop: 39637, Start Num: 43

Candidate Starts for Bxz2_60:

(Start: 43 @39741 has 288 MA's), (Start: 45 @39726 has 2 MA's), (48, 39714), (56, 39672),

Gene: CactusRose_59 Start: 40649, Stop: 40563, Start Num: 43

Candidate Starts for CactusRose_59:

(32, 40679), (34, 40673), (Start: 43 @40649 has 288 MA's),

Gene: Calvinny_64 Start: 39592, Stop: 39488, Start Num: 43

Candidate Starts for Calvinny_64:

(Start: 43 @39592 has 288 MA's), (Start: 45 @39577 has 2 MA's), (48, 39565), (56, 39523),

Gene: Camperdownii_57 Start: 38719, Stop: 38633, Start Num: 43

Candidate Starts for Camperdownii_57:

(2, 39805), (3, 39793), (7, 39646), (8, 39637), (10, 39328), (15, 38872), (24, 38785), (Start: 39 @38734 has 8 MA's), (Start: 43 @38719 has 288 MA's), (47, 38704), (56, 38665),

Gene: Carlyle_60 Start: 39245, Stop: 39159, Start Num: 43

Candidate Starts for Carlyle_60:

(22, 39329), (Start: 43 @39245 has 288 MA's), (52, 39200),

Gene: Caviar_61 Start: 39418, Stop: 39335, Start Num: 43

Candidate Starts for Caviar_61:

(Start: 43 @39418 has 288 MA's), (Start: 45 @39403 has 2 MA's), (48, 39391),

Gene: CentreCat_59 Start: 39048, Stop: 38962, Start Num: 43

Candidate Starts for CentreCat_59:

(24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (47, 39033), (56, 38994),

Gene: Cerulean_60 Start: 39449, Stop: 39363, Start Num: 43

Candidate Starts for Cerulean_60:

(9, 40199), (10, 40058), (15, 39602), (24, 39515), (Start: 39 @39464 has 8 MA's), (Start: 43 @39449 has 288 MA's), (56, 39395),

Gene: ChampagnePapi_61 Start: 39448, Stop: 39362, Start Num: 43

Candidate Starts for ChampagnePapi_61:

(9, 40198), (10, 40057), (15, 39601), (24, 39514), (Start: 39 @39463 has 8 MA's), (Start: 43 @39448 has 288 MA's), (56, 39394),

Gene: Chaph_59 Start: 39056, Stop: 38970, Start Num: 43

Candidate Starts for Chaph_59:

(2, 40142), (3, 40130), (7, 39983), (8, 39974), (10, 39665), (15, 39209), (24, 39122), (Start: 39 @39071 has 8 MA's), (Start: 43 @39056 has 288 MA's), (47, 39041), (56, 39002),

Gene: Ciao_59 Start: 39917, Stop: 39831, Start Num: 43

Candidate Starts for Ciao_59:

(Start: 43 @39917 has 288 MA's), (56, 39848),

Gene: Cici_57 Start: 38900, Stop: 38799, Start Num: 43

Candidate Starts for Cici_57:

(15, 39053), (24, 38966), (Start: 39 @38915 has 8 MA's), (Start: 43 @38900 has 288 MA's), (56, 38831),

Gene: Cindaradix_54 Start: 38518, Stop: 38429, Start Num: 43

Candidate Starts for Cindaradix_54:

(15, 38671), (24, 38584), (Start: 39 @38533 has 8 MA's), (Start: 43 @38518 has 288 MA's), (47, 38500),

Gene: Cintron_58 Start: 39025, Stop: 38936, Start Num: 43

Candidate Starts for Cintron_58:

(1, 40165), (6, 39958), (7, 39952), (10, 39634), (15, 39178), (24, 39091), (Start: 39 @39040 has 8 MA's), (Start: 43 @39025 has 288 MA's), (Start: 44 @39022 has 8 MA's), (47, 39007), (56, 38968),

Gene: Citius_59 Start: 39066, Stop: 38980, Start Num: 43

Candidate Starts for Citius_59:

(24, 39132), (Start: 39 @39081 has 8 MA's), (Start: 43 @39066 has 288 MA's), (47, 39051), (56, 39012),

Gene: Clarenza_58 Start: 39042, Stop: 38956, Start Num: 43

Candidate Starts for Clarenza_58:

(10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: Cocoaberry_59 Start: 39049, Stop: 38963, Start Num: 43

Candidate Starts for Cocoaberry_59:

(2, 40135), (3, 40123), (7, 39976), (8, 39967), (10, 39658), (15, 39202), (24, 39115), (Start: 39 @39064 has 8 MA's), (Start: 43 @39049 has 288 MA's), (47, 39034), (56, 38995),

Gene: ConceptII_63 Start: 41983, Stop: 41897, Start Num: 43

Candidate Starts for ConceptII_63:

(Start: 43 @41983 has 288 MA's), (54, 41926), (56, 41914),

Gene: Connomayer_59 Start: 39045, Stop: 38959, Start Num: 43

Candidate Starts for Connomayer_59:

(3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Corvo_61 Start: 41462, Stop: 41376, Start Num: 43

Candidate Starts for Corvo_61:

(Start: 43 @41462 has 288 MA's), (52, 41417),

Gene: Crispicious1_58 Start: 39702, Stop: 39616, Start Num: 43

Candidate Starts for Crispicious1_58:

(Start: 43 @39702 has 288 MA's),

Gene: Cullens_65 Start: 39706, Stop: 39602, Start Num: 43

Candidate Starts for Cullens_65:

(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: DaHudson_64 Start: 39699, Stop: 39595, Start Num: 43

Candidate Starts for DaHudson_64:

(Start: 43 @39699 has 288 MA's), (Start: 45 @39684 has 2 MA's), (48, 39672), (56, 39630),

Gene: Daishi_64 Start: 38575, Stop: 38471, Start Num: 43

Candidate Starts for Daishi_64:

(Start: 43 @38575 has 288 MA's), (Start: 45 @38560 has 2 MA's), (48, 38548), (56, 38506),

Gene: Datway_57 Start: 38886, Stop: 38770, Start Num: 39

Candidate Starts for Datway_57:

(15, 39024), (24, 38937), (Start: 39 @38886 has 8 MA's), (Start: 43 @38871 has 288 MA's), (56, 38802),

Gene: Dexes_60 Start: 40821, Stop: 40735, Start Num: 43

Candidate Starts for Dexes_60:

(Start: 43 @40821 has 288 MA's), (54, 40764),

Gene: Dhanush_59 Start: 39048, Stop: 38962, Start Num: 43

Candidate Starts for Dhanush_59:

(2, 40134), (3, 40122), (7, 39975), (8, 39966), (10, 39657), (15, 39201), (24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (56, 38994),

Gene: Dieselweasel_66 Start: 39709, Stop: 39605, Start Num: 43

Candidate Starts for Dieselweasel_66:

(Start: 43 @39709 has 288 MA's), (Start: 45 @39694 has 2 MA's), (48, 39682), (56, 39640),

Gene: DirtyDunning_58 Start: 39060, Stop: 38971, Start Num: 43

Candidate Starts for DirtyDunning_58:

(10, 39669), (15, 39213), (24, 39126), (Start: 39 @39075 has 8 MA's), (Start: 43 @39060 has 288 MA's), (Start: 44 @39057 has 8 MA's), (47, 39042), (56, 39003),

Gene: Doom_59 Start: 41395, Stop: 41309, Start Num: 43

Candidate Starts for Doom_59:

(Start: 43 @41395 has 288 MA's), (54, 41338),

Gene: DreamCatcher_64 Start: 41458, Stop: 41372, Start Num: 43

Candidate Starts for DreamCatcher_64:

(12, 41659), (26, 41515), (28, 41512), (Start: 43 @41458 has 288 MA's), (54, 41401),

Gene: Dreamboat_61 Start: 39688, Stop: 39602, Start Num: 43

Candidate Starts for Dreamboat_61:

(Start: 43 @39688 has 288 MA's), (52, 39643),

Gene: Dynamix_62 Start: 40205, Stop: 40119, Start Num: 43

Candidate Starts for Dynamix_62:

(16, 40343), (Start: 43 @40205 has 288 MA's),

Gene: Eapen_59 Start: 39040, Stop: 38954, Start Num: 43

Candidate Starts for Eapen_59:

(2, 40126), (3, 40114), (7, 39967), (8, 39958), (10, 39649), (15, 39193), (24, 39106), (Start: 39 @39055 has 8 MA's), (Start: 43 @39040 has 288 MA's), (47, 39025), (56, 38986),

Gene: Edtherson_60 Start: 41389, Stop: 41303, Start Num: 43

Candidate Starts for Edtherson_60:

(Start: 43 @41389 has 288 MA's),

Gene: EnzoK_59 Start: 38092, Stop: 37994, Start Num: 41

Candidate Starts for EnzoK_59:

(Start: 41 @38092 has 1 MA's), (Start: 43 @38080 has 288 MA's),

Gene: EpicPhail_66 Start: 39710, Stop: 39606, Start Num: 43

Candidate Starts for EpicPhail_66:

(Start: 43 @39710 has 288 MA's), (Start: 45 @39695 has 2 MA's), (48, 39683), (56, 39641),

Gene: Eris_58 Start: 39075, Stop: 38959, Start Num: 39

Candidate Starts for Eris_58:

(15, 39213), (24, 39126), (Start: 39 @39075 has 8 MA's), (Start: 43 @39060 has 288 MA's), (56, 38991),

Gene: Eros_59 Start: 39047, Stop: 38961, Start Num: 43

Candidate Starts for Eros_59:

(24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: Euphoria_58 Start: 40112, Stop: 40026, Start Num: 43

Candidate Starts for Euphoria_58:

(Start: 43 @40112 has 288 MA's), (54, 40055),

Gene: Eurydice_60 Start: 39042, Stop: 38956, Start Num: 44
Candidate Starts for Eurydice_60:
(9, 39795), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (Start: 44 @39042 has 8 MA's), (47, 39027), (56, 38988),

Gene: Eyeball_62 Start: 41559, Stop: 41473, Start Num: 43
Candidate Starts for Eyeball_62:
(Start: 40 @41571 has 3 MA's), (Start: 43 @41559 has 288 MA's),

Gene: Fajezeel_61 Start: 40257, Stop: 40171, Start Num: 43
Candidate Starts for Fajezeel_61:
(25, 40317), (Start: 43 @40257 has 288 MA's), (54, 40200),

Gene: Farber_65 Start: 39696, Stop: 39592, Start Num: 43
Candidate Starts for Farber_65:
(Start: 43 @39696 has 288 MA's), (Start: 45 @39681 has 2 MA's), (48, 39669), (56, 39627),

Gene: Fernando_65 Start: 39706, Stop: 39602, Start Num: 43
Candidate Starts for Fernando_65:
(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: Florean_59 Start: 39044, Stop: 38958, Start Num: 43
Candidate Starts for Florean_59:
(24, 39110), (Start: 39 @39059 has 8 MA's), (Start: 43 @39044 has 288 MA's), (47, 39029), (56, 38990),

Gene: Flux_59 Start: 39044, Stop: 38958, Start Num: 43
Candidate Starts for Flux_59:
(2, 40130), (3, 40118), (7, 39971), (8, 39962), (10, 39653), (15, 39197), (24, 39110), (Start: 39 @39059 has 8 MA's), (Start: 43 @39044 has 288 MA's), (47, 39029), (56, 38990),

Gene: Forsytheast_59 Start: 39678, Stop: 39592, Start Num: 43
Candidate Starts for Forsytheast_59:
(Start: 40 @39690 has 3 MA's), (Start: 43 @39678 has 288 MA's), (56, 39609),

Gene: Francis47_59 Start: 41463, Stop: 41377, Start Num: 43
Candidate Starts for Francis47_59:
(Start: 43 @41463 has 288 MA's), (54, 41406), (56, 41394),

Gene: Froghopper_58 Start: 39483, Stop: 39397, Start Num: 43
Candidate Starts for Froghopper_58:
(33, 39513), (38, 39504), (Start: 43 @39483 has 288 MA's), (54, 39426),

Gene: Funston_58 Start: 39045, Stop: 38959, Start Num: 43
Candidate Starts for Funston_58:
(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Fushigi_57 Start: 38939, Stop: 38853, Start Num: 43
Candidate Starts for Fushigi_57:
(Start: 43 @38939 has 288 MA's), (56, 38870),

Gene: Gadost_59 Start: 39049, Stop: 38963, Start Num: 43
Candidate Starts for Gadost_59:
(2, 40135), (3, 40123), (7, 39976), (8, 39967), (10, 39658), (15, 39202), (24, 39115), (Start: 39 @39064 has 8 MA's), (Start: 43 @39049 has 288 MA's), (47, 39034), (56, 38995),

Gene: GageAP_61 Start: 41027, Stop: 40941, Start Num: 43
Candidate Starts for GageAP_61:
(Start: 43 @41027 has 288 MA's), (52, 40982),

Gene: Gandalf20_63 Start: 42121, Stop: 42035, Start Num: 43
Candidate Starts for Gandalf20_63:
(Start: 43 @42121 has 288 MA's), (54, 42064), (56, 42052),

Gene: Gemma_64 Start: 39588, Stop: 39484, Start Num: 43
Candidate Starts for Gemma_64:
(Start: 43 @39588 has 288 MA's), (Start: 45 @39573 has 2 MA's), (48, 39561), (56, 39519),

Gene: GingkoMaracino_65 Start: 39592, Stop: 39488, Start Num: 43
Candidate Starts for GingkoMaracino_65:
(Start: 43 @39592 has 288 MA's), (Start: 45 @39577 has 2 MA's), (48, 39565), (56, 39523),

Gene: Gompeii16_60 Start: 42547, Stop: 42461, Start Num: 43
Candidate Starts for Gompeii16_60:
(Start: 43 @42547 has 288 MA's),

Gene: Graduation_64 Start: 41860, Stop: 41774, Start Num: 43
Candidate Starts for Graduation_64:
(Start: 43 @41860 has 288 MA's), (52, 41815),

Gene: GrecoEtereo_60 Start: 40025, Stop: 39939, Start Num: 43
Candidate Starts for GrecoEtereo_60:
(Start: 43 @40025 has 288 MA's), (54, 39968),

Gene: Greg_61 Start: 40257, Stop: 40171, Start Num: 43
Candidate Starts for Greg_61:
(25, 40317), (Start: 43 @40257 has 288 MA's), (54, 40200),

Gene: Grif_65 Start: 39781, Stop: 39677, Start Num: 43
Candidate Starts for Grif_65:
(Start: 43 @39781 has 288 MA's), (Start: 45 @39766 has 2 MA's), (48, 39754), (56, 39712),

Gene: Groupthink_66 Start: 39592, Stop: 39488, Start Num: 43
Candidate Starts for Groupthink_66:
(Start: 43 @39592 has 288 MA's), (Start: 45 @39577 has 2 MA's), (48, 39565), (56, 39523),

Gene: Grub_65 Start: 39698, Stop: 39594, Start Num: 43
Candidate Starts for Grub_65:
(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: GtownJaz_65 Start: 39708, Stop: 39604, Start Num: 43
Candidate Starts for GtownJaz_65:
(Start: 43 @39708 has 288 MA's), (Start: 45 @39693 has 2 MA's), (48, 39681), (56, 39639),

Gene: Gwendoluna_63 Start: 42377, Stop: 42291, Start Num: 43
Candidate Starts for Gwendoluna_63:
(29, 42422), (Start: 40 @42389 has 3 MA's), (Start: 43 @42377 has 288 MA's),

Gene: HanShotFirst_62 Start: 42534, Stop: 42448, Start Num: 43
Candidate Starts for HanShotFirst_62:
(Start: 43 @42534 has 288 MA's), (56, 42465),

Gene: Happiness_58 Start: 39031, Stop: 38945, Start Num: 43
Candidate Starts for Happiness_58:
(9, 39781), (10, 39640), (15, 39184), (24, 39097), (Start: 39 @39046 has 8 MA's), (Start: 43 @39031 has 288 MA's), (56, 38977),

Gene: HashRod_66 Start: 39734, Stop: 39630, Start Num: 43
Candidate Starts for HashRod_66:
(Start: 43 @39734 has 288 MA's), (Start: 45 @39719 has 2 MA's), (48, 39707), (56, 39665),

Gene: HaveUMetTed_66 Start: 39577, Stop: 39473, Start Num: 43
Candidate Starts for HaveUMetTed_66:
(Start: 43 @39577 has 288 MA's), (Start: 45 @39562 has 2 MA's), (48, 39550), (56, 39508),

Gene: Heathen_62 Start: 39153, Stop: 39070, Start Num: 42
Candidate Starts for Heathen_62:
(24, 39222), (Start: 42 @39153 has 11 MA's), (48, 39126), (52, 39108),

Gene: Heliosoles_64 Start: 39595, Stop: 39491, Start Num: 43
Candidate Starts for Heliosoles_64:
(Start: 43 @39595 has 288 MA's), (Start: 45 @39580 has 2 MA's), (48, 39568), (56, 39526),

Gene: Hercules11_65 Start: 39715, Stop: 39611, Start Num: 43
Candidate Starts for Hercules11_65:
(Start: 43 @39715 has 288 MA's), (Start: 45 @39700 has 2 MA's), (48, 39688), (56, 39646),

Gene: HermioneGrange_62 Start: 41601, Stop: 41515, Start Num: 43
Candidate Starts for HermioneGrange_62:
(Start: 43 @41601 has 288 MA's), (52, 41556),

Gene: Holli_58 Start: 38835, Stop: 38749, Start Num: 43
Candidate Starts for Holli_58:
(24, 38901), (Start: 39 @38850 has 8 MA's), (Start: 43 @38835 has 288 MA's), (47, 38820), (56, 38781),

Gene: Hookmount_61 Start: 39419, Stop: 39336, Start Num: 43
Candidate Starts for Hookmount_61:
(Start: 43 @39419 has 288 MA's), (Start: 45 @39404 has 2 MA's), (48, 39392),

Gene: Hope4ever_62 Start: 41007, Stop: 40921, Start Num: 43
Candidate Starts for Hope4ever_62:
(11, 41217), (12, 41208), (26, 41064), (28, 41061), (Start: 43 @41007 has 288 MA's), (56, 40938),

Gene: Iceman_59 Start: 39331, Stop: 39245, Start Num: 44
Candidate Starts for Iceman_59:

(15, 39487), (24, 39400), (Start: 39 @39349 has 8 MA's), (Start: 43 @39334 has 288 MA's), (Start: 44 @39331 has 8 MA's), (47, 39316), (56, 39277),

Gene: Ichabod_64 Start: 41728, Stop: 41642, Start Num: 43
Candidate Starts for Ichabod_64:
(Start: 43 @41728 has 288 MA's), (52, 41683),

Gene: Idleandcovert_62 Start: 39459, Stop: 39376, Start Num: 42
Candidate Starts for Idleandcovert_62:
(Start: 42 @39459 has 11 MA's), (48, 39432),

Gene: IgnatiusPatJac_60 Start: 40321, Stop: 40235, Start Num: 43
Candidate Starts for IgnatiusPatJac_60:
(Start: 40 @40333 has 3 MA's), (Start: 43 @40321 has 288 MA's),

Gene: Iracema64_60 Start: 39312, Stop: 39223, Start Num: 43
Candidate Starts for Iracema64_60:
(1, 40452), (6, 40245), (7, 40239), (10, 39921), (15, 39465), (24, 39378), (Start: 39 @39327 has 8 MA's), (Start: 43 @39312 has 288 MA's), (Start: 44 @39309 has 8 MA's), (47, 39294), (56, 39255),

Gene: JC27_63 Start: 41045, Stop: 40959, Start Num: 43
Candidate Starts for JC27_63:
(Start: 41 @41057 has 1 MA's), (Start: 43 @41045 has 288 MA's), (56, 40976),

Gene: JF2_60 Start: 37619, Stop: 37536, Start Num: 42
Candidate Starts for JF2_60:
(Start: 42 @37619 has 11 MA's), (48, 37592), (49, 37586),

Gene: JF4_60 Start: 37619, Stop: 37536, Start Num: 42
Candidate Starts for JF4_60:
(Start: 42 @37619 has 11 MA's), (48, 37592), (49, 37586),

Gene: JHC117_63 Start: 39705, Stop: 39601, Start Num: 43
Candidate Starts for JHC117_63:
(Start: 43 @39705 has 288 MA's), (Start: 45 @39690 has 2 MA's), (48, 39678), (56, 39636),

Gene: JackSparrow_63 Start: 40917, Stop: 40831, Start Num: 43
Candidate Starts for JackSparrow_63:
(Start: 43 @40917 has 288 MA's),

Gene: JenCasNa_66 Start: 39706, Stop: 39602, Start Num: 43
Candidate Starts for JenCasNa_66:
(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: JeppNRM_66 Start: 39593, Stop: 39489, Start Num: 43
Candidate Starts for JeppNRM_66:
(Start: 43 @39593 has 288 MA's), (Start: 45 @39578 has 2 MA's), (48, 39566), (56, 39524),

Gene: JetBlade_59 Start: 39039, Stop: 38953, Start Num: 43
Candidate Starts for JetBlade_59:
(9, 39789), (10, 39648), (15, 39192), (24, 39105), (Start: 39 @39054 has 8 MA's), (Start: 43 @39039 has 288 MA's), (47, 39024), (56, 38985),

Gene: Jobu08_63 Start: 39538, Stop: 39434, Start Num: 43

Candidate Starts for Jobu08_63:

(Start: 43 @39538 has 288 MA's), (Start: 45 @39523 has 2 MA's), (48, 39511), (56, 39469),

Gene: JoongJeon_58 Start: 39042, Stop: 38956, Start Num: 43

Candidate Starts for JoongJeon_58:

(2, 40128), (3, 40116), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: Jorgensen_61 Start: 40326, Stop: 40240, Start Num: 43

Candidate Starts for Jorgensen_61:

(21, 40416), (23, 40398), (30, 40371), (33, 40356), (Start: 43 @40326 has 288 MA's),

Gene: JuliaChild_62 Start: 41341, Stop: 41255, Start Num: 43

Candidate Starts for JuliaChild_62:

(Start: 43 @41341 has 288 MA's), (54, 41284),

Gene: KFPoly_58 Start: 39039, Stop: 38953, Start Num: 43

Candidate Starts for KFPoly_58:

(2, 40125), (3, 40113), (7, 39966), (8, 39957), (10, 39648), (15, 39192), (24, 39105), (Start: 39 @39054 has 8 MA's), (Start: 43 @39039 has 288 MA's), (47, 39024), (56, 38985),

Gene: KSSJEB_61 Start: 40326, Stop: 40240, Start Num: 43

Candidate Starts for KSSJEB_61:

(Start: 43 @40326 has 288 MA's),

Gene: Kalb97_66 Start: 39591, Stop: 39487, Start Num: 43

Candidate Starts for Kalb97_66:

(Start: 43 @39591 has 288 MA's), (Start: 45 @39576 has 2 MA's), (48, 39564), (56, 39522),

Gene: Kalnoky_66 Start: 39589, Stop: 39485, Start Num: 43

Candidate Starts for Kalnoky_66:

(Start: 43 @39589 has 288 MA's), (Start: 45 @39574 has 2 MA's), (48, 39562), (56, 39520),

Gene: Kamy_58 Start: 39047, Stop: 38961, Start Num: 43

Candidate Starts for Kamy_58:

(2, 40133), (3, 40121), (7, 39974), (8, 39965), (10, 39656), (15, 39200), (24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: Kanely_62 Start: 40905, Stop: 40819, Start Num: 43

Candidate Starts for Kanely_62:

(Start: 43 @40905 has 288 MA's), (56, 40836),

Gene: Katalie136_57 Start: 38885, Stop: 38784, Start Num: 43

Candidate Starts for Katalie136_57:

(15, 39038), (24, 38951), (Start: 39 @38900 has 8 MA's), (Start: 43 @38885 has 288 MA's), (56, 38816),

Gene: Killigrew_60 Start: 41100, Stop: 41014, Start Num: 43

Candidate Starts for Killigrew_60:

(Start: 43 @41100 has 288 MA's), (56, 41031),

Gene: Kingmustik0402_59 Start: 39034, Stop: 38948, Start Num: 43

Candidate Starts for Kingmustik0402_59:

(2, 40120), (3, 40108), (7, 39961), (8, 39952), (10, 39643), (15, 39187), (24, 39100), (Start: 39 @39049 has 8 MA's), (Start: 43 @39034 has 288 MA's), (47, 39019), (56, 38980),

Gene: Koreni_58 Start: 38726, Stop: 38640, Start Num: 43

Candidate Starts for Koreni_58:

(2, 39812), (3, 39800), (7, 39653), (8, 39644), (10, 39335), (15, 38879), (24, 38792), (Start: 39 @38741 has 8 MA's), (Start: 43 @38726 has 288 MA's), (47, 38711), (56, 38672),

Gene: Kratak_58 Start: 39040, Stop: 38954, Start Num: 44

Candidate Starts for Kratak_58:

(10, 39652), (15, 39196), (24, 39109), (Start: 39 @39058 has 8 MA's), (Start: 43 @39043 has 288 MA's), (Start: 44 @39040 has 8 MA's), (47, 39025),

Gene: Kugel_60 Start: 41153, Stop: 41067, Start Num: 43

Candidate Starts for Kugel_60:

(18, 41258), (20, 41249), (Start: 41 @41165 has 1 MA's), (Start: 43 @41153 has 288 MA's),

Gene: KyMonks1A_64 Start: 40904, Stop: 40818, Start Num: 43

Candidate Starts for KyMonks1A_64:

(12, 41105), (26, 40961), (28, 40958), (Start: 43 @40904 has 288 MA's),

Gene: Kyee_59 Start: 39043, Stop: 38957, Start Num: 43

Candidate Starts for Kyee_59:

(2, 40129), (3, 40117), (7, 39970), (8, 39961), (10, 39652), (15, 39196), (24, 39109), (Start: 39 @39058 has 8 MA's), (Start: 43 @39043 has 288 MA's), (47, 39028), (56, 38989),

Gene: LBerry_66 Start: 39710, Stop: 39606, Start Num: 43

Candidate Starts for LBerry_66:

(Start: 43 @39710 has 288 MA's), (Start: 45 @39695 has 2 MA's), (48, 39683), (56, 39641),

Gene: LHTSCC_61 Start: 39448, Stop: 39362, Start Num: 43

Candidate Starts for LHTSCC_61:

(9, 40198), (10, 40057), (15, 39601), (24, 39514), (Start: 39 @39463 has 8 MA's), (Start: 43 @39448 has 288 MA's), (56, 39394),

Gene: Lambert1_61 Start: 39418, Stop: 39335, Start Num: 43

Candidate Starts for Lambert1_61:

(Start: 43 @39418 has 288 MA's), (Start: 45 @39403 has 2 MA's), (48, 39391),

Gene: LappelDuVide_59 Start: 39044, Stop: 38958, Start Num: 43

Candidate Starts for LappelDuVide_59:

(2, 40130), (3, 40118), (7, 39971), (8, 39962), (10, 39653), (15, 39197), (24, 39110), (Start: 39 @39059 has 8 MA's), (Start: 43 @39044 has 288 MA's), (47, 39029), (56, 38990),

Gene: LarryKay_65 Start: 39736, Stop: 39632, Start Num: 43

Candidate Starts for LarryKay_65:

(Start: 43 @39736 has 288 MA's), (Start: 45 @39721 has 2 MA's), (48, 39709), (56, 39667),

Gene: Lemur_59 Start: 39042, Stop: 38956, Start Num: 43

Candidate Starts for Lemur_59:

(2, 40128), (3, 40116), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: LeoAvram_58 Start: 39045, Stop: 38959, Start Num: 44

Candidate Starts for LeoAvram_58:

(15, 39201), (24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (Start: 44 @39045 has 8 MA's), (47, 39030), (56, 38991),

Gene: Lesedi_56 Start: 38890, Stop: 38804, Start Num: 43

Candidate Starts for Lesedi_56:

(25, 38950), (Start: 43 @38890 has 288 MA's),

Gene: Licorice_62 Start: 42392, Stop: 42306, Start Num: 43

Candidate Starts for Licorice_62:

(Start: 43 @42392 has 288 MA's), (56, 42323),

Gene: LittleB_59 Start: 39046, Stop: 38960, Start Num: 43

Candidate Starts for LittleB_59:

(2, 40132), (3, 40120), (7, 39973), (8, 39964), (10, 39655), (15, 39199), (24, 39112), (Start: 39 @39061 has 8 MA's), (Start: 43 @39046 has 288 MA's), (47, 39031), (56, 38992),

Gene: LittleGuy_59 Start: 38941, Stop: 38855, Start Num: 43

Candidate Starts for LittleGuy_59:

(2, 40027), (3, 40015), (7, 39868), (8, 39859), (10, 39550), (15, 39094), (24, 39007), (Start: 39 @38956 has 8 MA's), (Start: 43 @38941 has 288 MA's), (47, 38926), (56, 38887),

Gene: LochMonster_60 Start: 39284, Stop: 39195, Start Num: 43

Candidate Starts for LochMonster_60:

(10, 39893), (15, 39437), (24, 39350), (Start: 39 @39299 has 8 MA's), (Start: 43 @39284 has 288 MA's), (Start: 44 @39281 has 8 MA's), (47, 39266), (56, 39227),

Gene: Lorenzo_59 Start: 39045, Stop: 38959, Start Num: 43

Candidate Starts for Lorenzo_59:

(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Louie6_64 Start: 39735, Stop: 39631, Start Num: 43

Candidate Starts for Louie6_64:

(Start: 43 @39735 has 288 MA's), (Start: 45 @39720 has 2 MA's), (48, 39708), (56, 39666),

Gene: Lowa_64 Start: 39698, Stop: 39594, Start Num: 43

Candidate Starts for Lowa_64:

(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: LugYA_68 Start: 39707, Stop: 39603, Start Num: 43

Candidate Starts for LugYA_68:

(Start: 43 @39707 has 288 MA's), (Start: 45 @39692 has 2 MA's), (48, 39680), (56, 39638),

Gene: Lunsford_60 Start: 39039, Stop: 38953, Start Num: 43

Candidate Starts for Lunsford_60:

(15, 39192), (24, 39105), (Start: 39 @39054 has 8 MA's), (Start: 43 @39039 has 288 MA's), (47, 39024), (56, 38985),

Gene: MA5_62 Start: 38819, Stop: 38736, Start Num: 42

Candidate Starts for MA5_62:

(Start: 42 @38819 has 11 MA's), (48, 38792),

Gene: MK4_62 Start: 38903, Stop: 38820, Start Num: 42

Candidate Starts for MK4_62:

(Start: 42 @38903 has 11 MA's), (48, 38876), (49, 38870),

Gene: MPlant7149_60 Start: 39489, Stop: 39403, Start Num: 43

Candidate Starts for MPlant7149_60:

(Start: 43 @39489 has 288 MA's), (52, 39444),

Gene: MadMarie_65 Start: 39708, Stop: 39604, Start Num: 43

Candidate Starts for MadMarie_65:

(Start: 43 @39708 has 288 MA's), (Start: 45 @39693 has 2 MA's), (48, 39681), (56, 39639),

Gene: Magnar_58 Start: 40505, Stop: 40419, Start Num: 43

Candidate Starts for Magnar_58:

(31, 40544), (37, 40526), (Start: 43 @40505 has 288 MA's),

Gene: Mainiac_65 Start: 39700, Stop: 39596, Start Num: 43

Candidate Starts for Mainiac_65:

(Start: 43 @39700 has 288 MA's), (Start: 45 @39685 has 2 MA's), (48, 39673), (56, 39631),

Gene: Makemake_62 Start: 41962, Stop: 41876, Start Num: 43

Candidate Starts for Makemake_62:

(Start: 43 @41962 has 288 MA's), (52, 41917),

Gene: Malinsilva_67 Start: 39698, Stop: 39594, Start Num: 43

Candidate Starts for Malinsilva_67:

(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: Manu_65 Start: 39592, Stop: 39488, Start Num: 43

Candidate Starts for Manu_65:

(Start: 43 @39592 has 288 MA's), (Start: 45 @39577 has 2 MA's), (48, 39565), (56, 39523),

Gene: MarQuardt_65 Start: 39708, Stop: 39604, Start Num: 43

Candidate Starts for MarQuardt_65:

(Start: 43 @39708 has 288 MA's), (Start: 45 @39693 has 2 MA's), (48, 39681), (56, 39639),

Gene: Marcell_57 Start: 39512, Stop: 39426, Start Num: 43

Candidate Starts for Marcell_57:

(Start: 43 @39512 has 288 MA's), (56, 39443),

Gene: Marchy_55 Start: 37600, Stop: 37514, Start Num: 43

Candidate Starts for Marchy_55:

(Start: 43 @37600 has 288 MA's), (56, 37531),

Gene: Margo_61 Start: 39444, Stop: 39361, Start Num: 43

Candidate Starts for Margo_61:

(Start: 43 @39444 has 288 MA's), (Start: 45 @39429 has 2 MA's), (48, 39417),

Gene: Marie_63 Start: 39706, Stop: 39602, Start Num: 43

Candidate Starts for Marie_63:

(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: Marius_66 Start: 39589, Stop: 39485, Start Num: 43

Candidate Starts for Marius_66:

(Start: 43 @39589 has 288 MA's), (Start: 45 @39574 has 2 MA's), (48, 39562), (56, 39520),

Gene: Marsha_60 Start: 41987, Stop: 41901, Start Num: 43

Candidate Starts for Marsha_60:

(Start: 43 @41987 has 288 MA's), (54, 41930), (56, 41918),

Gene: Maxo_60 Start: 39047, Stop: 38961, Start Num: 43

Candidate Starts for Maxo_60:

(2, 40133), (3, 40121), (7, 39974), (8, 39965), (10, 39656), (15, 39200), (24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: Mazhar510_59 Start: 39046, Stop: 38960, Start Num: 43

Candidate Starts for Mazhar510_59:

(2, 40132), (3, 40120), (7, 39973), (8, 39964), (10, 39655), (15, 39199), (24, 39112), (Start: 39 @39061 has 8 MA's), (Start: 43 @39046 has 288 MA's), (47, 39031), (56, 38992),

Gene: McGuire_62 Start: 40165, Stop: 40079, Start Num: 43

Candidate Starts for McGuire_62:

(Start: 43 @40165 has 288 MA's), (56, 40096),

Gene: Medusa_59 Start: 39074, Stop: 38958, Start Num: 39

Candidate Starts for Medusa_59:

(15, 39212), (24, 39125), (Start: 39 @39074 has 8 MA's), (Start: 43 @39059 has 288 MA's), (55, 38993), (56, 38990),

Gene: Melvin_61 Start: 39040, Stop: 38954, Start Num: 43

Candidate Starts for Melvin_61:

(2, 40126), (3, 40114), (7, 39967), (8, 39958), (10, 39649), (15, 39193), (24, 39106), (Start: 39 @39055 has 8 MA's), (Start: 43 @39040 has 288 MA's), (47, 39025), (56, 38986),

Gene: Methuselah_60 Start: 39730, Stop: 39626, Start Num: 43

Candidate Starts for Methuselah_60:

(Start: 43 @39730 has 288 MA's), (Start: 45 @39715 has 2 MA's), (48, 39703), (56, 39661),

Gene: Michley_63 Start: 41093, Stop: 41007, Start Num: 43

Candidate Starts for Michley_63:

(Start: 40 @41105 has 3 MA's), (Start: 43 @41093 has 288 MA's),

Gene: Microwolf_63 Start: 39707, Stop: 39618, Start Num: 45

Candidate Starts for Microwolf_63:

(Start: 43 @39722 has 288 MA's), (Start: 45 @39707 has 2 MA's), (48, 39695), (56, 39653),

Gene: Millski_58 Start: 39046, Stop: 38960, Start Num: 43

Candidate Starts for Millski_58:

(2, 40132), (3, 40120), (7, 39973), (8, 39964), (10, 39655), (15, 39199), (24, 39112), (Start: 39 @39061 has 8 MA's), (Start: 43 @39046 has 288 MA's), (47, 39031), (56, 38992),

Gene: Miramae_56 Start: 38334, Stop: 38245, Start Num: 43

Candidate Starts for Miramae_56:

(15, 38487), (24, 38400), (Start: 39 @38349 has 8 MA's), (Start: 43 @38334 has 288 MA's), (47, 38316), (56, 38277),

Gene: Misomonster_66 Start: 39733, Stop: 39629, Start Num: 43

Candidate Starts for Misomonster_66:

(Start: 43 @39733 has 288 MA's), (Start: 45 @39718 has 2 MA's), (48, 39706), (56, 39664),

Gene: MoneyMay_64 Start: 39706, Stop: 39602, Start Num: 43

Candidate Starts for MoneyMay_64:

(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: Moose_59 Start: 39678, Stop: 39592, Start Num: 43

Candidate Starts for Moose_59:

(Start: 40 @39690 has 3 MA's), (Start: 43 @39678 has 288 MA's), (56, 39609),

Gene: Morpher26_57 Start: 38906, Stop: 38805, Start Num: 43

Candidate Starts for Morpher26_57:

(15, 39059), (24, 38972), (Start: 39 @38921 has 8 MA's), (Start: 43 @38906 has 288 MA's), (56, 38837),

Gene: Morrow_60 Start: 39051, Stop: 38965, Start Num: 43

Candidate Starts for Morrow_60:

(7, 39978), (8, 39969), (10, 39660), (15, 39204), (24, 39117), (Start: 39 @39066 has 8 MA's), (Start: 43 @39051 has 288 MA's), (47, 39036), (56, 38997),

Gene: MrGordo_60 Start: 40333, Stop: 40247, Start Num: 43

Candidate Starts for MrGordo_60:

(14, 40504), (Start: 43 @40333 has 288 MA's),

Gene: Mryolo_57 Start: 40375, Stop: 40289, Start Num: 43

Candidate Starts for Mryolo_57:

(Start: 43 @40375 has 288 MA's),

Gene: MuchMore_68 Start: 39698, Stop: 39594, Start Num: 43

Candidate Starts for MuchMore_68:

(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: Mundrea_57 Start: 38898, Stop: 38797, Start Num: 43

Candidate Starts for Mundrea_57:

(15, 39051), (24, 38964), (Start: 39 @38913 has 8 MA's), (Start: 43 @38898 has 288 MA's), (48, 38871), (56, 38829),

Gene: Nebs_60 Start: 39045, Stop: 38959, Start Num: 44

Candidate Starts for Nebs_60:

(9, 39798), (10, 39657), (15, 39201), (24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (Start: 44 @39045 has 8 MA's), (47, 39030), (56, 38991),

Gene: Nerujay_63 Start: 42121, Stop: 42035, Start Num: 43

Candidate Starts for Nerujay_63:

(Start: 43 @42121 has 288 MA's), (54, 42064), (56, 42052),

Gene: Nhonho_59 Start: 41389, Stop: 41303, Start Num: 43

Candidate Starts for Nhonho_59:

(Start: 43 @41389 has 288 MA's),

Gene: Niza_62 Start: 41988, Stop: 41902, Start Num: 43

Candidate Starts for Niza_62:

(Start: 43 @41988 has 288 MA's), (54, 41931), (56, 41919),

Gene: Noella_61 Start: 39419, Stop: 39336, Start Num: 43

Candidate Starts for Noella_61:

(Start: 43 @39419 has 288 MA's), (Start: 45 @39404 has 2 MA's), (48, 39392),

Gene: Noelle_58 Start: 39222, Stop: 39106, Start Num: 39

Candidate Starts for Noelle_58:

(24, 39273), (Start: 39 @39222 has 8 MA's), (Start: 43 @39207 has 288 MA's), (56, 39138),

Gene: OKaNui_59 Start: 39095, Stop: 39009, Start Num: 43

Candidate Starts for OKaNui_59:

(2, 40181), (3, 40169), (7, 40022), (8, 40013), (10, 39704), (15, 39248), (24, 39161), (Start: 39 @39110 has 8 MA's), (Start: 43 @39095 has 288 MA's), (47, 39080), (56, 39041),

Gene: Obama12_60 Start: 39432, Stop: 39346, Start Num: 43

Candidate Starts for Obama12_60:

(9, 40182), (10, 40041), (15, 39585), (24, 39498), (Start: 39 @39447 has 8 MA's), (Start: 43 @39432 has 288 MA's), (56, 39378),

Gene: Ohfah_60 Start: 39048, Stop: 38959, Start Num: 43

Candidate Starts for Ohfah_60:

(9, 39798), (10, 39657), (15, 39201), (24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (Start: 44 @39045 has 8 MA's), (47, 39030), (56, 38991),

Gene: OlanP_64 Start: 39765, Stop: 39661, Start Num: 43

Candidate Starts for OlanP_64:

(Start: 43 @39765 has 288 MA's), (Start: 45 @39750 has 2 MA's), (48, 39738), (56, 39696),

Gene: Ollie_65 Start: 39577, Stop: 39473, Start Num: 43

Candidate Starts for Ollie_65:

(Start: 43 @39577 has 288 MA's), (Start: 45 @39562 has 2 MA's), (48, 39550), (56, 39508),

Gene: P28Green_66 Start: 39709, Stop: 39605, Start Num: 43

Candidate Starts for P28Green_66:

(Start: 43 @39709 has 288 MA's), (Start: 45 @39694 has 2 MA's), (48, 39682), (56, 39640),

Gene: PGHhamlin_67 Start: 39698, Stop: 39594, Start Num: 43

Candidate Starts for PGHhamlin_67:

(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: PP_62 Start: 43352, Stop: 43272, Start Num: 44

Candidate Starts for PP_62:

(24, 43421), (Start: 44 @43352 has 8 MA's), (50, 43322), (51, 43319), (58, 43283),

Gene: PacerPaul_60 Start: 40830, Stop: 40744, Start Num: 43

Candidate Starts for PacerPaul_60:

(Start: 43 @40830 has 288 MA's), (54, 40773), (56, 40761),

Gene: Palestino_58 Start: 39045, Stop: 38959, Start Num: 43
Candidate Starts for Palestino_58:
(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Panamaxus_59 Start: 39418, Stop: 39335, Start Num: 43
Candidate Starts for Panamaxus_59:
(Start: 43 @39418 has 288 MA's), (Start: 45 @39403 has 2 MA's), (48, 39391),

Gene: Papez_63 Start: 42358, Stop: 42272, Start Num: 43
Candidate Starts for Papez_63:
(Start: 43 @42358 has 288 MA's),

Gene: Paphu_60 Start: 41264, Stop: 41178, Start Num: 43
Candidate Starts for Paphu_60:
(29, 41309), (36, 41288), (Start: 40 @41276 has 3 MA's), (Start: 43 @41264 has 288 MA's),

Gene: Paraselene_58 Start: 40895, Stop: 40809, Start Num: 43
Candidate Starts for Paraselene_58:
(Start: 43 @40895 has 288 MA's), (52, 40850),

Gene: Pari_63 Start: 40356, Stop: 40270, Start Num: 43
Candidate Starts for Pari_63:
(Start: 43 @40356 has 288 MA's), (52, 40311),

Gene: Parliament_62 Start: 43056, Stop: 42970, Start Num: 43
Candidate Starts for Parliament_62:
(29, 43101), (36, 43080), (Start: 40 @43068 has 3 MA's), (Start: 43 @43056 has 288 MA's),

Gene: PattyP_63 Start: 42048, Stop: 41962, Start Num: 43
Candidate Starts for PattyP_63:
(Start: 43 @42048 has 288 MA's), (56, 41979),

Gene: Pawn_65 Start: 39596, Stop: 39492, Start Num: 43
Candidate Starts for Pawn_65:
(Start: 43 @39596 has 288 MA's), (Start: 45 @39581 has 2 MA's), (48, 39569), (56, 39527),

Gene: Pelly_61 Start: 42060, Stop: 41974, Start Num: 43
Candidate Starts for Pelly_61:
(Start: 43 @42060 has 288 MA's), (54, 42003),

Gene: Pembroke_65 Start: 39707, Stop: 39603, Start Num: 43
Candidate Starts for Pembroke_65:
(Start: 43 @39707 has 288 MA's), (Start: 45 @39692 has 2 MA's), (48, 39680), (56, 39638),

Gene: Pepe_57 Start: 39121, Stop: 39023, Start Num: 40
Candidate Starts for Pepe_57:
(Start: 40 @39121 has 3 MA's), (Start: 43 @39109 has 288 MA's),

Gene: Perplexer_57 Start: 38882, Stop: 38781, Start Num: 43
Candidate Starts for Perplexer_57:
(15, 39035), (24, 38948), (Start: 39 @38897 has 8 MA's), (Start: 43 @38882 has 288 MA's), (56, 38813),

Gene: PeterPeter_59 Start: 39042, Stop: 38956, Start Num: 43
Candidate Starts for PeterPeter_59:
(2, 40128), (3, 40116), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: PetiteSangsue_57 Start: 38885, Stop: 38784, Start Num: 43
Candidate Starts for PetiteSangsue_57:
(15, 39038), (24, 38951), (Start: 39 @38900 has 8 MA's), (Start: 43 @38885 has 288 MA's), (56, 38816),

Gene: Petp2012_62 Start: 42556, Stop: 42470, Start Num: 43
Candidate Starts for Petp2012_62:
(13, 42742), (Start: 43 @42556 has 288 MA's), (54, 42499),

Gene: Petruchio_59 Start: 39783, Stop: 39697, Start Num: 43
Candidate Starts for Petruchio_59:
(Start: 43 @39783 has 288 MA's),

Gene: Phacado_59 Start: 39044, Stop: 38958, Start Num: 43
Candidate Starts for Phacado_59:
(2, 40130), (3, 40118), (7, 39971), (8, 39962), (10, 39653), (15, 39197), (24, 39110), (Start: 43 @39044 has 288 MA's), (47, 39029), (56, 38990),

Gene: Phantastic_63 Start: 39080, Stop: 38997, Start Num: 42
Candidate Starts for Phantastic_63:
(Start: 42 @39080 has 11 MA's), (48, 39053), (49, 39047),

Gene: Phelipe_60 Start: 39048, Stop: 38959, Start Num: 43
Candidate Starts for Phelipe_60:
(9, 39798), (10, 39657), (15, 39201), (24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (Start: 44 @39045 has 8 MA's), (47, 39030), (56, 38991),

Gene: PherrisBueller_59 Start: 39225, Stop: 39139, Start Num: 43
Candidate Starts for PherrisBueller_59:
(Start: 43 @39225 has 288 MA's), (52, 39180),

Gene: Phighter1804_59 Start: 39109, Stop: 39020, Start Num: 43
Candidate Starts for Phighter1804_59:
(15, 39262), (24, 39175), (Start: 39 @39124 has 8 MA's), (Start: 43 @39109 has 288 MA's), (Start: 44 @39106 has 8 MA's), (47, 39091), (56, 39052),

Gene: PhishRPhriends_63 Start: 38773, Stop: 38669, Start Num: 43
Candidate Starts for PhishRPhriends_63:
(Start: 43 @38773 has 288 MA's), (Start: 45 @38758 has 2 MA's), (48, 38746), (56, 38704),

Gene: Phoebe_66 Start: 39699, Stop: 39595, Start Num: 43
Candidate Starts for Phoebe_66:
(Start: 43 @39699 has 288 MA's), (Start: 45 @39684 has 2 MA's), (48, 39672), (56, 39630),

Gene: Phontbonne_59 Start: 38951, Stop: 38850, Start Num: 43
Candidate Starts for Phontbonne_59:

(10, 39560), (15, 39104), (24, 39017), (Start: 39 @38966 has 8 MA's), (Start: 43 @38951 has 288 MA's), (55, 38885), (56, 38882),

Gene: Phoxy_65 Start: 39731, Stop: 39627, Start Num: 43

Candidate Starts for Phoxy_65:

(Start: 43 @39731 has 288 MA's), (Start: 45 @39716 has 2 MA's), (48, 39704), (56, 39662),

Gene: Phranny_66 Start: 39578, Stop: 39474, Start Num: 43

Candidate Starts for Phranny_66:

(Start: 43 @39578 has 288 MA's), (Start: 45 @39563 has 2 MA's), (48, 39551), (56, 39509),

Gene: PhrostyMug_61 Start: 42378, Stop: 42292, Start Num: 43

Candidate Starts for PhrostyMug_61:

(Start: 43 @42378 has 288 MA's), (56, 42309),

Gene: Pinto_61 Start: 40708, Stop: 40622, Start Num: 43

Candidate Starts for Pinto_61:

(12, 40909), (26, 40765), (28, 40762), (Start: 43 @40708 has 288 MA's), (54, 40651),

Gene: Pippin_61 Start: 40310, Stop: 40224, Start Num: 43

Candidate Starts for Pippin_61:

(Start: 43 @40310 has 288 MA's), (56, 40241),

Gene: Pocahontas_61 Start: 39415, Stop: 39332, Start Num: 43

Candidate Starts for Pocahontas_61:

(Start: 43 @39415 has 288 MA's), (Start: 45 @39400 has 2 MA's), (48, 39388),

Gene: Polymorphads_60 Start: 39038, Stop: 38952, Start Num: 43

Candidate Starts for Polymorphads_60:

(24, 39104), (Start: 39 @39053 has 8 MA's), (Start: 43 @39038 has 288 MA's), (47, 39023), (56, 38984),

Gene: Popcicle_61 Start: 39415, Stop: 39332, Start Num: 43

Candidate Starts for Popcicle_61:

(Start: 43 @39415 has 288 MA's), (Start: 45 @39400 has 2 MA's), (48, 39388),

Gene: PotatoSplit_66 Start: 39710, Stop: 39606, Start Num: 43

Candidate Starts for PotatoSplit_66:

(Start: 43 @39710 has 288 MA's), (Start: 45 @39695 has 2 MA's), (48, 39683), (56, 39641),

Gene: Pumbaa_59 Start: 38990, Stop: 38904, Start Num: 43

Candidate Starts for Pumbaa_59:

(2, 40076), (6, 39923), (7, 39917), (10, 39599), (15, 39143), (24, 39056), (Start: 39 @39005 has 8 MA's), (Start: 43 @38990 has 288 MA's), (47, 38975), (56, 38936),

Gene: PurpleHaze_65 Start: 39591, Stop: 39487, Start Num: 43

Candidate Starts for PurpleHaze_65:

(Start: 43 @39591 has 288 MA's), (Start: 45 @39576 has 2 MA's), (48, 39564), (56, 39522),

Gene: QTRlifeCrisis_61 Start: 41246, Stop: 41160, Start Num: 43

Candidate Starts for QTRlifeCrisis_61:

(Start: 43 @41246 has 288 MA's), (54, 41189),

Gene: QuinnKiro_60 Start: 39418, Stop: 39335, Start Num: 43
Candidate Starts for QuinnKiro_60:
(Start: 43 @39418 has 288 MA's), (Start: 45 @39403 has 2 MA's), (48, 39391),

Gene: Reba_65 Start: 39251, Stop: 39147, Start Num: 43
Candidate Starts for Reba_65:
(Start: 43 @39251 has 288 MA's), (Start: 45 @39236 has 2 MA's), (48, 39224), (56, 39182),

Gene: Relief_58 Start: 39042, Stop: 38956, Start Num: 43
Candidate Starts for Relief_58:
(2, 40128), (3, 40116), (5, 39996), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: RidgeCB_60 Start: 40684, Stop: 40598, Start Num: 43
Candidate Starts for RidgeCB_60:
(Start: 43 @40684 has 288 MA's), (54, 40627),

Gene: Ringer_60 Start: 41576, Stop: 41490, Start Num: 43
Candidate Starts for Ringer_60:
(27, 41633), (Start: 43 @41576 has 288 MA's), (52, 41531),

Gene: Rockstar_60 Start: 38912, Stop: 38829, Start Num: 42
Candidate Starts for Rockstar_60:
(Start: 42 @38912 has 11 MA's), (48, 38885), (49, 38879),

Gene: Romney_58 Start: 39042, Stop: 38956, Start Num: 43
Candidate Starts for Romney_58:
(2, 40128), (3, 40116), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: Rosa24_57 Start: 39076, Stop: 38987, Start Num: 43
Candidate Starts for Rosa24_57:
(10, 39685), (15, 39229), (24, 39142), (Start: 39 @39091 has 8 MA's), (Start: 43 @39076 has 288 MA's), (Start: 44 @39073 has 8 MA's), (47, 39058), (56, 39019),

Gene: Rufus_62 Start: 41185, Stop: 41099, Start Num: 43
Candidate Starts for Rufus_62:
(12, 41386), (26, 41242), (28, 41239), (Start: 43 @41185 has 288 MA's), (54, 41128),

Gene: Ruin_59 Start: 39038, Stop: 38952, Start Num: 43
Candidate Starts for Ruin_59:
(2, 40124), (3, 40112), (7, 39965), (8, 39956), (10, 39647), (15, 39191), (24, 39104), (Start: 39 @39053 has 8 MA's), (Start: 43 @39038 has 288 MA's), (47, 39023), (56, 38984),

Gene: Rummer_64 Start: 39734, Stop: 39630, Start Num: 43
Candidate Starts for Rummer_64:
(Start: 43 @39734 has 288 MA's), (Start: 45 @39719 has 2 MA's), (48, 39707), (56, 39665),

Gene: Ruotula_63 Start: 42698, Stop: 42612, Start Num: 43
Candidate Starts for Ruotula_63:
(Start: 43 @42698 has 288 MA's),

Gene: Sabertooth_59 Start: 39047, Stop: 38961, Start Num: 43

Candidate Starts for Sabertooth_59:

(24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: Sabia_65 Start: 39715, Stop: 39611, Start Num: 43

Candidate Starts for Sabia_65:

(Start: 43 @39715 has 288 MA's), (Start: 45 @39700 has 2 MA's), (48, 39688), (56, 39646),

Gene: Sagefire_63 Start: 42564, Stop: 42478, Start Num: 43

Candidate Starts for Sagefire_63:

(Start: 43 @42564 has 288 MA's), (54, 42507),

Gene: SarFire_57 Start: 39630, Stop: 39544, Start Num: 43

Candidate Starts for SarFire_57:

(17, 39738), (19, 39726), (30, 39675), (Start: 43 @39630 has 288 MA's), (52, 39585),

Gene: Scamp_59 Start: 39047, Stop: 38961, Start Num: 43

Candidate Starts for Scamp_59:

(24, 39113), (Start: 39 @39062 has 8 MA's), (Start: 43 @39047 has 288 MA's), (47, 39032), (56, 38993),

Gene: Scowl_61 Start: 40456, Stop: 40370, Start Num: 43

Candidate Starts for Scowl_61:

(Start: 43 @40456 has 288 MA's), (52, 40411),

Gene: Seabiscuit_64 Start: 40427, Stop: 40341, Start Num: 43

Candidate Starts for Seabiscuit_64:

(Start: 43 @40427 has 288 MA's), (56, 40358),

Gene: Seanderson_60 Start: 41890, Stop: 41804, Start Num: 43

Candidate Starts for Seanderson_60:

(Start: 40 @41902 has 3 MA's), (Start: 43 @41890 has 288 MA's), (56, 41821),

Gene: Sheen_61 Start: 42251, Stop: 42171, Start Num: 43

Candidate Starts for Sheen_61:

(15, 42407), (24, 42317), (Start: 43 @42251 has 288 MA's), (46, 42236), (57, 42185),

Gene: Shygu2_57 Start: 38936, Stop: 38835, Start Num: 43

Candidate Starts for Shygu2_57:

(15, 39089), (24, 39002), (Start: 39 @38951 has 8 MA's), (Start: 43 @38936 has 288 MA's), (56, 38867),

Gene: Sibs6_63 Start: 39536, Stop: 39450, Start Num: 43

Candidate Starts for Sibs6_63:

(Start: 43 @39536 has 288 MA's), (56, 39467),

Gene: SkiPole_65 Start: 41165, Stop: 41067, Start Num: 40

Candidate Starts for SkiPole_65:

(Start: 40 @41165 has 3 MA's), (Start: 43 @41153 has 288 MA's),

Gene: Skipitt_58 Start: 39054, Stop: 38953, Start Num: 39

Candidate Starts for Skipitt_58:

(2, 40125), (3, 40113), (7, 39966), (8, 39957), (10, 39648), (15, 39192), (24, 39105), (Start: 39 @39054 has 8 MA's), (Start: 43 @39039 has 288 MA's), (47, 39024), (56, 38985),

Gene: Snazzy_59 Start: 39990, Stop: 39904, Start Num: 43
Candidate Starts for Snazzy_59:
(Start: 43 @39990 has 288 MA's),

Gene: SoilDragon_65 Start: 39154, Stop: 39050, Start Num: 43
Candidate Starts for SoilDragon_65:
(Start: 43 @39154 has 288 MA's), (Start: 45 @39139 has 2 MA's), (48, 39127), (56, 39085),

Gene: Solon_58 Start: 39862, Stop: 39776, Start Num: 43
Candidate Starts for Solon_58:
(25, 39922), (Start: 43 @39862 has 288 MA's),

Gene: Soshari_67 Start: 39730, Stop: 39626, Start Num: 43
Candidate Starts for Soshari_67:
(Start: 43 @39730 has 288 MA's), (Start: 45 @39715 has 2 MA's), (48, 39703), (56, 39661),

Gene: Sparxx_60 Start: 39040, Stop: 38954, Start Num: 43
Candidate Starts for Sparxx_60:
(24, 39106), (Start: 39 @39055 has 8 MA's), (Start: 43 @39040 has 288 MA's), (47, 39025), (56, 38986),

Gene: Spike509_65 Start: 39731, Stop: 39627, Start Num: 43
Candidate Starts for Spike509_65:
(Start: 43 @39731 has 288 MA's), (Start: 45 @39716 has 2 MA's), (48, 39704), (56, 39662),

Gene: Spino_58 Start: 39048, Stop: 38959, Start Num: 43
Candidate Starts for Spino_58:
(10, 39657), (15, 39201), (24, 39114), (Start: 39 @39063 has 8 MA's), (Start: 43 @39048 has 288 MA's), (Start: 44 @39045 has 8 MA's), (47, 39030), (56, 38991),

Gene: Squee_61 Start: 40708, Stop: 40622, Start Num: 43
Candidate Starts for Squee_61:
(Start: 43 @40708 has 288 MA's), (52, 40663),

Gene: StepMih_64 Start: 39685, Stop: 39596, Start Num: 45
Candidate Starts for StepMih_64:
(Start: 43 @39700 has 288 MA's), (Start: 45 @39685 has 2 MA's), (48, 39673), (56, 39631),

Gene: Stink_56 Start: 38614, Stop: 38525, Start Num: 43
Candidate Starts for Stink_56:
(15, 38767), (24, 38680), (Start: 39 @38629 has 8 MA's), (Start: 43 @38614 has 288 MA's), (56, 38557),

Gene: Sunshine924_63 Start: 40103, Stop: 40017, Start Num: 43
Candidate Starts for Sunshine924_63:
(30, 40145), (Start: 43 @40103 has 288 MA's), (52, 40058),

Gene: SwissCheese_61 Start: 40178, Stop: 40092, Start Num: 43
Candidate Starts for SwissCheese_61:
(Start: 40 @40190 has 3 MA's), (Start: 43 @40178 has 288 MA's), (56, 40109),

Gene: Switzer_61 Start: 42225, Stop: 42139, Start Num: 43

Candidate Starts for Switzer_61:

(Start: 43 @42225 has 288 MA's),

Gene: Swole_62 Start: 40815, Stop: 40729, Start Num: 43

Candidate Starts for Swole_62:

(Start: 43 @40815 has 288 MA's), (54, 40758),

Gene: TNguyen7_63 Start: 39425, Stop: 39342, Start Num: 42

Candidate Starts for TNguyen7_63:

(Start: 42 @39425 has 11 MA's), (48, 39398),

Gene: Tasp14_64 Start: 42545, Stop: 42459, Start Num: 43

Candidate Starts for Tasp14_64:

(29, 42590), (36, 42569), (Start: 40 @42557 has 3 MA's), (Start: 43 @42545 has 288 MA's),

Gene: Taurus_66 Start: 39706, Stop: 39602, Start Num: 43

Candidate Starts for Taurus_66:

(Start: 43 @39706 has 288 MA's), (Start: 45 @39691 has 2 MA's), (48, 39679), (56, 39637),

Gene: Teodoridan_58 Start: 39685, Stop: 39587, Start Num: 40

Candidate Starts for Teodoridan_58:

(Start: 40 @39685 has 3 MA's), (Start: 43 @39673 has 288 MA's),

Gene: Thanksgivukkah_58 Start: 39043, Stop: 38957, Start Num: 43

Candidate Starts for Thanksgivukkah_58:

(2, 40129), (3, 40117), (7, 39970), (8, 39961), (10, 39652), (15, 39196), (24, 39109), (Start: 39 @39058 has 8 MA's), (Start: 43 @39043 has 288 MA's), (47, 39028), (56, 38989),

Gene: TheloniousMonk_61 Start: 42308, Stop: 42222, Start Num: 43

Candidate Starts for TheloniousMonk_61:

(23, 42380), (Start: 43 @42308 has 288 MA's),

Gene: Thor_57 Start: 38988, Stop: 38902, Start Num: 43

Candidate Starts for Thor_57:

(17, 39096), (19, 39084), (30, 39033), (Start: 43 @38988 has 288 MA's), (52, 38943),

Gene: Tiffany_64 Start: 39592, Stop: 39488, Start Num: 43

Candidate Starts for Tiffany_64:

(Start: 43 @39592 has 288 MA's), (Start: 45 @39577 has 2 MA's), (48, 39565), (56, 39523),

Gene: TinyPebbles_63 Start: 39736, Stop: 39632, Start Num: 43

Candidate Starts for TinyPebbles_63:

(Start: 43 @39736 has 288 MA's), (Start: 45 @39721 has 2 MA's), (48, 39709), (56, 39667),

Gene: Tinybot_58 Start: 39072, Stop: 38986, Start Num: 44

Candidate Starts for Tinybot_58:

(10, 39684), (15, 39228), (24, 39141), (Start: 39 @39090 has 8 MA's), (Start: 43 @39075 has 288 MA's), (Start: 44 @39072 has 8 MA's), (47, 39057), (56, 39018),

Gene: Todacoro_61 Start: 39418, Stop: 39335, Start Num: 43

Candidate Starts for Todacoro_61:

(Start: 43 @39418 has 288 MA's), (Start: 45 @39403 has 2 MA's), (48, 39391),

Gene: Tote_57 Start: 38082, Stop: 37996, Start Num: 43

Candidate Starts for Tote_57:

(Start: 43 @38082 has 288 MA's), (54, 38025),

Gene: Traft412_63 Start: 41489, Stop: 41403, Start Num: 43

Candidate Starts for Traft412_63:

(Start: 43 @41489 has 288 MA's),

Gene: Tripl3t_63 Start: 43200, Stop: 43114, Start Num: 43

Candidate Starts for Tripl3t_63:

(35, 43227), (Start: 40 @43212 has 3 MA's), (Start: 43 @43200 has 288 MA's),

Gene: Trouble_62 Start: 41402, Stop: 41316, Start Num: 43

Candidate Starts for Trouble_62:

(Start: 43 @41402 has 288 MA's), (56, 41333),

Gene: TroyPia_60 Start: 39043, Stop: 38957, Start Num: 43

Candidate Starts for TroyPia_60:

(2, 40129), (3, 40117), (7, 39970), (8, 39961), (10, 39652), (15, 39196), (24, 39109), (Start: 39 @39058 has 8 MA's), (Start: 43 @39043 has 288 MA's), (47, 39028), (56, 38989),

Gene: Turj99_59 Start: 41800, Stop: 41714, Start Num: 43

Candidate Starts for Turj99_59:

(12, 42001), (26, 41857), (28, 41854), (Start: 43 @41800 has 288 MA's),

Gene: TygerBlood_59 Start: 39045, Stop: 38959, Start Num: 43

Candidate Starts for TygerBlood_59:

(2, 40131), (3, 40119), (7, 39972), (8, 39963), (10, 39654), (15, 39198), (24, 39111), (Start: 39 @39060 has 8 MA's), (Start: 43 @39045 has 288 MA's), (47, 39030), (56, 38991),

Gene: Ulysses_58 Start: 38725, Stop: 38636, Start Num: 43

Candidate Starts for Ulysses_58:

(10, 39334), (15, 38878), (24, 38791), (Start: 39 @38740 has 8 MA's), (Start: 43 @38725 has 288 MA's), (Start: 44 @38722 has 8 MA's), (47, 38707), (56, 38668),

Gene: Vix_63 Start: 39789, Stop: 39685, Start Num: 43

Candidate Starts for Vix_63:

(Start: 43 @39789 has 288 MA's), (Start: 45 @39774 has 2 MA's), (48, 39762), (56, 39720),

Gene: Wander_59 Start: 39042, Stop: 38956, Start Num: 43

Candidate Starts for Wander_59:

(2, 40128), (3, 40116), (4, 40059), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: Watermelon_61 Start: 40365, Stop: 40279, Start Num: 43

Candidate Starts for Watermelon_61:

(Start: 43 @40365 has 288 MA's), (56, 40296),

Gene: Watson_64 Start: 39698, Stop: 39594, Start Num: 43

Candidate Starts for Watson_64:

(Start: 43 @39698 has 288 MA's), (Start: 45 @39683 has 2 MA's), (48, 39671), (56, 39629),

Gene: Wilbur_59 Start: 39042, Stop: 38956, Start Num: 43

Candidate Starts for Wilbur_59:

(2, 40128), (3, 40116), (7, 39969), (8, 39960), (10, 39651), (15, 39195), (24, 39108), (Start: 39 @39057 has 8 MA's), (Start: 43 @39042 has 288 MA's), (47, 39027), (56, 38988),

Gene: Wile_57 Start: 38916, Stop: 38815, Start Num: 43

Candidate Starts for Wile_57:

(15, 39069), (24, 38982), (Start: 39 @38931 has 8 MA's), (Start: 43 @38916 has 288 MA's), (56, 38847),

Gene: Wooldri_67 Start: 39618, Stop: 39514, Start Num: 43

Candidate Starts for Wooldri_67:

(Start: 43 @39618 has 288 MA's), (Start: 45 @39603 has 2 MA's), (48, 39591), (56, 39549),

Gene: Xena_56 Start: 38897, Stop: 38781, Start Num: 39

Candidate Starts for Xena_56:

(24, 38948), (Start: 39 @38897 has 8 MA's), (Start: 43 @38882 has 288 MA's), (56, 38813),

Gene: YoSam321_59 Start: 39039, Stop: 38953, Start Num: 43

Candidate Starts for YoSam321_59:

(2, 40125), (3, 40113), (7, 39966), (8, 39957), (10, 39648), (15, 39192), (24, 39105), (Start: 39 @39054 has 8 MA's), (Start: 43 @39039 has 288 MA's), (47, 39024), (56, 38985),

Gene: Zeeculate_58 Start: 41115, Stop: 41029, Start Num: 43

Candidate Starts for Zeeculate_58:

(Start: 43 @41115 has 288 MA's), (54, 41058), (56, 41046),

Gene: Zephyr_62 Start: 40532, Stop: 40446, Start Num: 43

Candidate Starts for Zephyr_62:

(Start: 43 @40532 has 288 MA's), (56, 40463),

Gene: Zetzy_64 Start: 39269, Stop: 39165, Start Num: 43

Candidate Starts for Zetzy_64:

(Start: 43 @39269 has 288 MA's), (Start: 45 @39254 has 2 MA's), (48, 39242), (56, 39200),

Gene: Zeuska_60 Start: 41858, Stop: 41760, Start Num: 40

Candidate Starts for Zeuska_60:

(Start: 40 @41858 has 3 MA's), (Start: 43 @41846 has 288 MA's),