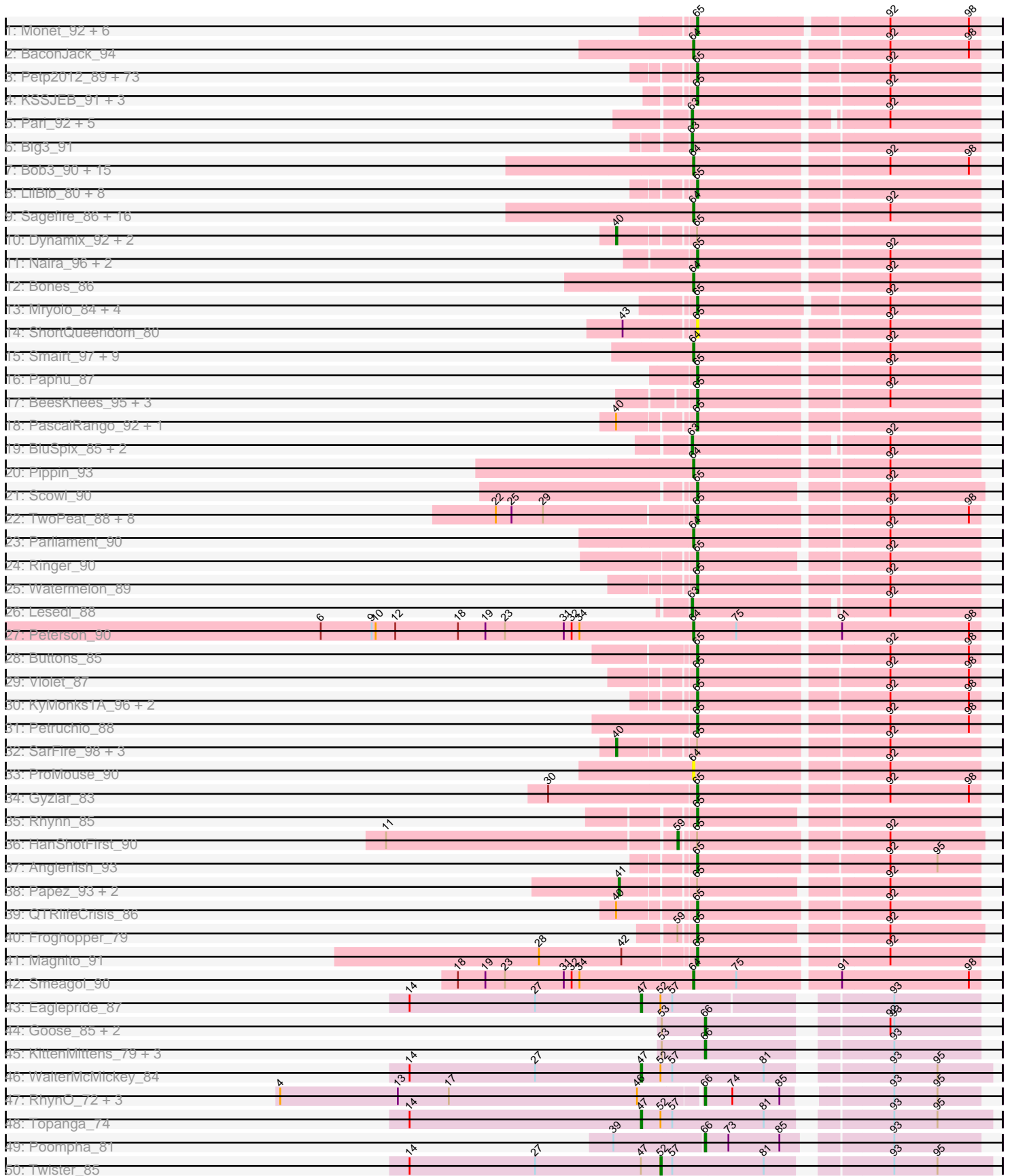
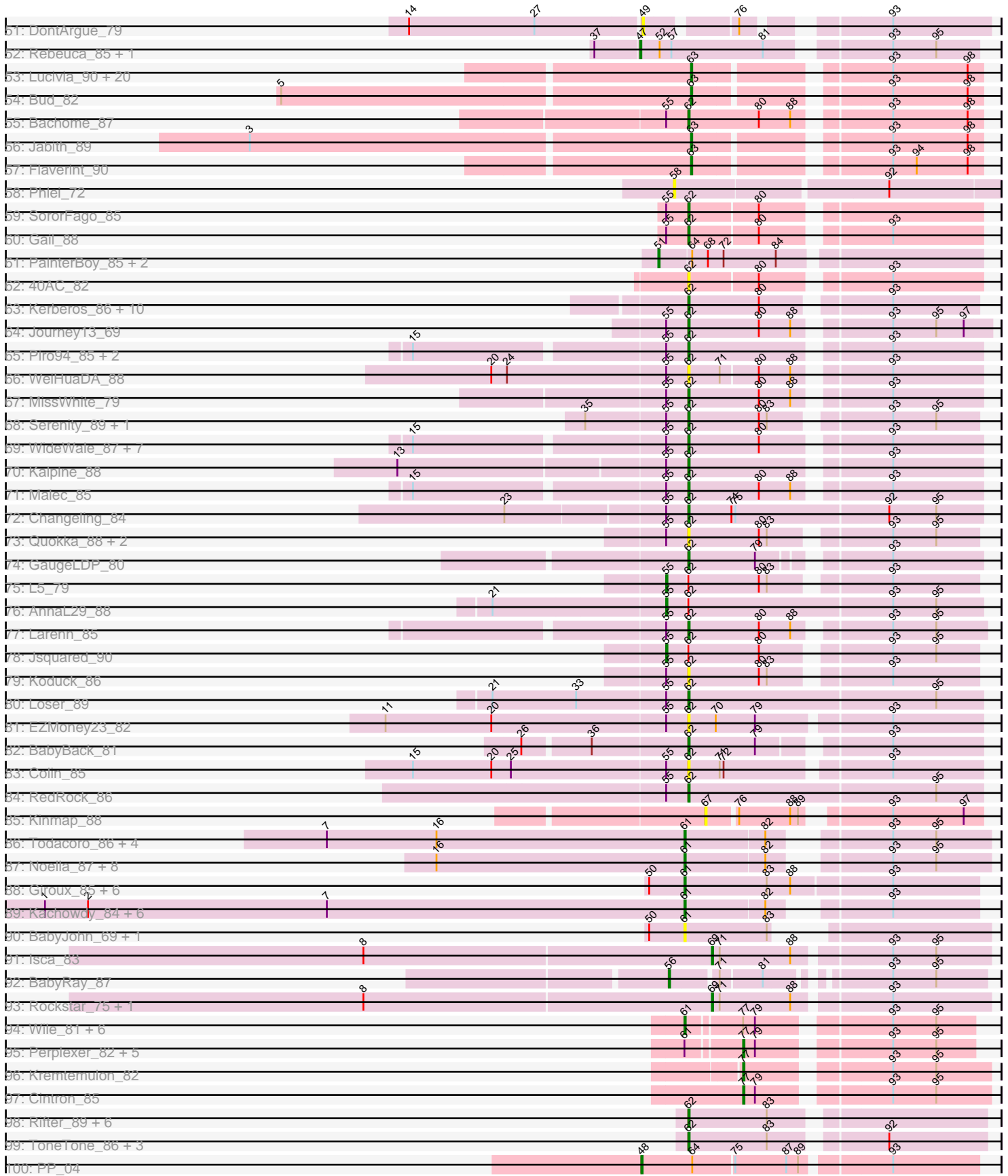


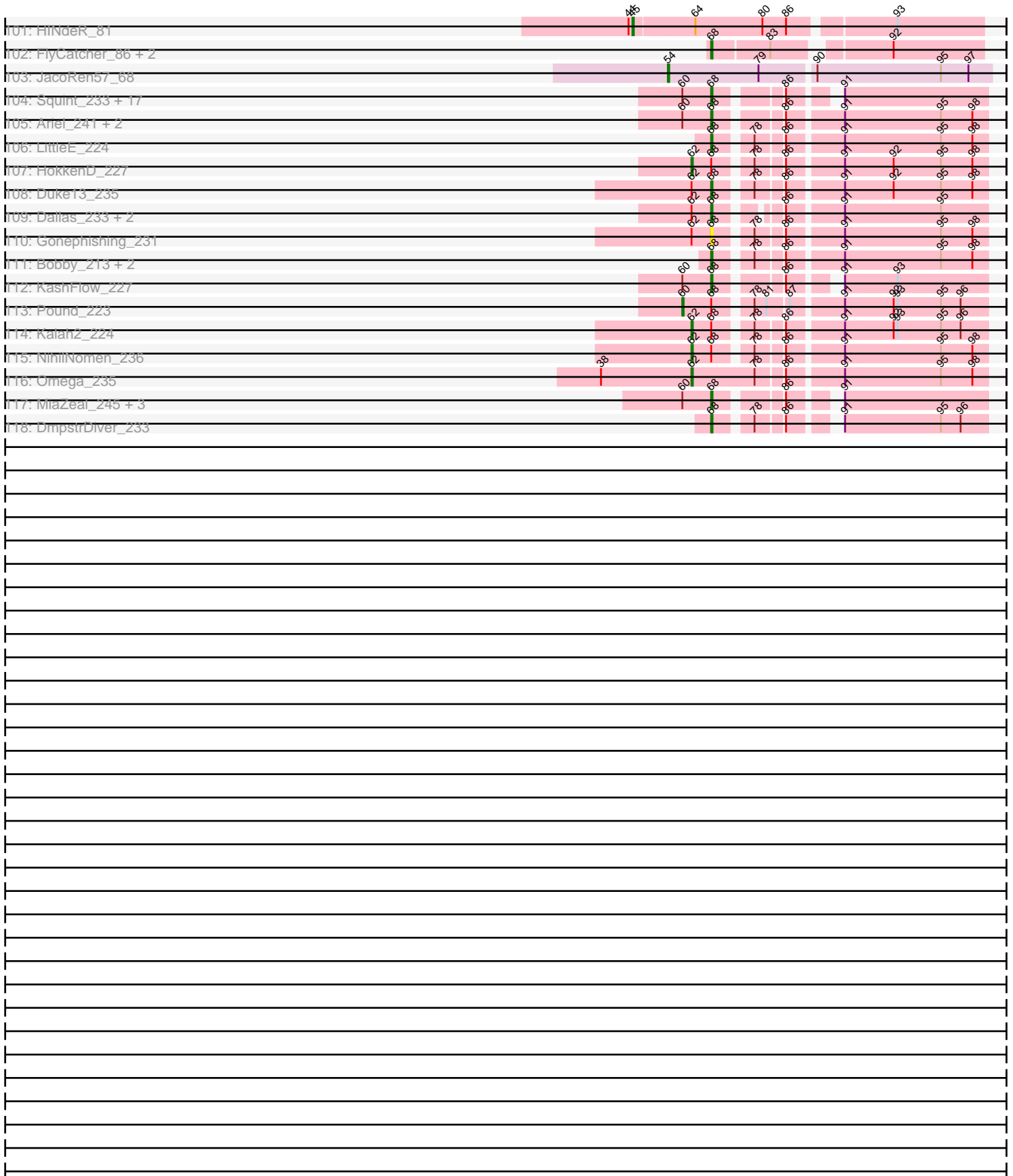
Pham 193651



Pham 193651



Pham 193651



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 193651 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193651 has 409 members, 39 are drafts.

Phages represented in each track:

- Track 1 : Monet_92, Inyanga_82, Bxb1_84, Fushigi_84, Treddle_90, Homines_83, Crispicus1_86
- Track 2 : BaconJack_94
- Track 3 : Petp2012_89, STLscum_100, Pepe_86, Rajelicia_89, Maroc7_92, Bigfoot_86, Sibs6_95, Magnar_91, Greg_90, Carlyle_91, MrGordo_92, Adahisdi_85, Kugel_94, Sanya_81, SwissCheese_95, Dussy_87, Dexes_93, Arcanine_94, TheloniousMonk_90, Sandaddy_90, Abbyshoes_89, Chanagan_91, CactusRose_96, Forsytheast_96, Pelly_94, Ohno789_95, Ajay_84, Bruns_96, Turj99_86, Hermia_84, Niza_89, Euphoria_95, Mkhuseleli_91, Fajezeel_90, GrecoEtereo_92, ILeeKay_91, Ruotula_94, Rufus_93, Bethlehem_87, Corvo_94, Burton_90, Lopton_88, Wheeler_96, Oogway_87, PattyP_92, Tripl3t_91, Arlo_96, Atkinbua_98, MetalQZJ_88, DrFeelGood_85, BillKnuckles_86, Kykar_88, Traft412_86, BigPaolini_85, ConceptII_97, Alvin_86, Museum_90, Zephyr_92, Moose_95, Kenmech_93, Acme_91, GageAP_90, Rubeus_88, Ciao_94, Sorpresa_93, MaryBeth_91, Fascinus_86, DreamCatcher_102, NEHalo_88, AFIS_88, Eyeball_94, Hope4ever_88, Snazzy_92, SpikeBT_87
- Track 4 : KSSJEB_91, Kanely_93, Seanderson_89, Altman_94
- Track 5 : Pari_92, A6_85, BK1_85, PherrisBueller_88, Killigrew_87, Zeeculate_91
- Track 6 : Big3_91
- Track 7 : Bob3_90, Gandalf20_90, RidgeCB_89, Solon_83, Edtherson_87, Rutherford_91, Paraselene_87, Abrogate_880, Sunshine924_93, Topgun_89, Wilkins_90, StewieG_86, SkiPole_98, Jorgensen_100, Applejack_88, Ashballer_91
- Track 8 : LilBib_80, Agaliana_87, Seabiscuit_95, Norz_90, Francis47_93, Marcell_83, Slagathor_92, PacerPaul_93, Pinto_87
- Track 9 : Sagefire_86, Barriga_101, Lamina13_93, Marsha_93, Sumter_87, Aeneas_96, Nerujay_93, Jerm2_90, HermioneGrange_94, Marge_87, Hami1_87, JC27_94, Nhonho_87, HarryOW_91, Rohr_92, BigMau_91, MPlant7149_90
- Track 10 : Dynamix_92, Briton15_95, Switzer_91
- Track 11 : Naira_96, Squee_92, Fenn_97
- Track 12 : Bones_86
- Track 13 : Mryolo_84, Espresso_87, Marchy_81, Teodoridan_93, Payneeful_77
- Track 14 : ShortQueendom_80
- Track 15 : Smairt_97, Mule_92, JackSparrow_92, Tasp14_87, Bexan_87, StrongArm_88, Trouble_90, PhrostyMug_94, Perseus_90, Beatrix_89
- Track 16 : Paphu_87
- Track 17 : BeesKnees_95, Jasper_93, McGuire_92, Dreamboat_93
- Track 18 : PascalRango_92, Manatee_92

- Track 19 : BluSpix_85, IgnatiusPatJac_87, Alsfro_94
- Track 20 : Pippin_93
- Track 21 : Scowl_90
- Track 22 : TwoPeat_88, Molly_89, PSullivan_87, Swole_88, KBG_87, JuliaChild_91, Tote_86, Doom_84, Pita2_91
- Track 23 : Parliament_90
- Track 24 : Ringer_90
- Track 25 : Watermelon_89
- Track 26 : Lesedi_88
- Track 27 : Peterson_90
- Track 28 : Buttons_85
- Track 29 : Violet_87
- Track 30 : KyMonks1A_96, Licorice_91, Target_90
- Track 31 : Petruchio_88
- Track 32 : SarFire_98, BPBiabs31_97, Thor_98, Ichabod_96
- Track 33 : ProMouse_90
- Track 34 : Gyzlar_83
- Track 35 : Rhynn_85
- Track 36 : HanShotFirst_90
- Track 37 : Anglerfish_93
- Track 38 : Papez_93, Michley_91, Graduation_93
- Track 39 : QTRlifeCrisis_86
- Track 40 : Froghopper_79
- Track 41 : Magnito_91
- Track 42 : Smeagol_90
- Track 43 : Eaglepride_87
- Track 44 : Goose_85, Chupacabra_81, OKCentral2016_83
- Track 45 : KittenMittens_79, Severus_82, PeaceMeal1_81, Drake94_81
- Track 46 : WalterMcMickey_84
- Track 47 : RhynO_72, DustyMartin_87, Shapes_87, Rowdy_87
- Track 48 : Topanga_74
- Track 49 : Poompha_81
- Track 50 : Twister_85
- Track 51 : DontArgue_79
- Track 52 : Rebeuca_85, Kristoff_82
- Track 53 : Lucivia_90, Orange_89, Gilberta_87, Aneem_90, MaCh_89, Joselito_87, Et2Brutus_89, Timothy_89, Bowtie_85, Fibonacci_89, Mabel_89, Salz_85, Munch_88, Sham4_86, Insomnia_89, Ebony_88, Hutc2_86, Petersenfast_83, TinyTimmy_87, Mulciber_88, Snape_89
- Track 54 : Bud_82
- Track 55 : Bachome_87
- Track 56 : Jabith_89
- Track 57 : Flaverint_90
- Track 58 : Phlei_72
- Track 59 : SororFago_85
- Track 60 : Gail_88
- Track 61 : PainterBoy_85, Lucyedi_86, EagleEye_87
- Track 62 : 40AC_82
- Track 63 : Kerberos_86, Tomathan_86, Travvers_86, Pomar16_86, Duplo_87, VC3_84, StarStuff_86, ANI8_85, DBQu4n_86, AN9_85, C3_78
- Track 64 : Journey13_69
- Track 65 : Piro94_85, HarryHoudini_86, Drake55_87
- Track 66 : WeiHuaDA_88

- Track 67 : MissWhite_79
- Track 68 : Serenity_89, TipsytheTRex_85
- Track 69 : WideWale_87, Updawg_87, Baehexic_85, MiculUcigas_86, Centaur_86, Flare16_86, Equemioh13_86, NaSiaTalie_87
- Track 70 : Kalpine_88
- Track 71 : Malec_85
- Track 72 : Changeling_84
- Track 73 : Quokka_88, MajorMajor_83, Bradman_89
- Track 74 : GaugeLDP_80
- Track 75 : L5_79
- Track 76 : AnnaL29_88
- Track 77 : Larenn_85
- Track 78 : Jsquared_90
- Track 79 : Koduck_86
- Track 80 : Loser_89
- Track 81 : EZMoney23_82
- Track 82 : BabyBack_81
- Track 83 : Colin_85
- Track 84 : RedRock_86
- Track 85 : Kinmap_88
- Track 86 : Todacoro_86, QuinnKiro_85, Veracruz_83, Margo_86, Lambert1_86
- Track 87 : Noella_87, Norbert_82, Hookmount_86, Caviar_75, Popcicle_86, ResDef_84, Panamaxus_82, Texage_84, Pocahontas_85
- Track 88 : Giroux_85, Puppy_88, Bugatti_88, Pistachio_87, SaturnRing_88, TNguyen7_88, BlueBird_89
- Track 89 : Kachowdy_84, Fred313_84, DropBear_84, HelDan_86, Heathen_86, Marchesa_86, Scout_86
- Track 90 : BabyJohn_69, Chiqui_69
- Track 91 : Isca_83
- Track 92 : BabyRay_87
- Track 93 : Rockstar_75, Phantastic_87
- Track 94 : Wile_81, Wizard007_82, Druantia_84, Backyardigan_80, Achebe_81, Badger_81, Cici_82
- Track 95 : Perplexer_82, Bumblebee11_81, Katalie136_82, PetiteSangsue_82, Morpher26_82, AbbysRanger_82
- Track 96 : Kremtemulon_82
- Track 97 : Cintron_85
- Track 98 : Rifter_89, Gruunaga_88, Artemis2UCLA_88, CloudWang3_89, Hexamo_88, Roksolana_89, Gladiator_85
- Track 99 : ToneTone_86, Lilbunny_88, Hammer_89, Tucker_89
- Track 100 : PP_04
- Track 101 : HINdeR_81
- Track 102 : FlyCatcher_86, Sheen_83, Toro_84
- Track 103 : JacoRen57_68
- Track 104 : Squint_233, Hughesyang_237, Dove_217, Yeet_229, EricMillard_232, Redno2_226, Bombitas_219, Bagrid_240, Beem_238, Ejimix_226, Zelink_228, Phoebus_233, Klein_242, ThreeRngTarjay_234, JuicyJay_230, Hannaconda_225, Schatzie_227, Odette_234
- Track 105 : Ariel_241, Courthouse_237, Superphikiman_233
- Track 106 : LittleE_224
- Track 107 : HokkenD_227
- Track 108 : Duke13_235
- Track 109 : Dallas_233, Halley_237, Minerva_233

- Track 110 : Gonephishing_231
- Track 111 : Bobby_213, Constella_224, Thibault_209
- Track 112 : KashFlow_227
- Track 113 : Pound_223
- Track 114 : Kalah2_224
- Track 115 : NihilNomen_236
- Track 116 : Omega_235
- Track 117 : MiaZeal_245, Lucky2013_232, Porcelain_236, Wanda_234
- Track 118 : DmpstrDiver_233

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

The start number called the most often in the published annotations is 65, it was called in 126 of the 370 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AFIS_88, Abbyshoes_89, Acme_91, Adahisdi_85, Agaliana_87, Ajay_84, Altman_94, Alvin_86, Anglerfish_93, Arcanine_94, Arlo_96, Atkinbua_98, BeesKnees_95, Bethlehem_87, BigPaolini_85, Bigfoot_86, BillKnuckles_86, Bruns_96, Burton_90, Buttons_85, Bxb1_84, CactusRose_96, Carlyle_91, Chanagan_91, Ciao_94, ConceptII_97, Corvo_94, Crispicous1_86, Dexes_93, Doom_84, DrFeelGood_85, DreamCatcher_102, Dreamboat_93, Dussy_87, Espresso_87, Euphoria_95, Eyeball_94, Fajezeel_90, Fascinus_86, Fenn_97, Forsytheast_96, Francis47_93, FrogHopper_79, Fushigi_84, GageAP_90, GrecoEtereo_92, Greg_90, Gyzlar_83, Hermia_84, Homines_83, Hope4ever_88, ILeeKay_91, Inyanga_82, Jasper_93, JuliaChild_91, KBG_87, KSSJEB_91, Kanely_93, Kenmech_93, Kugel_94, KyMonks1A_96, Kykar_88, Licorice_91, LilBib_80, Lopton_88, Magnar_91, Magnito_91, Manatee_92, Marcell_83, Marchy_81, Maroc7_92, MaryBeth_91, McGuire_92, MetalQZJ_88, Mkhuseleli_91, Molly_89, Monet_92, Moose_95, MrGordo_92, Mryolo_84, Museum_90, NEHalo_88, Naira_96, Niza_89, Norz_90, Ohno789_95, Oogway_87, PSullivan_87, PacerPaul_93, Paphu_87, PascalRango_92, PattyP_92, Payneful_77, Pelly_94, Pepe_86, Petp2012_89, Petruccio_88, Pinto_87, Pita2_91, QTRlifeCrisis_86, Rajelicia_89, Rhynn_85, Ringer_90, Rubeus_88, Rufus_93, Ruotula_94, STLscum_100, Sandaddy_90, Sanya_81, Scowl_90, Seabiscuit_95, Seanderson_89, ShortQueendom_80, Sibs6_95, Slagathor_92, Snazzy_92, Sorpresa_93, SpikeBT_87, Squee_92, SwissCheese_95, Swole_88, Target_90, Teodoridan_93, TheloniousMonk_90, Tote_86, Traft412_86, Treddle_90, Tripl3t_91, Turj99_86, TwoPeat_88, Violet_87, Watermelon_89, Wheeler_96, Zephyr_92,

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

- BPBiebs31_97, Briton15_95, Dynamix_92, Graduation_93, HanShotFirst_90, Ichabod_96, Michley_91, Papez_93, SarFire_98, Switzer_91, Thor_98,

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

- 40AC_82, A6_85, AN9_85, ANI8_85, AbbysRanger_82, Abrogate_880, Achebe_81, Aeneas_96, Alsfro_94, Aneem_90, AnnaL29_88, Applejack_88, Ariel_241, Artemis2UCLA_88, Ashballer_91, BK1_85, BabyBack_81, BabyJohn_69, BabyRay_87, Bachome_87, Backyardigan_80, BaconJack_94, Badger_81, Baehexic_85, Bagrid_240, Barriga_101, Beatrix_89, Beem_238, Bexan_87, Big3_91,

BigMau_91, BluSpix_85, BlueBird_89, Bob3_90, Bobby_213, Bombitas_219, Bones_86, Bowtie_85, Bradman_89, Bud_82, Bugatti_88, Bumblebee11_81, C3_78, Caviar_75, Centaur_86, Changeling_84, Chiqui_69, Chupacabra_81, Cici_82, Cintron_85, CloudWang3_89, Colin_85, Constella_224, Courthouse_237, DBQu4n_86, Dallas_233, DmpstrDiver_233, DontArgue_79, Dove_217, Drake55_87, Drake94_81, DropBear_84, Druantia_84, Duke13_235, Duplo_87, DustyMartin_87, EZMoney23_82, EagleEye_87, Eaglepride_87, Ebony_88, Edtherson_87, Ejimix_226, Equemioh13_86, EricMillard_232, Et2Brutus_89, Fibonacci_89, Flare16_86, Flaverint_90, FlyCatcher_86, Fred313_84, Gail_88, Gandalf20_90, GaugeLDP_80, Gilberta_87, Giroux_85, Gladiator_85, Gonephishing_231, Goose_85, Gruunaga_88, HINdeR_81, Halley_237, Hami1_87, Hammer_89, Hannaconda_225, HarryHoudini_86, HarryOW_91, Heathen_86, HelDan_86, HermioneGrange_94, Hexamo_88, HokkenD_227, Hookmount_86, Hughesyang_237, Hutc2_86, IgnatiusPatJac_87, Insomnia_89, Isca_83, JC27_94, Jabith_89, JackSparrow_92, JacoRen57_68, Jerm2_90, Jorgensen_100, Joselito_87, Journey13_69, Jsquared_90, JuicyJay_230, Kachowdy_84, Kalah2_224, Kalpine_88, KashFlow_227, Katalie136_82, Kerberos_86, Killigrew_87, Kinmap_88, KittenMittens_79, Klein_242, Koduck_86, Kremtemulon_82, Kristoff_82, L5_79, Lambert1_86, Lamina13_93, Larenn_85, Lesedi_88, Lilbunny_88, LittleE_224, Loser_89, Lucivia_90, Lucky2013_232, Lucyedi_86, MPlant7149_90, MaCh_89, Mabel_89, MajorMajor_83, Malec_85, Marchesa_86, Marge_87, Margo_86, Marsha_93, MiaZeal_245, MiculUcigas_86, Minerva_233, MissWhite_79, Morpher26_82, Mulciber_88, Mule_92, Munch_88, NaSiaTalie_87, Nerujay_93, Nhonho_87, NihilNomen_236, Noella_87, Norbert_82, OKCentral2016_83, Odette_234, Omega_235, Orange_89, PP_04, PainterBoy_85, Panamaxus_82, Paraselene_87, Pari_92, Parliament_90, PeaceMeal1_81, Perplexer_82, Perseus_90, Petersenfast_83, Peterson_90, PetiteSangsue_82, Phantastic_87, PherrisBueller_88, Phlei_72, Phoebus_233, PhrostyMug_94, Pippin_93, Piro94_85, Pistachio_87, Pocahontas_85, Pomar16_86, Poompha_81, Poppicle_86, Porcelain_236, Pound_223, ProMouse_90, Puppy_88, QuinnKiro_85, Quokka_88, Rebeuca_85, RedRock_86, Redno2_226, ResDef_84, RhynO_72, RidgeCB_89, Rifter_89, Rockstar_75, Rohr_92, Roksolana_89, Rowdy_87, Rutherford_91, Sagefire_86, Salz_85, SaturnRing_88, Schatzie_227, Scout_86, Serenity_89, Severus_82, Sham4_86, Shapes_87, Sheen_83, SkiPole_98, Smairt_97, Smeagol_90, Snape_89, Solon_83, SororFago_85, Squint_233, StarStuff_86, StewieG_86, StrongArm_88, Sumter_87, Sunshine924_93, Superphikiman_233, TNguyen7_88, Tasp14_87, Texage_84, Thibault_209, ThreeRngTarjay_234, Timothy_89, TinyTimmy_87, TipsytheTRex_85, Todacoro_86, Tomathan_86, ToneTone_86, Topanga_74, Topgun_89, Toro_84, Travvers_86, Trouble_90, Tucker_89, Twister_85, Updawg_87, VC3_84, Veracruz_83, WalterMcMickey_84, Wanda_234, WeiHuaDA_88, WideWale_87, Wile_81, Wilkins_90, Wizard007_82, Yeet_229, Zeeculate_91, Zelink_228,

Summary by start number:

Start 40:

- Found in 10 of 409 (2.4%) of genes in pham
- Manual Annotations of this start: 7 of 370
- Called 70.0% of time when present
- Phage (with cluster) where this start called: BPBiabs31_97 (A1), Briton15_95 (A1), Dynamix_92 (A1), Ichabod_96 (A1), SarFire_98 (A1), Switzer_91 (A1), Thor_98 (A1),

Start 41:

- Found in 3 of 409 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Graduation_93 (A1), Michley_91 (A1), Papez_93 (A1),

Start 45:

- Found in 1 of 409 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HINdeR_81 (A7),

Start 47:

- Found in 6 of 409 (1.5%) of genes in pham
- Manual Annotations of this start: 5 of 370
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Eaglepride_87 (A10), Kristoff_82 (A10), Rebeuca_85 (A10), Topanga_74 (A10), WalterMcMickey_84 (A10),

Start 48:

- Found in 1 of 409 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP_04 (A7),

Start 49:

- Found in 1 of 409 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DontArgue_79 (A10),

Start 51:

- Found in 3 of 409 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EagleEye_87 (A16), Lucyedi_86 (A16), PainterBoy_85 (A16),

Start 52:

- Found in 6 of 409 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Twister_85 (A10),

Start 54:

- Found in 1 of 409 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JacoRen57_68 (AB),

Start 55:

- Found in 34 of 409 (8.3%) of genes in pham
- Manual Annotations of this start: 3 of 370

- Called 8.8% of time when present
- Phage (with cluster) where this start called: AnnaL29_88 (A2), Jsquared_90 (A2), L5_79 (A2),

Start 56:

- Found in 1 of 409 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BabyRay_87 (A3),

Start 58:

- Found in 1 of 409 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phlei_72 (A13),

Start 59:

- Found in 2 of 409 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 50.0% of time when present
- Phage (with cluster) where this start called: HanShotFirst_90 (A1),

Start 60:

- Found in 27 of 409 (6.6%) of genes in pham
- Manual Annotations of this start: 1 of 370
- Called 3.7% of time when present
- Phage (with cluster) where this start called: Pound_223 (J),

Start 61:

- Found in 43 of 409 (10.5%) of genes in pham
- Manual Annotations of this start: 29 of 370
- Called 86.0% of time when present
- Phage (with cluster) where this start called: Achebe_81 (A4), BabyJohn_69 (A3), Backyardigan_80 (A4), Badger_81 (A4), BlueBird_89 (A3), Bugatti_88 (A3), Caviar_75 (A3), Chiqui_69 (A3), Cici_82 (A4), DropBear_84 (A3), Druantia_84 (A4), Fred313_84 (A3), Giroux_85 (A3), Heathen_86 (A3), HeiDan_86 (A3), Hookmount_86 (A3), Kachowdy_84 (A3), Lambert1_86 (A3), Marchesa_86 (A3), Margo_86 (A3), Noella_87 (A3), Norbert_82 (A3), Panamaxus_82 (A3), Pistachio_87 (A3), Pocahontas_85 (A3), Popcicle_86 (A3), Puppy_88 (A3), QuinnKiro_85 (A3), ResDef_84 (A3), SaturnRing_88 (A3), Scout_86 (A3), TNguyen7_88 (A3), Texage_84 (A3), Todacoro_86 (A3), Veracruz_83 (A3), Wile_81 (A4), Wizard007_82 (A4),

Start 62:

- Found in 68 of 409 (16.6%) of genes in pham
- Manual Annotations of this start: 51 of 370
- Called 88.2% of time when present
- Phage (with cluster) where this start called: 40AC_82 (A17), AN9_85 (A2), ANI8_85 (A2), Artemis2UCLA_88 (A6), BabyBack_81 (A2), Bachome_87 (A11), Baehexic_85 (A2), Bradman_89 (A2), C3_78 (A2), Centaur_86 (A2), Changeling_84 (A2), CloudWang3_89 (A6), Colin_85 (A2), DBQu4n_86 (A2), Drake55_87 (A2), Duplo_87 (A2), EZMoney23_82 (A2), Equemioh13_86 (A2), Flare16_86 (A2), Gail_88 (A14), GaugeLDP_80 (A2), Gladiator_85 (A6), Gruunaga_88 (A6), Hammer_89 (A6),

HarryHoudini_86 (A2), Hexamo_88 (A6), HokkenD_227 (J), Journey13_69 (A2), Kalah2_224 (J), Kalpine_88 (A2), Kerberos_86 (A2), Koduck_86 (A2), Larenn_85 (A2), Lilbunny_88 (A6), Loser_89 (A2), MajorMajor_83 (A2), Malec_85 (A2), MiculUcigas_86 (A2), MissWhite_79 (A2), NaSiaTalie_87 (A2), NihilNomen_236 (J), Omega_235 (J), Piro94_85 (A2), Pomar16_86 (A2), Quokka_88 (A2), RedRock_86 (A2), Rifter_89 (A6), Roksolana_89 (A6), Serenity_89 (A2), SororFago_85 (A14), StarStuff_86 (A2), TipsytheTRex_85 (A2), Tomathan_86 (A2), ToneTone_86 (A6), Travvers_86 (A2), Tucker_89 (A6), Updawg_87 (A2), VC3_84 (A2), WeiHuaDA_88 (A2), WideWale_87 (A2),

Start 63:

- Found in 35 of 409 (8.6%) of genes in pham
- Manual Annotations of this start: 34 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A6_85 (A1), Alsfro_94 (A1), Aneem_90 (A11), BK1_85 (A1), Big3_91 (A1), BluSpix_85 (A1), Bowtie_85 (A11), Bud_82 (A11), Ebony_88 (A11), Et2Brutus_89 (A11), Fibonacci_89 (A11), Flaverint_90 (A11), Gilberta_87 (A11), Hutc2_86 (A11), IgnatiusPatJac_87 (A1), Insomnia_89 (A11), Jabith_89 (A11), Joselito_87 (A11), Killigrew_87 (A1), Lesedi_88 (A1), Lucivia_90 (A11), MaCh_89 (A11), Mabel_89 (A11), Mulciber_88 (A11), Munch_88 (A11), Orange_89 (A11), Pari_92 (A1), Petersenfast_83 (A11), PherrisBueller_88 (A1), Salz_85 (A11), Sham4_86 (A11), Snape_89 (A11), Timothy_89 (A11), TinyTimmy_87 (A11), Zeeculate_91 (A1),

Start 64:

- Found in 55 of 409 (13.4%) of genes in pham
- Manual Annotations of this start: 48 of 370
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Abrogate_880 (A1), Aeneas_96 (A1), Applejack_88 (A1), Ashballer_91 (A1), BaconJack_94 (A1), Barriga_101 (A1), Beatrix_89 (A1), Bexan_87 (A1), BigMau_91 (A1), Bob3_90 (A1), Bones_86 (A1), Edtherson_87 (A1), Gandalf20_90 (A1), Hami1_87 (A1), HarryOW_91 (A1), HermioneGrange_94 (A1), JC27_94 (A1), JackSparrow_92 (A1), Jerm2_90 (A1), Jorgensen_100 (A1), Lamina13_93 (A1), MPlant7149_90 (A1), Marge_87 (A1), Marsha_93 (A1), Mule_92 (A1), Nerujay_93 (A1), Nhonho_87 (A1), Paraselene_87 (A1), Parliament_90 (A1), Perseus_90 (A1), Peterson_90 (A1), PhrostyMug_94 (A1), Pippin_93 (A1), ProMouse_90 (A1), RidgeCB_89 (A1), Rohr_92 (A1), Rutherford_91 (A1), Sagefire_86 (A1), SkiPole_98 (A1), Smairt_97 (A1), Smeagol_90 (A1), Solon_83 (A1), StewieG_86 (A1), StrongArm_88 (A1), Sumter_87 (A1), Sunshine924_93 (A1), Tasp14_87 (A1), Topgun_89 (A1), Trouble_90 (A1), Wilkins_90 (A1),

Start 65:

- Found in 145 of 409 (35.5%) of genes in pham
- Manual Annotations of this start: 126 of 370
- Called 92.4% of time when present
- Phage (with cluster) where this start called: AFIS_88 (A1), Abbyshoes_89 (A1), Acme_91 (A1), Adahisdi_85 (A1), Agaliana_87 (A1), Ajay_84 (A1), Altman_94 (A1), Alvin_86 (A1), Anglerfish_93 (A1), Arcanine_94 (A1), Arlo_96 (A1), Atkinbua_98 (A1), BeesKnees_95 (A1), Bethlehem_87 (A1), BigPaolini_85 (A1), Bigfoot_86 (A1), BillKnuckles_86 (A1), Bruns_96 (A1), Burton_90 (A1), Buttons_85 (A1), Bxb1_84 (A1), CactusRose_96 (A1), Carlyle_91 (A1), Chanagan_91 (A1), Ciao_94 (A1), ConceptII_97 (A1), Corvo_94 (A1), Crispicous1_86 (A1), Dexes_93 (A1), Doom_84

(A1), DrFeelGood_85 (A1), DreamCatcher_102 (A1), Dreamboat_93 (A1), Dussy_87 (A1), Espresso_87 (A1), Euphoria_95 (A1), Eyeball_94 (A1), Fajezeel_90 (A1), Fascinus_86 (A1), Fenn_97 (A1), Forsytheast_96 (A1), Francis47_93 (A1), Froghopper_79 (A1), Fushigi_84 (A1), GageAP_90 (A1), GrecoEtereo_92 (A1), Greg_90 (A1), Gyzzlar_83 (A1), Hermia_84 (A1), Homines_83 (A1), Hope4ever_88 (A1), ILeeKay_91 (A1), Inyanga_82 (A1), Jasper_93 (A1), JuliaChild_91 (A1), KBG_87 (A1), KSSJEB_91 (A1), Kanely_93 (A1), Kenmech_93 (A1), Kugel_94 (A1), KyMonks1A_96 (A1), Kykar_88 (A1), Licorice_91 (A1), LilBib_80 (A1), Lopton_88 (A1), Magnar_91 (A1), Magnito_91 (A1), Manatee_92 (A1), Marcell_83 (A1), Marchy_81 (A1), Maroc7_92 (A1), MaryBeth_91 (A1), McGuire_92 (A1), MetalQZJ_88 (A1), Mkhusei_91 (A1), Molly_89 (A1), Monet_92 (A1), Moose_95 (A1), MrGordo_92 (A1), Mryolo_84 (A1), Museum_90 (A1), NEHalo_88 (A1), Naira_96 (A1), Niza_89 (A1), Norz_90 (A1), Ohno789_95 (A1), Oogway_87 (A1), PSullivan_87 (A1), PacerPaul_93 (A1), Paphu_87 (A1), PascalRango_92 (A1), PattyP_92 (A1), Payneful_77 (A1), Pelly_94 (A1), Pepe_86 (A1), Petp2012_89 (A1), Petruccio_88 (A1), Pinto_87 (A1), Pita2_91 (A1), QTRlifeCrisis_86 (A1), Rajelicia_89 (A1), Rhynn_85 (A1), Ringer_90 (A1), Rubeus_88 (A1), Rufus_93 (A1), Ruotula_94 (A1), STLscum_100 (A1), Sandaddy_90 (A1), Sanya_81 (A1), Scowl_90 (A1), Seabiscuit_95 (A1), Seanderson_89 (A1), ShortQueendom_80 (A1), Sibs6_95 (A1), Slagathor_92 (A1), Snazzy_92 (A1), Sorpresa_93 (A1), SpikeBT_87 (A1), Squee_92 (A1), SwissCheese_95 (A1), Swole_88 (A1), Target_90 (A1), Teodoridan_93 (A1), TheloniousMonk_90 (A1), Tote_86 (A1), Traft412_86 (A1), Treddle_90 (A1), Tripl3t_91 (A1), Turj99_86 (A1), TwoPeat_88 (A1), Violet_87 (A1), Watermelon_89 (A1), Wheeler_96 (A1), Zephyr_92 (A1),

Start 66:

- Found in 12 of 409 (2.9%) of genes in pham
- Manual Annotations of this start: 9 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chupacabra_81 (A10), Drake94_81 (A10), DustyMartin_87 (A10), Goose_85 (A10), KittenMittens_79 (A10), OKCentral2016_83 (A10), PeaceMeal1_81 (A10), Poompha_81 (A10), RhynO_72 (A10), Rowdy_87 (A10), Severus_82 (A10), Shapes_87 (A10),

Start 67:

- Found in 1 of 409 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kinmap_88 (A21),

Start 68:

- Found in 46 of 409 (11.2%) of genes in pham
- Manual Annotations of this start: 34 of 370
- Called 84.8% of time when present
- Phage (with cluster) where this start called: Ariel_241 (J), Bagrid_240 (J), Beem_238 (J), Bobby_213 (J), Bombitas_219 (J), Constella_224 (J), Courthouse_237 (J), Dallas_233 (J), DmpstrDiver_233 (J), Dove_217 (J), Duke13_235 (J), Ejimix_226 (J), EricMillard_232 (J), FlyCatcher_86 (A7), Gonephishing_231 (J), Halley_237 (J), Hannaconda_225 (J), Hughesyang_237 (J), JuicyJay_230 (J), KashFlow_227 (J), Klein_242 (J), LittleE_224 (J), Lucky2013_232 (J), MiaZeal_245 (J), Minerva_233 (J), Odette_234 (J), Phoebus_233 (J), Porcelain_236 (J), Redno2_226 (J), Schatzie_227 (J), Sheen_83 (A7), Squint_233 (J), Superphikiman_233 (J), Thibault_209 (J), ThreeRngTarjay_234 (J), Toro_84

(A7), Wanda_234 (J), Yeet_229 (J), Zelink_228 (J),

Start 69:

- Found in 3 of 409 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 370
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Isca_83 (A3), Phantastic_87 (A3), Rockstar_75 (A3),

Start 77:

- Found in 15 of 409 (3.7%) of genes in pham
- Manual Annotations of this start: 8 of 370
- Called 53.3% of time when present
- Phage (with cluster) where this start called: AbbysRanger_82 (A4), Bumblebee11_81 (A4), Cintron_85 (A4), Katalie136_82 (A4), Kremtemulon_82 (A4), Morpher26_82 (A4), Perplexer_82 (A4), PetiteSangsue_82 (A4),

Summary by clusters:

There are 15 clusters represented in this pham: A14, A17, A16, A11, A10, A13, A21, J, A1, A3, A2, A4, A7, A6, AB,

Info for manual annotations of cluster A1:

- Start number 40 was manually annotated 7 times for cluster A1.
- Start number 41 was manually annotated 3 times for cluster A1.
- Start number 59 was manually annotated 1 time for cluster A1.
- Start number 63 was manually annotated 11 times for cluster A1.
- Start number 64 was manually annotated 48 times for cluster A1.
- Start number 65 was manually annotated 126 times for cluster A1.

Info for manual annotations of cluster A10:

- Start number 47 was manually annotated 5 times for cluster A10.
- Start number 52 was manually annotated 1 time for cluster A10.
- Start number 66 was manually annotated 9 times for cluster A10.

Info for manual annotations of cluster A11:

- Start number 62 was manually annotated 1 time for cluster A11.
- Start number 63 was manually annotated 23 times for cluster A11.

Info for manual annotations of cluster A14:

- Start number 62 was manually annotated 2 times for cluster A14.

Info for manual annotations of cluster A16:

- Start number 51 was manually annotated 3 times for cluster A16.

Info for manual annotations of cluster A2:

- Start number 55 was manually annotated 3 times for cluster A2.
- Start number 62 was manually annotated 33 times for cluster A2.

Info for manual annotations of cluster A3:

- Start number 56 was manually annotated 1 time for cluster A3.
- Start number 61 was manually annotated 22 times for cluster A3.
- Start number 69 was manually annotated 3 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 61 was manually annotated 7 times for cluster A4.
- Start number 77 was manually annotated 8 times for cluster A4.

Info for manual annotations of cluster A6:

- Start number 62 was manually annotated 11 times for cluster A6.

Info for manual annotations of cluster A7:

- Start number 45 was manually annotated 1 time for cluster A7.
- Start number 48 was manually annotated 1 time for cluster A7.
- Start number 68 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster AB:

- Start number 54 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster J:

- Start number 60 was manually annotated 1 time for cluster J.
- Start number 62 was manually annotated 4 times for cluster J.
- Start number 68 was manually annotated 33 times for cluster J.

Gene Information:

Gene: 40AC_82 Start: 48479, Stop: 48276, Start Num: 62

Candidate Starts for 40AC_82:

(Start: 62 @48479 has 51 MA's), (80, 48428), (93, 48344),

Gene: A6_85 Start: 49336, Stop: 49130, Start Num: 63

Candidate Starts for A6_85:

(Start: 63 @49336 has 34 MA's), (92, 49198),

Gene: AFIS_88 Start: 51338, Stop: 51135, Start Num: 65

Candidate Starts for AFIS_88:

(Start: 65 @51338 has 126 MA's), (92, 51203),

Gene: AN9_85 Start: 47253, Stop: 47056, Start Num: 62

Candidate Starts for AN9_85:

(Start: 62 @47253 has 51 MA's), (80, 47199), (93, 47121),

Gene: ANI8_85 Start: 47253, Stop: 47056, Start Num: 62

Candidate Starts for ANI8_85:

(Start: 62 @47253 has 51 MA's), (80, 47199), (93, 47121),

Gene: AbbysRanger_82 Start: 48599, Stop: 48441, Start Num: 77

Candidate Starts for AbbysRanger_82:

(Start: 61 @48638 has 29 MA's), (Start: 77 @48599 has 8 MA's), (79, 48590), (93, 48503), (95, 48470),

Gene: Abbysshoes_89 Start: 50942, Stop: 50739, Start Num: 65
Candidate Starts for Abbysshoes_89:
(Start: 65 @50942 has 126 MA's), (92, 50807),

Gene: Abrogate_880 Start: 50891, Stop: 51097, Start Num: 64
Candidate Starts for Abrogate_880:
(Start: 64 @50891 has 48 MA's), (92, 51029), (98, 51089),

Gene: Achebe_81 Start: 48782, Stop: 48585, Start Num: 61
Candidate Starts for Achebe_81:
(Start: 61 @48782 has 29 MA's), (Start: 77 @48743 has 8 MA's), (79, 48734), (93, 48647), (95, 48614),

Gene: Acme_91 Start: 51412, Stop: 51209, Start Num: 65
Candidate Starts for Acme_91:
(Start: 65 @51412 has 126 MA's), (92, 51277),

Gene: Adahisdi_85 Start: 51316, Stop: 51113, Start Num: 65
Candidate Starts for Adahisdi_85:
(Start: 65 @51316 has 126 MA's), (92, 51181),

Gene: Aeneas_96 Start: 52191, Stop: 52397, Start Num: 64
Candidate Starts for Aeneas_96:
(Start: 64 @52191 has 48 MA's), (92, 52329),

Gene: Agaliana_87 Start: 49294, Stop: 49091, Start Num: 65
Candidate Starts for Agaliana_87:
(Start: 65 @49294 has 126 MA's),

Gene: Ajay_84 Start: 49128, Stop: 48925, Start Num: 65
Candidate Starts for Ajay_84:
(Start: 65 @49128 has 126 MA's), (92, 48993),

Gene: Alsfro_94 Start: 49646, Stop: 49846, Start Num: 63
Candidate Starts for Alsfro_94:
(Start: 63 @49646 has 34 MA's), (92, 49778),

Gene: Altman_94 Start: 52124, Stop: 51921, Start Num: 65
Candidate Starts for Altman_94:
(Start: 65 @52124 has 126 MA's), (92, 51989),

Gene: Alvin_86 Start: 49180, Stop: 48977, Start Num: 65
Candidate Starts for Alvin_86:
(Start: 65 @49180 has 126 MA's), (92, 49045),

Gene: Aneem_90 Start: 48299, Stop: 48102, Start Num: 63
Candidate Starts for Aneem_90:
(Start: 63 @48299 has 34 MA's), (93, 48170), (98, 48113),

Gene: Anglerfish_93 Start: 51993, Stop: 51790, Start Num: 65
Candidate Starts for Anglerfish_93:
(Start: 65 @51993 has 126 MA's), (92, 51858), (95, 51822),

Gene: AnnaL29_88 Start: 49242, Stop: 49006, Start Num: 55
Candidate Starts for AnnaL29_88:
(21, 49371), (Start: 55 @49242 has 3 MA's), (Start: 62 @49227 has 51 MA's), (93, 49074), (95, 49041),

Gene: Applejack_88 Start: 48130, Stop: 48336, Start Num: 64
Candidate Starts for Applejack_88:
(Start: 64 @48130 has 48 MA's), (92, 48268), (98, 48328),

Gene: Arcanine_94 Start: 51887, Stop: 51687, Start Num: 65
Candidate Starts for Arcanine_94:
(Start: 65 @51887 has 126 MA's), (92, 51755),

Gene: Ariel_241 Start: 107734, Stop: 107546, Start Num: 68
Candidate Starts for Ariel_241:
(Start: 60 @107755 has 1 MA's), (Start: 68 @107734 has 34 MA's), (86, 107692), (91, 107653), (95, 107581), (98, 107557),

Gene: Arlo_96 Start: 52566, Stop: 52363, Start Num: 65
Candidate Starts for Arlo_96:
(Start: 65 @52566 has 126 MA's), (92, 52431),

Gene: Artemis2UCLA_88 Start: 46537, Stop: 46328, Start Num: 62
Candidate Starts for Artemis2UCLA_88:
(Start: 62 @46537 has 51 MA's), (83, 46477),

Gene: Ashballer_91 Start: 50593, Stop: 50799, Start Num: 64
Candidate Starts for Ashballer_91:
(Start: 64 @50593 has 48 MA's), (92, 50731), (98, 50791),

Gene: Atkinbua_98 Start: 52558, Stop: 52355, Start Num: 65
Candidate Starts for Atkinbua_98:
(Start: 65 @52558 has 126 MA's), (92, 52423),

Gene: BK1_85 Start: 49336, Stop: 49130, Start Num: 63
Candidate Starts for BK1_85:
(Start: 63 @49336 has 34 MA's), (92, 49198),

Gene: BPBiebs31_97 Start: 52824, Stop: 52570, Start Num: 40
Candidate Starts for BPBiebs31_97:
(Start: 40 @52824 has 7 MA's), (Start: 65 @52773 has 126 MA's), (92, 52638),

Gene: BabyBack_81 Start: 48271, Stop: 48068, Start Num: 62
Candidate Starts for BabyBack_81:
(26, 48391), (36, 48343), (Start: 62 @48271 has 51 MA's), (79, 48220), (93, 48136),

Gene: BabyJohn_69 Start: 44585, Stop: 44400, Start Num: 61
Candidate Starts for BabyJohn_69:
(50, 44612), (Start: 61 @44585 has 29 MA's), (83, 44522),

Gene: BabyRay_87 Start: 47952, Stop: 47743, Start Num: 56
Candidate Starts for BabyRay_87:
(Start: 56 @47952 has 1 MA's), (71, 47919), (81, 47889), (93, 47814), (95, 47781),

Gene: Bachome_87 Start: 47191, Stop: 46985, Start Num: 62
Candidate Starts for Bachome_87:
(Start: 55 @47206 has 3 MA's), (Start: 62 @47191 has 51 MA's), (80, 47137), (88, 47113), (93, 47053), (98, 46996),

Gene: Backyardigan_80 Start: 48654, Stop: 48457, Start Num: 61
Candidate Starts for Backyardigan_80:
(Start: 61 @48654 has 29 MA's), (Start: 77 @48615 has 8 MA's), (79, 48606), (93, 48519), (95, 48486),

Gene: BaconJack_94 Start: 52144, Stop: 52350, Start Num: 64
Candidate Starts for BaconJack_94:
(Start: 64 @52144 has 48 MA's), (92, 52282), (98, 52342),

Gene: Badger_81 Start: 48620, Stop: 48423, Start Num: 61
Candidate Starts for Badger_81:
(Start: 61 @48620 has 29 MA's), (Start: 77 @48581 has 8 MA's), (79, 48572), (93, 48485), (95, 48452),

Gene: Baehexic_85 Start: 48457, Stop: 48251, Start Num: 62
Candidate Starts for Baehexic_85:
(15, 48655), (Start: 55 @48472 has 3 MA's), (Start: 62 @48457 has 51 MA's), (80, 48403), (93, 48319),

Gene: Bagrid_240 Start: 111821, Stop: 111645, Start Num: 68
Candidate Starts for Bagrid_240:
(Start: 60 @111842 has 1 MA's), (Start: 68 @111821 has 34 MA's), (86, 111779), (91, 111752),

Gene: Barriga_101 Start: 51933, Stop: 52139, Start Num: 64
Candidate Starts for Barriga_101:
(Start: 64 @51933 has 48 MA's), (92, 52071),

Gene: Beatrix_89 Start: 50789, Stop: 50995, Start Num: 64
Candidate Starts for Beatrix_89:
(Start: 64 @50789 has 48 MA's), (92, 50927),

Gene: Beem_238 Start: 110940, Stop: 110764, Start Num: 68
Candidate Starts for Beem_238:
(Start: 60 @110961 has 1 MA's), (Start: 68 @110940 has 34 MA's), (86, 110898), (91, 110871),

Gene: BeesKnees_95 Start: 51081, Stop: 50878, Start Num: 65
Candidate Starts for BeesKnees_95:
(Start: 65 @51081 has 126 MA's), (92, 50946),

Gene: Bethlehem_87 Start: 51847, Stop: 51644, Start Num: 65
Candidate Starts for Bethlehem_87:
(Start: 65 @51847 has 126 MA's), (92, 51712),

Gene: Bexan_87 Start: 50565, Stop: 50771, Start Num: 64
Candidate Starts for Bexan_87:
(Start: 64 @50565 has 48 MA's), (92, 50703),

Gene: Big3_91 Start: 53046, Stop: 52840, Start Num: 63
Candidate Starts for Big3_91:
(Start: 63 @53046 has 34 MA's),

Gene: BigMau_91 Start: 51153, Stop: 51362, Start Num: 64
Candidate Starts for BigMau_91:
(Start: 64 @51153 has 48 MA's), (92, 51291),

Gene: BigPaolini_85 Start: 49205, Stop: 49005, Start Num: 65
Candidate Starts for BigPaolini_85:
(Start: 65 @49205 has 126 MA's), (92, 49073),

Gene: Bigfoot_86 Start: 51251, Stop: 51048, Start Num: 65
Candidate Starts for Bigfoot_86:
(Start: 65 @51251 has 126 MA's), (92, 51116),

Gene: BillKnuckles_86 Start: 51482, Stop: 51279, Start Num: 65
Candidate Starts for BillKnuckles_86:
(Start: 65 @51482 has 126 MA's), (92, 51347),

Gene: BluSpix_85 Start: 44982, Stop: 45182, Start Num: 63
Candidate Starts for BluSpix_85:
(Start: 63 @44982 has 34 MA's), (92, 45114),

Gene: BlueBird_89 Start: 48203, Stop: 47985, Start Num: 61
Candidate Starts for BlueBird_89:
(50, 48230), (Start: 61 @48203 has 29 MA's), (83, 48140), (88, 48122), (93, 48050),

Gene: Bob3_90 Start: 50587, Stop: 50793, Start Num: 64
Candidate Starts for Bob3_90:
(Start: 64 @50587 has 48 MA's), (92, 50725), (98, 50785),

Gene: Bobby_213 Start: 108407, Stop: 108219, Start Num: 68
Candidate Starts for Bobby_213:
(Start: 68 @108407 has 34 MA's), (78, 108383), (86, 108365), (91, 108326), (95, 108254), (98, 108230),

Gene: Bombitas_219 Start: 107223, Stop: 107050, Start Num: 68
Candidate Starts for Bombitas_219:
(Start: 60 @107244 has 1 MA's), (Start: 68 @107223 has 34 MA's), (86, 107181), (91, 107154),

Gene: Bones_86 Start: 51038, Stop: 51244, Start Num: 64
Candidate Starts for Bones_86:
(Start: 64 @51038 has 48 MA's), (92, 51176),

Gene: Bowtie_85 Start: 46906, Stop: 46709, Start Num: 63
Candidate Starts for Bowtie_85:
(Start: 63 @46906 has 34 MA's), (93, 46777), (98, 46720),

Gene: Bradman_89 Start: 47929, Stop: 47726, Start Num: 62
Candidate Starts for Bradman_89:
(Start: 55 @47944 has 3 MA's), (Start: 62 @47929 has 51 MA's), (80, 47875), (83, 47869), (93, 47791), (95, 47758),

Gene: Briton15_95 Start: 52689, Stop: 52435, Start Num: 40
Candidate Starts for Briton15_95:
(Start: 40 @52689 has 7 MA's), (Start: 65 @52638 has 126 MA's),

Gene: Bruns_96 Start: 52614, Stop: 52411, Start Num: 65
Candidate Starts for Bruns_96:
(Start: 65 @52614 has 126 MA's), (92, 52479),

Gene: Bud_82 Start: 46736, Stop: 46539, Start Num: 63
Candidate Starts for Bud_82:
(5, 47042), (Start: 63 @46736 has 34 MA's), (93, 46607), (98, 46550),

Gene: Bugatti_88 Start: 48203, Stop: 47985, Start Num: 61
Candidate Starts for Bugatti_88:
(50, 48230), (Start: 61 @48203 has 29 MA's), (83, 48140), (88, 48122), (93, 48050),

Gene: Bumblebee11_81 Start: 48581, Stop: 48423, Start Num: 77
Candidate Starts for Bumblebee11_81:
(Start: 61 @48620 has 29 MA's), (Start: 77 @48581 has 8 MA's), (79, 48572), (93, 48485), (95, 48452),

Gene: Burton_90 Start: 52230, Stop: 52027, Start Num: 65
Candidate Starts for Burton_90:
(Start: 65 @52230 has 126 MA's), (92, 52095),

Gene: Buttons_85 Start: 48633, Stop: 48430, Start Num: 65
Candidate Starts for Buttons_85:
(Start: 65 @48633 has 126 MA's), (92, 48498), (98, 48438),

Gene: Bxb1_84 Start: 48903, Stop: 49112, Start Num: 65
Candidate Starts for Bxb1_84:
(Start: 65 @48903 has 126 MA's), (92, 49044), (98, 49104),

Gene: C3_78 Start: 47253, Stop: 47056, Start Num: 62
Candidate Starts for C3_78:
(Start: 62 @47253 has 51 MA's), (80, 47199), (93, 47121),

Gene: CactusRose_96 Start: 52264, Stop: 52061, Start Num: 65
Candidate Starts for CactusRose_96:
(Start: 65 @52264 has 126 MA's), (92, 52129),

Gene: Carlyle_91 Start: 50831, Stop: 50628, Start Num: 65
Candidate Starts for Carlyle_91:
(Start: 65 @50831 has 126 MA's), (92, 50696),

Gene: Caviar_75 Start: 44830, Stop: 44630, Start Num: 61
Candidate Starts for Caviar_75:
(16, 45019), (Start: 61 @44830 has 29 MA's), (82, 44770), (93, 44704), (95, 44671),

Gene: Centaur_86 Start: 48324, Stop: 48118, Start Num: 62
Candidate Starts for Centaur_86:

(15, 48522), (Start: 55 @48339 has 3 MA's), (Start: 62 @48324 has 51 MA's), (80, 48270), (93, 48186),

Gene: Chanagan_91 Start: 50342, Stop: 50139, Start Num: 65
Candidate Starts for Chanagan_91:
(Start: 65 @50342 has 126 MA's), (92, 50207),

Gene: Changeling_84 Start: 49033, Stop: 48812, Start Num: 62
Candidate Starts for Changeling_84:
(23, 49165), (Start: 55 @49048 has 3 MA's), (Start: 62 @49033 has 51 MA's), (74, 49000), (75, 48997), (92, 48883), (95, 48847),

Gene: Chiqui_69 Start: 44594, Stop: 44409, Start Num: 61
Candidate Starts for Chiqui_69:
(50, 44621), (Start: 61 @44594 has 29 MA's), (83, 44531),

Gene: Chupacabra_81 Start: 48564, Stop: 48376, Start Num: 66
Candidate Starts for Chupacabra_81:
(53, 48597), (Start: 66 @48564 has 9 MA's), (92, 48444), (93, 48441),

Gene: Ciao_94 Start: 50559, Stop: 50362, Start Num: 65
Candidate Starts for Ciao_94:
(Start: 65 @50559 has 126 MA's), (92, 50430),

Gene: Cici_82 Start: 48633, Stop: 48436, Start Num: 61
Candidate Starts for Cici_82:
(Start: 61 @48633 has 29 MA's), (Start: 77 @48594 has 8 MA's), (79, 48585), (93, 48498), (95, 48465),

Gene: Cintron_85 Start: 48872, Stop: 48702, Start Num: 77
Candidate Starts for Cintron_85:
(Start: 77 @48872 has 8 MA's), (79, 48863), (93, 48776), (95, 48743),

Gene: CloudWang3_89 Start: 47066, Stop: 46857, Start Num: 62
Candidate Starts for CloudWang3_89:
(Start: 62 @47066 has 51 MA's), (83, 47006),

Gene: Colin_85 Start: 49399, Stop: 49190, Start Num: 62
Candidate Starts for Colin_85:
(15, 49606), (20, 49546), (25, 49531), (Start: 55 @49414 has 3 MA's), (Start: 62 @49399 has 51 MA's), (71, 49375), (72, 49372), (93, 49258),

Gene: ConceptII_97 Start: 52890, Stop: 52687, Start Num: 65
Candidate Starts for ConceptII_97:
(Start: 65 @52890 has 126 MA's), (92, 52755),

Gene: Constella_224 Start: 108319, Stop: 108131, Start Num: 68
Candidate Starts for Constella_224:
(Start: 68 @108319 has 34 MA's), (78, 108295), (86, 108277), (91, 108238), (95, 108166), (98, 108142),

Gene: Corvo_94 Start: 52995, Stop: 52792, Start Num: 65
Candidate Starts for Corvo_94:

(Start: 65 @52995 has 126 MA's), (92, 52860),

Gene: Courthouse_237 Start: 108498, Stop: 108310, Start Num: 68

Candidate Starts for Courthouse_237:

(Start: 60 @108519 has 1 MA's), (Start: 68 @108498 has 34 MA's), (86, 108456), (91, 108417), (95, 108345), (98, 108321),

Gene: Crispicious1_86 Start: 49167, Stop: 49370, Start Num: 65

Candidate Starts for Crispicious1_86:

(Start: 65 @49167 has 126 MA's), (92, 49302), (98, 49362),

Gene: DBQu4n_86 Start: 48304, Stop: 48101, Start Num: 62

Candidate Starts for DBQu4n_86:

(Start: 62 @48304 has 51 MA's), (80, 48250), (93, 48166),

Gene: Dallas_233 Start: 109177, Stop: 108995, Start Num: 68

Candidate Starts for Dallas_233:

(Start: 62 @109192 has 51 MA's), (Start: 68 @109177 has 34 MA's), (86, 109141), (91, 109102), (95, 109030),

Gene: Dexes_93 Start: 53941, Stop: 53738, Start Num: 65

Candidate Starts for Dexes_93:

(Start: 65 @53941 has 126 MA's), (92, 53806),

Gene: DmpstrDiver_233 Start: 109198, Stop: 109022, Start Num: 68

Candidate Starts for DmpstrDiver_233:

(Start: 68 @109198 has 34 MA's), (78, 109174), (86, 109156), (91, 109129), (95, 109057), (96, 109042),

Gene: DontArgue_79 Start: 47454, Stop: 47233, Start Num: 49

Candidate Starts for DontArgue_79:

(14, 47628), (27, 47532), (49, 47454), (76, 47394), (93, 47307),

Gene: Doom_84 Start: 50622, Stop: 50419, Start Num: 65

Candidate Starts for Doom_84:

(22, 50769), (25, 50757), (29, 50733), (Start: 65 @50622 has 126 MA's), (92, 50487), (98, 50427),

Gene: Dove_217 Start: 105704, Stop: 105528, Start Num: 68

Candidate Starts for Dove_217:

(Start: 60 @105725 has 1 MA's), (Start: 68 @105704 has 34 MA's), (86, 105662), (91, 105635),

Gene: DrFeelGood_85 Start: 49766, Stop: 49563, Start Num: 65

Candidate Starts for DrFeelGood_85:

(Start: 65 @49766 has 126 MA's), (92, 49631),

Gene: Drake55_87 Start: 48575, Stop: 48369, Start Num: 62

Candidate Starts for Drake55_87:

(15, 48773), (Start: 55 @48590 has 3 MA's), (Start: 62 @48575 has 51 MA's), (93, 48437),

Gene: Drake94_81 Start: 47718, Stop: 47530, Start Num: 66

Candidate Starts for Drake94_81:

(53, 47751), (Start: 66 @47718 has 9 MA's), (93, 47595),

Gene: DreamCatcher_102 Start: 53024, Stop: 52821, Start Num: 65
Candidate Starts for DreamCatcher_102:
(Start: 65 @53024 has 126 MA's), (92, 52889),

Gene: Dreamboat_93 Start: 50459, Stop: 50256, Start Num: 65
Candidate Starts for Dreamboat_93:
(Start: 65 @50459 has 126 MA's), (92, 50324),

Gene: DropBear_84 Start: 48015, Stop: 47824, Start Num: 61
Candidate Starts for DropBear_84:
(1, 48504), (2, 48471), (7, 48288), (Start: 61 @48015 has 29 MA's), (82, 47955), (93, 47889),

Gene: Druantia_84 Start: 48829, Stop: 48632, Start Num: 61
Candidate Starts for Druantia_84:
(Start: 61 @48829 has 29 MA's), (Start: 77 @48790 has 8 MA's), (79, 48781), (93, 48694), (95, 48661),

Gene: Duke13_235 Start: 110008, Stop: 109820, Start Num: 68
Candidate Starts for Duke13_235:
(Start: 62 @110023 has 51 MA's), (Start: 68 @110008 has 34 MA's), (78, 109984), (86, 109966), (91, 109927), (92, 109891), (95, 109855), (98, 109831),

Gene: Duplo_87 Start: 48361, Stop: 48158, Start Num: 62
Candidate Starts for Duplo_87:
(Start: 62 @48361 has 51 MA's), (80, 48307), (93, 48223),

Gene: Dussy_87 Start: 50962, Stop: 50759, Start Num: 65
Candidate Starts for Dussy_87:
(Start: 65 @50962 has 126 MA's), (92, 50827),

Gene: DustyMartin_87 Start: 48813, Stop: 48628, Start Num: 66
Candidate Starts for DustyMartin_87:
(4, 49131), (13, 49041), (17, 49002), (46, 48858), (Start: 66 @48813 has 9 MA's), (74, 48792), (85, 48756), (93, 48693), (95, 48660),

Gene: Dynamix_92 Start: 50284, Stop: 50030, Start Num: 40
Candidate Starts for Dynamix_92:
(Start: 40 @50284 has 7 MA's), (Start: 65 @50233 has 126 MA's),

Gene: EZMoney23_82 Start: 48034, Stop: 47822, Start Num: 62
Candidate Starts for EZMoney23_82:
(11, 48262), (20, 48181), (Start: 55 @48049 has 3 MA's), (Start: 62 @48034 has 51 MA's), (70, 48013), (79, 47983), (93, 47890),

Gene: EagleEye_87 Start: 48171, Stop: 47941, Start Num: 51
Candidate Starts for EagleEye_87:
(Start: 51 @48171 has 3 MA's), (Start: 64 @48147 has 48 MA's), (Start: 68 @48135 has 34 MA's), (72, 48123), (84, 48084),

Gene: Eaglepride_87 Start: 48695, Stop: 48462, Start Num: 47
Candidate Starts for Eaglepride_87:
(14, 48872), (27, 48776), (Start: 47 @48695 has 5 MA's), (Start: 52 @48680 has 1 MA's), (57, 48671), (93, 48527),

Gene: Ebony_88 Start: 47870, Stop: 47673, Start Num: 63

Candidate Starts for Ebony_88:

(Start: 63 @47870 has 34 MA's), (93, 47741), (98, 47684),

Gene: Edtherson_87 Start: 49832, Stop: 50038, Start Num: 64

Candidate Starts for Edtherson_87:

(Start: 64 @49832 has 48 MA's), (92, 49970), (98, 50030),

Gene: Ejimix_226 Start: 109183, Stop: 109007, Start Num: 68

Candidate Starts for Ejimix_226:

(Start: 60 @109204 has 1 MA's), (Start: 68 @109183 has 34 MA's), (86, 109141), (91, 109114),

Gene: Equemioh13_86 Start: 48553, Stop: 48347, Start Num: 62

Candidate Starts for Equemioh13_86:

(15, 48751), (Start: 55 @48568 has 3 MA's), (Start: 62 @48553 has 51 MA's), (80, 48499), (93, 48415),

Gene: EricMillard_232 Start: 111027, Stop: 110851, Start Num: 68

Candidate Starts for EricMillard_232:

(Start: 60 @111048 has 1 MA's), (Start: 68 @111027 has 34 MA's), (86, 110985), (91, 110958),

Gene: Espresso_87 Start: 50463, Stop: 50666, Start Num: 65

Candidate Starts for Espresso_87:

(Start: 65 @50463 has 126 MA's), (92, 50598),

Gene: Et2Brutus_89 Start: 48147, Stop: 47950, Start Num: 63

Candidate Starts for Et2Brutus_89:

(Start: 63 @48147 has 34 MA's), (93, 48018), (98, 47961),

Gene: Euphoria_95 Start: 53188, Stop: 52985, Start Num: 65

Candidate Starts for Euphoria_95:

(Start: 65 @53188 has 126 MA's), (92, 53053),

Gene: Eyeball_94 Start: 51846, Stop: 51643, Start Num: 65

Candidate Starts for Eyeball_94:

(Start: 65 @51846 has 126 MA's), (92, 51711),

Gene: Fajezeel_90 Start: 50702, Stop: 50499, Start Num: 65

Candidate Starts for Fajezeel_90:

(Start: 65 @50702 has 126 MA's), (92, 50567),

Gene: Fascinus_86 Start: 51761, Stop: 51558, Start Num: 65

Candidate Starts for Fascinus_86:

(Start: 65 @51761 has 126 MA's), (92, 51626),

Gene: Fenn_97 Start: 52841, Stop: 52638, Start Num: 65

Candidate Starts for Fenn_97:

(Start: 65 @52841 has 126 MA's), (92, 52706),

Gene: Fibonacci_89 Start: 48153, Stop: 47956, Start Num: 63

Candidate Starts for Fibonacci_89:

(Start: 63 @48153 has 34 MA's), (93, 48024), (98, 47967),

Gene: Flare16_86 Start: 48368, Stop: 48162, Start Num: 62
Candidate Starts for Flare16_86:
(15, 48566), (Start: 55 @48383 has 3 MA's), (Start: 62 @48368 has 51 MA's), (80, 48314), (93, 48230),

Gene: Flaverint_90 Start: 48297, Stop: 48100, Start Num: 63
Candidate Starts for Flaverint_90:
(Start: 63 @48297 has 34 MA's), (93, 48168), (94, 48150), (98, 48111),

Gene: FlyCatcher_86 Start: 51563, Stop: 51378, Start Num: 68
Candidate Starts for FlyCatcher_86:
(Start: 68 @51563 has 34 MA's), (83, 51521), (92, 51446),

Gene: Forsytheast_96 Start: 52313, Stop: 52110, Start Num: 65
Candidate Starts for Forsytheast_96:
(Start: 65 @52313 has 126 MA's), (92, 52178),

Gene: Francis47_93 Start: 53565, Stop: 53362, Start Num: 65
Candidate Starts for Francis47_93:
(Start: 65 @53565 has 126 MA's),

Gene: Fred313_84 Start: 47806, Stop: 47615, Start Num: 61
Candidate Starts for Fred313_84:
(1, 48295), (2, 48262), (7, 48079), (Start: 61 @47806 has 29 MA's), (82, 47746), (93, 47680),

Gene: Froghopper_79 Start: 47225, Stop: 47428, Start Num: 65
Candidate Starts for Froghopper_79:
(Start: 59 @47216 has 1 MA's), (Start: 65 @47225 has 126 MA's), (92, 47357),

Gene: Fushigi_84 Start: 48765, Stop: 48968, Start Num: 65
Candidate Starts for Fushigi_84:
(Start: 65 @48765 has 126 MA's), (92, 48900), (98, 48960),

Gene: GageAP_90 Start: 51509, Stop: 51306, Start Num: 65
Candidate Starts for GageAP_90:
(Start: 65 @51509 has 126 MA's), (92, 51374),

Gene: Gail_88 Start: 48344, Stop: 48141, Start Num: 62
Candidate Starts for Gail_88:
(Start: 55 @48359 has 3 MA's), (Start: 62 @48344 has 51 MA's), (80, 48293), (93, 48209),

Gene: Gandalf20_90 Start: 50084, Stop: 50290, Start Num: 64
Candidate Starts for Gandalf20_90:
(Start: 64 @50084 has 48 MA's), (92, 50222), (98, 50282),

Gene: GaugeLDP_80 Start: 47824, Stop: 47624, Start Num: 62
Candidate Starts for GaugeLDP_80:
(Start: 62 @47824 has 51 MA's), (79, 47773), (93, 47692),

Gene: Gilberta_87 Start: 47173, Stop: 46976, Start Num: 63
Candidate Starts for Gilberta_87:
(Start: 63 @47173 has 34 MA's), (93, 47044), (98, 46987),

Gene: Giroux_85 Start: 48202, Stop: 47984, Start Num: 61

Candidate Starts for Giroux_85:

(50, 48229), (Start: 61 @48202 has 29 MA's), (83, 48139), (88, 48121), (93, 48049),

Gene: Gladiator_85 Start: 46722, Stop: 46513, Start Num: 62

Candidate Starts for Gladiator_85:

(Start: 62 @46722 has 51 MA's), (83, 46662),

Gene: Gonephishing_231 Start: 108727, Stop: 108539, Start Num: 68

Candidate Starts for Gonephishing_231:

(Start: 62 @108742 has 51 MA's), (Start: 68 @108727 has 34 MA's), (78, 108703), (86, 108685), (91, 108646), (95, 108574), (98, 108550),

Gene: Goose_85 Start: 48375, Stop: 48187, Start Num: 66

Candidate Starts for Goose_85:

(53, 48408), (Start: 66 @48375 has 9 MA's), (92, 48255), (93, 48252),

Gene: Graduation_93 Start: 51162, Stop: 50911, Start Num: 41

Candidate Starts for Graduation_93:

(Start: 41 @51162 has 3 MA's), (Start: 65 @51114 has 126 MA's), (92, 50979),

Gene: GrecoEtereo_92 Start: 51814, Stop: 51611, Start Num: 65

Candidate Starts for GrecoEtereo_92:

(Start: 65 @51814 has 126 MA's), (92, 51679),

Gene: Greg_90 Start: 50702, Stop: 50499, Start Num: 65

Candidate Starts for Greg_90:

(Start: 65 @50702 has 126 MA's), (92, 50567),

Gene: Gruunaga_88 Start: 46677, Stop: 46468, Start Num: 62

Candidate Starts for Gruunaga_88:

(Start: 62 @46677 has 51 MA's), (83, 46617),

Gene: Gyzlar_83 Start: 47405, Stop: 47608, Start Num: 65

Candidate Starts for Gyzlar_83:

(30, 47294), (Start: 65 @47405 has 126 MA's), (92, 47540), (98, 47600),

Gene: HINdeR_81 Start: 50361, Stop: 50110, Start Num: 45

Candidate Starts for HINdeR_81:

(44, 50364), (Start: 45 @50361 has 1 MA's), (Start: 64 @50316 has 48 MA's), (80, 50265), (86, 50247), (93, 50175),

Gene: Halley_237 Start: 109664, Stop: 109482, Start Num: 68

Candidate Starts for Halley_237:

(Start: 62 @109679 has 51 MA's), (Start: 68 @109664 has 34 MA's), (86, 109628), (91, 109589), (95, 109517),

Gene: Hami1_87 Start: 46210, Stop: 46416, Start Num: 64

Candidate Starts for Hami1_87:

(Start: 64 @46210 has 48 MA's), (92, 46348),

Gene: Hammer_89 Start: 46384, Stop: 46175, Start Num: 62

Candidate Starts for Hammer_89:

(Start: 62 @46384 has 51 MA's), (83, 46324), (92, 46249),

Gene: HanShotFirst_90 Start: 51379, Stop: 51594, Start Num: 59

Candidate Starts for HanShotFirst_90:

(11, 51163), (Start: 59 @51379 has 1 MA's), (Start: 65 @51388 has 126 MA's), (92, 51523),

Gene: Hannaconda_225 Start: 109232, Stop: 109056, Start Num: 68

Candidate Starts for Hannaconda_225:

(Start: 60 @109253 has 1 MA's), (Start: 68 @109232 has 34 MA's), (86, 109190), (91, 109163),

Gene: HarryHoudini_86 Start: 48578, Stop: 48372, Start Num: 62

Candidate Starts for HarryHoudini_86:

(15, 48776), (Start: 55 @48593 has 3 MA's), (Start: 62 @48578 has 51 MA's), (93, 48440),

Gene: HarryOW_91 Start: 51434, Stop: 51640, Start Num: 64

Candidate Starts for HarryOW_91:

(Start: 64 @51434 has 48 MA's), (92, 51572),

Gene: Heathen_86 Start: 47894, Stop: 47703, Start Num: 61

Candidate Starts for Heathen_86:

(1, 48383), (2, 48350), (7, 48167), (Start: 61 @47894 has 29 MA's), (82, 47834), (93, 47768),

Gene: HelDan_86 Start: 48117, Stop: 47926, Start Num: 61

Candidate Starts for HelDan_86:

(1, 48606), (2, 48573), (7, 48390), (Start: 61 @48117 has 29 MA's), (82, 48057), (93, 47991),

Gene: Hermia_84 Start: 49274, Stop: 49071, Start Num: 65

Candidate Starts for Hermia_84:

(Start: 65 @49274 has 126 MA's), (92, 49139),

Gene: HermioneGrange_94 Start: 51648, Stop: 51857, Start Num: 64

Candidate Starts for HermioneGrange_94:

(Start: 64 @51648 has 48 MA's), (92, 51786),

Gene: Hexamo_88 Start: 46552, Stop: 46343, Start Num: 62

Candidate Starts for Hexamo_88:

(Start: 62 @46552 has 51 MA's), (83, 46492),

Gene: HokkenD_227 Start: 110994, Stop: 110791, Start Num: 62

Candidate Starts for HokkenD_227:

(Start: 62 @110994 has 51 MA's), (Start: 68 @110979 has 34 MA's), (78, 110955), (86, 110937), (91, 110898), (92, 110862), (95, 110826), (98, 110802),

Gene: Homines_83 Start: 46852, Stop: 47055, Start Num: 65

Candidate Starts for Homines_83:

(Start: 65 @46852 has 126 MA's), (92, 46987), (98, 47047),

Gene: Hookmount_86 Start: 47833, Stop: 47633, Start Num: 61

Candidate Starts for Hookmount_86:

(16, 48022), (Start: 61 @47833 has 29 MA's), (82, 47773), (93, 47707), (95, 47674),

Gene: Hope4ever_88 Start: 50126, Stop: 49923, Start Num: 65

Candidate Starts for Hope4ever_88:
(Start: 65 @50126 has 126 MA's), (92, 49991),

Gene: Hughesyang_237 Start: 110914, Stop: 110738, Start Num: 68
Candidate Starts for Hughesyang_237:
(Start: 60 @110935 has 1 MA's), (Start: 68 @110914 has 34 MA's), (86, 110872), (91, 110845),

Gene: Hutc2_86 Start: 47037, Stop: 46840, Start Num: 63
Candidate Starts for Hutc2_86:
(Start: 63 @47037 has 34 MA's), (93, 46908), (98, 46851),

Gene: ILeeKay_91 Start: 50632, Stop: 50429, Start Num: 65
Candidate Starts for ILeeKay_91:
(Start: 65 @50632 has 126 MA's), (92, 50497),

Gene: Ichabod_96 Start: 52974, Stop: 52720, Start Num: 40
Candidate Starts for Ichabod_96:
(Start: 40 @52974 has 7 MA's), (Start: 65 @52923 has 126 MA's), (92, 52788),

Gene: IgnatiusPatJac_87 Start: 48927, Stop: 49127, Start Num: 63
Candidate Starts for IgnatiusPatJac_87:
(Start: 63 @48927 has 34 MA's), (92, 49059),

Gene: Insomnia_89 Start: 48331, Stop: 48134, Start Num: 63
Candidate Starts for Insomnia_89:
(Start: 63 @48331 has 34 MA's), (93, 48202), (98, 48145),

Gene: Inyanga_82 Start: 49164, Stop: 49367, Start Num: 65
Candidate Starts for Inyanga_82:
(Start: 65 @49164 has 126 MA's), (92, 49299), (98, 49359),

Gene: Isca_83 Start: 47223, Stop: 47023, Start Num: 69
Candidate Starts for Isca_83:
(8, 47487), (Start: 69 @47223 has 3 MA's), (71, 47217), (88, 47163), (93, 47097), (95, 47064),

Gene: JC27_94 Start: 50665, Stop: 50871, Start Num: 64
Candidate Starts for JC27_94:
(Start: 64 @50665 has 48 MA's), (92, 50803),

Gene: Jabith_89 Start: 48345, Stop: 48148, Start Num: 63
Candidate Starts for Jabith_89:
(3, 48675), (Start: 63 @48345 has 34 MA's), (93, 48216), (98, 48159),

Gene: JackSparrow_92 Start: 50104, Stop: 50310, Start Num: 64
Candidate Starts for JackSparrow_92:
(Start: 64 @50104 has 48 MA's), (92, 50242),

Gene: JacoRen57_68 Start: 49553, Stop: 49792, Start Num: 54
Candidate Starts for JacoRen57_68:
(Start: 54 @49553 has 1 MA's), (79, 49622), (90, 49661), (95, 49754), (97, 49775),

Gene: Jasper_93 Start: 50345, Stop: 50142, Start Num: 65
Candidate Starts for Jasper_93:

(Start: 65 @50345 has 126 MA's), (92, 50210),

Gene: Jerm2_90 Start: 51717, Stop: 51926, Start Num: 64

Candidate Starts for Jerm2_90:

(Start: 64 @51717 has 48 MA's), (92, 51855),

Gene: Jorgensen_100 Start: 52124, Stop: 52330, Start Num: 64

Candidate Starts for Jorgensen_100:

(Start: 64 @52124 has 48 MA's), (92, 52262), (98, 52322),

Gene: Joselito_87 Start: 48051, Stop: 47854, Start Num: 63

Candidate Starts for Joselito_87:

(Start: 63 @48051 has 34 MA's), (93, 47922), (98, 47865),

Gene: Journey13_69 Start: 43468, Stop: 43256, Start Num: 62

Candidate Starts for Journey13_69:

(Start: 55 @43483 has 3 MA's), (Start: 62 @43468 has 51 MA's), (80, 43414), (88, 43390), (93, 43330), (95, 43297), (97, 43276),

Gene: Jsquared_90 Start: 48187, Stop: 47969, Start Num: 55

Candidate Starts for Jsquared_90:

(Start: 55 @48187 has 3 MA's), (Start: 62 @48172 has 51 MA's), (80, 48118), (93, 48034), (95, 48001),

Gene: JuicyJay_230 Start: 110889, Stop: 110713, Start Num: 68

Candidate Starts for JuicyJay_230:

(Start: 60 @110910 has 1 MA's), (Start: 68 @110889 has 34 MA's), (86, 110847), (91, 110820),

Gene: JuliaChild_91 Start: 51435, Stop: 51232, Start Num: 65

Candidate Starts for JuliaChild_91:

(22, 51582), (25, 51570), (29, 51546), (Start: 65 @51435 has 126 MA's), (92, 51300), (98, 51240),

Gene: KBG_87 Start: 52193, Stop: 51990, Start Num: 65

Candidate Starts for KBG_87:

(22, 52340), (25, 52328), (29, 52304), (Start: 65 @52193 has 126 MA's), (92, 52058), (98, 51998),

Gene: KSSJEB_91 Start: 50745, Stop: 50542, Start Num: 65

Candidate Starts for KSSJEB_91:

(Start: 65 @50745 has 126 MA's), (92, 50610),

Gene: Kachowdy_84 Start: 48146, Stop: 47955, Start Num: 61

Candidate Starts for Kachowdy_84:

(1, 48635), (2, 48602), (7, 48419), (Start: 61 @48146 has 29 MA's), (82, 48086), (93, 48020),

Gene: Kalah2_224 Start: 108578, Stop: 108375, Start Num: 62

Candidate Starts for Kalah2_224:

(Start: 62 @108578 has 51 MA's), (Start: 68 @108563 has 34 MA's), (78, 108539), (86, 108521), (91, 108482), (92, 108446), (93, 108443), (95, 108410), (96, 108395),

Gene: Kalpine_88 Start: 49294, Stop: 49088, Start Num: 62

Candidate Starts for Kalpine_88:

(13, 49507), (Start: 55 @49309 has 3 MA's), (Start: 62 @49294 has 51 MA's), (93, 49156),

Gene: Kanely_93 Start: 51901, Stop: 51698, Start Num: 65

Candidate Starts for Kanely_93:

(Start: 65 @51901 has 126 MA's), (92, 51766),

Gene: KashFlow_227 Start: 109125, Stop: 108949, Start Num: 68

Candidate Starts for KashFlow_227:

(Start: 60 @109146 has 1 MA's), (Start: 68 @109125 has 34 MA's), (86, 109083), (91, 109056), (93, 109017),

Gene: Katalie136_82 Start: 48581, Stop: 48423, Start Num: 77

Candidate Starts for Katalie136_82:

(Start: 61 @48620 has 29 MA's), (Start: 77 @48581 has 8 MA's), (79, 48572), (93, 48485), (95, 48452),

Gene: Kenmech_93 Start: 52088, Stop: 51885, Start Num: 65

Candidate Starts for Kenmech_93:

(Start: 65 @52088 has 126 MA's), (92, 51953),

Gene: Kerberos_86 Start: 48324, Stop: 48121, Start Num: 62

Candidate Starts for Kerberos_86:

(Start: 62 @48324 has 51 MA's), (80, 48270), (93, 48186),

Gene: Killigrew_87 Start: 50774, Stop: 50574, Start Num: 63

Candidate Starts for Killigrew_87:

(Start: 63 @50774 has 34 MA's), (92, 50642),

Gene: Kinmap_88 Start: 46506, Stop: 46321, Start Num: 67

Candidate Starts for Kinmap_88:

(67, 46506), (76, 46485), (88, 46446), (89, 46440), (93, 46389), (97, 46335),

Gene: KittenMittens_79 Start: 47725, Stop: 47537, Start Num: 66

Candidate Starts for KittenMittens_79:

(53, 47758), (Start: 66 @47725 has 9 MA's), (93, 47602),

Gene: Klein_242 Start: 109911, Stop: 109735, Start Num: 68

Candidate Starts for Klein_242:

(Start: 60 @109932 has 1 MA's), (Start: 68 @109911 has 34 MA's), (86, 109869), (91, 109842),

Gene: Koduck_86 Start: 47511, Stop: 47308, Start Num: 62

Candidate Starts for Koduck_86:

(Start: 55 @47526 has 3 MA's), (Start: 62 @47511 has 51 MA's), (80, 47457), (83, 47451), (93, 47373),

Gene: Kremtemulon_82 Start: 48636, Stop: 48466, Start Num: 77

Candidate Starts for Kremtemulon_82:

(Start: 77 @48636 has 8 MA's), (93, 48540), (95, 48507),

Gene: Kristoff_82 Start: 49033, Stop: 48797, Start Num: 47

Candidate Starts for Kristoff_82:

(37, 49066), (Start: 47 @49033 has 5 MA's), (Start: 52 @49018 has 1 MA's), (57, 49009), (81, 48940), (93, 48862), (95, 48829),

Gene: Kugel_94 Start: 51995, Stop: 51792, Start Num: 65

Candidate Starts for Kugel_94:
(Start: 65 @51995 has 126 MA's), (92, 51860),

Gene: KyMonks1A_96 Start: 51763, Stop: 51560, Start Num: 65
Candidate Starts for KyMonks1A_96:
(Start: 65 @51763 has 126 MA's), (92, 51628), (98, 51568),

Gene: Kykar_88 Start: 49910, Stop: 49701, Start Num: 65
Candidate Starts for Kykar_88:
(Start: 65 @49910 has 126 MA's), (92, 49769),

Gene: L5_79 Start: 47417, Stop: 47199, Start Num: 55
Candidate Starts for L5_79:
(Start: 55 @47417 has 3 MA's), (Start: 62 @47402 has 51 MA's), (80, 47348), (83, 47342), (93, 47264),

Gene: Lambert1_86 Start: 47834, Stop: 47634, Start Num: 61
Candidate Starts for Lambert1_86:
(7, 48107), (16, 48023), (Start: 61 @47834 has 29 MA's), (82, 47774), (93, 47708), (95, 47675),

Gene: Lamina13_93 Start: 51757, Stop: 51963, Start Num: 64
Candidate Starts for Lamina13_93:
(Start: 64 @51757 has 48 MA's), (92, 51895),

Gene: Larenn_85 Start: 48736, Stop: 48527, Start Num: 62
Candidate Starts for Larenn_85:
(Start: 55 @48751 has 3 MA's), (Start: 62 @48736 has 51 MA's), (80, 48682), (88, 48658), (93, 48598), (95, 48565),

Gene: Lesedi_88 Start: 50089, Stop: 49889, Start Num: 63
Candidate Starts for Lesedi_88:
(Start: 63 @50089 has 34 MA's), (92, 49957),

Gene: Licorice_91 Start: 52878, Stop: 52678, Start Num: 65
Candidate Starts for Licorice_91:
(Start: 65 @52878 has 126 MA's), (92, 52746), (98, 52686),

Gene: LilBib_80 Start: 49937, Stop: 49734, Start Num: 65
Candidate Starts for LilBib_80:
(Start: 65 @49937 has 126 MA's),

Gene: Lilbunny_88 Start: 46631, Stop: 46422, Start Num: 62
Candidate Starts for Lilbunny_88:
(Start: 62 @46631 has 51 MA's), (83, 46571), (92, 46496),

Gene: LittleE_224 Start: 106916, Stop: 106728, Start Num: 68
Candidate Starts for LittleE_224:
(Start: 68 @106916 has 34 MA's), (78, 106892), (86, 106874), (91, 106835), (95, 106763), (98, 106739),

Gene: Lopton_88 Start: 52012, Stop: 51809, Start Num: 65
Candidate Starts for Lopton_88:
(Start: 65 @52012 has 126 MA's), (92, 51877),

Gene: Loser_89 Start: 49477, Stop: 49256, Start Num: 62
Candidate Starts for Loser_89:
(21, 49621), (33, 49558), (Start: 55 @49492 has 3 MA's), (Start: 62 @49477 has 51 MA's), (95, 49291),

Gene: Lucivia_90 Start: 48330, Stop: 48133, Start Num: 63
Candidate Starts for Lucivia_90:
(Start: 63 @48330 has 34 MA's), (93, 48201), (98, 48144),

Gene: Lucky2013_232 Start: 106413, Stop: 106237, Start Num: 68
Candidate Starts for Lucky2013_232:
(Start: 60 @106434 has 1 MA's), (Start: 68 @106413 has 34 MA's), (86, 106371), (91, 106344),

Gene: Lucyedi_86 Start: 48370, Stop: 48140, Start Num: 51
Candidate Starts for Lucyedi_86:
(Start: 51 @48370 has 3 MA's), (Start: 64 @48346 has 48 MA's), (Start: 68 @48334 has 34 MA's),
(72, 48322), (84, 48283),

Gene: MPlant7149_90 Start: 49878, Stop: 50087, Start Num: 64
Candidate Starts for MPlant7149_90:
(Start: 64 @49878 has 48 MA's), (92, 50016),

Gene: MaCh_89 Start: 48294, Stop: 48097, Start Num: 63
Candidate Starts for MaCh_89:
(Start: 63 @48294 has 34 MA's), (93, 48165), (98, 48108),

Gene: Mabel_89 Start: 48295, Stop: 48098, Start Num: 63
Candidate Starts for Mabel_89:
(Start: 63 @48295 has 34 MA's), (93, 48166), (98, 48109),

Gene: Magnar_91 Start: 51040, Stop: 50837, Start Num: 65
Candidate Starts for Magnar_91:
(Start: 65 @51040 has 126 MA's), (92, 50905),

Gene: Magnito_91 Start: 51185, Stop: 50982, Start Num: 65
Candidate Starts for Magnito_91:
(28, 51299), (42, 51236), (Start: 65 @51185 has 126 MA's), (92, 51050),

Gene: MajorMajor_83 Start: 46221, Stop: 46018, Start Num: 62
Candidate Starts for MajorMajor_83:
(Start: 55 @46236 has 3 MA's), (Start: 62 @46221 has 51 MA's), (80, 46167), (83, 46161), (93, 46083), (95, 46050),

Gene: Malec_85 Start: 49144, Stop: 48938, Start Num: 62
Candidate Starts for Malec_85:
(15, 49342), (Start: 55 @49159 has 3 MA's), (Start: 62 @49144 has 51 MA's), (80, 49090), (88, 49066), (93, 49006),

Gene: Manatee_92 Start: 50646, Stop: 50443, Start Num: 65
Candidate Starts for Manatee_92:
(Start: 40 @50697 has 7 MA's), (Start: 65 @50646 has 126 MA's),

Gene: Marcell_83 Start: 48789, Stop: 48586, Start Num: 65
Candidate Starts for Marcell_83:
(Start: 65 @48789 has 126 MA's),

Gene: Marchesa_86 Start: 48008, Stop: 47817, Start Num: 61
Candidate Starts for Marchesa_86:
(1, 48497), (2, 48464), (7, 48281), (Start: 61 @48008 has 29 MA's), (82, 47948), (93, 47882),

Gene: Marchy_81 Start: 47255, Stop: 47052, Start Num: 65
Candidate Starts for Marchy_81:
(Start: 65 @47255 has 126 MA's), (92, 47120),

Gene: Marge_87 Start: 49768, Stop: 49974, Start Num: 64
Candidate Starts for Marge_87:
(Start: 64 @49768 has 48 MA's), (92, 49906),

Gene: Margo_86 Start: 47859, Stop: 47659, Start Num: 61
Candidate Starts for Margo_86:
(7, 48132), (16, 48048), (Start: 61 @47859 has 29 MA's), (82, 47799), (93, 47733), (95, 47700),

Gene: Maroc7_92 Start: 52980, Stop: 52777, Start Num: 65
Candidate Starts for Maroc7_92:
(Start: 65 @52980 has 126 MA's), (92, 52845),

Gene: Marsha_93 Start: 52954, Stop: 53160, Start Num: 64
Candidate Starts for Marsha_93:
(Start: 64 @52954 has 48 MA's), (92, 53092),

Gene: MaryBeth_91 Start: 51469, Stop: 51266, Start Num: 65
Candidate Starts for MaryBeth_91:
(Start: 65 @51469 has 126 MA's), (92, 51334),

Gene: McGuire_92 Start: 50898, Stop: 50695, Start Num: 65
Candidate Starts for McGuire_92:
(Start: 65 @50898 has 126 MA's), (92, 50763),

Gene: MetalQZJ_88 Start: 51469, Stop: 51266, Start Num: 65
Candidate Starts for MetalQZJ_88:
(Start: 65 @51469 has 126 MA's), (92, 51334),

Gene: MiaZeal_245 Start: 108550, Stop: 108374, Start Num: 68
Candidate Starts for MiaZeal_245:
(Start: 60 @108571 has 1 MA's), (Start: 68 @108550 has 34 MA's), (86, 108508), (91, 108481),

Gene: Michley_91 Start: 50597, Stop: 50346, Start Num: 41
Candidate Starts for Michley_91:
(Start: 41 @50597 has 3 MA's), (Start: 65 @50549 has 126 MA's), (92, 50414),

Gene: MiculUcigas_86 Start: 48271, Stop: 48065, Start Num: 62
Candidate Starts for MiculUcigas_86:
(15, 48469), (Start: 55 @48286 has 3 MA's), (Start: 62 @48271 has 51 MA's), (80, 48217), (93, 48133),

Gene: Minerva_233 Start: 107908, Stop: 107726, Start Num: 68

Candidate Starts for Minerva_233:

(Start: 62 @107923 has 51 MA's), (Start: 68 @107908 has 34 MA's), (86, 107872), (91, 107833), (95, 107761),

Gene: MissWhite_79 Start: 45139, Stop: 44933, Start Num: 62

Candidate Starts for MissWhite_79:

(Start: 55 @45154 has 3 MA's), (Start: 62 @45139 has 51 MA's), (80, 45085), (88, 45061), (93, 45001),

Gene: Mkhuseli_91 Start: 49763, Stop: 49557, Start Num: 65

Candidate Starts for Mkhuseli_91:

(Start: 65 @49763 has 126 MA's), (92, 49625),

Gene: Molly_89 Start: 49678, Stop: 49475, Start Num: 65

Candidate Starts for Molly_89:

(22, 49825), (25, 49813), (29, 49789), (Start: 65 @49678 has 126 MA's), (92, 49543), (98, 49483),

Gene: Monet_92 Start: 51735, Stop: 51938, Start Num: 65

Candidate Starts for Monet_92:

(Start: 65 @51735 has 126 MA's), (92, 51870), (98, 51930),

Gene: Moose_95 Start: 52313, Stop: 52110, Start Num: 65

Candidate Starts for Moose_95:

(Start: 65 @52313 has 126 MA's), (92, 52178),

Gene: Morpher26_82 Start: 48602, Stop: 48444, Start Num: 77

Candidate Starts for Morpher26_82:

(Start: 61 @48641 has 29 MA's), (Start: 77 @48602 has 8 MA's), (79, 48593), (93, 48506), (95, 48473),

Gene: MrGordo_92 Start: 50603, Stop: 50400, Start Num: 65

Candidate Starts for MrGordo_92:

(Start: 65 @50603 has 126 MA's), (92, 50468),

Gene: Mryolo_84 Start: 48769, Stop: 48972, Start Num: 65

Candidate Starts for Mryolo_84:

(Start: 65 @48769 has 126 MA's), (92, 48904),

Gene: Mulciber_88 Start: 48150, Stop: 47953, Start Num: 63

Candidate Starts for Mulciber_88:

(Start: 63 @48150 has 34 MA's), (93, 48021), (98, 47964),

Gene: Mule_92 Start: 49973, Stop: 50179, Start Num: 64

Candidate Starts for Mule_92:

(Start: 64 @49973 has 48 MA's), (92, 50111),

Gene: Munch_88 Start: 48299, Stop: 48102, Start Num: 63

Candidate Starts for Munch_88:

(Start: 63 @48299 has 34 MA's), (93, 48170), (98, 48113),

Gene: Museum_90 Start: 51040, Stop: 50837, Start Num: 65

Candidate Starts for Museum_90:

(Start: 65 @51040 has 126 MA's), (92, 50905),

Gene: NEHalo_88 Start: 50148, Stop: 49945, Start Num: 65

Candidate Starts for NEHalo_88:

(Start: 65 @50148 has 126 MA's), (92, 50013),

Gene: NaSiaTalie_87 Start: 48558, Stop: 48352, Start Num: 62

Candidate Starts for NaSiaTalie_87:

(15, 48756), (Start: 55 @48573 has 3 MA's), (Start: 62 @48558 has 51 MA's), (80, 48504), (93, 48420),

Gene: Naira_96 Start: 52973, Stop: 52770, Start Num: 65

Candidate Starts for Naira_96:

(Start: 65 @52973 has 126 MA's), (92, 52838),

Gene: Nerujay_93 Start: 51720, Stop: 51926, Start Num: 64

Candidate Starts for Nerujay_93:

(Start: 64 @51720 has 48 MA's), (92, 51858),

Gene: Nhonho_87 Start: 50646, Stop: 50852, Start Num: 64

Candidate Starts for Nhonho_87:

(Start: 64 @50646 has 48 MA's), (92, 50784),

Gene: NihilNomen_236 Start: 108748, Stop: 108545, Start Num: 62

Candidate Starts for NihilNomen_236:

(Start: 62 @108748 has 51 MA's), (Start: 68 @108733 has 34 MA's), (78, 108709), (86, 108691), (91, 108652), (95, 108580), (98, 108556),

Gene: Niza_89 Start: 51286, Stop: 51083, Start Num: 65

Candidate Starts for Niza_89:

(Start: 65 @51286 has 126 MA's), (92, 51151),

Gene: Noella_87 Start: 47835, Stop: 47635, Start Num: 61

Candidate Starts for Noella_87:

(16, 48024), (Start: 61 @47835 has 29 MA's), (82, 47775), (93, 47709), (95, 47676),

Gene: Norbert_82 Start: 47832, Stop: 47632, Start Num: 61

Candidate Starts for Norbert_82:

(16, 48021), (Start: 61 @47832 has 29 MA's), (82, 47772), (93, 47706), (95, 47673),

Gene: Norz_90 Start: 53476, Stop: 53273, Start Num: 65

Candidate Starts for Norz_90:

(Start: 65 @53476 has 126 MA's),

Gene: OKCentral2016_83 Start: 47802, Stop: 47614, Start Num: 66

Candidate Starts for OKCentral2016_83:

(53, 47835), (Start: 66 @47802 has 9 MA's), (92, 47682), (93, 47679),

Gene: Odette_234 Start: 110012, Stop: 109836, Start Num: 68

Candidate Starts for Odette_234:

(Start: 60 @110033 has 1 MA's), (Start: 68 @110012 has 34 MA's), (86, 109970), (91, 109943),

Gene: Ohno789_95 Start: 52428, Stop: 52225, Start Num: 65

Candidate Starts for Ohno789_95:
(Start: 65 @52428 has 126 MA's), (92, 52293),

Gene: Omega_235 Start: 109887, Stop: 109675, Start Num: 62
Candidate Starts for Omega_235:
(38, 109956), (Start: 62 @109887 has 51 MA's), (78, 109839), (86, 109821), (91, 109782), (95, 109710), (98, 109686),

Gene: Oogway_87 Start: 51358, Stop: 51155, Start Num: 65
Candidate Starts for Oogway_87:
(Start: 65 @51358 has 126 MA's), (92, 51223),

Gene: Orange_89 Start: 47849, Stop: 47652, Start Num: 63
Candidate Starts for Orange_89:
(Start: 63 @47849 has 34 MA's), (93, 47720), (98, 47663),

Gene: PP_04 Start: 1143, Stop: 901, Start Num: 48
Candidate Starts for PP_04:
(Start: 48 @1143 has 1 MA's), (Start: 64 @1104 has 48 MA's), (75, 1074), (87, 1035), (89, 1026), (93, 966),

Gene: PSullivan_87 Start: 49195, Stop: 48992, Start Num: 65
Candidate Starts for PSullivan_87:
(22, 49342), (25, 49330), (29, 49306), (Start: 65 @49195 has 126 MA's), (92, 49060), (98, 49000),

Gene: PacerPaul_93 Start: 52361, Stop: 52158, Start Num: 65
Candidate Starts for PacerPaul_93:
(Start: 65 @52361 has 126 MA's),

Gene: PainterBoy_85 Start: 48081, Stop: 47851, Start Num: 51
Candidate Starts for PainterBoy_85:
(Start: 51 @48081 has 3 MA's), (Start: 64 @48057 has 48 MA's), (Start: 68 @48045 has 34 MA's), (72, 48033), (84, 47994),

Gene: Panamaxus_82 Start: 47834, Stop: 47634, Start Num: 61
Candidate Starts for Panamaxus_82:
(16, 48023), (Start: 61 @47834 has 29 MA's), (82, 47774), (93, 47708), (95, 47675),

Gene: Papez_93 Start: 51585, Stop: 51337, Start Num: 41
Candidate Starts for Papez_93:
(Start: 41 @51585 has 3 MA's), (Start: 65 @51537 has 126 MA's), (92, 51405),

Gene: Paphu_87 Start: 49638, Stop: 49841, Start Num: 65
Candidate Starts for Paphu_87:
(Start: 65 @49638 has 126 MA's), (92, 49773),

Gene: Paraselene_87 Start: 49509, Stop: 49715, Start Num: 64
Candidate Starts for Paraselene_87:
(Start: 64 @49509 has 48 MA's), (92, 49647), (98, 49707),

Gene: Pari_92 Start: 50227, Stop: 50027, Start Num: 63
Candidate Starts for Pari_92:
(Start: 63 @50227 has 34 MA's), (92, 50095),

Gene: Parliament_90 Start: 52239, Stop: 52445, Start Num: 64
Candidate Starts for Parliament_90:
(Start: 64 @52239 has 48 MA's), (92, 52377),

Gene: PascalRango_92 Start: 52074, Stop: 51871, Start Num: 65
Candidate Starts for PascalRango_92:
(Start: 40 @52125 has 7 MA's), (Start: 65 @52074 has 126 MA's),

Gene: PattyP_92 Start: 51679, Stop: 51476, Start Num: 65
Candidate Starts for PattyP_92:
(Start: 65 @51679 has 126 MA's), (92, 51544),

Gene: Payneful_77 Start: 46347, Stop: 46144, Start Num: 65
Candidate Starts for Payneful_77:
(Start: 65 @46347 has 126 MA's), (92, 46212),

Gene: PeaceMeal1_81 Start: 47729, Stop: 47541, Start Num: 66
Candidate Starts for PeaceMeal1_81:
(53, 47762), (Start: 66 @47729 has 9 MA's), (93, 47606),

Gene: Pelly_94 Start: 53346, Stop: 53143, Start Num: 65
Candidate Starts for Pelly_94:
(Start: 65 @53346 has 126 MA's), (92, 53211),

Gene: Pepe_86 Start: 50134, Stop: 49931, Start Num: 65
Candidate Starts for Pepe_86:
(Start: 65 @50134 has 126 MA's), (92, 49999),

Gene: Perplexer_82 Start: 48582, Stop: 48424, Start Num: 77
Candidate Starts for Perplexer_82:
(Start: 61 @48621 has 29 MA's), (Start: 77 @48582 has 8 MA's), (79, 48573), (93, 48486), (95, 48453),

Gene: Perseus_90 Start: 51769, Stop: 51975, Start Num: 64
Candidate Starts for Perseus_90:
(Start: 64 @51769 has 48 MA's), (92, 51907),

Gene: Petersenfast_83 Start: 46730, Stop: 46533, Start Num: 63
Candidate Starts for Petersenfast_83:
(Start: 63 @46730 has 34 MA's), (93, 46601), (98, 46544),

Gene: Peterson_90 Start: 51816, Stop: 51607, Start Num: 64
Candidate Starts for Peterson_90:
(6, 52101), (9, 52062), (10, 52059), (12, 52044), (18, 51996), (19, 51975), (23, 51960), (31, 51915), (32, 51909), (34, 51903), (Start: 64 @51816 has 48 MA's), (75, 51783), (91, 51711), (98, 51615),

Gene: PetiteSangsue_82 Start: 48585, Stop: 48427, Start Num: 77
Candidate Starts for PetiteSangsue_82:
(Start: 61 @48624 has 29 MA's), (Start: 77 @48585 has 8 MA's), (79, 48576), (93, 48489), (95, 48456),

Gene: Petp2012_89 Start: 51326, Stop: 51123, Start Num: 65

Candidate Starts for Petp2012_89:
(Start: 65 @51326 has 126 MA's), (92, 51191),

Gene: Petruccio_88 Start: 48718, Stop: 48515, Start Num: 65
Candidate Starts for Petruccio_88:
(Start: 65 @48718 has 126 MA's), (92, 48583), (98, 48523),

Gene: Phantastic_87 Start: 47341, Stop: 47150, Start Num: 69
Candidate Starts for Phantastic_87:
(8, 47605), (Start: 69 @47341 has 3 MA's), (71, 47335), (88, 47281), (93, 47215),

Gene: PherrisBueller_88 Start: 48812, Stop: 48612, Start Num: 63
Candidate Starts for PherrisBueller_88:
(Start: 63 @48812 has 34 MA's), (92, 48680),

Gene: Phlei_72 Start: 46175, Stop: 45936, Start Num: 58
Candidate Starts for Phlei_72:
(58, 46175), (92, 46019),

Gene: Phoebus_233 Start: 112122, Stop: 111946, Start Num: 68
Candidate Starts for Phoebus_233:
(Start: 60 @112143 has 1 MA's), (Start: 68 @112122 has 34 MA's), (86, 112080), (91, 112053),

Gene: PhrostyMug_94 Start: 52143, Stop: 52349, Start Num: 64
Candidate Starts for PhrostyMug_94:
(Start: 64 @52143 has 48 MA's), (92, 52281),

Gene: Pinto_87 Start: 50214, Stop: 50011, Start Num: 65
Candidate Starts for Pinto_87:
(Start: 65 @50214 has 126 MA's),

Gene: Pippin_93 Start: 50646, Stop: 50852, Start Num: 64
Candidate Starts for Pippin_93:
(Start: 64 @50646 has 48 MA's), (92, 50784),

Gene: Piro94_85 Start: 48506, Stop: 48300, Start Num: 62
Candidate Starts for Piro94_85:
(15, 48704), (Start: 55 @48521 has 3 MA's), (Start: 62 @48506 has 51 MA's), (93, 48368),

Gene: Pistachio_87 Start: 47750, Stop: 47532, Start Num: 61
Candidate Starts for Pistachio_87:
(50, 47777), (Start: 61 @47750 has 29 MA's), (83, 47687), (88, 47669), (93, 47597),

Gene: Pita2_91 Start: 50691, Stop: 50488, Start Num: 65
Candidate Starts for Pita2_91:
(22, 50838), (25, 50826), (29, 50802), (Start: 65 @50691 has 126 MA's), (92, 50556), (98, 50496),

Gene: Pocahontas_85 Start: 47830, Stop: 47630, Start Num: 61
Candidate Starts for Pocahontas_85:
(16, 48019), (Start: 61 @47830 has 29 MA's), (82, 47770), (93, 47704), (95, 47671),

Gene: Pomar16_86 Start: 48397, Stop: 48194, Start Num: 62
Candidate Starts for Pomar16_86:

(Start: 62 @48397 has 51 MA's), (80, 48343), (93, 48259),

Gene: Poompha_81 Start: 47730, Stop: 47539, Start Num: 66

Candidate Starts for Poompha_81:

(39, 47796), (Start: 66 @47730 has 9 MA's), (73, 47712), (85, 47673), (93, 47604),

Gene: Popcicle_86 Start: 47830, Stop: 47630, Start Num: 61

Candidate Starts for Popcicle_86:

(16, 48019), (Start: 61 @47830 has 29 MA's), (82, 47770), (93, 47704), (95, 47671),

Gene: Porcelain_236 Start: 107360, Stop: 107184, Start Num: 68

Candidate Starts for Porcelain_236:

(Start: 60 @107381 has 1 MA's), (Start: 68 @107360 has 34 MA's), (86, 107318), (91, 107291),

Gene: Pound_223 Start: 107829, Stop: 107617, Start Num: 60

Candidate Starts for Pound_223:

(Start: 60 @107829 has 1 MA's), (Start: 68 @107808 has 34 MA's), (78, 107784), (81, 107775), (87, 107760), (91, 107724), (92, 107688), (93, 107685), (95, 107652), (96, 107637),

Gene: ProMouse_90 Start: 49279, Stop: 49485, Start Num: 64

Candidate Starts for ProMouse_90:

(Start: 64 @49279 has 48 MA's), (92, 49417),

Gene: Puppy_88 Start: 47820, Stop: 47602, Start Num: 61

Candidate Starts for Puppy_88:

(50, 47847), (Start: 61 @47820 has 29 MA's), (83, 47757), (88, 47739), (93, 47667),

Gene: QTRlifeCrisis_86 Start: 49246, Stop: 49043, Start Num: 65

Candidate Starts for QTRlifeCrisis_86:

(Start: 40 @49297 has 7 MA's), (Start: 65 @49246 has 126 MA's), (92, 49111),

Gene: QuinnKiro_85 Start: 47833, Stop: 47633, Start Num: 61

Candidate Starts for QuinnKiro_85:

(7, 48106), (16, 48022), (Start: 61 @47833 has 29 MA's), (82, 47773), (93, 47707), (95, 47674),

Gene: Quokka_88 Start: 47930, Stop: 47727, Start Num: 62

Candidate Starts for Quokka_88:

(Start: 55 @47945 has 3 MA's), (Start: 62 @47930 has 51 MA's), (80, 47876), (83, 47870), (93, 47792), (95, 47759),

Gene: Rajelicia_89 Start: 52457, Stop: 52257, Start Num: 65

Candidate Starts for Rajelicia_89:

(Start: 65 @52457 has 126 MA's), (92, 52325),

Gene: Rebeuca_85 Start: 49034, Stop: 48798, Start Num: 47

Candidate Starts for Rebeuca_85:

(37, 49067), (Start: 47 @49034 has 5 MA's), (Start: 52 @49019 has 1 MA's), (57, 49010), (81, 48941), (93, 48863), (95, 48830),

Gene: RedRock_86 Start: 49130, Stop: 48909, Start Num: 62

Candidate Starts for RedRock_86:

(Start: 55 @49145 has 3 MA's), (Start: 62 @49130 has 51 MA's), (95, 48944),

Gene: Redno2_226 Start: 106231, Stop: 106055, Start Num: 68
Candidate Starts for Redno2_226:
(Start: 60 @106252 has 1 MA's), (Start: 68 @106231 has 34 MA's), (86, 106189), (91, 106162),

Gene: ResDef_84 Start: 47836, Stop: 47636, Start Num: 61
Candidate Starts for ResDef_84:
(16, 48025), (Start: 61 @47836 has 29 MA's), (82, 47776), (93, 47710), (95, 47677),

Gene: RhynO_72 Start: 44427, Stop: 44242, Start Num: 66
Candidate Starts for RhynO_72:
(4, 44745), (13, 44655), (17, 44616), (46, 44472), (Start: 66 @44427 has 9 MA's), (74, 44406), (85, 44370), (93, 44307), (95, 44274),

Gene: Rhynn_85 Start: 50726, Stop: 50926, Start Num: 65
Candidate Starts for Rhynn_85:
(Start: 65 @50726 has 126 MA's),

Gene: RidgeCB_89 Start: 49216, Stop: 49422, Start Num: 64
Candidate Starts for RidgeCB_89:
(Start: 64 @49216 has 48 MA's), (92, 49354), (98, 49414),

Gene: Rifter_89 Start: 46179, Stop: 45970, Start Num: 62
Candidate Starts for Rifter_89:
(Start: 62 @46179 has 51 MA's), (83, 46119),

Gene: Ringer_90 Start: 51410, Stop: 51210, Start Num: 65
Candidate Starts for Ringer_90:
(Start: 65 @51410 has 126 MA's), (92, 51278),

Gene: Rockstar_75 Start: 45031, Stop: 44831, Start Num: 69
Candidate Starts for Rockstar_75:
(8, 45295), (Start: 69 @45031 has 3 MA's), (71, 45025), (88, 44971), (93, 44905),

Gene: Rohr_92 Start: 51968, Stop: 52177, Start Num: 64
Candidate Starts for Rohr_92:
(Start: 64 @51968 has 48 MA's), (92, 52106),

Gene: Roksolana_89 Start: 46895, Stop: 46686, Start Num: 62
Candidate Starts for Roksolana_89:
(Start: 62 @46895 has 51 MA's), (83, 46835),

Gene: Rowdy_87 Start: 48813, Stop: 48628, Start Num: 66
Candidate Starts for Rowdy_87:
(4, 49131), (13, 49041), (17, 49002), (46, 48858), (Start: 66 @48813 has 9 MA's), (74, 48792), (85, 48756), (93, 48693), (95, 48660),

Gene: Rubeus_88 Start: 48657, Stop: 48454, Start Num: 65
Candidate Starts for Rubeus_88:
(Start: 65 @48657 has 126 MA's), (92, 48522),

Gene: Rufus_93 Start: 51974, Stop: 51771, Start Num: 65
Candidate Starts for Rufus_93:
(Start: 65 @51974 has 126 MA's), (92, 51839),

Gene: Ruotula_94 Start: 52218, Stop: 52015, Start Num: 65

Candidate Starts for Ruotula_94:

(Start: 65 @52218 has 126 MA's), (92, 52083),

Gene: Rutherferd_91 Start: 50676, Stop: 50882, Start Num: 64

Candidate Starts for Rutherferd_91:

(Start: 64 @50676 has 48 MA's), (92, 50814), (98, 50874),

Gene: STLscum_100 Start: 51894, Stop: 51691, Start Num: 65

Candidate Starts for STLscum_100:

(Start: 65 @51894 has 126 MA's), (92, 51759),

Gene: Sagefire_86 Start: 50112, Stop: 50318, Start Num: 64

Candidate Starts for Sagefire_86:

(Start: 64 @50112 has 48 MA's), (92, 50250),

Gene: Salz_85 Start: 46959, Stop: 46762, Start Num: 63

Candidate Starts for Salz_85:

(Start: 63 @46959 has 34 MA's), (93, 46830), (98, 46773),

Gene: Sandaddy_90 Start: 51546, Stop: 51343, Start Num: 65

Candidate Starts for Sandaddy_90:

(Start: 65 @51546 has 126 MA's), (92, 51411),

Gene: Sanya_81 Start: 50361, Stop: 50158, Start Num: 65

Candidate Starts for Sanya_81:

(Start: 65 @50361 has 126 MA's), (92, 50226),

Gene: SarFire_98 Start: 53353, Stop: 53099, Start Num: 40

Candidate Starts for SarFire_98:

(Start: 40 @53353 has 7 MA's), (Start: 65 @53302 has 126 MA's), (92, 53167),

Gene: SaturnRing_88 Start: 48203, Stop: 47985, Start Num: 61

Candidate Starts for SaturnRing_88:

(50, 48230), (Start: 61 @48203 has 29 MA's), (83, 48140), (88, 48122), (93, 48050),

Gene: Schatzie_227 Start: 109153, Stop: 108977, Start Num: 68

Candidate Starts for Schatzie_227:

(Start: 60 @109174 has 1 MA's), (Start: 68 @109153 has 34 MA's), (86, 109111), (91, 109084),

Gene: Scout_86 Start: 47357, Stop: 47166, Start Num: 61

Candidate Starts for Scout_86:

(1, 47846), (2, 47813), (7, 47630), (Start: 61 @47357 has 29 MA's), (82, 47297), (93, 47231),

Gene: Scowl_90 Start: 50695, Stop: 50898, Start Num: 65

Candidate Starts for Scowl_90:

(Start: 65 @50695 has 126 MA's), (92, 50827),

Gene: Seabiscuit_95 Start: 51387, Stop: 51184, Start Num: 65

Candidate Starts for Seabiscuit_95:

(Start: 65 @51387 has 126 MA's),

Gene: Seanderson_89 Start: 52624, Stop: 52421, Start Num: 65
Candidate Starts for Seanderson_89:
(Start: 65 @52624 has 126 MA's), (92, 52489),

Gene: Serenity_89 Start: 47970, Stop: 47767, Start Num: 62
Candidate Starts for Serenity_89:
(35, 48045), (Start: 55 @47985 has 3 MA's), (Start: 62 @47970 has 51 MA's), (80, 47916), (83, 47910), (93, 47832), (95, 47799),

Gene: Severus_82 Start: 47724, Stop: 47536, Start Num: 66
Candidate Starts for Severus_82:
(53, 47757), (Start: 66 @47724 has 9 MA's), (93, 47601),

Gene: Sham4_86 Start: 47045, Stop: 46848, Start Num: 63
Candidate Starts for Sham4_86:
(Start: 63 @47045 has 34 MA's), (93, 46916), (98, 46859),

Gene: Shapes_87 Start: 48813, Stop: 48628, Start Num: 66
Candidate Starts for Shapes_87:
(4, 49131), (13, 49041), (17, 49002), (46, 48858), (Start: 66 @48813 has 9 MA's), (74, 48792), (85, 48756), (93, 48693), (95, 48660),

Gene: Sheen_83 Start: 50900, Stop: 50715, Start Num: 68
Candidate Starts for Sheen_83:
(Start: 68 @50900 has 34 MA's), (83, 50858), (92, 50783),

Gene: ShortQueendom_80 Start: 48241, Stop: 48038, Start Num: 65
Candidate Starts for ShortQueendom_80:
(43, 48289), (Start: 65 @48241 has 126 MA's), (92, 48106),

Gene: Sibs6_95 Start: 49833, Stop: 49630, Start Num: 65
Candidate Starts for Sibs6_95:
(Start: 65 @49833 has 126 MA's), (92, 49698),

Gene: SkiPole_98 Start: 51505, Stop: 51711, Start Num: 64
Candidate Starts for SkiPole_98:
(Start: 64 @51505 has 48 MA's), (92, 51643), (98, 51703),

Gene: Slagathor_92 Start: 51592, Stop: 51389, Start Num: 65
Candidate Starts for Slagathor_92:
(Start: 65 @51592 has 126 MA's),

Gene: Smairt_97 Start: 53160, Stop: 53366, Start Num: 64
Candidate Starts for Smairt_97:
(Start: 64 @53160 has 48 MA's), (92, 53298),

Gene: Smeagol_90 Start: 52545, Stop: 52336, Start Num: 64
Candidate Starts for Smeagol_90:
(18, 52725), (19, 52704), (23, 52689), (31, 52644), (32, 52638), (34, 52632), (Start: 64 @52545 has 48 MA's), (75, 52512), (91, 52440), (98, 52344),

Gene: Snape_89 Start: 47838, Stop: 47641, Start Num: 63
Candidate Starts for Snape_89:

(Start: 63 @47838 has 34 MA's), (93, 47709), (98, 47652),

Gene: Snazzy_92 Start: 51835, Stop: 51632, Start Num: 65

Candidate Starts for Snazzy_92:

(Start: 65 @51835 has 126 MA's), (92, 51700),

Gene: Solon_83 Start: 47822, Stop: 48028, Start Num: 64

Candidate Starts for Solon_83:

(Start: 64 @47822 has 48 MA's), (92, 47960), (98, 48020),

Gene: SororFago_85 Start: 48106, Stop: 47903, Start Num: 62

Candidate Starts for SororFago_85:

(Start: 55 @48121 has 3 MA's), (Start: 62 @48106 has 51 MA's), (80, 48055),

Gene: Sorpresa_93 Start: 51552, Stop: 51349, Start Num: 65

Candidate Starts for Sorpresa_93:

(Start: 65 @51552 has 126 MA's), (92, 51417),

Gene: SpikeBT_87 Start: 49792, Stop: 49589, Start Num: 65

Candidate Starts for SpikeBT_87:

(Start: 65 @49792 has 126 MA's), (92, 49657),

Gene: Squee_92 Start: 51943, Stop: 51740, Start Num: 65

Candidate Starts for Squee_92:

(Start: 65 @51943 has 126 MA's), (92, 51808),

Gene: Squint_233 Start: 108166, Stop: 107990, Start Num: 68

Candidate Starts for Squint_233:

(Start: 60 @108187 has 1 MA's), (Start: 68 @108166 has 34 MA's), (86, 108124), (91, 108097),

Gene: StarStuff_86 Start: 48359, Stop: 48156, Start Num: 62

Candidate Starts for StarStuff_86:

(Start: 62 @48359 has 51 MA's), (80, 48305), (93, 48221),

Gene: StewieG_86 Start: 47748, Stop: 47954, Start Num: 64

Candidate Starts for StewieG_86:

(Start: 64 @47748 has 48 MA's), (92, 47886), (98, 47946),

Gene: StrongArm_88 Start: 50693, Stop: 50899, Start Num: 64

Candidate Starts for StrongArm_88:

(Start: 64 @50693 has 48 MA's), (92, 50831),

Gene: Sumter_87 Start: 51154, Stop: 51363, Start Num: 64

Candidate Starts for Sumter_87:

(Start: 64 @51154 has 48 MA's), (92, 51292),

Gene: Sunshine924_93 Start: 49690, Stop: 49896, Start Num: 64

Candidate Starts for Sunshine924_93:

(Start: 64 @49690 has 48 MA's), (92, 49828), (98, 49888),

Gene: Superphikiman_233 Start: 107294, Stop: 107106, Start Num: 68

Candidate Starts for Superphikiman_233:

(Start: 60 @107315 has 1 MA's), (Start: 68 @107294 has 34 MA's), (86, 107252), (91, 107213), (95, 107141), (98, 107117),

Gene: SwissCheese_95 Start: 51439, Stop: 51236, Start Num: 65
Candidate Starts for SwissCheese_95:
(Start: 65 @51439 has 126 MA's), (92, 51304),

Gene: Switzer_91 Start: 51956, Stop: 51702, Start Num: 40
Candidate Starts for Switzer_91:
(Start: 40 @51956 has 7 MA's), (Start: 65 @51905 has 126 MA's),

Gene: Swole_88 Start: 50909, Stop: 50706, Start Num: 65
Candidate Starts for Swole_88:
(22, 51056), (25, 51044), (29, 51020), (Start: 65 @50909 has 126 MA's), (92, 50774), (98, 50714),

Gene: TNguyen7_88 Start: 48161, Stop: 47943, Start Num: 61
Candidate Starts for TNguyen7_88:
(50, 48188), (Start: 61 @48161 has 29 MA's), (83, 48098), (88, 48080), (93, 48008),

Gene: Target_90 Start: 48713, Stop: 48510, Start Num: 65
Candidate Starts for Target_90:
(Start: 65 @48713 has 126 MA's), (92, 48578), (98, 48518),

Gene: Tasp14_87 Start: 49921, Stop: 50127, Start Num: 64
Candidate Starts for Tasp14_87:
(Start: 64 @49921 has 48 MA's), (92, 50059),

Gene: Teodoridan_93 Start: 50495, Stop: 50698, Start Num: 65
Candidate Starts for Teodoridan_93:
(Start: 65 @50495 has 126 MA's), (92, 50630),

Gene: Texage_84 Start: 47834, Stop: 47634, Start Num: 61
Candidate Starts for Texage_84:
(16, 48023), (Start: 61 @47834 has 29 MA's), (82, 47774), (93, 47708), (95, 47675),

Gene: TheloniousMonk_90 Start: 51663, Stop: 51460, Start Num: 65
Candidate Starts for TheloniousMonk_90:
(Start: 65 @51663 has 126 MA's), (92, 51528),

Gene: Thibault_209 Start: 104098, Stop: 103910, Start Num: 68
Candidate Starts for Thibault_209:
(Start: 68 @104098 has 34 MA's), (78, 104074), (86, 104056), (91, 104017), (95, 103945), (98, 103921),

Gene: Thor_98 Start: 52711, Stop: 52457, Start Num: 40
Candidate Starts for Thor_98:
(Start: 40 @52711 has 7 MA's), (Start: 65 @52660 has 126 MA's), (92, 52525),

Gene: ThreeRngTarjay_234 Start: 111335, Stop: 111162, Start Num: 68
Candidate Starts for ThreeRngTarjay_234:
(Start: 60 @111356 has 1 MA's), (Start: 68 @111335 has 34 MA's), (86, 111293), (91, 111266),

Gene: Timothy_89 Start: 47815, Stop: 47618, Start Num: 63

Candidate Starts for Timothy_89:

(Start: 63 @47815 has 34 MA's), (93, 47686), (98, 47629),

Gene: TinyTimmy_87 Start: 47544, Stop: 47347, Start Num: 63

Candidate Starts for TinyTimmy_87:

(Start: 63 @47544 has 34 MA's), (93, 47415), (98, 47358),

Gene: TopsytheTRex_85 Start: 47972, Stop: 47769, Start Num: 62

Candidate Starts for TopsytheTRex_85:

(35, 48047), (Start: 55 @47987 has 3 MA's), (Start: 62 @47972 has 51 MA's), (80, 47918), (83, 47912), (93, 47834), (95, 47801),

Gene: Todacoro_86 Start: 47833, Stop: 47633, Start Num: 61

Candidate Starts for Todacoro_86:

(7, 48106), (16, 48022), (Start: 61 @47833 has 29 MA's), (82, 47773), (93, 47707), (95, 47674),

Gene: Tomathan_86 Start: 48437, Stop: 48234, Start Num: 62

Candidate Starts for Tomathan_86:

(Start: 62 @48437 has 51 MA's), (80, 48383), (93, 48299),

Gene: ToneTone_86 Start: 46559, Stop: 46350, Start Num: 62

Candidate Starts for ToneTone_86:

(Start: 62 @46559 has 51 MA's), (83, 46499), (92, 46424),

Gene: Topanga_74 Start: 45508, Stop: 45263, Start Num: 47

Candidate Starts for Topanga_74:

(14, 45685), (Start: 47 @45508 has 5 MA's), (Start: 52 @45493 has 1 MA's), (57, 45484), (81, 45415), (93, 45337), (95, 45304),

Gene: Topgun_89 Start: 49318, Stop: 49524, Start Num: 64

Candidate Starts for Topgun_89:

(Start: 64 @49318 has 48 MA's), (92, 49456), (98, 49516),

Gene: Toro_84 Start: 51563, Stop: 51378, Start Num: 68

Candidate Starts for Toro_84:

(Start: 68 @51563 has 34 MA's), (83, 51521), (92, 51446),

Gene: Tote_86 Start: 48177, Stop: 47974, Start Num: 65

Candidate Starts for Tote_86:

(22, 48324), (25, 48312), (29, 48288), (Start: 65 @48177 has 126 MA's), (92, 48042), (98, 47982),

Gene: Traft412_86 Start: 50830, Stop: 50627, Start Num: 65

Candidate Starts for Traft412_86:

(Start: 65 @50830 has 126 MA's), (92, 50695),

Gene: Travvers_86 Start: 48354, Stop: 48151, Start Num: 62

Candidate Starts for Travvers_86:

(Start: 62 @48354 has 51 MA's), (80, 48300), (93, 48216),

Gene: Treddle_90 Start: 51379, Stop: 51582, Start Num: 65

Candidate Starts for Treddle_90:

(Start: 65 @51379 has 126 MA's), (92, 51514), (98, 51574),

Gene: Tripl3t_91 Start: 53185, Stop: 52982, Start Num: 65
Candidate Starts for Tripl3t_91:
(Start: 65 @53185 has 126 MA's), (92, 53050),

Gene: Trouble_90 Start: 50598, Stop: 50804, Start Num: 64
Candidate Starts for Trouble_90:
(Start: 64 @50598 has 48 MA's), (92, 50736),

Gene: Tucker_89 Start: 46762, Stop: 46553, Start Num: 62
Candidate Starts for Tucker_89:
(Start: 62 @46762 has 51 MA's), (83, 46702), (92, 46627),

Gene: Turj99_86 Start: 50763, Stop: 50560, Start Num: 65
Candidate Starts for Turj99_86:
(Start: 65 @50763 has 126 MA's), (92, 50628),

Gene: Twister_85 Start: 48707, Stop: 48477, Start Num: 52
Candidate Starts for Twister_85:
(14, 48899), (27, 48803), (Start: 47 @48722 has 5 MA's), (Start: 52 @48707 has 1 MA's), (57, 48698),
(81, 48629), (93, 48551), (95, 48518),

Gene: TwoPeat_88 Start: 50371, Stop: 50168, Start Num: 65
Candidate Starts for TwoPeat_88:
(22, 50518), (25, 50506), (29, 50482), (Start: 65 @50371 has 126 MA's), (92, 50236), (98, 50176),

Gene: Updawg_87 Start: 48553, Stop: 48347, Start Num: 62
Candidate Starts for Updawg_87:
(15, 48751), (Start: 55 @48568 has 3 MA's), (Start: 62 @48553 has 51 MA's), (80, 48499), (93, 48415),

Gene: VC3_84 Start: 47253, Stop: 47056, Start Num: 62
Candidate Starts for VC3_84:
(Start: 62 @47253 has 51 MA's), (80, 47199), (93, 47121),

Gene: Veracruz_83 Start: 47834, Stop: 47634, Start Num: 61
Candidate Starts for Veracruz_83:
(7, 48107), (16, 48023), (Start: 61 @47834 has 29 MA's), (82, 47774), (93, 47708), (95, 47675),

Gene: Violet_87 Start: 50920, Stop: 51123, Start Num: 65
Candidate Starts for Violet_87:
(Start: 65 @50920 has 126 MA's), (92, 51055), (98, 51115),

Gene: WalterMcMickey_84 Start: 48722, Stop: 48477, Start Num: 47
Candidate Starts for WalterMcMickey_84:
(14, 48899), (27, 48803), (Start: 47 @48722 has 5 MA's), (Start: 52 @48707 has 1 MA's), (57, 48698),
(81, 48629), (93, 48551), (95, 48518),

Gene: Wanda_234 Start: 107541, Stop: 107365, Start Num: 68
Candidate Starts for Wanda_234:
(Start: 60 @107562 has 1 MA's), (Start: 68 @107541 has 34 MA's), (86, 107499), (91, 107472),

Gene: Watermelon_89 Start: 50581, Stop: 50378, Start Num: 65
Candidate Starts for Watermelon_89:

(Start: 65 @50581 has 126 MA's), (92, 50446),

Gene: WeiHuaDA_88 Start: 49575, Stop: 49372, Start Num: 62

Candidate Starts for WeiHuaDA_88:

(20, 49722), (24, 49710), (Start: 55 @49590 has 3 MA's), (Start: 62 @49575 has 51 MA's), (71, 49551), (80, 49524), (88, 49500), (93, 49440),

Gene: Wheeler_96 Start: 53218, Stop: 53015, Start Num: 65

Candidate Starts for Wheeler_96:

(Start: 65 @53218 has 126 MA's), (92, 53083),

Gene: WideWale_87 Start: 48553, Stop: 48347, Start Num: 62

Candidate Starts for WideWale_87:

(15, 48751), (Start: 55 @48568 has 3 MA's), (Start: 62 @48553 has 51 MA's), (80, 48499), (93, 48415),

Gene: Wile_81 Start: 48650, Stop: 48453, Start Num: 61

Candidate Starts for Wile_81:

(Start: 61 @48650 has 29 MA's), (Start: 77 @48611 has 8 MA's), (79, 48602), (93, 48515), (95, 48482),

Gene: Wilkins_90 Start: 49248, Stop: 49454, Start Num: 64

Candidate Starts for Wilkins_90:

(Start: 64 @49248 has 48 MA's), (92, 49386), (98, 49446),

Gene: Wizard007_82 Start: 48376, Stop: 48179, Start Num: 61

Candidate Starts for Wizard007_82:

(Start: 61 @48376 has 29 MA's), (Start: 77 @48337 has 8 MA's), (79, 48328), (93, 48241), (95, 48208),

Gene: Yeet_229 Start: 109251, Stop: 109075, Start Num: 68

Candidate Starts for Yeet_229:

(Start: 60 @109272 has 1 MA's), (Start: 68 @109251 has 34 MA's), (86, 109209), (91, 109182),

Gene: Zeeculate_91 Start: 53471, Stop: 53271, Start Num: 63

Candidate Starts for Zeeculate_91:

(Start: 63 @53471 has 34 MA's), (92, 53339),

Gene: Zelink_228 Start: 108839, Stop: 108663, Start Num: 68

Candidate Starts for Zelink_228:

(Start: 60 @108860 has 1 MA's), (Start: 68 @108839 has 34 MA's), (86, 108797), (91, 108770),

Gene: Zephyr_92 Start: 51932, Stop: 51723, Start Num: 65

Candidate Starts for Zephyr_92:

(Start: 65 @51932 has 126 MA's), (92, 51791),