

Pham 296231



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 296231 Report

This analysis was run 04/25/26 on database version 644.

Pham number 296231 has 227 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Jorgensen_100, Ashballer_91, Applejack_88, Edtherson_87, Bob3_90, Abrogate_880, Marco3_91, Sunshine924_93, Topgun_89, Gandalf20_90, Wilkins_90, StewieG_86, SkiPole_98, RidgeCB_89, Phlippers_89, Rutherford_91, Solon_83, Paraselene_87
- Track 2 : Monet_92, Iqorha_82, Treddle_90, Inyanga_82, Bxb1_84, Fushigi_84, Homines_83, Crispicous1_86
- Track 3 : BaconJack_94
- Track 4 : Kugel_94, Petp2012_89, Arcanine_94, Pelly_94, Tripl3t_91, Arlo_96, Zephyr_92, KikiBouba_83, Bigfoot_86, Blesser_85, Ajay_84, Ohno789_95, PowerRanger_85, CatBus_81, Noxious_83, Kykar_88, Moose_95, Atkinbua_98, Kenmech_93, Pepe_86, Rajelicia_89, Bruns_96, BillKnuckles_86, Acme_91, MetalQZJ_88, GageAP_90, Aldrich_81, Ciao_94, GroundGoblin_82, Sorpresa_93, DrFeelGood_85, Hermia_84, Whitspit_82, Maroc7_92, Sibs6_95, Magnar_91, Niza_89, Alvin_86, Euphoria_95, Mkhuseleli_91, Greg_90, MaryBeth_91, Dussy_87, Carlyle_91, MrGordo_92, Fajezeel_90, Fascinus_86, STLscum_100, McSinger_84, DreamCatcher_102, Adahisdi_85, NEHalo_88, DirtDevil_83, Blackflame_88, Oogway_87, Traft412_86, ILeeKay_91, Bigchungu_86, Sanya_81, BigPaolini_85, Ruotula_94, ConceptII_97, SwissCheese_95, GrecoEtereo_92, Museum_90, Dexes_93, Wheeler_96, AFIS_88, Rufus_93, Bethlehem_87, Corvo_94, Puppet_88, Eyeball_94, Rubeus_88, TheloniousMonk_90, Hope4ever_88, Sandaddy_90, Abbysshoes_89, Burton_90, Chanagan_91, Lopton_88, CactusRose_96, Snazzy_92, Forsytheast_96, SpikeBT_87, PattyP_92
- Track 5 : Violet_87
- Track 6 : KSSJEB_91, Altman_94, Kanely_93, Seanderson_89, CartmannCramer_82
- Track 7 : HanShotFirst_90
- Track 8 : ProMouse_90
- Track 9 : Anglerfish_93
- Track 10 : Pippin_93
- Track 11 : Francis47_93, LilBib_80, Agaliana_87, Marcell_83, Pinto_87, Norz_90, Slagathor_92, PacerPaul_93, Seabiscuit_95
- Track 12 : Teodoridan_93, Marchy_81, Levia_85, Espresso_87, Mryolo_84, Payneful_77, PhineBark_85
- Track 13 : TwoPeat_88, Molly_89, PSullivan_87, ChristmasHams_80, KBG_87, Swole_91, JuliaChild_91, Tote_86, Pita2_91, Doom_84
- Track 14 : Bircsak_90, Gompeii16_90, Gwendoluna_91
- Track 15 : Parliament_90, Ringer_90

- Track 16 : Squee_92, Naira_96, Fenn_97
- Track 17 : KyMonks1A_96, Licorice_91, LunarLander_80, Target_90
- Track 18 : MilleFeuille_88, Sagefire_86, Barriga_101, Lamina13_93, HermioneGrange_94, Nerujay_93, Gachnar_77, JC27_94, Jerm2_90, Nhonho_87, Marsha_93, HarryOW_91, Rohr_92, BigMau_91, Sumter_87, Marge_87, Aeneas_96, MPlant7149_90, Hami1_87
- Track 19 : Mule_92, PhrostyMug_94, Smairt_97, Trouble_90, Tasp14_87, Perseus_90, Bexan_87, StrongArm_88, JackSparrow_92, Beatrix_89
- Track 20 : Ichabod_96, Thor_98, SarFire_98, BPBiebs31_97
- Track 21 : QTRlifeCrisis_86
- Track 22 : Dynamix_92, Briton15_95, Switzer_91
- Track 23 : Bones_86
- Track 24 : A6_85, BeesKnees_95, Jasper_93, Dreamboat_93, McGuire_92, BK1_85
- Track 25 : ShortQueendom_80
- Track 26 : Froghopper_79
- Track 27 : Smeagol_90
- Track 28 : Petruccio_88
- Track 29 : Watermelon_89
- Track 30 : Michley_91, Papez_93, Graduation_93
- Track 31 : Paphu_87
- Track 32 : Scowl_90
- Track 33 : Rhynn_85
- Track 34 : Magnito_91
- Track 35 : PascalRango_92, Manatee_92
- Track 36 : Gyzlar_83
- Track 37 : Peterson_90
- Track 38 : Buttons_85
- Track 39 : Koduck_86
- Track 40 : HINdeR_81
- Track 41 : PP_04
- Track 42 : Minerva_233, Dallas_233

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

The start number called the most often in the published annotations is 28, it was called in 182 of the 201 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6_85, AFIS_88, Abbyshoes_89, Abrogate_880, Acme_91, Adahisdi_85, Aeneas_96, Agaliana_87, Ajay_84, Aldrich_81, Altman_94, Alvin_86, Anglerfish_93, Applejack_88, Arcanine_94, Arlo_96, Ashballer_91, Atkinbua_98, BK1_85, BaconJack_94, Barriga_101, Beatrix_89, BeesKnees_95, Bethlehem_87, Bexan_87, BigMau_91, BigPaolini_85, Bigchungu_86, Bigfoot_86, BillKnuckles_86, Blackflame_88, Blesser_85, Bob3_90, Bones_86, Bruns_96, Burton_90, Buttons_85, Bxb1_84, CactusRose_96, Carlyle_91, CartmannCramer_82, CatBus_81, Chanagan_91, ChristmasHams_80, Ciao_94, ConceptII_97, Corvo_94, Crispicous1_86, Dexes_93, DirtDevil_83, Doom_84, DrFeelGood_85, DreamCatcher_102, Dreamboat_93, Dussy_87, Edtherson_87, Espresso_87, Euphoria_95, Eyeball_94, Fajezeel_90, Fascinus_86, Fenn_97, Forsytheast_96, Francis47_93, Froghopper_79, Fushigi_84, Gachnar_77, GageAP_90,

Gandalf20_90, GrecoEtereo_92, Greg_90, GroundGoblin_82, Gyzlar_83, Hami1_87, HarryOW_91, Hermia_84, HermioneGrange_94, Homines_83, Hope4ever_88, ILeeKay_91, Inyanga_82, Iqorha_82, JC27_94, JackSparrow_92, Jasper_93, Jerm2_90, Jorgensen_100, JuliaChild_91, KBG_87, KSSJEB_91, Kanely_93, Kenmech_93, KikiBouba_83, Kugel_94, KyMonks1A_96, Kykar_88, Lamina13_93, Levia_85, Licorice_91, LilBib_80, Lopton_88, LunarLander_80, MPlant7149_90, Magnar_91, Magnito_91, Manatee_92, Marcell_83, Marchy_81, Marco3_91, Marge_87, Maroc7_92, Marsha_93, MaryBeth_91, McGuire_92, McSinger_84, MetalQZJ_88, MilleFeuille_88, Mkhusei_91, Molly_89, Monet_92, Moose_95, MrGordo_92, Mryolo_84, Mule_92, Museum_90, NEHalo_88, Naira_96, Nerujay_93, Nhonho_87, Niza_89, Norz_90, Noxious_83, Ohno789_95, Oogway_87, PSullivan_87, PacerPaul_93, Paphu_87, Paraselene_87, Parliament_90, PascalRango_92, PattyP_92, Payneful_77, Pelly_94, Pepe_86, Perseus_90, Peterson_90, Petp2012_89, Petruchio_88, PhineBark_85, Philippers_89, PhrostyMug_94, Pinto_87, Pippin_93, Pita2_91, PowerRanger_85, ProMouse_90, Puppet_88, QTRlifeCrisis_86, Rajelicia_89, Rhynn_85, RidgeCB_89, Ringer_90, Rohr_92, Rubeus_88, Rufus_93, Ruotula_94, Rutherford_91, STLscum_100, Sagefire_86, Sandaddy_90, Sanya_81, Scowl_90, Seabiscuit_95, Seanderson_89, ShortQueendom_80, Sibs6_95, SkiPole_98, Slagathor_92, Smairt_97, Smeagol_90, Snazzy_92, Solon_83, Sorpresa_93, SpikeBT_87, Squee_92, StewieG_86, StrongArm_88, Sumter_87, Sunshine924_93, SwissCheese_95, Swole_91, Target_90, Tasp14_87, Teodoridan_93, TheloniousMonk_90, Topgun_89, Tote_86, Traft412_86, Treddle_90, Tripl3t_91, Trouble_90, TwoPeat_88, Violet_87, Watermelon_89, Wheeler_96, Whitspit_82, Wilkins_90, Zephyr_92,

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

- BPBiebs31_97, Bircsak_90, Briton15_95, Dynamix_92, Gompeii16_90, Graduation_93, Gwendoluna_91, HINdeR_81, HanShotFirst_90, Ichabod_96, Michley_91, PP_04, Papez_93, SarFire_98, Switzer_91, Thor_98,

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

- Dallas_233, Koduck_86, Minerva_233,

Summary by start number:

Start 17:

- Found in 3 of 227 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bircsak_90 (A1), Gompeii16_90 (A1), Gwendoluna_91 (A1),

Start 19:

- Found in 10 of 227 (4.4%) of genes in pham
- Manual Annotations of this start: 7 of 201
- Called 70.0% of time when present
- Phage (with cluster) where this start called: BPBiebs31_97 (A1), Briton15_95 (A1), Dynamix_92 (A1), Ichabod_96 (A1), SarFire_98 (A1), Switzer_91 (A1), Thor_98 (A1),

Start 20:

- Found in 3 of 227 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 201
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Graduation_93 (A1), Michley_91 (A1), Papez_93 (A1),

Start 24:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HINdeR_81 (A7),

Start 25:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PP_04 (A7),

Start 26:

- Found in 2 of 227 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 50.0% of time when present
- Phage (with cluster) where this start called: HanShotFirst_90 (A1),

Start 28:

- Found in 224 of 227 (98.7%) of genes in pham
- Manual Annotations of this start: 182 of 201
- Called 92.9% of time when present
- Phage (with cluster) where this start called: A6_85 (A1), AFIS_88 (A1), Abbyshoes_89 (A1), Abrogate_880 (A1), Acme_91 (A1), Adahisdi_85 (A1), Aeneas_96 (A1), Agaliana_87 (A1), Ajay_84 (A1), Aldrich_81 (A1), Altman_94 (A1), Alvin_86 (A1), Anglerfish_93 (A1), Applejack_88 (A1), Arcanine_94 (A1), Arlo_96 (A1), Ashballer_91 (A1), Atkinbua_98 (A1), BK1_85 (A1), BaconJack_94 (A1), Barriga_101 (A1), Beatrix_89 (A1), BeesKnees_95 (A1), Bethlehem_87 (A1), Bexan_87 (A1), BigMau_91 (A1), BigPaolini_85 (A1), Bigchungji_86 (A1), Bigfoot_86 (A1), BillKnuckles_86 (A1), Blackflame_88 (A1), Blessor_85 (A1), Bob3_90 (A1), Bones_86 (A1), Bruns_96 (A1), Burton_90 (A1), Buttons_85 (A1), Bxb1_84 (A1), CactusRose_96 (A1), Carlyle_91 (A1), CartmannCramer_82 (A1), CatBus_81 (A1), Chanagan_91 (A1), ChristmasHams_80 (A1), Ciao_94 (A1), ConceptII_97 (A1), Corvo_94 (A1), Crispicous1_86 (A1), Dexes_93 (A1), DirtDevil_83 (A1), Doom_84 (A1), DrFeelGood_85 (A1), DreamCatcher_102 (A1), Dreamboat_93 (A1), Dussy_87 (A1), Edtherson_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), Gachnar_77 (A1), GageAP_90 (A1), Gandalf20_90 (A1), GrecoEtereo_92 (A1), Greg_90 (A1), GroundGoblin_82 (A1), Gyzlar_83 (A1), Hami1_87 (A1), HarryOW_91 (A1), Hermia_84 (A1), HermioneGrange_94 (A1), Homines_83 (A1), Hope4ever_88 (A1), ILeeKay_91 (A1), Inyanga_82 (A1), Iqorha_82 (A1), JC27_94 (A1), JackSparrow_92 (A1), Jasper_93 (A1), Jerm2_90 (A1), Jorgensen_100 (A1), JuliaChild_91 (A1), KBG_87 (A1), KSSJEB_91 (A1), Kanely_93 (A1), Kenmech_93 (A1), KikiBouba_83 (A1), Kugel_94 (A1), KyMonks1A_96 (A1), Kykar_88 (A1), Lamina13_93 (A1), Levia_85 (A1), Licorice_91 (A1), LilBib_80 (A1), Lopton_88 (A1), LunarLander_80 (A1), MPlant7149_90 (A1), Magnar_91 (A1), Magnito_91 (A1), Manatee_92 (A1), Marcell_83 (A1), Marchy_81 (A1), Marco3_91 (A1), Marge_87 (A1), Maroc7_92 (A1), Marsha_93 (A1), MaryBeth_91 (A1), McGuire_92 (A1), McSinger_84 (A1), MetalQZJ_88 (A1), MilleFeuille_88 (A1), Mkhusei_91 (A1), Molly_89 (A1), Monet_92

(A1), Moose_95 (A1), MrGordo_92 (A1), Mryolo_84 (A1), Mule_92 (A1), Museum_90 (A1), NEHalo_88 (A1), Naira_96 (A1), Nerujay_93 (A1), Nhonho_87 (A1), Niza_89 (A1), Norz_90 (A1), Noxious_83 (A1), Ohno789_95 (A1), Oogway_87 (A1), PSullivan_87 (A1), PacerPaul_93 (A1), Paphu_87 (A1), Paraselene_87 (A1), Parliament_90 (A1), PascalRango_92 (A1), PattyP_92 (A1), Payneful_77 (A1), Pelly_94 (A1), Pepe_86 (A1), Perseus_90 (A1), Peterson_90 (A1), Petp2012_89 (A1), Petruchio_88 (A1), PhineBark_85 (A1), Phlippers_89 (A1), PhrostyMug_94 (A1), Pinto_87 (A1), Pippin_93 (A1), Pita2_91 (A1), PowerRanger_85 (A1), ProMouse_90 (A1), Puppet_88 (A1), QTRLifeCrisis_86 (A1), Rajelicia_89 (A1), Rhynn_85 (A1), RidgeCB_89 (A1), Ringer_90 (A1), Rohr_92 (A1), Rubeus_88 (A1), Rufus_93 (A1), Ruotula_94 (A1), Rutherferd_91 (A1), STLscum_100 (A1), Sagefire_86 (A1), Sandaddy_90 (A1), Sanya_81 (A1), Scowl_90 (A1), Seabiscuit_95 (A1), Seanderson_89 (A1), ShortQueendom_80 (A1), Sibs6_95 (A1), SkiPole_98 (A1), Slagathor_92 (A1), Smairt_97 (A1), Smeagol_90 (A1), Snazzy_92 (A1), Solon_83 (A1), Sorpresa_93 (A1), SpikeBT_87 (A1), Squee_92 (A1), StewieG_86 (A1), StrongArm_88 (A1), Sumter_87 (A1), Sunshine924_93 (A1), SwissCheese_95 (A1), Swole_91 (A1), Target_90 (A1), Tasp14_87 (A1), Teodoridan_93 (A1), TheloniousMonk_90 (A1), Topgun_89 (A1), Tote_86 (A1), Traft412_86 (A1), Treddle_90 (A1), Tripl3t_91 (A1), Trouble_90 (A1), TwoPeat_88 (A1), Violet_87 (A1), Watermelon_89 (A1), Wheeler_96 (A1), Whitspit_82 (A1), Wilkins_90 (A1), Zephyr_92 (A1),

Start 29:

- Found in 1 of 227 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 201
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Koduck_86 (A2),

Start 31:

- Found in 5 of 227 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 201
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Dallas_233 (J), Minerva_233 (J),

Summary by clusters:

There are 4 clusters represented in this pham: A1, J, A2, A7,

Info for manual annotations of cluster A1:

- Start number 17 was manually annotated 3 times for cluster A1.
- Start number 19 was manually annotated 7 times for cluster A1.
- Start number 20 was manually annotated 3 times for cluster A1.
- Start number 26 was manually annotated 1 time for cluster A1.
- Start number 28 was manually annotated 182 times for cluster A1.

Info for manual annotations of cluster A2:

- Start number 29 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A7:

- Start number 24 was manually annotated 1 time for cluster A7.
- Start number 25 was manually annotated 1 time for cluster A7.

Info for manual annotations of cluster J:

- Start number 31 was manually annotated 2 times for cluster J.

Gene Information:

Gene: A6_85 Start: 49336, Stop: 49130, Start Num: 28

Candidate Starts for A6_85:

(Start: 28 @49336 has 182 MA's), (39, 49198),

Gene: AFIS_88 Start: 51338, Stop: 51135, Start Num: 28

Candidate Starts for AFIS_88:

(Start: 28 @51338 has 182 MA's), (39, 51203),

Gene: Abbysshoes_89 Start: 50942, Stop: 50739, Start Num: 28

Candidate Starts for Abbysshoes_89:

(Start: 28 @50942 has 182 MA's), (39, 50807),

Gene: Abrogate_880 Start: 50891, Stop: 51097, Start Num: 28

Candidate Starts for Abrogate_880:

(Start: 28 @50891 has 182 MA's), (39, 51029), (42, 51089),

Gene: Acme_91 Start: 51412, Stop: 51209, Start Num: 28

Candidate Starts for Acme_91:

(Start: 28 @51412 has 182 MA's), (39, 51277),

Gene: Adahisdi_85 Start: 51316, Stop: 51113, Start Num: 28

Candidate Starts for Adahisdi_85:

(Start: 28 @51316 has 182 MA's), (39, 51181),

Gene: Aeneas_96 Start: 52191, Stop: 52397, Start Num: 28

Candidate Starts for Aeneas_96:

(Start: 28 @52191 has 182 MA's), (39, 52329),

Gene: Agaliana_87 Start: 49294, Stop: 49091, Start Num: 28

Candidate Starts for Agaliana_87:

(Start: 28 @49294 has 182 MA's),

Gene: Ajay_84 Start: 49128, Stop: 48925, Start Num: 28

Candidate Starts for Ajay_84:

(Start: 28 @49128 has 182 MA's), (39, 48993),

Gene: Aldrich_81 Start: 49082, Stop: 48879, Start Num: 28

Candidate Starts for Aldrich_81:

(Start: 28 @49082 has 182 MA's), (39, 48947),

Gene: Altman_94 Start: 52124, Stop: 51921, Start Num: 28

Candidate Starts for Altman_94:

(Start: 28 @52124 has 182 MA's), (39, 51989),

Gene: Alvin_86 Start: 49180, Stop: 48977, Start Num: 28

Candidate Starts for Alvin_86:

(Start: 28 @49180 has 182 MA's), (39, 49045),

Gene: Anglerfish_93 Start: 51993, Stop: 51790, Start Num: 28
Candidate Starts for Anglerfish_93:
(Start: 28 @51993 has 182 MA's), (39, 51858), (41, 51822),

Gene: Applejack_88 Start: 48130, Stop: 48336, Start Num: 28
Candidate Starts for Applejack_88:
(Start: 28 @48130 has 182 MA's), (39, 48268), (42, 48328),

Gene: Arcanine_94 Start: 51887, Stop: 51687, Start Num: 28
Candidate Starts for Arcanine_94:
(Start: 28 @51887 has 182 MA's), (39, 51755),

Gene: Arlo_96 Start: 52566, Stop: 52363, Start Num: 28
Candidate Starts for Arlo_96:
(Start: 28 @52566 has 182 MA's), (39, 52431),

Gene: Ashballer_91 Start: 50593, Stop: 50799, Start Num: 28
Candidate Starts for Ashballer_91:
(Start: 28 @50593 has 182 MA's), (39, 50731), (42, 50791),

Gene: Atkinbua_98 Start: 52558, Stop: 52355, Start Num: 28
Candidate Starts for Atkinbua_98:
(Start: 28 @52558 has 182 MA's), (39, 52423),

Gene: BK1_85 Start: 49336, Stop: 49130, Start Num: 28
Candidate Starts for BK1_85:
(Start: 28 @49336 has 182 MA's), (39, 49198),

Gene: BPBiubs31_97 Start: 52824, Stop: 52570, Start Num: 19
Candidate Starts for BPBiubs31_97:
(Start: 19 @52824 has 7 MA's), (Start: 28 @52773 has 182 MA's), (39, 52638),

Gene: BaconJack_94 Start: 52144, Stop: 52350, Start Num: 28
Candidate Starts for BaconJack_94:
(Start: 28 @52144 has 182 MA's), (39, 52282), (42, 52342),

Gene: Barriga_101 Start: 51933, Stop: 52139, Start Num: 28
Candidate Starts for Barriga_101:
(Start: 28 @51933 has 182 MA's), (39, 52071),

Gene: Beatrix_89 Start: 50789, Stop: 50995, Start Num: 28
Candidate Starts for Beatrix_89:
(Start: 28 @50789 has 182 MA's), (39, 50927),

Gene: BeesKnees_95 Start: 51081, Stop: 50878, Start Num: 28
Candidate Starts for BeesKnees_95:
(Start: 28 @51081 has 182 MA's), (39, 50946),

Gene: Bethlehem_87 Start: 51847, Stop: 51644, Start Num: 28
Candidate Starts for Bethlehem_87:
(Start: 28 @51847 has 182 MA's), (39, 51712),

Gene: Bexan_87 Start: 50565, Stop: 50771, Start Num: 28

Candidate Starts for Bexan_87:

(Start: 28 @50565 has 182 MA's), (39, 50703),

Gene: BigMau_91 Start: 51153, Stop: 51362, Start Num: 28

Candidate Starts for BigMau_91:

(Start: 28 @51153 has 182 MA's), (39, 51291),

Gene: BigPaolini_85 Start: 49205, Stop: 49005, Start Num: 28

Candidate Starts for BigPaolini_85:

(Start: 28 @49205 has 182 MA's), (39, 49073),

Gene: Bigchungji_86 Start: 50716, Stop: 50513, Start Num: 28

Candidate Starts for Bigchungji_86:

(Start: 28 @50716 has 182 MA's), (39, 50581),

Gene: Bigfoot_86 Start: 51251, Stop: 51048, Start Num: 28

Candidate Starts for Bigfoot_86:

(Start: 28 @51251 has 182 MA's), (39, 51116),

Gene: BillKnuckles_86 Start: 51482, Stop: 51279, Start Num: 28

Candidate Starts for BillKnuckles_86:

(Start: 28 @51482 has 182 MA's), (39, 51347),

Gene: Bircsak_90 Start: 52909, Stop: 52619, Start Num: 17

Candidate Starts for Bircsak_90:

(6, 53011), (Start: 17 @52909 has 3 MA's), (Start: 28 @52822 has 182 MA's), (39, 52687),

Gene: Blackflame_88 Start: 52641, Stop: 52438, Start Num: 28

Candidate Starts for Blackflame_88:

(Start: 28 @52641 has 182 MA's), (39, 52506),

Gene: Blesser_85 Start: 49105, Stop: 48902, Start Num: 28

Candidate Starts for Blesser_85:

(Start: 28 @49105 has 182 MA's), (39, 48970),

Gene: Bob3_90 Start: 50587, Stop: 50793, Start Num: 28

Candidate Starts for Bob3_90:

(Start: 28 @50587 has 182 MA's), (39, 50725), (42, 50785),

Gene: Bones_86 Start: 51038, Stop: 51244, Start Num: 28

Candidate Starts for Bones_86:

(Start: 28 @51038 has 182 MA's), (39, 51176),

Gene: Briton15_95 Start: 52689, Stop: 52435, Start Num: 19

Candidate Starts for Briton15_95:

(Start: 19 @52689 has 7 MA's), (Start: 28 @52638 has 182 MA's),

Gene: Bruns_96 Start: 52614, Stop: 52411, Start Num: 28

Candidate Starts for Bruns_96:

(Start: 28 @52614 has 182 MA's), (39, 52479),

Gene: Burton_90 Start: 52230, Stop: 52027, Start Num: 28

Candidate Starts for Burton_90:
(Start: 28 @52230 has 182 MA's), (39, 52095),

Gene: Buttons_85 Start: 48633, Stop: 48430, Start Num: 28
Candidate Starts for Buttons_85:
(Start: 28 @48633 has 182 MA's), (39, 48498), (42, 48438),

Gene: Bxb1_84 Start: 48903, Stop: 49112, Start Num: 28
Candidate Starts for Bxb1_84:
(Start: 28 @48903 has 182 MA's), (39, 49044), (42, 49104),

Gene: CactusRose_96 Start: 52264, Stop: 52061, Start Num: 28
Candidate Starts for CactusRose_96:
(Start: 28 @52264 has 182 MA's), (39, 52129),

Gene: Carlyle_91 Start: 50831, Stop: 50628, Start Num: 28
Candidate Starts for Carlyle_91:
(Start: 28 @50831 has 182 MA's), (39, 50696),

Gene: CartmannCramer_82 Start: 50392, Stop: 50189, Start Num: 28
Candidate Starts for CartmannCramer_82:
(Start: 28 @50392 has 182 MA's), (39, 50257),

Gene: CatBus_81 Start: 49274, Stop: 49071, Start Num: 28
Candidate Starts for CatBus_81:
(Start: 28 @49274 has 182 MA's), (39, 49139),

Gene: Chanagan_91 Start: 50342, Stop: 50139, Start Num: 28
Candidate Starts for Chanagan_91:
(Start: 28 @50342 has 182 MA's), (39, 50207),

Gene: ChristmasHams_80 Start: 47861, Stop: 47658, Start Num: 28
Candidate Starts for ChristmasHams_80:
(9, 48008), (11, 47996), (13, 47972), (Start: 28 @47861 has 182 MA's), (39, 47726), (42, 47666),

Gene: Ciao_94 Start: 50559, Stop: 50362, Start Num: 28
Candidate Starts for Ciao_94:
(Start: 28 @50559 has 182 MA's), (39, 50430),

Gene: ConceptII_97 Start: 52890, Stop: 52687, Start Num: 28
Candidate Starts for ConceptII_97:
(Start: 28 @52890 has 182 MA's), (39, 52755),

Gene: Corvo_94 Start: 52995, Stop: 52792, Start Num: 28
Candidate Starts for Corvo_94:
(Start: 28 @52995 has 182 MA's), (39, 52860),

Gene: Crispicous1_86 Start: 49167, Stop: 49370, Start Num: 28
Candidate Starts for Crispicous1_86:
(Start: 28 @49167 has 182 MA's), (39, 49302), (42, 49362),

Gene: Dallas_233 Start: 109177, Stop: 108995, Start Num: 31
Candidate Starts for Dallas_233:

(30, 109192), (Start: 31 @109177 has 2 MA's), (35, 109141), (38, 109102), (41, 109030),

Gene: Dexes_93 Start: 53941, Stop: 53738, Start Num: 28

Candidate Starts for Dexes_93:

(Start: 28 @53941 has 182 MA's), (39, 53806),

Gene: DirtDevil_83 Start: 49082, Stop: 48879, Start Num: 28

Candidate Starts for DirtDevil_83:

(Start: 28 @49082 has 182 MA's), (39, 48947),

Gene: Doom_84 Start: 50622, Stop: 50419, Start Num: 28

Candidate Starts for Doom_84:

(9, 50769), (11, 50757), (13, 50733), (Start: 28 @50622 has 182 MA's), (39, 50487), (42, 50427),

Gene: DrFeelGood_85 Start: 49766, Stop: 49563, Start Num: 28

Candidate Starts for DrFeelGood_85:

(Start: 28 @49766 has 182 MA's), (39, 49631),

Gene: DreamCatcher_102 Start: 53024, Stop: 52821, Start Num: 28

Candidate Starts for DreamCatcher_102:

(Start: 28 @53024 has 182 MA's), (39, 52889),

Gene: Dreamboat_93 Start: 50459, Stop: 50256, Start Num: 28

Candidate Starts for Dreamboat_93:

(Start: 28 @50459 has 182 MA's), (39, 50324),

Gene: Dussy_87 Start: 50962, Stop: 50759, Start Num: 28

Candidate Starts for Dussy_87:

(Start: 28 @50962 has 182 MA's), (39, 50827),

Gene: Dynamix_92 Start: 50284, Stop: 50030, Start Num: 19

Candidate Starts for Dynamix_92:

(Start: 19 @50284 has 7 MA's), (Start: 28 @50233 has 182 MA's),

Gene: Edtherson_87 Start: 49832, Stop: 50038, Start Num: 28

Candidate Starts for Edtherson_87:

(Start: 28 @49832 has 182 MA's), (39, 49970), (42, 50030),

Gene: Espresso_87 Start: 50463, Stop: 50666, Start Num: 28

Candidate Starts for Espresso_87:

(Start: 28 @50463 has 182 MA's), (39, 50598),

Gene: Euphoria_95 Start: 53188, Stop: 52985, Start Num: 28

Candidate Starts for Euphoria_95:

(Start: 28 @53188 has 182 MA's), (39, 53053),

Gene: Eyeball_94 Start: 51846, Stop: 51643, Start Num: 28

Candidate Starts for Eyeball_94:

(Start: 28 @51846 has 182 MA's), (39, 51711),

Gene: Fajezeel_90 Start: 50702, Stop: 50499, Start Num: 28

Candidate Starts for Fajezeel_90:

(Start: 28 @50702 has 182 MA's), (39, 50567),

Gene: Fascinus_86 Start: 51761, Stop: 51558, Start Num: 28

Candidate Starts for Fascinus_86:

(Start: 28 @51761 has 182 MA's), (39, 51626),

Gene: Fenn_97 Start: 52841, Stop: 52638, Start Num: 28

Candidate Starts for Fenn_97:

(Start: 28 @52841 has 182 MA's), (39, 52706),

Gene: Forsytheast_96 Start: 52313, Stop: 52110, Start Num: 28

Candidate Starts for Forsytheast_96:

(Start: 28 @52313 has 182 MA's), (39, 52178),

Gene: Francis47_93 Start: 53565, Stop: 53362, Start Num: 28

Candidate Starts for Francis47_93:

(Start: 28 @53565 has 182 MA's),

Gene: Froghopper_79 Start: 47225, Stop: 47428, Start Num: 28

Candidate Starts for Froghopper_79:

(Start: 26 @47216 has 1 MA's), (Start: 28 @47225 has 182 MA's), (39, 47357),

Gene: Fushigi_84 Start: 48765, Stop: 48968, Start Num: 28

Candidate Starts for Fushigi_84:

(Start: 28 @48765 has 182 MA's), (39, 48900), (42, 48960),

Gene: Gachnar_77 Start: 46581, Stop: 46787, Start Num: 28

Candidate Starts for Gachnar_77:

(Start: 28 @46581 has 182 MA's), (39, 46719),

Gene: GageAP_90 Start: 51509, Stop: 51306, Start Num: 28

Candidate Starts for GageAP_90:

(Start: 28 @51509 has 182 MA's), (39, 51374),

Gene: Gandalf20_90 Start: 50084, Stop: 50290, Start Num: 28

Candidate Starts for Gandalf20_90:

(Start: 28 @50084 has 182 MA's), (39, 50222), (42, 50282),

Gene: Gompeii16_90 Start: 52910, Stop: 52620, Start Num: 17

Candidate Starts for Gompeii16_90:

(6, 53012), (Start: 17 @52910 has 3 MA's), (Start: 28 @52823 has 182 MA's), (39, 52688),

Gene: Graduation_93 Start: 51162, Stop: 50911, Start Num: 20

Candidate Starts for Graduation_93:

(Start: 20 @51162 has 3 MA's), (Start: 28 @51114 has 182 MA's), (39, 50979),

Gene: GrecoEtereo_92 Start: 51814, Stop: 51611, Start Num: 28

Candidate Starts for GrecoEtereo_92:

(Start: 28 @51814 has 182 MA's), (39, 51679),

Gene: Greg_90 Start: 50702, Stop: 50499, Start Num: 28

Candidate Starts for Greg_90:

(Start: 28 @50702 has 182 MA's), (39, 50567),

Gene: GroundGoblin_82 Start: 49224, Stop: 49021, Start Num: 28
Candidate Starts for GroundGoblin_82:
(Start: 28 @49224 has 182 MA's), (39, 49089),

Gene: Gwendoluna_91 Start: 51399, Stop: 51109, Start Num: 17
Candidate Starts for Gwendoluna_91:
(6, 51501), (Start: 17 @51399 has 3 MA's), (Start: 28 @51312 has 182 MA's), (39, 51177),

Gene: Gyzlar_83 Start: 47405, Stop: 47608, Start Num: 28
Candidate Starts for Gyzlar_83:
(14, 47294), (Start: 28 @47405 has 182 MA's), (39, 47540), (42, 47600),

Gene: HINdeR_81 Start: 50361, Stop: 50110, Start Num: 24
Candidate Starts for HINdeR_81:
(23, 50364), (Start: 24 @50361 has 1 MA's), (Start: 28 @50316 has 182 MA's), (32, 50265), (35, 50247), (40, 50175),

Gene: Hami1_87 Start: 46210, Stop: 46416, Start Num: 28
Candidate Starts for Hami1_87:
(Start: 28 @46210 has 182 MA's), (39, 46348),

Gene: HanShotFirst_90 Start: 51379, Stop: 51594, Start Num: 26
Candidate Starts for HanShotFirst_90:
(4, 51163), (Start: 26 @51379 has 1 MA's), (Start: 28 @51388 has 182 MA's), (39, 51523),

Gene: HarryOW_91 Start: 51434, Stop: 51640, Start Num: 28
Candidate Starts for HarryOW_91:
(Start: 28 @51434 has 182 MA's), (39, 51572),

Gene: Hermia_84 Start: 49274, Stop: 49071, Start Num: 28
Candidate Starts for Hermia_84:
(Start: 28 @49274 has 182 MA's), (39, 49139),

Gene: HermioneGrange_94 Start: 51648, Stop: 51857, Start Num: 28
Candidate Starts for HermioneGrange_94:
(Start: 28 @51648 has 182 MA's), (39, 51786),

Gene: Homines_83 Start: 46852, Stop: 47055, Start Num: 28
Candidate Starts for Homines_83:
(Start: 28 @46852 has 182 MA's), (39, 46987), (42, 47047),

Gene: Hope4ever_88 Start: 50126, Stop: 49923, Start Num: 28
Candidate Starts for Hope4ever_88:
(Start: 28 @50126 has 182 MA's), (39, 49991),

Gene: ILeeKay_91 Start: 50632, Stop: 50429, Start Num: 28
Candidate Starts for ILeeKay_91:
(Start: 28 @50632 has 182 MA's), (39, 50497),

Gene: Ichabod_96 Start: 52974, Stop: 52720, Start Num: 19
Candidate Starts for Ichabod_96:
(Start: 19 @52974 has 7 MA's), (Start: 28 @52923 has 182 MA's), (39, 52788),

Gene: Inyanga_82 Start: 49164, Stop: 49367, Start Num: 28
Candidate Starts for Inyanga_82:
(Start: 28 @49164 has 182 MA's), (39, 49299), (42, 49359),

Gene: Iqorha_82 Start: 49163, Stop: 49366, Start Num: 28
Candidate Starts for Iqorha_82:
(Start: 28 @49163 has 182 MA's), (39, 49298), (42, 49358),

Gene: JC27_94 Start: 50665, Stop: 50871, Start Num: 28
Candidate Starts for JC27_94:
(Start: 28 @50665 has 182 MA's), (39, 50803),

Gene: JackSparrow_92 Start: 50104, Stop: 50310, Start Num: 28
Candidate Starts for JackSparrow_92:
(Start: 28 @50104 has 182 MA's), (39, 50242),

Gene: Jasper_93 Start: 50345, Stop: 50142, Start Num: 28
Candidate Starts for Jasper_93:
(Start: 28 @50345 has 182 MA's), (39, 50210),

Gene: Jerm2_90 Start: 51717, Stop: 51926, Start Num: 28
Candidate Starts for Jerm2_90:
(Start: 28 @51717 has 182 MA's), (39, 51855),

Gene: Jorgensen_100 Start: 52124, Stop: 52330, Start Num: 28
Candidate Starts for Jorgensen_100:
(Start: 28 @52124 has 182 MA's), (39, 52262), (42, 52322),

Gene: JuliaChild_91 Start: 51435, Stop: 51232, Start Num: 28
Candidate Starts for JuliaChild_91:
(9, 51582), (11, 51570), (13, 51546), (Start: 28 @51435 has 182 MA's), (39, 51300), (42, 51240),

Gene: KBG_87 Start: 52193, Stop: 51990, Start Num: 28
Candidate Starts for KBG_87:
(9, 52340), (11, 52328), (13, 52304), (Start: 28 @52193 has 182 MA's), (39, 52058), (42, 51998),

Gene: KSSJEB_91 Start: 50745, Stop: 50542, Start Num: 28
Candidate Starts for KSSJEB_91:
(Start: 28 @50745 has 182 MA's), (39, 50610),

Gene: Kanely_93 Start: 51901, Stop: 51698, Start Num: 28
Candidate Starts for Kanely_93:
(Start: 28 @51901 has 182 MA's), (39, 51766),

Gene: Kenmech_93 Start: 52088, Stop: 51885, Start Num: 28
Candidate Starts for Kenmech_93:
(Start: 28 @52088 has 182 MA's), (39, 51953),

Gene: KikiBouba_83 Start: 49083, Stop: 48880, Start Num: 28
Candidate Starts for KikiBouba_83:
(Start: 28 @49083 has 182 MA's), (39, 48948),

Gene: Koduck_86 Start: 47511, Stop: 47308, Start Num: 29

Candidate Starts for Koduck_86:
(27, 47526), (Start: 29 @47511 has 1 MA's), (33, 47457), (34, 47451), (40, 47373),

Gene: Kugel_94 Start: 51995, Stop: 51792, Start Num: 28
Candidate Starts for Kugel_94:
(Start: 28 @51995 has 182 MA's), (39, 51860),

Gene: KyMonks1A_96 Start: 51763, Stop: 51560, Start Num: 28
Candidate Starts for KyMonks1A_96:
(Start: 28 @51763 has 182 MA's), (39, 51628), (42, 51568),

Gene: Kykar_88 Start: 49910, Stop: 49701, Start Num: 28
Candidate Starts for Kykar_88:
(Start: 28 @49910 has 182 MA's), (39, 49769),

Gene: Lamina13_93 Start: 51757, Stop: 51963, Start Num: 28
Candidate Starts for Lamina13_93:
(Start: 28 @51757 has 182 MA's), (39, 51895),

Gene: Levia_85 Start: 48437, Stop: 48640, Start Num: 28
Candidate Starts for Levia_85:
(Start: 28 @48437 has 182 MA's), (39, 48572),

Gene: Licorice_91 Start: 52878, Stop: 52678, Start Num: 28
Candidate Starts for Licorice_91:
(Start: 28 @52878 has 182 MA's), (39, 52746), (42, 52686),

Gene: LilBib_80 Start: 49937, Stop: 49734, Start Num: 28
Candidate Starts for LilBib_80:
(Start: 28 @49937 has 182 MA's),

Gene: Lopton_88 Start: 52012, Stop: 51809, Start Num: 28
Candidate Starts for Lopton_88:
(Start: 28 @52012 has 182 MA's), (39, 51877),

Gene: LunarLander_80 Start: 48577, Stop: 48374, Start Num: 28
Candidate Starts for LunarLander_80:
(Start: 28 @48577 has 182 MA's), (39, 48442), (42, 48382),

Gene: MPlant7149_90 Start: 49878, Stop: 50087, Start Num: 28
Candidate Starts for MPlant7149_90:
(Start: 28 @49878 has 182 MA's), (39, 50016),

Gene: Magnar_91 Start: 51040, Stop: 50837, Start Num: 28
Candidate Starts for Magnar_91:
(Start: 28 @51040 has 182 MA's), (39, 50905),

Gene: Magnito_91 Start: 51185, Stop: 50982, Start Num: 28
Candidate Starts for Magnito_91:
(12, 51299), (21, 51236), (Start: 28 @51185 has 182 MA's), (39, 51050),

Gene: Manatee_92 Start: 50646, Stop: 50443, Start Num: 28
Candidate Starts for Manatee_92:

(Start: 19 @50697 has 7 MA's), (Start: 28 @50646 has 182 MA's),

Gene: Marcell_83 Start: 48789, Stop: 48586, Start Num: 28
Candidate Starts for Marcell_83:
(Start: 28 @48789 has 182 MA's),

Gene: Marchy_81 Start: 47255, Stop: 47052, Start Num: 28
Candidate Starts for Marchy_81:
(Start: 28 @47255 has 182 MA's), (39, 47120),

Gene: Marco3_91 Start: 51455, Stop: 51661, Start Num: 28
Candidate Starts for Marco3_91:
(Start: 28 @51455 has 182 MA's), (39, 51593), (42, 51653),

Gene: Marge_87 Start: 49768, Stop: 49974, Start Num: 28
Candidate Starts for Marge_87:
(Start: 28 @49768 has 182 MA's), (39, 49906),

Gene: Maroc7_92 Start: 52980, Stop: 52777, Start Num: 28
Candidate Starts for Maroc7_92:
(Start: 28 @52980 has 182 MA's), (39, 52845),

Gene: Marsha_93 Start: 52954, Stop: 53160, Start Num: 28
Candidate Starts for Marsha_93:
(Start: 28 @52954 has 182 MA's), (39, 53092),

Gene: MaryBeth_91 Start: 51469, Stop: 51266, Start Num: 28
Candidate Starts for MaryBeth_91:
(Start: 28 @51469 has 182 MA's), (39, 51334),

Gene: McGuire_92 Start: 50898, Stop: 50695, Start Num: 28
Candidate Starts for McGuire_92:
(Start: 28 @50898 has 182 MA's), (39, 50763),

Gene: McSinger_84 Start: 49911, Stop: 49708, Start Num: 28
Candidate Starts for McSinger_84:
(Start: 28 @49911 has 182 MA's), (39, 49776),

Gene: MetalQZJ_88 Start: 51469, Stop: 51266, Start Num: 28
Candidate Starts for MetalQZJ_88:
(Start: 28 @51469 has 182 MA's), (39, 51334),

Gene: Michley_91 Start: 50597, Stop: 50346, Start Num: 20
Candidate Starts for Michley_91:
(Start: 20 @50597 has 3 MA's), (Start: 28 @50549 has 182 MA's), (39, 50414),

Gene: MilleFeuille_88 Start: 50374, Stop: 50580, Start Num: 28
Candidate Starts for MilleFeuille_88:
(Start: 28 @50374 has 182 MA's), (39, 50512),

Gene: Minerva_233 Start: 107908, Stop: 107726, Start Num: 31
Candidate Starts for Minerva_233:
(30, 107923), (Start: 31 @107908 has 2 MA's), (35, 107872), (38, 107833), (41, 107761),

Gene: Mkhuseleli_91 Start: 49763, Stop: 49557, Start Num: 28

Candidate Starts for Mkhuseleli_91:

(Start: 28 @49763 has 182 MA's), (39, 49625),

Gene: Molly_89 Start: 49678, Stop: 49475, Start Num: 28

Candidate Starts for Molly_89:

(9, 49825), (11, 49813), (13, 49789), (Start: 28 @49678 has 182 MA's), (39, 49543), (42, 49483),

Gene: Monet_92 Start: 51735, Stop: 51938, Start Num: 28

Candidate Starts for Monet_92:

(Start: 28 @51735 has 182 MA's), (39, 51870), (42, 51930),

Gene: Moose_95 Start: 52313, Stop: 52110, Start Num: 28

Candidate Starts for Moose_95:

(Start: 28 @52313 has 182 MA's), (39, 52178),

Gene: MrGordo_92 Start: 50603, Stop: 50400, Start Num: 28

Candidate Starts for MrGordo_92:

(Start: 28 @50603 has 182 MA's), (39, 50468),

Gene: Mryolo_84 Start: 48769, Stop: 48972, Start Num: 28

Candidate Starts for Mryolo_84:

(Start: 28 @48769 has 182 MA's), (39, 48904),

Gene: Mule_92 Start: 49973, Stop: 50179, Start Num: 28

Candidate Starts for Mule_92:

(Start: 28 @49973 has 182 MA's), (39, 50111),

Gene: Museum_90 Start: 51040, Stop: 50837, Start Num: 28

Candidate Starts for Museum_90:

(Start: 28 @51040 has 182 MA's), (39, 50905),

Gene: NEHalo_88 Start: 50148, Stop: 49945, Start Num: 28

Candidate Starts for NEHalo_88:

(Start: 28 @50148 has 182 MA's), (39, 50013),

Gene: Naira_96 Start: 52973, Stop: 52770, Start Num: 28

Candidate Starts for Naira_96:

(Start: 28 @52973 has 182 MA's), (39, 52838),

Gene: Nerujay_93 Start: 51720, Stop: 51926, Start Num: 28

Candidate Starts for Nerujay_93:

(Start: 28 @51720 has 182 MA's), (39, 51858),

Gene: Nhonho_87 Start: 50646, Stop: 50852, Start Num: 28

Candidate Starts for Nhonho_87:

(Start: 28 @50646 has 182 MA's), (39, 50784),

Gene: Niza_89 Start: 51286, Stop: 51083, Start Num: 28

Candidate Starts for Niza_89:

(Start: 28 @51286 has 182 MA's), (39, 51151),

Gene: Norz_90 Start: 53476, Stop: 53273, Start Num: 28
Candidate Starts for Norz_90:
(Start: 28 @53476 has 182 MA's),

Gene: Noxious_83 Start: 49598, Stop: 49395, Start Num: 28
Candidate Starts for Noxious_83:
(Start: 28 @49598 has 182 MA's), (39, 49463),

Gene: Ohno789_95 Start: 52428, Stop: 52225, Start Num: 28
Candidate Starts for Ohno789_95:
(Start: 28 @52428 has 182 MA's), (39, 52293),

Gene: Oogway_87 Start: 51358, Stop: 51155, Start Num: 28
Candidate Starts for Oogway_87:
(Start: 28 @51358 has 182 MA's), (39, 51223),

Gene: PP_04 Start: 1143, Stop: 901, Start Num: 25
Candidate Starts for PP_04:
(Start: 25 @1143 has 1 MA's), (Start: 28 @1104 has 182 MA's), (Start: 31 @1074 has 2 MA's), (36, 1035), (37, 1026), (40, 966),

Gene: PSullivan_87 Start: 49195, Stop: 48992, Start Num: 28
Candidate Starts for PSullivan_87:
(9, 49342), (11, 49330), (13, 49306), (Start: 28 @49195 has 182 MA's), (39, 49060), (42, 49000),

Gene: PacerPaul_93 Start: 52361, Stop: 52158, Start Num: 28
Candidate Starts for PacerPaul_93:
(Start: 28 @52361 has 182 MA's),

Gene: Papez_93 Start: 51585, Stop: 51337, Start Num: 20
Candidate Starts for Papez_93:
(Start: 20 @51585 has 3 MA's), (Start: 28 @51537 has 182 MA's), (39, 51405),

Gene: Paphu_87 Start: 49638, Stop: 49841, Start Num: 28
Candidate Starts for Paphu_87:
(Start: 28 @49638 has 182 MA's), (39, 49773),

Gene: Paraselene_87 Start: 49509, Stop: 49715, Start Num: 28
Candidate Starts for Paraselene_87:
(Start: 28 @49509 has 182 MA's), (39, 49647), (42, 49707),

Gene: Parliament_90 Start: 52239, Stop: 52445, Start Num: 28
Candidate Starts for Parliament_90:
(Start: 28 @52239 has 182 MA's), (39, 52377),

Gene: PascalRango_92 Start: 52074, Stop: 51871, Start Num: 28
Candidate Starts for PascalRango_92:
(Start: 19 @52125 has 7 MA's), (Start: 28 @52074 has 182 MA's),

Gene: PattyP_92 Start: 51679, Stop: 51476, Start Num: 28
Candidate Starts for PattyP_92:
(Start: 28 @51679 has 182 MA's), (39, 51544),

Gene: Payneful_77 Start: 46347, Stop: 46144, Start Num: 28
Candidate Starts for Payneful_77:
(Start: 28 @46347 has 182 MA's), (39, 46212),

Gene: Pelly_94 Start: 53346, Stop: 53143, Start Num: 28
Candidate Starts for Pelly_94:
(Start: 28 @53346 has 182 MA's), (39, 53211),

Gene: Pepe_86 Start: 50134, Stop: 49931, Start Num: 28
Candidate Starts for Pepe_86:
(Start: 28 @50134 has 182 MA's), (39, 49999),

Gene: Perseus_90 Start: 51769, Stop: 51975, Start Num: 28
Candidate Starts for Perseus_90:
(Start: 28 @51769 has 182 MA's), (39, 51907),

Gene: Peterson_90 Start: 51816, Stop: 51607, Start Num: 28
Candidate Starts for Peterson_90:
(1, 52101), (2, 52062), (3, 52059), (5, 52044), (7, 51996), (8, 51975), (10, 51960), (15, 51915), (16, 51909), (18, 51903), (Start: 28 @51816 has 182 MA's), (Start: 31 @51783 has 2 MA's), (38, 51711), (42, 51615),

Gene: Petp2012_89 Start: 51326, Stop: 51123, Start Num: 28
Candidate Starts for Petp2012_89:
(Start: 28 @51326 has 182 MA's), (39, 51191),

Gene: Petruchio_88 Start: 48718, Stop: 48515, Start Num: 28
Candidate Starts for Petruchio_88:
(Start: 28 @48718 has 182 MA's), (39, 48583), (42, 48523),

Gene: PhineBark_85 Start: 49455, Stop: 49658, Start Num: 28
Candidate Starts for PhineBark_85:
(Start: 28 @49455 has 182 MA's), (39, 49590),

Gene: Phlippers_89 Start: 51409, Stop: 51615, Start Num: 28
Candidate Starts for Phlippers_89:
(Start: 28 @51409 has 182 MA's), (39, 51547), (42, 51607),

Gene: PhrostyMug_94 Start: 52143, Stop: 52349, Start Num: 28
Candidate Starts for PhrostyMug_94:
(Start: 28 @52143 has 182 MA's), (39, 52281),

Gene: Pinto_87 Start: 50214, Stop: 50011, Start Num: 28
Candidate Starts for Pinto_87:
(Start: 28 @50214 has 182 MA's),

Gene: Pippin_93 Start: 50646, Stop: 50852, Start Num: 28
Candidate Starts for Pippin_93:
(Start: 28 @50646 has 182 MA's), (39, 50784),

Gene: Pita2_91 Start: 50691, Stop: 50488, Start Num: 28
Candidate Starts for Pita2_91:
(9, 50838), (11, 50826), (13, 50802), (Start: 28 @50691 has 182 MA's), (39, 50556), (42, 50496),

Gene: PowerRanger_85 Start: 50934, Stop: 50731, Start Num: 28
Candidate Starts for PowerRanger_85:
(Start: 28 @50934 has 182 MA's), (39, 50799),

Gene: ProMouse_90 Start: 49279, Stop: 49485, Start Num: 28
Candidate Starts for ProMouse_90:
(Start: 28 @49279 has 182 MA's), (39, 49417),

Gene: Puppet_88 Start: 51713, Stop: 51510, Start Num: 28
Candidate Starts for Puppet_88:
(Start: 28 @51713 has 182 MA's), (39, 51578),

Gene: QTRlifeCrisis_86 Start: 49246, Stop: 49043, Start Num: 28
Candidate Starts for QTRlifeCrisis_86:
(Start: 19 @49297 has 7 MA's), (Start: 28 @49246 has 182 MA's), (39, 49111),

Gene: Rajelicia_89 Start: 52457, Stop: 52257, Start Num: 28
Candidate Starts for Rajelicia_89:
(Start: 28 @52457 has 182 MA's), (39, 52325),

Gene: Rhynn_85 Start: 50726, Stop: 50926, Start Num: 28
Candidate Starts for Rhynn_85:
(Start: 28 @50726 has 182 MA's),

Gene: RidgeCB_89 Start: 49216, Stop: 49422, Start Num: 28
Candidate Starts for RidgeCB_89:
(Start: 28 @49216 has 182 MA's), (39, 49354), (42, 49414),

Gene: Ringer_90 Start: 51410, Stop: 51210, Start Num: 28
Candidate Starts for Ringer_90:
(Start: 28 @51410 has 182 MA's), (39, 51278),

Gene: Rohr_92 Start: 51968, Stop: 52177, Start Num: 28
Candidate Starts for Rohr_92:
(Start: 28 @51968 has 182 MA's), (39, 52106),

Gene: Rubeus_88 Start: 48657, Stop: 48454, Start Num: 28
Candidate Starts for Rubeus_88:
(Start: 28 @48657 has 182 MA's), (39, 48522),

Gene: Rufus_93 Start: 51974, Stop: 51771, Start Num: 28
Candidate Starts for Rufus_93:
(Start: 28 @51974 has 182 MA's), (39, 51839),

Gene: Ruotula_94 Start: 52218, Stop: 52015, Start Num: 28
Candidate Starts for Ruotula_94:
(Start: 28 @52218 has 182 MA's), (39, 52083),

Gene: Rutherferd_91 Start: 50676, Stop: 50882, Start Num: 28
Candidate Starts for Rutherferd_91:
(Start: 28 @50676 has 182 MA's), (39, 50814), (42, 50874),

Gene: STLscum_100 Start: 51894, Stop: 51691, Start Num: 28
Candidate Starts for STLscum_100:
(Start: 28 @51894 has 182 MA's), (39, 51759),

Gene: Sagefire_86 Start: 50112, Stop: 50318, Start Num: 28
Candidate Starts for Sagefire_86:
(Start: 28 @50112 has 182 MA's), (39, 50250),

Gene: Sandaddy_90 Start: 51546, Stop: 51343, Start Num: 28
Candidate Starts for Sandaddy_90:
(Start: 28 @51546 has 182 MA's), (39, 51411),

Gene: Sanya_81 Start: 50361, Stop: 50158, Start Num: 28
Candidate Starts for Sanya_81:
(Start: 28 @50361 has 182 MA's), (39, 50226),

Gene: SarFire_98 Start: 53353, Stop: 53099, Start Num: 19
Candidate Starts for SarFire_98:
(Start: 19 @53353 has 7 MA's), (Start: 28 @53302 has 182 MA's), (39, 53167),

Gene: Scowl_90 Start: 50695, Stop: 50898, Start Num: 28
Candidate Starts for Scowl_90:
(Start: 28 @50695 has 182 MA's), (39, 50827),

Gene: Seabiscuit_95 Start: 51387, Stop: 51184, Start Num: 28
Candidate Starts for Seabiscuit_95:
(Start: 28 @51387 has 182 MA's),

Gene: Seanderson_89 Start: 52624, Stop: 52421, Start Num: 28
Candidate Starts for Seanderson_89:
(Start: 28 @52624 has 182 MA's), (39, 52489),

Gene: ShortQueendom_80 Start: 48241, Stop: 48038, Start Num: 28
Candidate Starts for ShortQueendom_80:
(22, 48289), (Start: 28 @48241 has 182 MA's), (39, 48106),

Gene: Sibs6_95 Start: 49833, Stop: 49630, Start Num: 28
Candidate Starts for Sibs6_95:
(Start: 28 @49833 has 182 MA's), (39, 49698),

Gene: SkiPole_98 Start: 51505, Stop: 51711, Start Num: 28
Candidate Starts for SkiPole_98:
(Start: 28 @51505 has 182 MA's), (39, 51643), (42, 51703),

Gene: Slagathor_92 Start: 51592, Stop: 51389, Start Num: 28
Candidate Starts for Slagathor_92:
(Start: 28 @51592 has 182 MA's),

Gene: Smairt_97 Start: 53160, Stop: 53366, Start Num: 28
Candidate Starts for Smairt_97:
(Start: 28 @53160 has 182 MA's), (39, 53298),

Gene: Smeagol_90 Start: 52545, Stop: 52336, Start Num: 28

Candidate Starts for Smeagol_90:

(7, 52725), (8, 52704), (10, 52689), (15, 52644), (16, 52638), (18, 52632), (Start: 28 @52545 has 182 MA's), (Start: 31 @52512 has 2 MA's), (38, 52440), (42, 52344),

Gene: Snazzy_92 Start: 51835, Stop: 51632, Start Num: 28

Candidate Starts for Snazzy_92:

(Start: 28 @51835 has 182 MA's), (39, 51700),

Gene: Solon_83 Start: 47822, Stop: 48028, Start Num: 28

Candidate Starts for Solon_83:

(Start: 28 @47822 has 182 MA's), (39, 47960), (42, 48020),

Gene: Sorpresa_93 Start: 51552, Stop: 51349, Start Num: 28

Candidate Starts for Sorpresa_93:

(Start: 28 @51552 has 182 MA's), (39, 51417),

Gene: SpikeBT_87 Start: 49792, Stop: 49589, Start Num: 28

Candidate Starts for SpikeBT_87:

(Start: 28 @49792 has 182 MA's), (39, 49657),

Gene: Squee_92 Start: 51943, Stop: 51740, Start Num: 28

Candidate Starts for Squee_92:

(Start: 28 @51943 has 182 MA's), (39, 51808),

Gene: StewieG_86 Start: 47748, Stop: 47954, Start Num: 28

Candidate Starts for StewieG_86:

(Start: 28 @47748 has 182 MA's), (39, 47886), (42, 47946),

Gene: StrongArm_88 Start: 50693, Stop: 50899, Start Num: 28

Candidate Starts for StrongArm_88:

(Start: 28 @50693 has 182 MA's), (39, 50831),

Gene: Sumter_87 Start: 51154, Stop: 51363, Start Num: 28

Candidate Starts for Sumter_87:

(Start: 28 @51154 has 182 MA's), (39, 51292),

Gene: Sunshine924_93 Start: 49690, Stop: 49896, Start Num: 28

Candidate Starts for Sunshine924_93:

(Start: 28 @49690 has 182 MA's), (39, 49828), (42, 49888),

Gene: SwissCheese_95 Start: 51439, Stop: 51236, Start Num: 28

Candidate Starts for SwissCheese_95:

(Start: 28 @51439 has 182 MA's), (39, 51304),

Gene: Switzer_91 Start: 51956, Stop: 51702, Start Num: 19

Candidate Starts for Switzer_91:

(Start: 19 @51956 has 7 MA's), (Start: 28 @51905 has 182 MA's),

Gene: Swole_91 Start: 50909, Stop: 50706, Start Num: 28

Candidate Starts for Swole_91:

(9, 51056), (11, 51044), (13, 51020), (Start: 28 @50909 has 182 MA's), (39, 50774), (42, 50714),

Gene: Target_90 Start: 48713, Stop: 48510, Start Num: 28

Candidate Starts for Target_90:
(Start: 28 @48713 has 182 MA's), (39, 48578), (42, 48518),

Gene: Tasp14_87 Start: 49921, Stop: 50127, Start Num: 28
Candidate Starts for Tasp14_87:
(Start: 28 @49921 has 182 MA's), (39, 50059),

Gene: Teodoridan_93 Start: 50495, Stop: 50698, Start Num: 28
Candidate Starts for Teodoridan_93:
(Start: 28 @50495 has 182 MA's), (39, 50630),

Gene: TheloniousMonk_90 Start: 51663, Stop: 51460, Start Num: 28
Candidate Starts for TheloniousMonk_90:
(Start: 28 @51663 has 182 MA's), (39, 51528),

Gene: Thor_98 Start: 52711, Stop: 52457, Start Num: 19
Candidate Starts for Thor_98:
(Start: 19 @52711 has 7 MA's), (Start: 28 @52660 has 182 MA's), (39, 52525),

Gene: Topgun_89 Start: 49318, Stop: 49524, Start Num: 28
Candidate Starts for Topgun_89:
(Start: 28 @49318 has 182 MA's), (39, 49456), (42, 49516),

Gene: Tote_86 Start: 48177, Stop: 47974, Start Num: 28
Candidate Starts for Tote_86:
(9, 48324), (11, 48312), (13, 48288), (Start: 28 @48177 has 182 MA's), (39, 48042), (42, 47982),

Gene: Traft412_86 Start: 50830, Stop: 50627, Start Num: 28
Candidate Starts for Traft412_86:
(Start: 28 @50830 has 182 MA's), (39, 50695),

Gene: Treddle_90 Start: 51379, Stop: 51582, Start Num: 28
Candidate Starts for Treddle_90:
(Start: 28 @51379 has 182 MA's), (39, 51514), (42, 51574),

Gene: Tripl3t_91 Start: 53185, Stop: 52982, Start Num: 28
Candidate Starts for Tripl3t_91:
(Start: 28 @53185 has 182 MA's), (39, 53050),

Gene: Trouble_90 Start: 50598, Stop: 50804, Start Num: 28
Candidate Starts for Trouble_90:
(Start: 28 @50598 has 182 MA's), (39, 50736),

Gene: TwoPeat_88 Start: 50371, Stop: 50168, Start Num: 28
Candidate Starts for TwoPeat_88:
(9, 50518), (11, 50506), (13, 50482), (Start: 28 @50371 has 182 MA's), (39, 50236), (42, 50176),

Gene: Violet_87 Start: 50920, Stop: 51123, Start Num: 28
Candidate Starts for Violet_87:
(Start: 28 @50920 has 182 MA's), (39, 51055), (42, 51115),

Gene: Watermelon_89 Start: 50581, Stop: 50378, Start Num: 28
Candidate Starts for Watermelon_89:

(Start: 28 @50581 has 182 MA's), (39, 50446),

Gene: Wheeler_96 Start: 53218, Stop: 53015, Start Num: 28

Candidate Starts for Wheeler_96:

(Start: 28 @53218 has 182 MA's), (39, 53083),

Gene: Whitspit_82 Start: 48679, Stop: 48476, Start Num: 28

Candidate Starts for Whitspit_82:

(Start: 28 @48679 has 182 MA's), (39, 48544),

Gene: Wilkins_90 Start: 49248, Stop: 49454, Start Num: 28

Candidate Starts for Wilkins_90:

(Start: 28 @49248 has 182 MA's), (39, 49386), (42, 49446),

Gene: Zephyr_92 Start: 51932, Stop: 51723, Start Num: 28

Candidate Starts for Zephyr_92:

(Start: 28 @51932 has 182 MA's), (39, 51791),