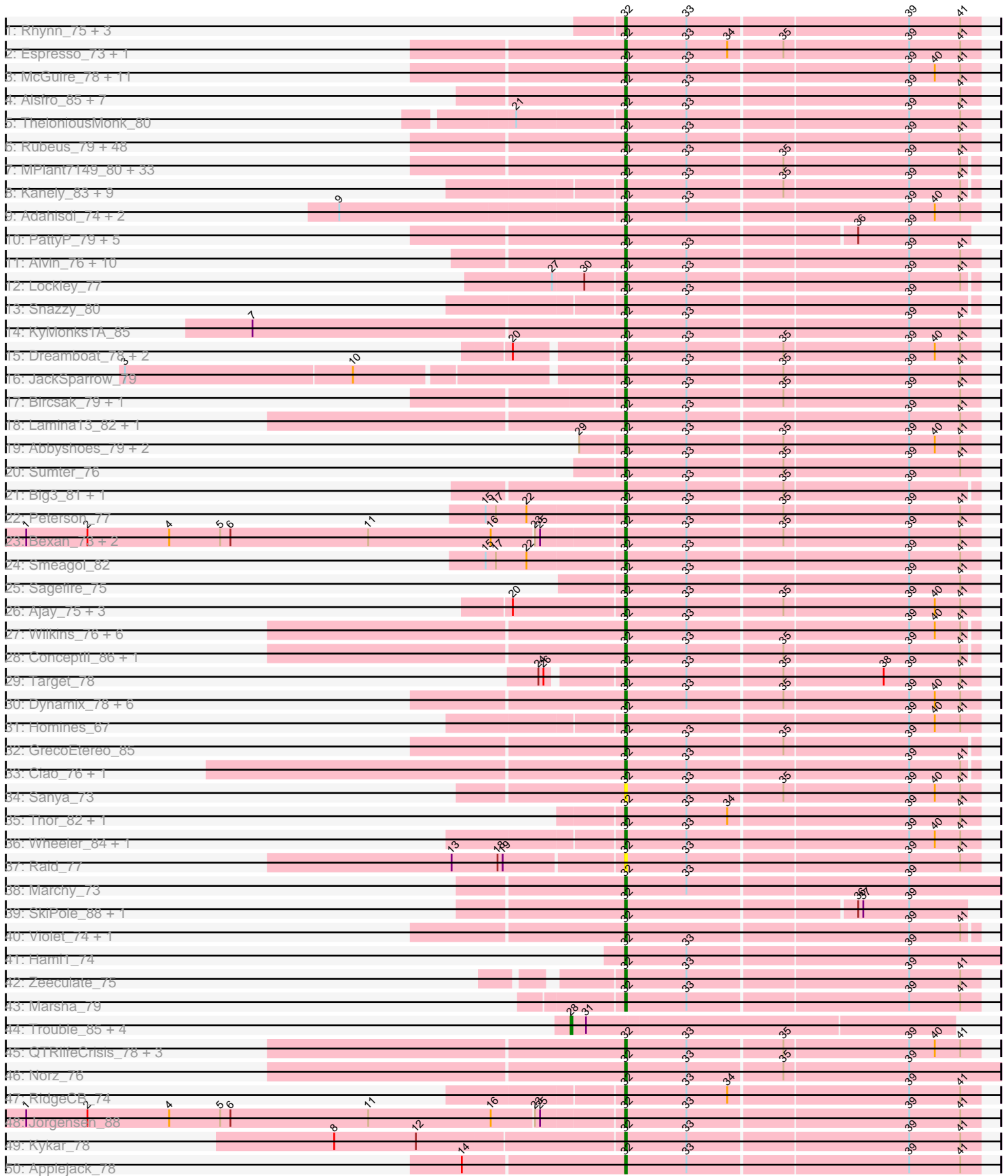
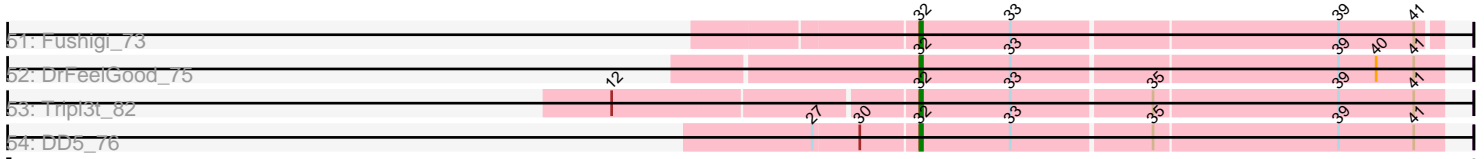


Pham 202668



Pham 202668



Track	Sample	12	21	30	22	33	36	39	40	41
51	Fushigi_73				22	33		39		41
52	DTFeelGood_75	12			22	33		39	40	41
53	Tmp13t_82		21	30	22	33	36	39		41
54	DD5_76				22	33		39		41

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 202668 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202668 has 220 members, 11 are drafts.

Phages represented in each track:

- Track 1 : Rhynn_75, PhrostyMug_81, Smairt_84, Mule_79
- Track 2 : Espresso_73, Gandalf20_78
- Track 3 : McGuire_78, Ohno789_82, Oogway_77, ShortQueendom_71, Hermia_74, GageAP_81, AFIS_76, Sorpresa_78, Chanagan_75, Tasp14_78, StewieG_75, Sandaddy_77
- Track 4 : Alsfro_85, BeesKnees_79, BillKnuckles_72, Lesedi_76, HarryOW_80, Graduation_82, Marge_75, ProMouse_78
- Track 5 : TheloniousMonk_80
- Track 6 : Rubeus_79, Dulcie_80, Makemake_82, Traft412_78, Nhonho_75, Nerujay_83, BluSpix_77, Ichabod_81, Tote_76, Bxb1_73, Barriga_86, TwoPeat_78, Squee_79, PSullivan_78, Moose_82, Magnar_76, Briton15_81, Pita2_81, Hope4ever_80, Papez_83, Petp2012_79, Mkhuseli_77, Fascinus_75, Watermelon_82, Blue_75, Swole_81, Maroc7_81, Bigfoot_74, PascalRango_77, Michley_79, Euphoria_80, SwissCheese_83, Zeuska_82, SpikeBT_76, Forsytheast_82, Switzer_77, IgnatiusPatJac_79, Inyanga_70, Lopton_79, Scowl_79, Bruns_81, JuliaChild_81, Bethlehem_82, CactusRose_82, Pari_84, Zephyr_80, Rufus_81, Carlyle_79, Seabiscuit_79
- Track 7 : MPlant7149_80, BigPaolini_78, Doom_71, PacerPaul_83, Francis47_80, Niza_79, Acme_84, Greg_83, Sunshine924_81, BPBiebs31_85, Rajelicia_80, U2_73, Pinto_78, GMonster_74, Trouble_79, Fajezeel_83, Killigrew_75, Licorice_82, Ringer_79, Sibs6_80, Solon_74, Seanderson_78, JC27_82, Agaliana_76, Bones_74, MaryBeth_78, Burton_81, Rohr_82, MetalQZJ_77, BaconJack_81, Paphu_76, Arlo_80, KBG_78, Corvo_82
- Track 8 : Kanely_83, Altman_84, Atkinbua_88, DreamCatcher_83, Monet_82, STLscum_85, Edtherson_77, Rutherford_81, PinkPlastic_74, Mryolo_74
- Track 9 : Adahisdi_74, Turj99_75, Magnito_78
- Track 10 : PattyP_79, Arcanine_82, Slagathor_79, NEHalo_75, Museum_79, Molly_79
- Track 11 : Alvin_76, BK1_73, Anglerfish_82, Marcell_71, Ruotula_84, HanShotFirst_77, Naira_80, A6_73, Fenn_81, Pelly_82, Dexes_82
- Track 12 : Lockley_77
- Track 13 : Snazzy_80
- Track 14 : KyMonks1A_85
- Track 15 : Dreamboat_78, PherrisBueller_77, Jasper_77
- Track 16 : JackSparrow_79
- Track 17 : Bircsak_79, Gompeii16_79
- Track 18 : Lamina13_82, Petruccio_80

- Track 19 : Abbyshoes_79, Kenmech_81, Dussy_78
- Track 20 : Sumter_76
- Track 21 : Big3_81, MrGordo_81
- Track 22 : Peterson_77
- Track 23 : Bexan_73, Beatrix_75, StrongArm_74
- Track 24 : Smeagol_82
- Track 25 : Sagefire_75
- Track 26 : Ajay_75, Eyeball_78, KSSJEB_77, Teodoridan_76
- Track 27 : Wilkins_76, Topgun_75, Crispicous1_74, Aeneas_84, Perseus_79, Abrogate_760, Gyzlar_71
- Track 28 : Conceptll_86, Kugel_80
- Track 29 : Target_78
- Track 30 : Dynamix_78, HermioneGrange_82, Manatee_77, Bob3_79, Gwendoluna_83, Jerm2_80, BigMau_81
- Track 31 : Homines_67
- Track 32 : GrecoEtereo_85
- Track 33 : Ciao_76, Pippin_80
- Track 34 : Sanya_73
- Track 35 : Thor_82, SarFire_82
- Track 36 : Wheeler_84, Treddle_80
- Track 37 : Raid_77
- Track 38 : Marchy_73
- Track 39 : SkiPole_88, Pepe_73
- Track 40 : Violet_74, Paraselene_77
- Track 41 : Hami1_74
- Track 42 : Zeeculate_75
- Track 43 : Marsha_79
- Track 44 : Trouble_85, Sumter_82, Perseus_85, Pelly_88, Paraselene_82
- Track 45 : QTRlifeCrisis_78, Buttons_76, Parliament_80, ILeeKay_76
- Track 46 : Norz_76
- Track 47 : RidgeCB_74
- Track 48 : Jorgensen_88
- Track 49 : Kykar_78
- Track 50 : Applejack_78
- Track 51 : Fushigi_73
- Track 52 : DrFeelGood_75
- Track 53 : Tripl3t_82
- Track 54 : DD5_76

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

The start number called the most often in the published annotations is 32, it was called in 204 of the 209 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6_73, AFIS_76, Abbyshoes_79, Abrogate_760, Acme_84, Adahisdi_74, Aeneas_84, Agaliana_76, Ajay_75, Alsfro_85, Altman_84, Alvin_76, Anglerfish_82, Applejack_78, Arcanine_82, Arlo_80, Atkinbua_88, BK1_73, BPBiebs31_85, BaconJack_81, Barriga_86, Beatrix_75, BeesKnees_79, Bethlehem_82, Bexan_73, Big3_81, BigMau_81, BigPaolini_78, Bigfoot_74, BillKnuckles_72, Bircsak_79,

BluSpix_77, Blue_75, Bob3_79, Bones_74, Briton15_81, Bruns_81, Burton_81, Buttons_76, Bxb1_73, CactusRose_82, Carlyle_79, Chanagan_75, Ciao_76, ConceptII_86, Corvo_82, Crispicous1_74, DD5_76, Dexes_82, Doom_71, DrFeelGood_75, DreamCatcher_83, Dreamboat_78, Dulcie_80, Dussy_78, Dynamix_78, Edtherson_77, Espresso_73, Euphoria_80, Eyeball_78, Fajezeel_83, Fascinus_75, Fenn_81, Forsytheast_82, Francis47_80, Fushigi_73, GMonster_74, GageAP_81, Gandalf20_78, Gompeii16_79, Graduation_82, GrecoEtereo_85, Greg_83, Gwendoluna_83, Gyzlar_71, Hami1_74, HanShotFirst_77, HarryOW_80, Hermia_74, HermioneGrange_82, Homines_67, Hope4ever_80, ILeeKay_76, Ichabod_81, IgnatiusPatJac_79, Inyanga_70, JC27_82, JackSparrow_79, Jasper_77, Jerm2_80, Jorgensen_88, JuliaChild_81, KBG_78, KSSJEB_77, Kanely_83, Kenmech_81, Killigrew_75, Kugel_80, KyMonks1A_85, Kykar_78, Lamina13_82, Lesedi_76, Licorice_82, Lockley_77, Lopton_79, MPlant7149_80, Magnar_76, Magnito_78, Makemake_82, Manatee_77, Marcell_71, Marchy_73, Marge_75, Maroc7_81, Marsha_79, MaryBeth_78, McGuire_78, MetalQZJ_77, Michley_79, Mkhusei_77, Molly_79, Monet_82, Moose_82, MrGordo_81, Mryolo_74, Mule_79, Museum_79, NEHalo_75, Naira_80, Nerujay_83, Nhonho_75, Niza_79, Norz_76, Ohno789_82, Oogway_77, PSullivan_78, PacerPaul_83, Papez_83, Paphu_76, Paraselene_77, Pari_84, Parliament_80, PascalRango_77, PattyP_79, Pelly_82, Pepe_73, Perseus_79, Peterson_77, Petp2012_79, Petruccio_80, PherrisBueller_77, PhrostyMug_81, PinkPlastic_74, Pinto_78, Pippin_80, Pita2_81, ProMouse_78, QTRlifeCrisis_78, Raid_77, Rajelicia_80, Rhynn_75, RidgeCB_74, Ringer_79, Rohr_82, Rubeus_79, Rufus_81, Ruotula_84, Rutherford_81, STLscum_85, Sagefire_75, Sandaddy_77, Sanya_73, SarFire_82, Scowl_79, Seabiscuit_79, Seanderson_78, ShortQueendom_71, Sibs6_80, SkiPole_88, Slagathor_79, Smairt_84, Smeagol_82, Snazzy_80, Solon_74, Sorpresa_78, SpikeBT_76, Squee_79, StewieG_75, StrongArm_74, Sumter_76, Sunshine924_81, SwissCheese_83, Switzer_77, Swole_81, Target_78, Tasp14_78, Teodoridan_76, TheloniousMonk_80, Thor_82, Topgun_75, Tote_76, Traft412_78, Treddle_80, Tripl3t_82, Trouble_79, Turj99_75, TwoPeat_78, U2_73, Violet_74, Watermelon_82, Wheeler_84, Wilkins_76, Zeeculate_75, Zephyr_80, Zeuska_82,

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

-

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

- Paraselene_82, Pelly_88, Perseus_85, Sumter_82, Trouble_85,

Summary by start number:

Start 28:

- Found in 5 of 220 (2.3%) of genes in pham
- Manual Annotations of this start: 5 of 209
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Paraselene_82 (A1), Pelly_88 (A1), Perseus_85 (A1), Sumter_82 (A1), Trouble_85 (A1),

Start 32:

- Found in 215 of 220 (97.7%) of genes in pham
- Manual Annotations of this start: 204 of 209
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A6_73 (A1), AFIS_76 (A1), Abbyshoes_79 (A1), Abrogate_760 (A1), Acme_84 (A1), Adahisdi_74 (A1),

Aeneas_84 (A1), Agaliana_76 (A1), Ajay_75 (A1), Alsfro_85 (A1), Altman_84 (A1), Alvin_76 (A1), Anglerfish_82 (A1), Applejack_78 (A1), Arcanine_82 (A1), Arlo_80 (A1), Atkinbua_88 (A1), BK1_73 (A1), BPBiabs31_85 (A1), BaconJack_81 (A1), Barriga_86 (A1), Beatrix_75 (A1), BeesKnees_79 (A1), Bethlehem_82 (A1), Bexan_73 (A1), Big3_81 (A1), BigMau_81 (A1), BigPaolini_78 (A1), Bigfoot_74 (A1), BillKnuckles_72 (A1), Bircsak_79 (A1), BluSpix_77 (A1), Blue_75 (A1), Bob3_79 (A1), Bones_74 (A1), Briton15_81 (A1), Bruns_81 (A1), Burton_81 (A1), Buttons_76 (A1), Bxb1_73 (A1), CactusRose_82 (A1), Carlyle_79 (A1), Chanagan_75 (A1), Ciao_76 (A1), Conceptll_86 (A1), Corvo_82 (A1), Crispicous1_74 (A1), DD5_76 (A1), Dexes_82 (A1), Doom_71 (A1), DrFeelGood_75 (A1), DreamCatcher_83 (A1), Dreamboat_78 (A1), Dulcie_80 (A1), Dussy_78 (A1), Dynamix_78 (A1), Edtherson_77 (A1), Espresso_73 (A1), Euphoria_80 (A1), Eyeball_78 (A1), Fajezeel_83 (A1), Fascinus_75 (A1), Fenn_81 (A1), Forsytheast_82 (A1), Francis47_80 (A1), Fushigi_73 (A1), GMonster_74 (A1), GageAP_81 (A1), Gandalf20_78 (A1), Gompeii16_79 (A1), Graduation_82 (A1), GrecoEtereo_85 (A1), Greg_83 (A1), Gwendoluna_83 (A1), Gyzlar_71 (A1), Hami1_74 (A1), HanShotFirst_77 (A1), HarryOW_80 (A1), Hermia_74 (A1), HermioneGrange_82 (A1), Homines_67 (A1), Hope4ever_80 (A1), ILeeKay_76 (A1), Ichabod_81 (A1), IgnatiusPatJac_79 (A1), Inyanga_70 (A1), JC27_82 (A1), JackSparrow_79 (A1), Jasper_77 (A1), Jerm2_80 (A1), Jorgensen_88 (A1), JuliaChild_81 (A1), KBG_78 (A1), KSSJEB_77 (A1), Kanely_83 (A1), Kenmech_81 (A1), Killigrew_75 (A1), Kugel_80 (A1), KyMonks1A_85 (A1), Kykar_78 (A1), Lamina13_82 (A1), Lesedi_76 (A1), Licorice_82 (A1), Lockley_77 (A1), Lopton_79 (A1), MPlant7149_80 (A1), Magnar_76 (A1), Magnito_78 (A1), Makemake_82 (A1), Manatee_77 (A1), Marcell_71 (A1), Marchy_73 (A1), Marge_75 (A1), Maroc7_81 (A1), Marsha_79 (A1), MaryBeth_78 (A1), McGuire_78 (A1), MetalQZJ_77 (A1), Michley_79 (A1), Mkhusei_77 (A1), Molly_79 (A1), Monet_82 (A1), Moose_82 (A1), MrGordo_81 (A1), Mryolo_74 (A1), Mule_79 (A1), Museum_79 (A1), NEHalo_75 (A1), Naira_80 (A1), Nerujay_83 (A1), Nhonho_75 (A1), Niza_79 (A1), Norz_76 (A1), Ohno789_82 (A1), Oogway_77 (A1), PSullivan_78 (A1), PacerPaul_83 (A1), Papez_83 (A1), Paphu_76 (A1), Paraselene_77 (A1), Pari_84 (A1), Parliament_80 (A1), PascalRango_77 (A1), PattyP_79 (A1), Pelly_82 (A1), Pepe_73 (A1), Perseus_79 (A1), Peterson_77 (A1), Petp2012_79 (A1), Petruchio_80 (A1), PherrisBueller_77 (A1), PhrostyMug_81 (A1), PinkPlastic_74 (A1), Pinto_78 (A1), Pippin_80 (A1), Pita2_81 (A1), ProMouse_78 (A1), QTRLifeCrisis_78 (A1), Raid_77 (A1), Rajelicia_80 (A1), Rhynn_75 (A1), RidgeCB_74 (A1), Ringer_79 (A1), Rohr_82 (A1), Rubeus_79 (A1), Rufus_81 (A1), Ruotula_84 (A1), Rutherferd_81 (A1), STLscum_85 (A1), Sagefire_75 (A1), Sandaddy_77 (A1), Sanya_73 (A1), SarFire_82 (A1), Scowl_79 (A1), Seabiscuit_79 (A1), Seanderson_78 (A1), ShortQueendom_71 (A1), Sibs6_80 (A1), SkiPole_88 (A1), Slagathor_79 (A1), Smairt_84 (A1), Smeagol_82 (A1), Snazzy_80 (A1), Solon_74 (A1), Sorpresa_78 (A1), SpikeBT_76 (A1), Squee_79 (A1), StewieG_75 (A1), StrongArm_74 (A1), Sumter_76 (A1), Sunshine924_81 (A1), SwissCheese_83 (A1), Switzer_77 (A1), Swole_81 (A1), Target_78 (A1), Tasp14_78 (A1), Teodoridan_76 (A1), TheloniousMonk_80 (A1), Thor_82 (A1), Topgun_75 (A1), Tote_76 (A1), Traft412_78 (A1), Treddle_80 (A1), Tripl3t_82 (A1), Trouble_79 (A1), Turj99_75 (A1), TwoPeat_78 (A1), U2_73 (A1), Violet_74 (A1), Watermelon_82 (A1), Wheeler_84 (A1), Wilkins_76 (A1), Zeeculate_75 (A1), Zephyr_80 (A1), Zeuska_82 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 28 was manually annotated 5 times for cluster A1.
- Start number 32 was manually annotated 204 times for cluster A1.

Gene Information:

Gene: A6_73 Start: 45132, Stop: 44929, Start Num: 32

Candidate Starts for A6_73:

(Start: 32 @45132 has 204 MA's), (33, 45096), (39, 44970), (41, 44940),

Gene: AFIS_76 Start: 48153, Stop: 47950, Start Num: 32

Candidate Starts for AFIS_76:

(Start: 32 @48153 has 204 MA's), (33, 48117), (39, 47991), (40, 47976), (41, 47961),

Gene: Abbysshoes_79 Start: 47406, Stop: 47203, Start Num: 32

Candidate Starts for Abbysshoes_79:

(29, 47430), (Start: 32 @47406 has 204 MA's), (33, 47370), (35, 47316), (39, 47244), (40, 47229), (41, 47214),

Gene: Abrogate_760 Start: 48119, Stop: 47916, Start Num: 32

Candidate Starts for Abrogate_760:

(Start: 32 @48119 has 204 MA's), (33, 48083), (39, 47957), (40, 47942), (41, 47927),

Gene: Acme_84 Start: 49836, Stop: 49636, Start Num: 32

Candidate Starts for Acme_84:

(Start: 32 @49836 has 204 MA's), (33, 49800), (35, 49746), (39, 49674), (41, 49644),

Gene: Adahisdi_74 Start: 47304, Stop: 47101, Start Num: 32

Candidate Starts for Adahisdi_74:

(9, 47466), (Start: 32 @47304 has 204 MA's), (33, 47268), (39, 47142), (40, 47127), (41, 47112),

Gene: Aeneas_84 Start: 49765, Stop: 49562, Start Num: 32

Candidate Starts for Aeneas_84:

(Start: 32 @49765 has 204 MA's), (33, 49729), (39, 49603), (40, 49588), (41, 49573),

Gene: Agaliana_76 Start: 46122, Stop: 45919, Start Num: 32

Candidate Starts for Agaliana_76:

(Start: 32 @46122 has 204 MA's), (33, 46086), (35, 46032), (39, 45960), (41, 45930),

Gene: Ajay_75 Start: 46505, Stop: 46302, Start Num: 32

Candidate Starts for Ajay_75:

(20, 46568), (Start: 32 @46505 has 204 MA's), (33, 46469), (35, 46415), (39, 46343), (40, 46328), (41, 46313),

Gene: Alsfro_85 Start: 47868, Stop: 47665, Start Num: 32

Candidate Starts for Alsfro_85:

(Start: 32 @47868 has 204 MA's), (33, 47832), (39, 47706), (41, 47676),

Gene: Altman_84 Start: 48968, Stop: 48768, Start Num: 32

Candidate Starts for Altman_84:

(Start: 32 @48968 has 204 MA's), (33, 48932), (35, 48878), (39, 48806), (41, 48776),

Gene: Alvin_76 Start: 46725, Stop: 46522, Start Num: 32

Candidate Starts for Alvin_76:

(Start: 32 @46725 has 204 MA's), (33, 46689), (39, 46563), (41, 46533),

Gene: Anglerfish_82 Start: 48973, Stop: 48773, Start Num: 32

Candidate Starts for Anglerfish_82:

(Start: 32 @48973 has 204 MA's), (33, 48937), (39, 48811), (41, 48781),

Gene: Applejack_78 Start: 45786, Stop: 45583, Start Num: 32

Candidate Starts for Applejack_78:

(14, 45879), (Start: 32 @45786 has 204 MA's), (33, 45750), (39, 45624), (41, 45594),

Gene: Arcanine_82 Start: 49232, Stop: 49038, Start Num: 32

Candidate Starts for Arcanine_82:

(Start: 32 @49232 has 204 MA's), (36, 49103), (39, 49073),

Gene: Arlo_80 Start: 48283, Stop: 48083, Start Num: 32

Candidate Starts for Arlo_80:

(Start: 32 @48283 has 204 MA's), (33, 48247), (35, 48193), (39, 48121), (41, 48091),

Gene: Atkinbua_88 Start: 49776, Stop: 49576, Start Num: 32

Candidate Starts for Atkinbua_88:

(Start: 32 @49776 has 204 MA's), (33, 49740), (35, 49686), (39, 49614), (41, 49584),

Gene: BK1_73 Start: 45132, Stop: 44929, Start Num: 32

Candidate Starts for BK1_73:

(Start: 32 @45132 has 204 MA's), (33, 45096), (39, 44970), (41, 44940),

Gene: BPBiebs31_85 Start: 49488, Stop: 49288, Start Num: 32

Candidate Starts for BPBiebs31_85:

(Start: 32 @49488 has 204 MA's), (33, 49452), (35, 49398), (39, 49326), (41, 49296),

Gene: BaconJack_81 Start: 49467, Stop: 49264, Start Num: 32

Candidate Starts for BaconJack_81:

(Start: 32 @49467 has 204 MA's), (33, 49431), (35, 49377), (39, 49305), (41, 49275),

Gene: Barriga_86 Start: 48333, Stop: 48130, Start Num: 32

Candidate Starts for Barriga_86:

(Start: 32 @48333 has 204 MA's), (33, 48297), (39, 48171), (41, 48141),

Gene: Beatrix_75 Start: 47300, Stop: 47097, Start Num: 32

Candidate Starts for Beatrix_75:

(1, 47645), (2, 47609), (4, 47561), (5, 47531), (6, 47525), (11, 47444), (16, 47372), (23, 47348), (25, 47345), (Start: 32 @47300 has 204 MA's), (33, 47264), (35, 47210), (39, 47138), (41, 47108),

Gene: BeesKnees_79 Start: 46403, Stop: 46200, Start Num: 32

Candidate Starts for BeesKnees_79:

(Start: 32 @46403 has 204 MA's), (33, 46367), (39, 46241), (41, 46211),

Gene: Bethlehem_82 Start: 50352, Stop: 50149, Start Num: 32

Candidate Starts for Bethlehem_82:

(Start: 32 @50352 has 204 MA's), (33, 50316), (39, 50190), (41, 50160),

Gene: Bexan_73 Start: 47074, Stop: 46871, Start Num: 32

Candidate Starts for Bexan_73:

(1, 47419), (2, 47383), (4, 47335), (5, 47305), (6, 47299), (11, 47218), (16, 47146), (23, 47122), (25, 47119), (Start: 32 @47074 has 204 MA's), (33, 47038), (35, 46984), (39, 46912), (41, 46882),

Gene: Big3_81 Start: 49478, Stop: 49278, Start Num: 32

Candidate Starts for Big3_81:

(Start: 32 @49478 has 204 MA's), (33, 49442), (35, 49388), (39, 49316),

Gene: BigMau_81 Start: 48890, Stop: 48687, Start Num: 32

Candidate Starts for BigMau_81:

(Start: 32 @48890 has 204 MA's), (33, 48854), (35, 48800), (39, 48728), (40, 48713), (41, 48698),

Gene: BigPaolini_78 Start: 46838, Stop: 46635, Start Num: 32

Candidate Starts for BigPaolini_78:

(Start: 32 @46838 has 204 MA's), (33, 46802), (35, 46748), (39, 46676), (41, 46646),

Gene: Bigfoot_74 Start: 47546, Stop: 47346, Start Num: 32

Candidate Starts for Bigfoot_74:

(Start: 32 @47546 has 204 MA's), (33, 47510), (39, 47384), (41, 47354),

Gene: BillKnuckles_72 Start: 47277, Stop: 47074, Start Num: 32

Candidate Starts for BillKnuckles_72:

(Start: 32 @47277 has 204 MA's), (33, 47241), (39, 47115), (41, 47085),

Gene: Bircsak_79 Start: 49965, Stop: 49762, Start Num: 32

Candidate Starts for Bircsak_79:

(Start: 32 @49965 has 204 MA's), (33, 49929), (35, 49875), (39, 49803), (41, 49773),

Gene: BluSpix_77 Start: 43001, Stop: 42798, Start Num: 32

Candidate Starts for BluSpix_77:

(Start: 32 @43001 has 204 MA's), (33, 42965), (39, 42839), (41, 42809),

Gene: Blue_75 Start: 47181, Stop: 46978, Start Num: 32

Candidate Starts for Blue_75:

(Start: 32 @47181 has 204 MA's), (33, 47145), (39, 47019), (41, 46989),

Gene: Bob3_79 Start: 48157, Stop: 47954, Start Num: 32

Candidate Starts for Bob3_79:

(Start: 32 @48157 has 204 MA's), (33, 48121), (35, 48067), (39, 47995), (40, 47980), (41, 47965),

Gene: Bones_74 Start: 47463, Stop: 47260, Start Num: 32

Candidate Starts for Bones_74:

(Start: 32 @47463 has 204 MA's), (33, 47427), (35, 47373), (39, 47301), (41, 47271),

Gene: Briton15_81 Start: 48543, Stop: 48340, Start Num: 32

Candidate Starts for Briton15_81:

(Start: 32 @48543 has 204 MA's), (33, 48507), (39, 48381), (41, 48351),

Gene: Bruns_81 Start: 47406, Stop: 47203, Start Num: 32

Candidate Starts for Bruns_81:

(Start: 32 @47406 has 204 MA's), (33, 47370), (39, 47244), (41, 47214),

Gene: Burton_81 Start: 49920, Stop: 49720, Start Num: 32

Candidate Starts for Burton_81:

(Start: 32 @49920 has 204 MA's), (33, 49884), (35, 49830), (39, 49758), (41, 49728),

Gene: Buttons_76 Start: 45862, Stop: 45659, Start Num: 32

Candidate Starts for Buttons_76:

(Start: 32 @45862 has 204 MA's), (33, 45826), (35, 45772), (39, 45700), (40, 45685), (41, 45670),

Gene: Bxb1_73 Start: 45949, Stop: 45746, Start Num: 32

Candidate Starts for Bxb1_73:

(Start: 32 @45949 has 204 MA's), (33, 45913), (39, 45787), (41, 45757),

Gene: CactusRose_82 Start: 48563, Stop: 48363, Start Num: 32

Candidate Starts for CactusRose_82:

(Start: 32 @48563 has 204 MA's), (33, 48527), (39, 48401), (41, 48371),

Gene: Carlyle_79 Start: 46861, Stop: 46658, Start Num: 32

Candidate Starts for Carlyle_79:

(Start: 32 @46861 has 204 MA's), (33, 46825), (39, 46699), (41, 46669),

Gene: Chanagan_75 Start: 45822, Stop: 45619, Start Num: 32

Candidate Starts for Chanagan_75:

(Start: 32 @45822 has 204 MA's), (33, 45786), (39, 45660), (40, 45645), (41, 45630),

Gene: Ciao_76 Start: 46158, Stop: 45958, Start Num: 32

Candidate Starts for Ciao_76:

(Start: 32 @46158 has 204 MA's), (33, 46122), (39, 45996), (41, 45966),

Gene: ConceptII_86 Start: 50069, Stop: 49869, Start Num: 32

Candidate Starts for ConceptII_86:

(Start: 32 @50069 has 204 MA's), (33, 50033), (35, 49979), (39, 49907), (41, 49877),

Gene: Corvo_82 Start: 49411, Stop: 49211, Start Num: 32

Candidate Starts for Corvo_82:

(Start: 32 @49411 has 204 MA's), (33, 49375), (35, 49321), (39, 49249), (41, 49219),

Gene: Crispicous1_74 Start: 45668, Stop: 45465, Start Num: 32

Candidate Starts for Crispicous1_74:

(Start: 32 @45668 has 204 MA's), (33, 45632), (39, 45506), (40, 45491), (41, 45476),

Gene: DD5_76 Start: 47589, Stop: 47386, Start Num: 32

Candidate Starts for DD5_76:

(27, 47628), (30, 47610), (Start: 32 @47589 has 204 MA's), (33, 47553), (35, 47499), (39, 47427), (41, 47397),

Gene: Dexes_82 Start: 50671, Stop: 50468, Start Num: 32

Candidate Starts for Dexes_82:

(Start: 32 @50671 has 204 MA's), (33, 50635), (39, 50509), (41, 50479),

Gene: Doom_71 Start: 46518, Stop: 46315, Start Num: 32

Candidate Starts for Doom_71:

(Start: 32 @46518 has 204 MA's), (33, 46482), (35, 46428), (39, 46356), (41, 46326),

Gene: DrFeelGood_75 Start: 45947, Stop: 45744, Start Num: 32

Candidate Starts for DrFeelGood_75:

(Start: 32 @45947 has 204 MA's), (33, 45911), (39, 45785), (40, 45770), (41, 45755),

Gene: DreamCatcher_83 Start: 48569, Stop: 48369, Start Num: 32

Candidate Starts for DreamCatcher_83:

(Start: 32 @48569 has 204 MA's), (33, 48533), (35, 48479), (39, 48407), (41, 48377),

Gene: Dreamboat_78 Start: 45875, Stop: 45672, Start Num: 32

Candidate Starts for Dreamboat_78:

(20, 45932), (Start: 32 @45875 has 204 MA's), (33, 45839), (35, 45785), (39, 45713), (40, 45698), (41, 45683),

Gene: Dulcie_80 Start: 49841, Stop: 49638, Start Num: 32

Candidate Starts for Dulcie_80:

(Start: 32 @49841 has 204 MA's), (33, 49805), (39, 49679), (41, 49649),

Gene: Dussy_78 Start: 47426, Stop: 47223, Start Num: 32

Candidate Starts for Dussy_78:

(29, 47450), (Start: 32 @47426 has 204 MA's), (33, 47390), (35, 47336), (39, 47264), (40, 47249), (41, 47234),

Gene: Dynamix_78 Start: 46309, Stop: 46106, Start Num: 32

Candidate Starts for Dynamix_78:

(Start: 32 @46309 has 204 MA's), (33, 46273), (35, 46219), (39, 46147), (40, 46132), (41, 46117),

Gene: Edtherson_77 Start: 47485, Stop: 47282, Start Num: 32

Candidate Starts for Edtherson_77:

(Start: 32 @47485 has 204 MA's), (33, 47449), (35, 47395), (39, 47323), (41, 47293),

Gene: Espresso_73 Start: 46530, Stop: 46327, Start Num: 32

Candidate Starts for Espresso_73:

(Start: 32 @46530 has 204 MA's), (33, 46494), (34, 46470), (35, 46440), (39, 46368), (41, 46338),

Gene: Euphoria_80 Start: 48246, Stop: 48043, Start Num: 32

Candidate Starts for Euphoria_80:

(Start: 32 @48246 has 204 MA's), (33, 48210), (39, 48084), (41, 48054),

Gene: Eyeball_78 Start: 47531, Stop: 47328, Start Num: 32

Candidate Starts for Eyeball_78:

(20, 47594), (Start: 32 @47531 has 204 MA's), (33, 47495), (35, 47441), (39, 47369), (40, 47354), (41, 47339),

Gene: Fajezeel_83 Start: 49126, Stop: 48926, Start Num: 32

Candidate Starts for Fajezeel_83:

(Start: 32 @49126 has 204 MA's), (33, 49090), (35, 49036), (39, 48964), (41, 48934),

Gene: Fascinus_75 Start: 48059, Stop: 47859, Start Num: 32

Candidate Starts for Fascinus_75:

(Start: 32 @48059 has 204 MA's), (33, 48023), (39, 47897), (41, 47867),

Gene: Fenn_81 Start: 48414, Stop: 48211, Start Num: 32

Candidate Starts for Fenn_81:

(Start: 32 @48414 has 204 MA's), (33, 48378), (39, 48252), (41, 48222),

Gene: Forsytheast_82 Start: 48445, Stop: 48245, Start Num: 32

Candidate Starts for Forsytheast_82:

(Start: 32 @48445 has 204 MA's), (33, 48409), (39, 48283), (41, 48253),

Gene: Francis47_80 Start: 49966, Stop: 49763, Start Num: 32

Candidate Starts for Francis47_80:

(Start: 32 @49966 has 204 MA's), (33, 49930), (35, 49876), (39, 49804), (41, 49774),

Gene: Fushigi_73 Start: 44498, Stop: 44298, Start Num: 32

Candidate Starts for Fushigi_73:

(Start: 32 @44498 has 204 MA's), (33, 44462), (39, 44336), (41, 44306),

Gene: GMonster_74 Start: 47261, Stop: 47058, Start Num: 32

Candidate Starts for GMonster_74:

(Start: 32 @47261 has 204 MA's), (33, 47225), (35, 47171), (39, 47099), (41, 47069),

Gene: GageAP_81 Start: 49319, Stop: 49116, Start Num: 32

Candidate Starts for GageAP_81:

(Start: 32 @49319 has 204 MA's), (33, 49283), (39, 49157), (40, 49142), (41, 49127),

Gene: Gandalf20_78 Start: 47815, Stop: 47612, Start Num: 32

Candidate Starts for Gandalf20_78:

(Start: 32 @47815 has 204 MA's), (33, 47779), (34, 47755), (35, 47725), (39, 47653), (41, 47623),

Gene: Gompeii16_79 Start: 49966, Stop: 49763, Start Num: 32

Candidate Starts for Gompeii16_79:

(Start: 32 @49966 has 204 MA's), (33, 49930), (35, 49876), (39, 49804), (41, 49774),

Gene: Graduation_82 Start: 48096, Stop: 47893, Start Num: 32

Candidate Starts for Graduation_82:

(Start: 32 @48096 has 204 MA's), (33, 48060), (39, 47934), (41, 47904),

Gene: GrecoEtereo_85 Start: 49769, Stop: 49569, Start Num: 32

Candidate Starts for GrecoEtereo_85:

(Start: 32 @49769 has 204 MA's), (33, 49733), (35, 49679), (39, 49607),

Gene: Greg_83 Start: 49126, Stop: 48926, Start Num: 32

Candidate Starts for Greg_83:

(Start: 32 @49126 has 204 MA's), (33, 49090), (35, 49036), (39, 48964), (41, 48934),

Gene: Gwendoluna_83 Start: 49080, Stop: 48877, Start Num: 32

Candidate Starts for Gwendoluna_83:

(Start: 32 @49080 has 204 MA's), (33, 49044), (35, 48990), (39, 48918), (40, 48903), (41, 48888),

Gene: Gyzlar_71 Start: 44267, Stop: 44064, Start Num: 32

Candidate Starts for Gyzlar_71:

(Start: 32 @44267 has 204 MA's), (33, 44231), (39, 44105), (40, 44090), (41, 44075),

Gene: Hami1_74 Start: 43709, Stop: 43494, Start Num: 32

Candidate Starts for Hami1_74:

(Start: 32 @43709 has 204 MA's), (33, 43673), (39, 43547),

Gene: HanShotFirst_77 Start: 48049, Stop: 47849, Start Num: 32

Candidate Starts for HanShotFirst_77:

(Start: 32 @48049 has 204 MA's), (33, 48013), (39, 47887), (41, 47857),

Gene: HarryOW_80 Start: 49291, Stop: 49088, Start Num: 32

Candidate Starts for HarryOW_80:

(Start: 32 @49291 has 204 MA's), (33, 49255), (39, 49129), (41, 49099),

Gene: Hermia_74 Start: 46187, Stop: 45984, Start Num: 32

Candidate Starts for Hermia_74:

(Start: 32 @46187 has 204 MA's), (33, 46151), (39, 46025), (40, 46010), (41, 45995),

Gene: HermioneGrange_82 Start: 49384, Stop: 49181, Start Num: 32

Candidate Starts for HermioneGrange_82:

(Start: 32 @49384 has 204 MA's), (33, 49348), (35, 49294), (39, 49222), (40, 49207), (41, 49192),

Gene: Homines_67 Start: 42517, Stop: 42314, Start Num: 32

Candidate Starts for Homines_67:

(Start: 32 @42517 has 204 MA's), (39, 42355), (40, 42340), (41, 42325),

Gene: Hope4ever_80 Start: 47898, Stop: 47695, Start Num: 32

Candidate Starts for Hope4ever_80:

(Start: 32 @47898 has 204 MA's), (33, 47862), (39, 47736), (41, 47706),

Gene: ILeeKay_76 Start: 45909, Stop: 45706, Start Num: 32

Candidate Starts for ILeeKay_76:

(Start: 32 @45909 has 204 MA's), (33, 45873), (35, 45819), (39, 45747), (40, 45732), (41, 45717),

Gene: Ichabod_81 Start: 48156, Stop: 47953, Start Num: 32

Candidate Starts for Ichabod_81:

(Start: 32 @48156 has 204 MA's), (33, 48120), (39, 47994), (41, 47964),

Gene: IgnatiusPatJac_79 Start: 46946, Stop: 46743, Start Num: 32

Candidate Starts for IgnatiusPatJac_79:

(Start: 32 @46946 has 204 MA's), (33, 46910), (39, 46784), (41, 46754),

Gene: Inyanga_70 Start: 46102, Stop: 45899, Start Num: 32

Candidate Starts for Inyanga_70:

(Start: 32 @46102 has 204 MA's), (33, 46066), (39, 45940), (41, 45910),

Gene: JC27_82 Start: 48025, Stop: 47822, Start Num: 32

Candidate Starts for JC27_82:

(Start: 32 @48025 has 204 MA's), (33, 47989), (35, 47935), (39, 47863), (41, 47833),

Gene: JackSparrow_79 Start: 47009, Stop: 46806, Start Num: 32

Candidate Starts for JackSparrow_79:

(3, 47285), (10, 47153), (Start: 32 @47009 has 204 MA's), (33, 46973), (35, 46919), (39, 46847), (41, 46817),

Gene: Jasper_77 Start: 45761, Stop: 45558, Start Num: 32

Candidate Starts for Jasper_77:

(20, 45818), (Start: 32 @45761 has 204 MA's), (33, 45725), (35, 45671), (39, 45599), (40, 45584), (41, 45569),

Gene: Jerm2_80 Start: 49454, Stop: 49251, Start Num: 32

Candidate Starts for Jerm2_80:

(Start: 32 @49454 has 204 MA's), (33, 49418), (35, 49364), (39, 49292), (40, 49277), (41, 49262),

Gene: Jorgensen_88 Start: 49498, Stop: 49295, Start Num: 32

Candidate Starts for Jorgensen_88:

(1, 49843), (2, 49807), (4, 49759), (5, 49729), (6, 49723), (11, 49642), (16, 49570), (23, 49546), (25, 49543), (Start: 32 @49498 has 204 MA's), (33, 49462), (39, 49336), (41, 49306),

Gene: JuliaChild_81 Start: 48350, Stop: 48150, Start Num: 32

Candidate Starts for JuliaChild_81:

(Start: 32 @48350 has 204 MA's), (33, 48314), (39, 48188), (41, 48158),

Gene: KBG_78 Start: 48993, Stop: 48790, Start Num: 32

Candidate Starts for KBG_78:

(Start: 32 @48993 has 204 MA's), (33, 48957), (35, 48903), (39, 48831), (41, 48801),

Gene: KSSJEB_77 Start: 46474, Stop: 46274, Start Num: 32

Candidate Starts for KSSJEB_77:

(20, 46537), (Start: 32 @46474 has 204 MA's), (33, 46438), (35, 46384), (39, 46312), (40, 46297), (41, 46282),

Gene: Kanely_83 Start: 48745, Stop: 48545, Start Num: 32

Candidate Starts for Kanely_83:

(Start: 32 @48745 has 204 MA's), (33, 48709), (35, 48655), (39, 48583), (41, 48553),

Gene: Kenmech_81 Start: 48552, Stop: 48349, Start Num: 32

Candidate Starts for Kenmech_81:

(29, 48576), (Start: 32 @48552 has 204 MA's), (33, 48516), (35, 48462), (39, 48390), (40, 48375), (41, 48360),

Gene: Killigrew_75 Start: 46600, Stop: 46397, Start Num: 32

Candidate Starts for Killigrew_75:

(Start: 32 @46600 has 204 MA's), (33, 46564), (35, 46510), (39, 46438), (41, 46408),

Gene: Kugel_80 Start: 48242, Stop: 48039, Start Num: 32

Candidate Starts for Kugel_80:

(Start: 32 @48242 has 204 MA's), (33, 48206), (35, 48152), (39, 48080), (41, 48050),

Gene: KyMonks1A_85 Start: 48883, Stop: 48680, Start Num: 32

Candidate Starts for KyMonks1A_85:

(7, 49099), (Start: 32 @48883 has 204 MA's), (33, 48847), (39, 48721), (41, 48691),

Gene: Kykar_78 Start: 47281, Stop: 47078, Start Num: 32

Candidate Starts for Kykar_78:

(8, 47446), (12, 47398), (Start: 32 @47281 has 204 MA's), (33, 47245), (39, 47119), (41, 47089),

Gene: Lamina13_82 Start: 49734, Stop: 49531, Start Num: 32

Candidate Starts for Lamina13_82:

(Start: 32 @49734 has 204 MA's), (33, 49698), (39, 49572), (41, 49542),

Gene: Lesedi_76 Start: 46040, Stop: 45837, Start Num: 32
Candidate Starts for Lesedi_76:
(Start: 32 @46040 has 204 MA's), (33, 46004), (39, 45878), (41, 45848),

Gene: Licorice_82 Start: 50034, Stop: 49831, Start Num: 32
Candidate Starts for Licorice_82:
(Start: 32 @50034 has 204 MA's), (33, 49998), (35, 49944), (39, 49872), (41, 49842),

Gene: Lockley_77 Start: 47186, Stop: 46986, Start Num: 32
Candidate Starts for Lockley_77:
(27, 47225), (30, 47207), (Start: 32 @47186 has 204 MA's), (33, 47150), (39, 47024), (41, 46994),

Gene: Lopton_79 Start: 49061, Stop: 48861, Start Num: 32
Candidate Starts for Lopton_79:
(Start: 32 @49061 has 204 MA's), (33, 49025), (39, 48899), (41, 48869),

Gene: MPlant7149_80 Start: 47615, Stop: 47415, Start Num: 32
Candidate Starts for MPlant7149_80:
(Start: 32 @47615 has 204 MA's), (33, 47579), (35, 47525), (39, 47453), (41, 47423),

Gene: Magnar_76 Start: 46914, Stop: 46711, Start Num: 32
Candidate Starts for Magnar_76:
(Start: 32 @46914 has 204 MA's), (33, 46878), (39, 46752), (41, 46722),

Gene: Magnito_78 Start: 46868, Stop: 46665, Start Num: 32
Candidate Starts for Magnito_78:
(9, 47030), (Start: 32 @46868 has 204 MA's), (33, 46832), (39, 46706), (40, 46691), (41, 46676),

Gene: Makemake_82 Start: 48490, Stop: 48287, Start Num: 32
Candidate Starts for Makemake_82:
(Start: 32 @48490 has 204 MA's), (33, 48454), (39, 48328), (41, 48298),

Gene: Manatee_77 Start: 46420, Stop: 46217, Start Num: 32
Candidate Starts for Manatee_77:
(Start: 32 @46420 has 204 MA's), (33, 46384), (35, 46330), (39, 46258), (40, 46243), (41, 46228),

Gene: Marcell_71 Start: 45015, Stop: 44812, Start Num: 32
Candidate Starts for Marcell_71:
(Start: 32 @45015 has 204 MA's), (33, 44979), (39, 44853), (41, 44823),

Gene: Marchy_73 Start: 45220, Stop: 45005, Start Num: 32
Candidate Starts for Marchy_73:
(Start: 32 @45220 has 204 MA's), (33, 45184), (39, 45058),

Gene: Marge_75 Start: 46512, Stop: 46309, Start Num: 32
Candidate Starts for Marge_75:
(Start: 32 @46512 has 204 MA's), (33, 46476), (39, 46350), (41, 46320),

Gene: Maroc7_81 Start: 49487, Stop: 49287, Start Num: 32
Candidate Starts for Maroc7_81:
(Start: 32 @49487 has 204 MA's), (33, 49451), (39, 49325), (41, 49295),

Gene: Marsha_79 Start: 49315, Stop: 49112, Start Num: 32
Candidate Starts for Marsha_79:
(Start: 32 @49315 has 204 MA's), (33, 49279), (39, 49153), (41, 49123),

Gene: MaryBeth_78 Start: 47886, Stop: 47686, Start Num: 32
Candidate Starts for MaryBeth_78:
(Start: 32 @47886 has 204 MA's), (33, 47850), (35, 47796), (39, 47724), (41, 47694),

Gene: McGuire_78 Start: 46551, Stop: 46348, Start Num: 32
Candidate Starts for McGuire_78:
(Start: 32 @46551 has 204 MA's), (33, 46515), (39, 46389), (40, 46374), (41, 46359),

Gene: MetalQZJ_77 Start: 47886, Stop: 47686, Start Num: 32
Candidate Starts for MetalQZJ_77:
(Start: 32 @47886 has 204 MA's), (33, 47850), (35, 47796), (39, 47724), (41, 47694),

Gene: Michley_79 Start: 47279, Stop: 47076, Start Num: 32
Candidate Starts for Michley_79:
(Start: 32 @47279 has 204 MA's), (33, 47243), (39, 47117), (41, 47087),

Gene: Mkhuseleli_77 Start: 45606, Stop: 45403, Start Num: 32
Candidate Starts for Mkhuseleli_77:
(Start: 32 @45606 has 204 MA's), (33, 45570), (39, 45444), (41, 45414),

Gene: Molly_79 Start: 47090, Stop: 46896, Start Num: 32
Candidate Starts for Molly_79:
(Start: 32 @47090 has 204 MA's), (36, 46961), (39, 46931),

Gene: Monet_82 Start: 48961, Stop: 48758, Start Num: 32
Candidate Starts for Monet_82:
(Start: 32 @48961 has 204 MA's), (33, 48925), (35, 48871), (39, 48799), (41, 48769),

Gene: Moose_82 Start: 48445, Stop: 48245, Start Num: 32
Candidate Starts for Moose_82:
(Start: 32 @48445 has 204 MA's), (33, 48409), (39, 48283), (41, 48253),

Gene: MrGordo_81 Start: 47224, Stop: 47024, Start Num: 32
Candidate Starts for MrGordo_81:
(Start: 32 @47224 has 204 MA's), (33, 47188), (35, 47134), (39, 47062),

Gene: Mryolo_74 Start: 46054, Stop: 45851, Start Num: 32
Candidate Starts for Mryolo_74:
(Start: 32 @46054 has 204 MA's), (33, 46018), (35, 45964), (39, 45892), (41, 45862),

Gene: Mule_79 Start: 47341, Stop: 47138, Start Num: 32
Candidate Starts for Mule_79:
(Start: 32 @47341 has 204 MA's), (33, 47305), (39, 47179), (41, 47149),

Gene: Museum_79 Start: 48153, Stop: 47959, Start Num: 32
Candidate Starts for Museum_79:
(Start: 32 @48153 has 204 MA's), (36, 48024), (39, 47994),

Gene: NEHalo_75 Start: 46963, Stop: 46769, Start Num: 32

Candidate Starts for NEHalo_75:
(Start: 32 @46963 has 204 MA's), (36, 46834), (39, 46804),

Gene: Naira_80 Start: 48470, Stop: 48267, Start Num: 32
Candidate Starts for Naira_80:
(Start: 32 @48470 has 204 MA's), (33, 48434), (39, 48308), (41, 48278),

Gene: Nerujay_83 Start: 49538, Stop: 49335, Start Num: 32
Candidate Starts for Nerujay_83:
(Start: 32 @49538 has 204 MA's), (33, 49502), (39, 49376), (41, 49346),

Gene: Nhonho_75 Start: 47335, Stop: 47132, Start Num: 32
Candidate Starts for Nhonho_75:
(Start: 32 @47335 has 204 MA's), (33, 47299), (39, 47173), (41, 47143),

Gene: Niza_79 Start: 48442, Stop: 48239, Start Num: 32
Candidate Starts for Niza_79:
(Start: 32 @48442 has 204 MA's), (33, 48406), (35, 48352), (39, 48280), (41, 48250),

Gene: Norz_76 Start: 49697, Stop: 49482, Start Num: 32
Candidate Starts for Norz_76:
(Start: 32 @49697 has 204 MA's), (33, 49661), (35, 49607), (39, 49535),

Gene: Ohno789_82 Start: 49192, Stop: 48989, Start Num: 32
Candidate Starts for Ohno789_82:
(Start: 32 @49192 has 204 MA's), (33, 49156), (39, 49030), (40, 49015), (41, 49000),

Gene: Oogway_77 Start: 47851, Stop: 47648, Start Num: 32
Candidate Starts for Oogway_77:
(Start: 32 @47851 has 204 MA's), (33, 47815), (39, 47689), (40, 47674), (41, 47659),

Gene: PSullivan_78 Start: 46418, Stop: 46218, Start Num: 32
Candidate Starts for PSullivan_78:
(Start: 32 @46418 has 204 MA's), (33, 46382), (39, 46256), (41, 46226),

Gene: PacerPaul_83 Start: 49333, Stop: 49130, Start Num: 32
Candidate Starts for PacerPaul_83:
(Start: 32 @49333 has 204 MA's), (33, 49297), (35, 49243), (39, 49171), (41, 49141),

Gene: Papez_83 Start: 48887, Stop: 48687, Start Num: 32
Candidate Starts for Papez_83:
(Start: 32 @48887 has 204 MA's), (33, 48851), (39, 48725), (41, 48695),

Gene: Paphu_76 Start: 47057, Stop: 46854, Start Num: 32
Candidate Starts for Paphu_76:
(Start: 32 @47057 has 204 MA's), (33, 47021), (35, 46967), (39, 46895), (41, 46865),

Gene: Paraselene_77 Start: 47305, Stop: 47102, Start Num: 32
Candidate Starts for Paraselene_77:
(Start: 32 @47305 has 204 MA's), (39, 47143), (41, 47113),

Gene: Paraselene_82 Start: 48170, Stop: 47949, Start Num: 28
Candidate Starts for Paraselene_82:

(Start: 28 @48170 has 5 MA's), (31, 48161),

Gene: Pari_84 Start: 48036, Stop: 47833, Start Num: 32

Candidate Starts for Pari_84:

(Start: 32 @48036 has 204 MA's), (33, 48000), (39, 47874), (41, 47844),

Gene: Parliament_80 Start: 50217, Stop: 50014, Start Num: 32

Candidate Starts for Parliament_80:

(Start: 32 @50217 has 204 MA's), (33, 50181), (35, 50127), (39, 50055), (40, 50040), (41, 50025),

Gene: PascalRango_77 Start: 47311, Stop: 47108, Start Num: 32

Candidate Starts for PascalRango_77:

(Start: 32 @47311 has 204 MA's), (33, 47275), (39, 47149), (41, 47119),

Gene: PattyP_79 Start: 47859, Stop: 47665, Start Num: 32

Candidate Starts for PattyP_79:

(Start: 32 @47859 has 204 MA's), (36, 47730), (39, 47700),

Gene: Pelly_88 Start: 51616, Stop: 51395, Start Num: 28

Candidate Starts for Pelly_88:

(Start: 28 @51616 has 5 MA's), (31, 51607),

Gene: Pelly_82 Start: 50581, Stop: 50378, Start Num: 32

Candidate Starts for Pelly_82:

(Start: 32 @50581 has 204 MA's), (33, 50545), (39, 50419), (41, 50389),

Gene: Pepe_73 Start: 45753, Stop: 45562, Start Num: 32

Candidate Starts for Pepe_73:

(Start: 32 @45753 has 204 MA's), (36, 45624), (37, 45621), (39, 45594),

Gene: Perseus_85 Start: 50464, Stop: 50243, Start Num: 28

Candidate Starts for Perseus_85:

(Start: 28 @50464 has 5 MA's), (31, 50455),

Gene: Perseus_79 Start: 49298, Stop: 49095, Start Num: 32

Candidate Starts for Perseus_79:

(Start: 32 @49298 has 204 MA's), (33, 49262), (39, 49136), (40, 49121), (41, 49106),

Gene: Peterson_77 Start: 48292, Stop: 48089, Start Num: 32

Candidate Starts for Peterson_77:

(15, 48370), (17, 48364), (22, 48346), (Start: 32 @48292 has 204 MA's), (33, 48256), (35, 48202), (39, 48130), (41, 48100),

Gene: Petp2012_79 Start: 48474, Stop: 48271, Start Num: 32

Candidate Starts for Petp2012_79:

(Start: 32 @48474 has 204 MA's), (33, 48438), (39, 48312), (41, 48282),

Gene: Petruccio_80 Start: 46874, Stop: 46671, Start Num: 32

Candidate Starts for Petruccio_80:

(Start: 32 @46874 has 204 MA's), (33, 46838), (39, 46712), (41, 46682),

Gene: PherrisBueller_77 Start: 45412, Stop: 45209, Start Num: 32

Candidate Starts for PherrisBueller_77:

(20, 45469), (Start: 32 @45412 has 204 MA's), (33, 45376), (35, 45322), (39, 45250), (40, 45235), (41, 45220),

Gene: PhrostyMug_81 Start: 49511, Stop: 49308, Start Num: 32

Candidate Starts for PhrostyMug_81:

(Start: 32 @49511 has 204 MA's), (33, 49475), (39, 49349), (41, 49319),

Gene: PinkPlastic_74 Start: 46060, Stop: 45857, Start Num: 32

Candidate Starts for PinkPlastic_74:

(Start: 32 @46060 has 204 MA's), (33, 46024), (35, 45970), (39, 45898), (41, 45868),

Gene: Pinto_78 Start: 47923, Stop: 47720, Start Num: 32

Candidate Starts for Pinto_78:

(Start: 32 @47923 has 204 MA's), (33, 47887), (35, 47833), (39, 47761), (41, 47731),

Gene: Pippin_80 Start: 47741, Stop: 47541, Start Num: 32

Candidate Starts for Pippin_80:

(Start: 32 @47741 has 204 MA's), (33, 47705), (39, 47579), (41, 47549),

Gene: Pita2_81 Start: 47914, Stop: 47714, Start Num: 32

Candidate Starts for Pita2_81:

(Start: 32 @47914 has 204 MA's), (33, 47878), (39, 47752), (41, 47722),

Gene: ProMouse_78 Start: 47065, Stop: 46862, Start Num: 32

Candidate Starts for ProMouse_78:

(Start: 32 @47065 has 204 MA's), (33, 47029), (39, 46903), (41, 46873),

Gene: QTRlifeCrisis_78 Start: 47097, Stop: 46894, Start Num: 32

Candidate Starts for QTRlifeCrisis_78:

(Start: 32 @47097 has 204 MA's), (33, 47061), (35, 47007), (39, 46935), (40, 46920), (41, 46905),

Gene: Raid_77 Start: 46964, Stop: 46761, Start Num: 32

Candidate Starts for Raid_77:

(13, 47060), (18, 47033), (19, 47030), (Start: 32 @46964 has 204 MA's), (33, 46928), (39, 46802), (41, 46772),

Gene: Rajelicia_80 Start: 49746, Stop: 49543, Start Num: 32

Candidate Starts for Rajelicia_80:

(Start: 32 @49746 has 204 MA's), (33, 49710), (35, 49656), (39, 49584), (41, 49554),

Gene: Rhynn_75 Start: 47688, Stop: 47485, Start Num: 32

Candidate Starts for Rhynn_75:

(Start: 32 @47688 has 204 MA's), (33, 47652), (39, 47526), (41, 47496),

Gene: RidgeCB_74 Start: 46007, Stop: 45804, Start Num: 32

Candidate Starts for RidgeCB_74:

(Start: 32 @46007 has 204 MA's), (33, 45971), (34, 45947), (39, 45845), (41, 45815),

Gene: Ringer_79 Start: 48655, Stop: 48452, Start Num: 32

Candidate Starts for Ringer_79:

(Start: 32 @48655 has 204 MA's), (33, 48619), (35, 48565), (39, 48493), (41, 48463),

Gene: Rohr_82 Start: 49705, Stop: 49505, Start Num: 32

Candidate Starts for Rohr_82:

(Start: 32 @49705 has 204 MA's), (33, 49669), (35, 49615), (39, 49543), (41, 49513),

Gene: Rubeus_79 Start: 46029, Stop: 45826, Start Num: 32

Candidate Starts for Rubeus_79:

(Start: 32 @46029 has 204 MA's), (33, 45993), (39, 45867), (41, 45837),

Gene: Rufus_81 Start: 48718, Stop: 48515, Start Num: 32

Candidate Starts for Rufus_81:

(Start: 32 @48718 has 204 MA's), (33, 48682), (39, 48556), (41, 48526),

Gene: Ruotula_84 Start: 49577, Stop: 49377, Start Num: 32

Candidate Starts for Ruotula_84:

(Start: 32 @49577 has 204 MA's), (33, 49541), (39, 49415), (41, 49385),

Gene: Rutherferd_81 Start: 48483, Stop: 48280, Start Num: 32

Candidate Starts for Rutherferd_81:

(Start: 32 @48483 has 204 MA's), (33, 48447), (35, 48393), (39, 48321), (41, 48291),

Gene: STLscum_85 Start: 48512, Stop: 48309, Start Num: 32

Candidate Starts for STLscum_85:

(Start: 32 @48512 has 204 MA's), (33, 48476), (35, 48422), (39, 48350), (41, 48320),

Gene: Sagefire_75 Start: 47388, Stop: 47185, Start Num: 32

Candidate Starts for Sagefire_75:

(Start: 32 @47388 has 204 MA's), (33, 47352), (39, 47226), (41, 47196),

Gene: Sandaddy_77 Start: 47892, Stop: 47689, Start Num: 32

Candidate Starts for Sandaddy_77:

(Start: 32 @47892 has 204 MA's), (33, 47856), (39, 47730), (40, 47715), (41, 47700),

Gene: Sanya_73 Start: 48025, Stop: 47822, Start Num: 32

Candidate Starts for Sanya_73:

(Start: 32 @48025 has 204 MA's), (33, 47989), (35, 47935), (39, 47863), (40, 47848), (41, 47833),

Gene: SarFire_82 Start: 49362, Stop: 49159, Start Num: 32

Candidate Starts for SarFire_82:

(Start: 32 @49362 has 204 MA's), (33, 49326), (34, 49302), (39, 49200), (41, 49170),

Gene: Scowl_79 Start: 47685, Stop: 47482, Start Num: 32

Candidate Starts for Scowl_79:

(Start: 32 @47685 has 204 MA's), (33, 47649), (39, 47523), (41, 47493),

Gene: Seabiscuit_79 Start: 46785, Stop: 46582, Start Num: 32

Candidate Starts for Seabiscuit_79:

(Start: 32 @46785 has 204 MA's), (33, 46749), (39, 46623), (41, 46593),

Gene: Seanderson_78 Start: 49089, Stop: 48886, Start Num: 32

Candidate Starts for Seanderson_78:

(Start: 32 @49089 has 204 MA's), (33, 49053), (35, 48999), (39, 48927), (41, 48897),

Gene: ShortQueendom_71 Start: 45394, Stop: 45191, Start Num: 32

Candidate Starts for ShortQueendom_71:

(Start: 32 @45394 has 204 MA's), (33, 45358), (39, 45232), (40, 45217), (41, 45202),

Gene: Sibs6_80 Start: 45382, Stop: 45182, Start Num: 32

Candidate Starts for Sibs6_80:

(Start: 32 @45382 has 204 MA's), (33, 45346), (35, 45292), (39, 45220), (41, 45190),

Gene: SkiPole_88 Start: 49295, Stop: 49104, Start Num: 32

Candidate Starts for SkiPole_88:

(Start: 32 @49295 has 204 MA's), (36, 49166), (37, 49163), (39, 49136),

Gene: Slagathor_79 Start: 48540, Stop: 48346, Start Num: 32

Candidate Starts for Slagathor_79:

(Start: 32 @48540 has 204 MA's), (36, 48411), (39, 48381),

Gene: Smairt_84 Start: 50528, Stop: 50325, Start Num: 32

Candidate Starts for Smairt_84:

(Start: 32 @50528 has 204 MA's), (33, 50492), (39, 50366), (41, 50336),

Gene: Smeagol_82 Start: 50026, Stop: 49823, Start Num: 32

Candidate Starts for Smeagol_82:

(15, 50104), (17, 50098), (22, 50080), (Start: 32 @50026 has 204 MA's), (33, 49990), (39, 49864), (41, 49834),

Gene: Snazzy_80 Start: 48373, Stop: 48173, Start Num: 32

Candidate Starts for Snazzy_80:

(Start: 32 @48373 has 204 MA's), (33, 48337), (39, 48211),

Gene: Solon_74 Start: 45832, Stop: 45629, Start Num: 32

Candidate Starts for Solon_74:

(Start: 32 @45832 has 204 MA's), (33, 45796), (35, 45742), (39, 45670), (41, 45640),

Gene: Sorpresa_78 Start: 47898, Stop: 47695, Start Num: 32

Candidate Starts for Sorpresa_78:

(Start: 32 @47898 has 204 MA's), (33, 47862), (39, 47736), (40, 47721), (41, 47706),

Gene: SpikeBT_76 Start: 46826, Stop: 46623, Start Num: 32

Candidate Starts for SpikeBT_76:

(Start: 32 @46826 has 204 MA's), (33, 46790), (39, 46664), (41, 46634),

Gene: Squee_79 Start: 47270, Stop: 47067, Start Num: 32

Candidate Starts for Squee_79:

(Start: 32 @47270 has 204 MA's), (33, 47234), (39, 47108), (41, 47078),

Gene: StewieG_75 Start: 44976, Stop: 44773, Start Num: 32

Candidate Starts for StewieG_75:

(Start: 32 @44976 has 204 MA's), (33, 44940), (39, 44814), (40, 44799), (41, 44784),

Gene: StrongArm_74 Start: 47202, Stop: 46999, Start Num: 32

Candidate Starts for StrongArm_74:

(1, 47547), (2, 47511), (4, 47463), (5, 47433), (6, 47427), (11, 47346), (16, 47274), (23, 47250), (25, 47247), (Start: 32 @47202 has 204 MA's), (33, 47166), (35, 47112), (39, 47040), (41, 47010),

Gene: Sumter_76 Start: 48550, Stop: 48347, Start Num: 32

Candidate Starts for Sumter_76:
(Start: 32 @48550 has 204 MA's), (33, 48514), (35, 48460), (39, 48388), (41, 48358),

Gene: Sumter_82 Start: 49815, Stop: 49594, Start Num: 28
Candidate Starts for Sumter_82:
(Start: 28 @49815 has 5 MA's), (31, 49806),

Gene: Sunshine924_81 Start: 47337, Stop: 47134, Start Num: 32
Candidate Starts for Sunshine924_81:
(Start: 32 @47337 has 204 MA's), (33, 47301), (35, 47247), (39, 47175), (41, 47145),

Gene: SwissCheese_83 Start: 47889, Stop: 47686, Start Num: 32
Candidate Starts for SwissCheese_83:
(Start: 32 @47889 has 204 MA's), (33, 47853), (39, 47727), (41, 47697),

Gene: Switzer_77 Start: 47661, Stop: 47458, Start Num: 32
Candidate Starts for Switzer_77:
(Start: 32 @47661 has 204 MA's), (33, 47625), (39, 47499), (41, 47469),

Gene: Swole_81 Start: 47824, Stop: 47624, Start Num: 32
Candidate Starts for Swole_81:
(Start: 32 @47824 has 204 MA's), (33, 47788), (39, 47662), (41, 47632),

Gene: Target_78 Start: 46294, Stop: 46091, Start Num: 32
Candidate Starts for Target_78:
(24, 46336), (26, 46333), (Start: 32 @46294 has 204 MA's), (33, 46258), (35, 46204), (38, 46147), (39, 46132), (41, 46102),

Gene: Tasp14_78 Start: 47936, Stop: 47733, Start Num: 32
Candidate Starts for Tasp14_78:
(Start: 32 @47936 has 204 MA's), (33, 47900), (39, 47774), (40, 47759), (41, 47744),

Gene: Teodoridan_76 Start: 45601, Stop: 45398, Start Num: 32
Candidate Starts for Teodoridan_76:
(20, 45664), (Start: 32 @45601 has 204 MA's), (33, 45565), (35, 45511), (39, 45439), (40, 45424), (41, 45409),

Gene: TheloniousMonk_80 Start: 48986, Stop: 48783, Start Num: 32
Candidate Starts for TheloniousMonk_80:
(21, 49046), (Start: 32 @48986 has 204 MA's), (33, 48950), (39, 48824), (41, 48794),

Gene: Thor_82 Start: 48720, Stop: 48517, Start Num: 32
Candidate Starts for Thor_82:
(Start: 32 @48720 has 204 MA's), (33, 48684), (34, 48660), (39, 48558), (41, 48528),

Gene: Topgun_75 Start: 46114, Stop: 45914, Start Num: 32
Candidate Starts for Topgun_75:
(Start: 32 @46114 has 204 MA's), (33, 46078), (39, 45952), (40, 45937), (41, 45922),

Gene: Tote_76 Start: 45092, Stop: 44892, Start Num: 32
Candidate Starts for Tote_76:
(Start: 32 @45092 has 204 MA's), (33, 45056), (39, 44930), (41, 44900),

Gene: Traft412_78 Start: 48019, Stop: 47816, Start Num: 32
Candidate Starts for Traft412_78:
(Start: 32 @48019 has 204 MA's), (33, 47983), (39, 47857), (41, 47827),

Gene: Treddle_80 Start: 48749, Stop: 48546, Start Num: 32
Candidate Starts for Treddle_80:
(Start: 32 @48749 has 204 MA's), (33, 48713), (39, 48587), (40, 48572), (41, 48557),

Gene: Tripl3t_82 Start: 50461, Stop: 50258, Start Num: 32
Candidate Starts for Tripl3t_82:
(12, 50575), (Start: 32 @50461 has 204 MA's), (33, 50425), (35, 50371), (39, 50299), (41, 50269),

Gene: Trouble_79 Start: 48127, Stop: 47924, Start Num: 32
Candidate Starts for Trouble_79:
(Start: 32 @48127 has 204 MA's), (33, 48091), (35, 48037), (39, 47965), (41, 47935),

Gene: Trouble_85 Start: 49293, Stop: 49072, Start Num: 28
Candidate Starts for Trouble_85:
(Start: 28 @49293 has 5 MA's), (31, 49284),

Gene: Turj99_75 Start: 47479, Stop: 47276, Start Num: 32
Candidate Starts for Turj99_75:
(9, 47641), (Start: 32 @47479 has 204 MA's), (33, 47443), (39, 47317), (40, 47302), (41, 47287),

Gene: TwoPeat_78 Start: 47281, Stop: 47078, Start Num: 32
Candidate Starts for TwoPeat_78:
(Start: 32 @47281 has 204 MA's), (33, 47245), (39, 47119), (41, 47089),

Gene: U2_73 Start: 47866, Stop: 47666, Start Num: 32
Candidate Starts for U2_73:
(Start: 32 @47866 has 204 MA's), (33, 47830), (35, 47776), (39, 47704), (41, 47674),

Gene: Violet_74 Start: 48089, Stop: 47889, Start Num: 32
Candidate Starts for Violet_74:
(Start: 32 @48089 has 204 MA's), (39, 47927), (41, 47897),

Gene: Watermelon_82 Start: 48995, Stop: 48792, Start Num: 32
Candidate Starts for Watermelon_82:
(Start: 32 @48995 has 204 MA's), (33, 48959), (39, 48833), (41, 48803),

Gene: Wheeler_84 Start: 49724, Stop: 49521, Start Num: 32
Candidate Starts for Wheeler_84:
(Start: 32 @49724 has 204 MA's), (33, 49688), (39, 49562), (40, 49547), (41, 49532),

Gene: Wilkins_76 Start: 46044, Stop: 45844, Start Num: 32
Candidate Starts for Wilkins_76:
(Start: 32 @46044 has 204 MA's), (33, 46008), (39, 45882), (40, 45867), (41, 45852),

Gene: Zeeculate_75 Start: 47813, Stop: 47610, Start Num: 32
Candidate Starts for Zeeculate_75:
(Start: 32 @47813 has 204 MA's), (33, 47777), (39, 47651), (41, 47621),

Gene: Zephyr_80 Start: 47913, Stop: 47710, Start Num: 32

Candidate Starts for Zephyr_80:

(Start: 32 @47913 has 204 MA's), (33, 47877), (39, 47751), (41, 47721),

Gene: Zeuska_82 Start: 49482, Stop: 49282, Start Num: 32

Candidate Starts for Zeuska_82:

(Start: 32 @49482 has 204 MA's), (33, 49446), (39, 49320), (41, 49290),