Pham 283494

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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 283494 Report

This analysis was run 02/23/26 on database version 636.

Pham number 283494 has 205 members, 5 are drafts.

Phages represented in each track:
• Track 1 : Espresso_72, Makemake_81, Seanderson_77, BK1_72, Sumter_75, HarryOW_79, Manatee_76, BillKnuckles_71, Target_77, Solon_73, SwissCheese_82, Kugel_79, Gandalf20_77, Jorgensen_87, Gwendoluna_82, Bethlehem_81, BaconJack_80, A6_72, Tripl3t_81, Pari_83
• Track 2 : BeesKnees_78, Traft412_77, Bxb1_72, Rajelicia_79
• Track 3 : Alsfro_84, Dulcie_79, Ichabod_80, Lesedi_75, PinkPlastic_73, Briton15_80, Graduation_81, Blesser_72, Seabiscuit_78
• Track 4 : McGuire_77, Homines_66, Sorpresa_77, Wheeler_83, Hermia_73, Gyzlar_70
• Track 5 : Rhynn_74, Fenn_80, Naira_79
• Track 6 : Rubeus_78, Adahisdi_73, PherrisBueller_76, Dreamboat_77, Bircsak_78, Bruns_80, Ringer_78, Beatrix_74, JC27_81, Sagefire_74, Ajay_74, Treddle_79, Jasper_76, StrongArm_73, McSinger_76, Turj99_74, Blue_74, Euphoria_79, Marcell_70, Michley_78, Raid_76, Chanagan_74, Bexan_72, Magnito_77, Norz_73, Kykar_77, Trouble_78, Gompeii16_78, DrFeelGood_74, Pelly_81, PowerRanger_73, Carlyle_78
• Track 7 : Slagathor_78, PattyP_78, Museum_78, Molly_78, NEHalo_74, Arcanine_81
• Track 8 : Bigchungi_78, GageAP_80
• Track 9 : Kanely_81, Altman_82, Atkinbua_86, ConceptII_84, HanShotFirst_75
• Track 10 : Topgun_73, Maroc7_79, Phlippers_75, BPBiebs31_83, Wilkins_74, Bigfoot_72, U2_72, Fascinus_73, MrGordo_79, Big3_79, CactusRose_80
• Track 11 : Alvin_75, Hope4ever_79, Sunshine924_80
• Track 12 : Doom_70, PhrostyMug_80, Smairt_83, Mule_78, Zeeculate_74, PascalRango_76
• Track 13 : Ciao_74
• Track 14 : KyMonks1A_84, Niza_78, STLscum_84
• Track 15 : Nerujay_82, Lamina13_81, Jerm2_79, Dynamix_77, HermioneGrange_81, Watermelon_81, BigMau_80, Scowl_78, Marge_74
• Track 16 : JackSparrow_78
• Track 17 : PhineBark_74, Levia_72, GMonster_75, Abbyshoes_78, AFIS_75, Dussy_77, Perseus_78, BluSpix_76, Thor_81, SpikeBT_75, SarFire_81, Marsha_78, BarrowTuph_81, Kenmech_80, IgnatiusPatJac_78, StewieG_74, Aeneas_83, Ohno789_81
• Track 18 : BigPaolini_76, Magnar_74, Licorice_80, KBG_76
• Track 19 : Monet_81, Edtherson_76

- Track 20 : Tote_74, Sibs6_78, Burton_79, PSullivan_76, Moose_80, Swole_79, Lopton_77, Forsytheast_80, MPlant7149_78, JuliaChild_79, Pita2_79
- Track 21 : Zephyr_79, Pinto_77, Petp2012_78, Nhonho_74, Paphu_75
- Track 22 : Acme_82, Fajezeel_81, Greg_81
- Track 23 : EnzoK_79
- Track 24 : Corvo_80, MaryBeth_76, MetalQZJ_75
- Track 25 : Barriga_85, DD5_75
- Track 26 : Peterson_76
- Track 27 : TwoPeat_77
- Track 28 : Ashballer_79
- Track 29 : Squee_78
- Track 30 : Arlo_78, Fushigi_71, KSSJEB_75
- Track 31 : Francis47_79, PacerPaul_82
- Track 32 : Anglerfish_79
- Track 33 : GrecoEtereo_82
- Track 34 : Killigrew_74
- Track 35 : Crispicous1_72
- Track 36 : Ruotula_82
- Track 37 : Violet_72
- Track 38 : Marchy_69, Hami1_70
- Track 39 : Eyeball_77
- Track 40 : SkiPole_86
- Track 41 : Tasp14_77, QTRlifeCrisis_77, Abrogate_750
- Track 42 : Snazzy_78
- Track 43 : Mryolo_73
- Track 44 : Switzer_76
- Track 45 : Paraselene_75
- Track 46 : Parliament_79
- Track 47 : Petruchio_78
- Track 48 : Pippin_78
- Track 49 : DreamCatcher_81
- Track 50 : Rutherferd_80
- Track 51 : Rufus_80
- Track 52 : Rohr_80
- Track 53 : TheloniousMonk_79
- Track 54 : ILeeKay_75

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

The start number called the most often in the published annotations is 12, it was called in 200 of the 200 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- A6_72, AFIS_75, Abbyshoes_78, Abrogate_750, Acme_82, Adahisdi_73, Aeneas_83, Ajay_74, Alsfro_84, Altman_82, Alvin_75, Anglerfish_79, Arcanine_81, Arlo_78, Ashballer_79, Atkinbua_86, BK1_72, BPBiebs31_83, BaconJack_80, Barriga_85, BarrowTuph_81, Beatrix_74, BeesKnees_78, Bethlehem_81, Bexan_72, Big3_79, BigMau_80, BigPaolini_76, Bigchungi_78, Bigfoot_72, BillKnuckles_71, Bircsak_78, Blesser_72, BluSpix_76, Blue_74, Briton15_80, Bruns_80, Burton_79, Bxb1_72, CactusRose_80, Carlyle_78, Chanagan_74, Ciao_74, ConceptII_84,

Corvo_80, Crispicous1_72, DD5_75, Doom_70, DrFeelGood_74, DreamCatcher_81, Dreamboat_77, Dulcie_79, Dussy_77, Dynamix_77, Edtherson_76, EnzoK_79, Espresso_72, Euphoria_79, Eyeball_77, Fajezeel_81, Fascinus_73, Fenn_80, Forsytheast_80, Francis47_79, Fushigi_71, GMonster_75, GageAP_80, Gandalf20_77, Gompeii16_78, Graduation_81, GrecoEtereo_82, Greg_81, Gwendoluna_82, Gyzlar_70, Hami1_70, HanShotFirst_75, HarryOW_79, Hermia_73, HermioneGrange_81, Homines_66, Hope4ever_79, ILeeKay_75, Ichabod_80, IgnatiusPatJac_78, JC27_81, JackSparrow_78, Jasper_76, Jerm2_79, Jorgensen_87, JuliaChild_79, KBG_76, KSSJEB_75, Kanely_81, Kenmech_80, Killigrew_74, Kugel_79, KyMonks1A_84, Kykar_77, Lamina13_81, Lesedi_75, Levia_72, Licorice_80, Lopton_77, MPlant7149_78, Magnar_74, Magnito_77, Makemake_81, Manatee_76, Marcell_70, Marchy_69, Marge_74, Maroc7_79, Marsha_78, MaryBeth_76, McGuire_77, McSinger_76, MetalQZJ_75, Michley_78, Molly_78, Monet_81, Moose_80, MrGordo_79, Mryolo_73, Mule_78, Museum_78, NEHalo_74, Naira_79, Nerujay_82, Nhonho_74, Niza_78, Norz_73, Ohno789_81, PSullivan_76, PacerPaul_82, Paphu_75, Paraselene_75, Pari_83, Parliament_79, PascalRango_76, PattyP_78, Pelly_81, Perseus_78, Peterson_76, Petp2012_78, Petruchio_78, PherrisBueller_76, PhineBark_74, Phlippers_75, PhrostyMug_80, PinkPlastic_73, Pinto_77, Pippin_78, Pita2_79, PowerRanger_73, QTRlifeCrisis_77, Raid_76, Rajelicia_79, Rhynn_74, Ringer_78, Rohr_80, Rubeus_78, Rufus_80, Ruotula_82, Rutherferd_80, STLscum_84, Sagefire_74, SarFire_81, Scowl_78, Seabiscuit_78, Seanderson_77, Sibs6_78, SkiPole_86, Slagathor_78, Smairt_83, Snazzy_78, Solon_73, Sorpresa_77, SpikeBT_75, Squee_78, StewieG_74, StrongArm_73, Sumter_75, Sunshine924_80, SwissCheese_82, Switzer_76, Swole_79, Target_77, Tasp14_77, TheloniousMonk_79, Thor_81, Topgun_73, Tote_74, Traft412_77, Treddle_79, Tripl3t_81, Trouble_78, Turj99_74, TwoPeat_77, U2_72, Violet_72, Watermelon_81, Wheeler_83, Wilkins_74, Zeeculate_74, Zephyr_79,

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

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

Summary by start number:

Start 12:
• Found in 205 of 205 (100.0%) of genes in pham
• Manual Annotations of this start: 200 of 200
• Called 100.0% of time when present
• Phage (with cluster) where this start called: A6_72 (A1), AFIS_75 (A1), Abbyshoes_78 (A1), Abrogate_750 (A1), Acme_82 (A1), Adahisdi_73 (A1), Aeneas_83 (A1), Ajay_74 (A1), Alsfro_84 (A1), Altman_82 (A1), Alvin_75 (A1), Anglerfish_79 (A1), Arcanine_81 (A1), Arlo_78 (A1), Ashballer_79 (A1), Atkinbua_86 (A1), BK1_72 (A1), BPBiebs31_83 (A1), BaconJack_80 (A1), Barriga_85 (A1), BarrowTuph_81 (A1), Beatrix_74 (A1), BeesKnees_78 (A1), Bethlehem_81 (A1), Bexan_72 (A1), Big3_79 (A1), BigMau_80 (A1), BigPaolini_76 (A1), Bigchungi_78 (A1), Bigfoot_72 (A1), BillKnuckles_71 (A1), Bircsak_78 (A1), Blesser_72 (A1), BluSpix_76 (A1), Blue_74 (A1), Briton15_80 (A1), Bruns_80 (A1), Burton_79 (A1), Bxb1_72 (A1), CactusRose_80 (A1), Carlyle_78 (A1), Chanagan_74 (A1), Ciao_74 (A1), ConceptII_84 (A1), Corvo_80 (A1), Crispicous1_72 (A1), DD5_75 (A1), Doom_70 (A1), DrFeelGood_74 (A1), DreamCatcher_81 (A1), Dreamboat_77 (A1),

Dulcie_79 (A1), Dussy_77 (A1), Dynamix_77 (A1), Edtherson_76 (A1), EnzoK_79 (A1), Espresso_72 (A1), Euphoria_79 (A1), Eyeball_77 (A1), Fajezeel_81 (A1), Fascinus_73 (A1), Fenn_80 (A1), Forsytheast_80 (A1), Francis47_79 (A1), Fushigi_71 (A1), GMonster_75 (A1), GageAP_80 (A1), Gandalf20_77 (A1), Gompeii16_78 (A1), Graduation_81 (A1), GrecoEtereo_82 (A1), Greg_81 (A1), Gwendoluna_82 (A1), Gyzlar_70 (A1), Hami1_70 (A1), HanShotFirst_75 (A1), HarryOW_79 (A1), Hermia_73 (A1), HermioneGrange_81 (A1), Homines_66 (A1), Hope4ever_79 (A1), ILeeKay_75 (A1), Ichabod_80 (A1), IgnatiusPatJac_78 (A1), JC27_81 (A1), JackSparrow_78 (A1), Jasper_76 (A1), Jerm2_79 (A1), Jorgensen_87 (A1), JuliaChild_79 (A1), KBG_76 (A1), KSSJEB_75 (A1), Kanely_81 (A1), Kenmech_80 (A1), Killigrew_74 (A1), Kugel_79 (A1), KyMonks1A_84 (A1), Kykar_77 (A1), Lamina13_81 (A1), Lesedi_75 (A1), Levia_72 (A1), Licorice_80 (A1), Lopton_77 (A1), MPlant7149_78 (A1), Magnar_74 (A1), Magnito_77 (A1), Makemake_81 (A1), Manatee_76 (A1), Marcell_70 (A1), Marchy_69 (A1), Marge_74 (A1), Maroc7_79 (A1), Marsha_78 (A1), MaryBeth_76 (A1), McGuire_77 (A1), McSinger_76 (A1), MetalQZJ_75 (A1), Michley_78 (A1), Molly_78 (A1), Monet_81 (A1), Moose_80 (A1), MrGordo_79 (A1), Mryolo_73 (A1), Mule_78 (A1), Museum_78 (A1), NEHalo_74 (A1), Naira_79 (A1), Nerujay_82 (A1), Nhonho_74 (A1), Niza_78 (A1), Norz_73 (A1), Ohno789_81 (A1), PSullivan_76 (A1), PacerPaul_82 (A1), Paphu_75 (A1), Paraselene_75 (A1), Pari_83 (A1), Parliament_79 (A1), PascalRango_76 (A1), PattyP_78 (A1), Pelly_81 (A1), Perseus_78 (A1), Peterson_76 (A1), Petp2012_78 (A1), Petruchio_78 (A1), PherrisBueller_76 (A1), PhineBark_74 (A1), Phlippers_75 (A1), PhrostyMug_80 (A1), PinkPlastic_73 (A1), Pinto_77 (A1), Pippin_78 (A1), Pita2_79 (A1), PowerRanger_73 (A1), QTRlifeCrisis_77 (A1), Raid_76 (A1), Rajelicia_79 (A1), Rhynn_74 (A1), Ringer_78 (A1), Rohr_80 (A1), Rubeus_78 (A1), Rufus_80 (A1), Ruotula_82 (A1), Rutherferd_80 (A1), STLscum_84 (A1), Sagefire_74 (A1), SarFire_81 (A1), Scowl_78 (A1), Seabiscuit_78 (A1), Seanderson_77 (A1), Sibs6_78 (A1), SkiPole_86 (A1), Slagathor_78 (A1), Smairt_83 (A1), Snazzy_78 (A1), Solon_73 (A1), Sorpresa_77 (A1), SpikeBT_75 (A1), Squee_78 (A1), StewieG_74 (A1), StrongArm_73 (A1), Sumter_75 (A1), Sunshine924_80 (A1), SwissCheese_82 (A1), Switzer_76 (A1), Swole_79 (A1), Target_77 (A1), Tasp14_77 (A1), TheloniousMonk_79 (A1), Thor_81 (A1), Topgun_73 (A1), Tote_74 (A1), Traft412_77 (A1), Treddle_79 (A1), Tripl3t_81 (A1), Trouble_78 (A1), Turj99_74 (A1), TwoPeat_77 (A1), U2_72 (A1), Violet_72 (A1), Watermelon_81 (A1), Wheeler_83 (A1), Wilkins_74 (A1), Zeeculate_74 (A1), Zephyr_79 (A1),

Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:
•Start number 12 was manually annotated 200 times for cluster A1.

Gene Information:

Gene: A6_72 Start: 44932, Stop: 44663, Start Num: 12
Candidate Starts for A6_72:
(Start: 12 @44932 has 200 MA's), (16, 44830), (19, 44758), (23, 44677), (24, 44668),

Gene: AFIS_75 Start: 47953, Stop: 47684, Start Num: 12
Candidate Starts for AFIS_75:

(Start: 12 @47953 has 200 MA's), (16, 47851), (19, 47779), (23, 47698),

Gene: Abbyshoes_78 Start: 47206, Stop: 46937, Start Num: 12
Candidate Starts for Abbyshoes_78:
(Start: 12 @47206 has 200 MA's), (16, 47104), (19, 47032), (23, 46951),

Gene: Abrogate_750 Start: 47919, Stop: 47650, Start Num: 12
Candidate Starts for Abrogate_750:
(Start: 12 @47919 has 200 MA's), (16, 47817), (23, 47664), (24, 47655),

Gene: Acme_82 Start: 49460, Stop: 49191, Start Num: 12
Candidate Starts for Acme_82:
(Start: 12 @49460 has 200 MA's), (16, 49358), (19, 49286), (22, 49214), (23, 49205), (24, 49196),

Gene: Adahisdi_73 Start: 47104, Stop: 46835, Start Num: 12
Candidate Starts for Adahisdi_73:
(Start: 12 @47104 has 200 MA's), (16, 47002), (19, 46930), (23, 46849), (24, 46840),

Gene: Aeneas_83 Start: 49565, Stop: 49296, Start Num: 12
Candidate Starts for Aeneas_83:
(Start: 12 @49565 has 200 MA's), (16, 49463), (19, 49391), (23, 49310),

Gene: Ajay_74 Start: 46305, Stop: 46036, Start Num: 12
Candidate Starts for Ajay_74:
(Start: 12 @46305 has 200 MA's), (16, 46203), (19, 46131), (23, 46050), (24, 46041),

Gene: Alsfro_84 Start: 47668, Stop: 47399, Start Num: 12
Candidate Starts for Alsfro_84:
(Start: 12 @47668 has 200 MA's), (16, 47566), (19, 47494), (23, 47413),

Gene: Altman_82 Start: 48592, Stop: 48323, Start Num: 12
Candidate Starts for Altman_82:
(7, 48733), (Start: 12 @48592 has 200 MA's), (16, 48490), (23, 48337), (24, 48328),

Gene: Alvin_75 Start: 46525, Stop: 46256, Start Num: 12
Candidate Starts for Alvin_75:
(6, 46714), (Start: 12 @46525 has 200 MA's), (16, 46423), (19, 46351), (21, 46333), (23, 46270), (24, 46261),

Gene: Anglerfish_79 Start: 48433, Stop: 48167, Start Num: 12
Candidate Starts for Anglerfish_79:
(Start: 12 @48433 has 200 MA's), (16, 48334), (19, 48262), (21, 48244), (22, 48190), (23, 48181), (24, 48172),

Gene: Arcanine_81 Start: 49041, Stop: 48769, Start Num: 12
Candidate Starts for Arcanine_81:
(Start: 12 @49041 has 200 MA's), (16, 48936), (19, 48864), (23, 48783),

Gene: Arlo_78 Start: 47997, Stop: 47731, Start Num: 12
Candidate Starts for Arlo_78:
(Start: 12 @47997 has 200 MA's), (16, 47898), (19, 47826), (23, 47745), (24, 47736),

Gene: Ashballer_79 Start: 48035, Stop: 47766, Start Num: 12

Candidate Starts for Ashballer_79:
(7, 48176), (8, 48143), (Start: 12 @48035 has 200 MA's), (16, 47933), (19, 47861), (23, 47780), (24, 47771),

Gene: Atkinbua_86 Start: 49400, Stop: 49131, Start Num: 12
Candidate Starts for Atkinbua_86:
(7, 49541), (Start: 12 @49400 has 200 MA's), (16, 49298), (23, 49145), (24, 49136),

Gene: BK1_72 Start: 44932, Stop: 44663, Start Num: 12
Candidate Starts for BK1_72:
(Start: 12 @44932 has 200 MA's), (16, 44830), (19, 44758), (23, 44677), (24, 44668),

Gene: BPBiebs31_83 Start: 49112, Stop: 48843, Start Num: 12
Candidate Starts for BPBiebs31_83:
(Start: 12 @49112 has 200 MA's), (16, 49010), (19, 48938), (23, 48857), (24, 48848),

Gene: BaconJack_80 Start: 49267, Stop: 48998, Start Num: 12
Candidate Starts for BaconJack_80:
(Start: 12 @49267 has 200 MA's), (16, 49165), (19, 49093), (23, 49012), (24, 49003),

Gene: Barriga_85 Start: 48133, Stop: 47864, Start Num: 12
Candidate Starts for Barriga_85:
(Start: 12 @48133 has 200 MA's), (16, 48031), (18, 47998), (19, 47959), (21, 47941), (23, 47878), (24, 47869),

Gene: BarrowTuph_81 Start: 48313, Stop: 48044, Start Num: 12
Candidate Starts for BarrowTuph_81:
(Start: 12 @48313 has 200 MA's), (16, 48211), (19, 48139), (23, 48058),

Gene: Beatrix_74 Start: 47100, Stop: 46831, Start Num: 12
Candidate Starts for Beatrix_74:
(Start: 12 @47100 has 200 MA's), (16, 46998), (19, 46926), (23, 46845), (24, 46836),

Gene: BeesKnees_78 Start: 46203, Stop: 45934, Start Num: 12
Candidate Starts for BeesKnees_78:
(6, 46392), (Start: 12 @46203 has 200 MA's), (16, 46101), (19, 46029), (23, 45948), (24, 45939),

Gene: Bethlehem_81 Start: 50152, Stop: 49883, Start Num: 12
Candidate Starts for Bethlehem_81:
(Start: 12 @50152 has 200 MA's), (16, 50050), (19, 49978), (23, 49897), (24, 49888),

Gene: Bexan_72 Start: 46874, Stop: 46605, Start Num: 12
Candidate Starts for Bexan_72:
(Start: 12 @46874 has 200 MA's), (16, 46772), (19, 46700), (23, 46619), (24, 46610),

Gene: Big3_79 Start: 49102, Stop: 48833, Start Num: 12
Candidate Starts for Big3_79:
(Start: 12 @49102 has 200 MA's), (16, 49000), (19, 48928), (23, 48847), (24, 48838),

Gene: BigMau_80 Start: 48690, Stop: 48421, Start Num: 12
Candidate Starts for BigMau_80:
(Start: 12 @48690 has 200 MA's), (16, 48588), (19, 48516), (21, 48498), (23, 48435), (24, 48426),

Gene: BigPaolini_76 Start: 46474, Stop: 46205, Start Num: 12
Candidate Starts for BigPaolini_76:
(Start: 12 @46474 has 200 MA's), (16, 46372), (19, 46300), (23, 46219), (24, 46210),

Gene: Bigchungi_78 Start: 48515, Stop: 48246, Start Num: 12
Candidate Starts for Bigchungi_78:
(Start: 12 @48515 has 200 MA's), (16, 48413), (19, 48341), (21, 48323), (23, 48260),

Gene: Bigfoot_72 Start: 47170, Stop: 46901, Start Num: 12
Candidate Starts for Bigfoot_72:
(Start: 12 @47170 has 200 MA's), (16, 47068), (19, 46996), (23, 46915), (24, 46906),

Gene: BillKnuckles_71 Start: 47077, Stop: 46808, Start Num: 12
Candidate Starts for BillKnuckles_71:
(Start: 12 @47077 has 200 MA's), (16, 46975), (19, 46903), (23, 46822), (24, 46813),

Gene: Bircsak_78 Start: 49765, Stop: 49496, Start Num: 12
Candidate Starts for Bircsak_78:
(Start: 12 @49765 has 200 MA's), (16, 49663), (19, 49591), (23, 49510), (24, 49501),

Gene: Blesser_72 Start: 45803, Stop: 45534, Start Num: 12
Candidate Starts for Blesser_72:
(Start: 12 @45803 has 200 MA's), (16, 45701), (19, 45629), (23, 45548),

Gene: BluSpix_76 Start: 42801, Stop: 42532, Start Num: 12
Candidate Starts for BluSpix_76:
(Start: 12 @42801 has 200 MA's), (16, 42699), (19, 42627), (23, 42546),

Gene: Blue_74 Start: 46981, Stop: 46712, Start Num: 12
Candidate Starts for Blue_74:
(Start: 12 @46981 has 200 MA's), (16, 46879), (19, 46807), (23, 46726), (24, 46717),

Gene: Briton15_80 Start: 48343, Stop: 48074, Start Num: 12
Candidate Starts for Briton15_80:
(Start: 12 @48343 has 200 MA's), (16, 48241), (19, 48169), (23, 48088),

Gene: Bruns_80 Start: 47206, Stop: 46937, Start Num: 12
Candidate Starts for Bruns_80:
(Start: 12 @47206 has 200 MA's), (16, 47104), (19, 47032), (23, 46951), (24, 46942),

Gene: Burton_79 Start: 49544, Stop: 49275, Start Num: 12
Candidate Starts for Burton_79:
(Start: 12 @49544 has 200 MA's), (16, 49442), (19, 49370), (23, 49289),

Gene: Bxb1_72 Start: 45749, Stop: 45480, Start Num: 12
Candidate Starts for Bxb1_72:
(6, 45938), (Start: 12 @45749 has 200 MA's), (16, 45647), (19, 45575), (23, 45494), (24, 45485),

Gene: CactusRose_80 Start: 48187, Stop: 47918, Start Num: 12
Candidate Starts for CactusRose_80:
(Start: 12 @48187 has 200 MA's), (16, 48085), (19, 48013), (23, 47932), (24, 47923),

Gene: Carlyle_78 Start: 46661, Stop: 46392, Start Num: 12

Candidate Starts for Carlyle_78:
(Start: 12 @46661 has 200 MA's), (16, 46559), (19, 46487), (23, 46406), (24, 46397),

Gene: Chanagan_74 Start: 45622, Stop: 45353, Start Num: 12
Candidate Starts for Chanagan_74:
(Start: 12 @45622 has 200 MA's), (16, 45520), (19, 45448), (23, 45367), (24, 45358),

Gene: Ciao_74 Start: 45782, Stop: 45513, Start Num: 12
Candidate Starts for Ciao_74:
(7, 45923), (Start: 12 @45782 has 200 MA's), (16, 45680), (19, 45608), (21, 45590), (23, 45527), (24, 45518),

Gene: ConceptII_84 Start: 49693, Stop: 49424, Start Num: 12
Candidate Starts for ConceptII_84:
(7, 49834), (Start: 12 @49693 has 200 MA's), (16, 49591), (23, 49438), (24, 49429),

Gene: Corvo_80 Start: 49035, Stop: 48766, Start Num: 12
Candidate Starts for Corvo_80:
(7, 49176), (Start: 12 @49035 has 200 MA's), (16, 48933), (19, 48861), (23, 48780),

Gene: Crispicous1_72 Start: 45304, Stop: 45035, Start Num: 12
Candidate Starts for Crispicous1_72:
(Start: 12 @45304 has 200 MA's), (16, 45202), (23, 45049), (24, 45040),

Gene: DD5_75 Start: 47389, Stop: 47120, Start Num: 12
Candidate Starts for DD5_75:
(Start: 12 @47389 has 200 MA's), (16, 47287), (18, 47254), (19, 47215), (21, 47197), (23, 47134), (24, 47125),

Gene: Doom_70 Start: 46318, Stop: 46049, Start Num: 12
Candidate Starts for Doom_70:
(Start: 12 @46318 has 200 MA's), (16, 46216), (19, 46144), (23, 46063), (24, 46054),

Gene: DrFeelGood_74 Start: 45747, Stop: 45478, Start Num: 12
Candidate Starts for DrFeelGood_74:
(Start: 12 @45747 has 200 MA's), (16, 45645), (19, 45573), (23, 45492), (24, 45483),

Gene: DreamCatcher_81 Start: 48193, Stop: 47924, Start Num: 12
Candidate Starts for DreamCatcher_81:
(7, 48334), (Start: 12 @48193 has 200 MA's), (16, 48091), (19, 48019), (23, 47938),

Gene: Dreamboat_77 Start: 45675, Stop: 45406, Start Num: 12
Candidate Starts for Dreamboat_77:
(Start: 12 @45675 has 200 MA's), (16, 45573), (19, 45501), (23, 45420), (24, 45411),

Gene: Dulcie_79 Start: 49641, Stop: 49372, Start Num: 12
Candidate Starts for Dulcie_79:
(Start: 12 @49641 has 200 MA's), (16, 49539), (19, 49467), (23, 49386),

Gene: Dussy_77 Start: 47226, Stop: 46957, Start Num: 12
Candidate Starts for Dussy_77:
(Start: 12 @47226 has 200 MA's), (16, 47124), (19, 47052), (23, 46971),

Gene: Dynamix_77 Start: 46109, Stop: 45840, Start Num: 12
Candidate Starts for Dynamix_77:
(Start: 12 @46109 has 200 MA's), (16, 46007), (19, 45935), (21, 45917), (23, 45854), (24, 45845),

Gene: Edtherson_76 Start: 47285, Stop: 47016, Start Num: 12
Candidate Starts for Edtherson_76:
(6, 47474), (Start: 12 @47285 has 200 MA's), (16, 47183), (18, 47150), (19, 47111), (23, 47030), (24, 47021),

Gene: EnzoK_79 Start: 45567, Stop: 45298, Start Num: 12
Candidate Starts for EnzoK_79:
(2, 45870), (6, 45756), (Start: 12 @45567 has 200 MA's), (16, 45465), (19, 45393), (21, 45375), (23, 45312), (24, 45303),

Gene: Espresso_72 Start: 46330, Stop: 46061, Start Num: 12
Candidate Starts for Espresso_72:
(Start: 12 @46330 has 200 MA's), (16, 46228), (19, 46156), (23, 46075), (24, 46066),

Gene: Euphoria_79 Start: 48046, Stop: 47777, Start Num: 12
Candidate Starts for Euphoria_79:
(Start: 12 @48046 has 200 MA's), (16, 47944), (19, 47872), (23, 47791), (24, 47782),

Gene: Eyeball_77 Start: 47331, Stop: 47062, Start Num: 12
Candidate Starts for Eyeball_77:
(Start: 12 @47331 has 200 MA's), (13, 47292), (16, 47229), (19, 47157), (21, 47139), (23, 47076),

Gene: Fajezeel_81 Start: 48750, Stop: 48481, Start Num: 12
Candidate Starts for Fajezeel_81:
(Start: 12 @48750 has 200 MA's), (16, 48648), (19, 48576), (22, 48504), (23, 48495), (24, 48486),

Gene: Fascinus_73 Start: 47683, Stop: 47414, Start Num: 12
Candidate Starts for Fascinus_73:
(Start: 12 @47683 has 200 MA's), (16, 47581), (19, 47509), (23, 47428), (24, 47419),

Gene: Fenn_80 Start: 48214, Stop: 47945, Start Num: 12
Candidate Starts for Fenn_80:
(Start: 12 @48214 has 200 MA's), (16, 48112), (19, 48040), (22, 47968), (23, 47959), (24, 47950),

Gene: Forsytheast_80 Start: 48069, Stop: 47800, Start Num: 12
Candidate Starts for Forsytheast_80:
(Start: 12 @48069 has 200 MA's), (16, 47967), (19, 47895), (23, 47814),

Gene: Francis47_79 Start: 49766, Stop: 49497, Start Num: 12
Candidate Starts for Francis47_79:
(Start: 12 @49766 has 200 MA's), (16, 49664), (18, 49631), (19, 49592), (23, 49511), (24, 49502),

Gene: Fushigi_71 Start: 44212, Stop: 43946, Start Num: 12
Candidate Starts for Fushigi_71:
(Start: 12 @44212 has 200 MA's), (16, 44113), (19, 44041), (23, 43960), (24, 43951),

Gene: GMonster_75 Start: 47061, Stop: 46792, Start Num: 12
Candidate Starts for GMonster_75:
(Start: 12 @47061 has 200 MA's), (16, 46959), (19, 46887), (23, 46806),

Gene: GageAP_80 Start: 49119, Stop: 48850, Start Num: 12
Candidate Starts for GageAP_80:
(Start: 12 @49119 has 200 MA's), (16, 49017), (19, 48945), (21, 48927), (23, 48864),

Gene: Gandalf20_77 Start: 47615, Stop: 47346, Start Num: 12
Candidate Starts for Gandalf20_77:
(Start: 12 @47615 has 200 MA's), (16, 47513), (19, 47441), (23, 47360), (24, 47351),

Gene: Gompeii16_78 Start: 49766, Stop: 49497, Start Num: 12
Candidate Starts for Gompeii16_78:
(Start: 12 @49766 has 200 MA's), (16, 49664), (19, 49592), (23, 49511), (24, 49502),

Gene: Graduation_81 Start: 47896, Stop: 47627, Start Num: 12
Candidate Starts for Graduation_81:
(Start: 12 @47896 has 200 MA's), (16, 47794), (19, 47722), (23, 47641),

Gene: GrecoEtereo_82 Start: 49049, Stop: 48774, Start Num: 12
Candidate Starts for GrecoEtereo_82:
(9, 49151), (10, 49100), (11, 49091), (Start: 12 @49049 has 200 MA's), (14, 48986), (16, 48941), (19, 48869), (23, 48788), (24, 48779),

Gene: Greg_81 Start: 48750, Stop: 48481, Start Num: 12
Candidate Starts for Greg_81:
(Start: 12 @48750 has 200 MA's), (16, 48648), (19, 48576), (22, 48504), (23, 48495), (24, 48486),

Gene: Gwendoluna_82 Start: 48880, Stop: 48611, Start Num: 12
Candidate Starts for Gwendoluna_82:
(Start: 12 @48880 has 200 MA's), (16, 48778), (19, 48706), (23, 48625), (24, 48616),

Gene: Gyzlar_70 Start: 44067, Stop: 43798, Start Num: 12
Candidate Starts for Gyzlar_70:
(Start: 12 @44067 has 200 MA's), (16, 43965), (19, 43893), (21, 43875), (23, 43812), (24, 43803),

Gene: Hami1_70 Start: 42108, Stop: 41839, Start Num: 12
Candidate Starts for Hami1_70:
(Start: 12 @42108 has 200 MA's), (16, 42006), (20, 41925), (23, 41853), (24, 41844),

Gene: HanShotFirst_75 Start: 47673, Stop: 47404, Start Num: 12
Candidate Starts for HanShotFirst_75:
(7, 47814), (Start: 12 @47673 has 200 MA's), (16, 47571), (23, 47418), (24, 47409),

Gene: HarryOW_79 Start: 49091, Stop: 48822, Start Num: 12
Candidate Starts for HarryOW_79:
(Start: 12 @49091 has 200 MA's), (16, 48989), (19, 48917), (23, 48836), (24, 48827),

Gene: Hermia_73 Start: 45987, Stop: 45709, Start Num: 12
Candidate Starts for Hermia_73:
(Start: 12 @45987 has 200 MA's), (16, 45885), (19, 45813), (21, 45795), (23, 45732), (24, 45723),

Gene: HermioneGrange_81 Start: 49184, Stop: 48915, Start Num: 12
Candidate Starts for HermioneGrange_81:
(Start: 12 @49184 has 200 MA's), (16, 49082), (19, 49010), (21, 48992), (23, 48929), (24, 48920),

Gene: Homines_66 Start: 42317, Stop: 42039, Start Num: 12
Candidate Starts for Homines_66:
(Start: 12 @42317 has 200 MA's), (16, 42215), (19, 42143), (21, 42125), (23, 42062), (24, 42053),

Gene: Hope4ever_79 Start: 47698, Stop: 47429, Start Num: 12
Candidate Starts for Hope4ever_79:
(6, 47887), (Start: 12 @47698 has 200 MA's), (16, 47596), (19, 47524), (21, 47506), (23, 47443), (24, 47434),

Gene: ILeeKay_75 Start: 45709, Stop: 45440, Start Num: 12
Candidate Starts for ILeeKay_75:
(Start: 12 @45709 has 200 MA's), (16, 45607), (19, 45535), (22, 45463), (23, 45454),

Gene: Ichabod_80 Start: 47956, Stop: 47687, Start Num: 12
Candidate Starts for Ichabod_80:
(Start: 12 @47956 has 200 MA's), (16, 47854), (19, 47782), (23, 47701),

Gene: IgnatiusPatJac_78 Start: 46746, Stop: 46477, Start Num: 12
Candidate Starts for IgnatiusPatJac_78:
(Start: 12 @46746 has 200 MA's), (16, 46644), (19, 46572), (23, 46491),

Gene: JC27_81 Start: 47825, Stop: 47556, Start Num: 12
Candidate Starts for JC27_81:
(Start: 12 @47825 has 200 MA's), (16, 47723), (19, 47651), (23, 47570), (24, 47561),

Gene: JackSparrow_78 Start: 46809, Stop: 46540, Start Num: 12
Candidate Starts for JackSparrow_78:
(5, 47031), (6, 46998), (Start: 12 @46809 has 200 MA's), (16, 46707), (19, 46635), (23, 46554), (24, 46545),

Gene: Jasper_76 Start: 45561, Stop: 45292, Start Num: 12
Candidate Starts for Jasper_76:
(Start: 12 @45561 has 200 MA's), (16, 45459), (19, 45387), (23, 45306), (24, 45297),

Gene: Jerm2_79 Start: 49254, Stop: 48985, Start Num: 12
Candidate Starts for Jerm2_79:
(Start: 12 @49254 has 200 MA's), (16, 49152), (19, 49080), (21, 49062), (23, 48999), (24, 48990),

Gene: Jorgensen_87 Start: 49298, Stop: 49029, Start Num: 12
Candidate Starts for Jorgensen_87:
(Start: 12 @49298 has 200 MA's), (16, 49196), (19, 49124), (23, 49043), (24, 49034),

Gene: JuliaChild_79 Start: 47974, Stop: 47705, Start Num: 12
Candidate Starts for JuliaChild_79:
(Start: 12 @47974 has 200 MA's), (16, 47872), (19, 47800), (23, 47719),

Gene: KBG_76 Start: 48629, Stop: 48360, Start Num: 12
Candidate Starts for KBG_76:
(Start: 12 @48629 has 200 MA's), (16, 48527), (19, 48455), (23, 48374), (24, 48365),

Gene: KSSJEB_75 Start: 46188, Stop: 45922, Start Num: 12
Candidate Starts for KSSJEB_75:

(Start: 12 @46188 has 200 MA's), (16, 46089), (19, 46017), (23, 45936), (24, 45927),

Gene: Kanely_81 Start: 48369, Stop: 48100, Start Num: 12
Candidate Starts for Kanely_81:
(7, 48510), (Start: 12 @48369 has 200 MA's), (16, 48267), (23, 48114), (24, 48105),

Gene: Kenmech_80 Start: 48352, Stop: 48083, Start Num: 12
Candidate Starts for Kenmech_80:
(Start: 12 @48352 has 200 MA's), (16, 48250), (19, 48178), (23, 48097),

Gene: Killigrew_74 Start: 46400, Stop: 46131, Start Num: 12
Candidate Starts for Killigrew_74:
(Start: 12 @46400 has 200 MA's), (16, 46298), (23, 46145), (24, 46136),

Gene: Kugel_79 Start: 48042, Stop: 47773, Start Num: 12
Candidate Starts for Kugel_79:
(Start: 12 @48042 has 200 MA's), (16, 47940), (19, 47868), (23, 47787), (24, 47778),

Gene: KyMonks1A_84 Start: 48683, Stop: 48414, Start Num: 12
Candidate Starts for KyMonks1A_84:
(Start: 12 @48683 has 200 MA's), (16, 48581), (19, 48509), (23, 48428),

Gene: Kykar_77 Start: 47081, Stop: 46812, Start Num: 12
Candidate Starts for Kykar_77:
(Start: 12 @47081 has 200 MA's), (16, 46979), (19, 46907), (23, 46826), (24, 46817),

Gene: Lamina13_81 Start: 49534, Stop: 49265, Start Num: 12
Candidate Starts for Lamina13_81:
(Start: 12 @49534 has 200 MA's), (16, 49432), (19, 49360), (21, 49342), (23, 49279), (24, 49270),

Gene: Lesedi_75 Start: 45840, Stop: 45571, Start Num: 12
Candidate Starts for Lesedi_75:
(Start: 12 @45840 has 200 MA's), (16, 45738), (19, 45666), (23, 45585),

Gene: Levia_72 Start: 45378, Stop: 45109, Start Num: 12
Candidate Starts for Levia_72:
(Start: 12 @45378 has 200 MA's), (16, 45276), (19, 45204), (23, 45123),

Gene: Licorice_80 Start: 49670, Stop: 49401, Start Num: 12
Candidate Starts for Licorice_80:
(Start: 12 @49670 has 200 MA's), (16, 49568), (19, 49496), (23, 49415), (24, 49406),

Gene: Lopton_77 Start: 48685, Stop: 48416, Start Num: 12
Candidate Starts for Lopton_77:
(Start: 12 @48685 has 200 MA's), (16, 48583), (19, 48511), (23, 48430),

Gene: MPlant7149_78 Start: 47239, Stop: 46970, Start Num: 12
Candidate Starts for MPlant7149_78:
(Start: 12 @47239 has 200 MA's), (16, 47137), (19, 47065), (23, 46984),

Gene: Magnar_74 Start: 46550, Stop: 46281, Start Num: 12
Candidate Starts for Magnar_74:
(Start: 12 @46550 has 200 MA's), (16, 46448), (19, 46376), (23, 46295), (24, 46286),

Gene: Magnito_77 Start: 46668, Stop: 46399, Start Num: 12
Candidate Starts for Magnito_77:
(Start: 12 @46668 has 200 MA's), (16, 46566), (19, 46494), (23, 46413), (24, 46404),

Gene: Makemake_81 Start: 48290, Stop: 48021, Start Num: 12
Candidate Starts for Makemake_81:
(Start: 12 @48290 has 200 MA's), (16, 48188), (19, 48116), (23, 48035), (24, 48026),

Gene: Manatee_76 Start: 46220, Stop: 45951, Start Num: 12
Candidate Starts for Manatee_76:
(Start: 12 @46220 has 200 MA's), (16, 46118), (19, 46046), (23, 45965), (24, 45956),

Gene: Marcell_70 Start: 44815, Stop: 44546, Start Num: 12
Candidate Starts for Marcell_70:
(Start: 12 @44815 has 200 MA's), (16, 44713), (19, 44641), (23, 44560), (24, 44551),

Gene: Marchy_69 Start: 43619, Stop: 43350, Start Num: 12
Candidate Starts for Marchy_69:
(Start: 12 @43619 has 200 MA's), (16, 43517), (20, 43436), (23, 43364), (24, 43355),

Gene: Marge_74 Start: 46312, Stop: 46043, Start Num: 12
Candidate Starts for Marge_74:
(Start: 12 @46312 has 200 MA's), (16, 46210), (19, 46138), (21, 46120), (23, 46057), (24, 46048),

Gene: Maroc7_79 Start: 49111, Stop: 48842, Start Num: 12
Candidate Starts for Maroc7_79:
(Start: 12 @49111 has 200 MA's), (16, 49009), (19, 48937), (23, 48856), (24, 48847),

Gene: Marsha_78 Start: 49115, Stop: 48846, Start Num: 12
Candidate Starts for Marsha_78:
(Start: 12 @49115 has 200 MA's), (16, 49013), (19, 48941), (23, 48860),

Gene: MaryBeth_76 Start: 47510, Stop: 47241, Start Num: 12
Candidate Starts for MaryBeth_76:
(7, 47651), (Start: 12 @47510 has 200 MA's), (16, 47408), (19, 47336), (23, 47255),

Gene: McGuire_77 Start: 46351, Stop: 46082, Start Num: 12
Candidate Starts for McGuire_77:
(Start: 12 @46351 has 200 MA's), (16, 46249), (19, 46177), (21, 46159), (23, 46096), (24, 46087),

Gene: McSinger_76 Start: 47481, Stop: 47212, Start Num: 12
Candidate Starts for McSinger_76:
(Start: 12 @47481 has 200 MA's), (16, 47379), (19, 47307), (23, 47226), (24, 47217),

Gene: MetalQZJ_75 Start: 47510, Stop: 47241, Start Num: 12
Candidate Starts for MetalQZJ_75:
(7, 47651), (Start: 12 @47510 has 200 MA's), (16, 47408), (19, 47336), (23, 47255),

Gene: Michley_78 Start: 47079, Stop: 46810, Start Num: 12
Candidate Starts for Michley_78:
(Start: 12 @47079 has 200 MA's), (16, 46977), (19, 46905), (23, 46824), (24, 46815),

Gene: Molly_78 Start: 46899, Stop: 46627, Start Num: 12
Candidate Starts for Molly_78:
(Start: 12 @46899 has 200 MA's), (16, 46794), (19, 46722), (23, 46641),

Gene: Monet_81 Start: 48761, Stop: 48492, Start Num: 12
Candidate Starts for Monet_81:
(6, 48950), (Start: 12 @48761 has 200 MA's), (16, 48659), (18, 48626), (19, 48587), (23, 48506), (24, 48497),

Gene: Moose_80 Start: 48069, Stop: 47800, Start Num: 12
Candidate Starts for Moose_80:
(Start: 12 @48069 has 200 MA's), (16, 47967), (19, 47895), (23, 47814),

Gene: MrGordo_79 Start: 46848, Stop: 46579, Start Num: 12
Candidate Starts for MrGordo_79:
(Start: 12 @46848 has 200 MA's), (16, 46746), (19, 46674), (23, 46593), (24, 46584),

Gene: Mryolo_73 Start: 45854, Stop: 45585, Start Num: 12
Candidate Starts for Mryolo_73:
(Start: 12 @45854 has 200 MA's), (16, 45752), (19, 45680), (21, 45662), (23, 45599),

Gene: Mule_78 Start: 47141, Stop: 46872, Start Num: 12
Candidate Starts for Mule_78:
(Start: 12 @47141 has 200 MA's), (16, 47039), (19, 46967), (23, 46886), (24, 46877),

Gene: Museum_78 Start: 47962, Stop: 47690, Start Num: 12
Candidate Starts for Museum_78:
(Start: 12 @47962 has 200 MA's), (16, 47857), (19, 47785), (23, 47704),

Gene: NEHalo_74 Start: 46772, Stop: 46500, Start Num: 12
Candidate Starts for NEHalo_74:
(Start: 12 @46772 has 200 MA's), (16, 46667), (19, 46595), (23, 46514),

Gene: Naira_79 Start: 48270, Stop: 48001, Start Num: 12
Candidate Starts for Naira_79:
(Start: 12 @48270 has 200 MA's), (16, 48168), (19, 48096), (22, 48024), (23, 48015), (24, 48006),

Gene: Nerujay_82 Start: 49338, Stop: 49069, Start Num: 12
Candidate Starts for Nerujay_82:
(Start: 12 @49338 has 200 MA's), (16, 49236), (19, 49164), (21, 49146), (23, 49083), (24, 49074),

Gene: Nhonho_74 Start: 47135, Stop: 46866, Start Num: 12
Candidate Starts for Nhonho_74:
(Start: 12 @47135 has 200 MA's), (16, 47033), (19, 46961), (23, 46880), (24, 46871),

Gene: Niza_78 Start: 48242, Stop: 47973, Start Num: 12
Candidate Starts for Niza_78:
(Start: 12 @48242 has 200 MA's), (16, 48140), (19, 48068), (23, 47987),

Gene: Norz_73 Start: 48260, Stop: 47991, Start Num: 12
Candidate Starts for Norz_73:
(Start: 12 @48260 has 200 MA's), (16, 48158), (19, 48086), (23, 48005), (24, 47996),

Gene: Ohno789_81 Start: 48992, Stop: 48723, Start Num: 12
Candidate Starts for Ohno789_81:
(Start: 12 @48992 has 200 MA's), (16, 48890), (19, 48818), (23, 48737),

Gene: PSullivan_76 Start: 46042, Stop: 45773, Start Num: 12
Candidate Starts for PSullivan_76:
(Start: 12 @46042 has 200 MA's), (16, 45940), (19, 45868), (23, 45787),

Gene: PacerPaul_82 Start: 49133, Stop: 48864, Start Num: 12
Candidate Starts for PacerPaul_82:
(Start: 12 @49133 has 200 MA's), (16, 49031), (18, 48998), (19, 48959), (23, 48878), (24, 48869),

Gene: Paphu_75 Start: 46857, Stop: 46588, Start Num: 12
Candidate Starts for Paphu_75:
(Start: 12 @46857 has 200 MA's), (16, 46755), (19, 46683), (23, 46602), (24, 46593),

Gene: Paraselene_75 Start: 46941, Stop: 46675, Start Num: 12
Candidate Starts for Paraselene_75:
(Start: 12 @46941 has 200 MA's), (16, 46842), (19, 46770), (21, 46752), (23, 46689), (24, 46680),

Gene: Pari_83 Start: 47836, Stop: 47567, Start Num: 12
Candidate Starts for Pari_83:
(Start: 12 @47836 has 200 MA's), (16, 47734), (19, 47662), (23, 47581), (24, 47572),

Gene: Parliament_79 Start: 50017, Stop: 49748, Start Num: 12
Candidate Starts for Parliament_79:
(Start: 12 @50017 has 200 MA's), (16, 49915), (23, 49762), (24, 49753),

Gene: PascalRango_76 Start: 47111, Stop: 46842, Start Num: 12
Candidate Starts for PascalRango_76:
(Start: 12 @47111 has 200 MA's), (16, 47009), (19, 46937), (23, 46856), (24, 46847),

Gene: PattyP_78 Start: 47668, Stop: 47396, Start Num: 12
Candidate Starts for PattyP_78:
(Start: 12 @47668 has 200 MA's), (16, 47563), (19, 47491), (23, 47410),

Gene: Pelly_81 Start: 50381, Stop: 50112, Start Num: 12
Candidate Starts for Pelly_81:
(Start: 12 @50381 has 200 MA's), (16, 50279), (19, 50207), (23, 50126), (24, 50117),

Gene: Perseus_78 Start: 49098, Stop: 48829, Start Num: 12
Candidate Starts for Perseus_78:
(Start: 12 @49098 has 200 MA's), (16, 48996), (19, 48924), (23, 48843),

Gene: Peterson_76 Start: 48092, Stop: 47823, Start Num: 12
Candidate Starts for Peterson_76:
(1, 48413), (3, 48341), (4, 48335), (6, 48281), (Start: 12 @48092 has 200 MA's), (16, 47990), (19, 47918), (23, 47837), (24, 47828),

Gene: Petp2012_78 Start: 48274, Stop: 48005, Start Num: 12
Candidate Starts for Petp2012_78:
(Start: 12 @48274 has 200 MA's), (16, 48172), (19, 48100), (23, 48019), (24, 48010),

Gene: Petruchio_78 Start: 46510, Stop: 46244, Start Num: 12
Candidate Starts for Petruchio_78:
(Start: 12 @46510 has 200 MA's), (16, 46411), (19, 46339), (23, 46258), (24, 46249),

Gene: PherrisBueller_76 Start: 45212, Stop: 44943, Start Num: 12
Candidate Starts for PherrisBueller_76:
(Start: 12 @45212 has 200 MA's), (16, 45110), (19, 45038), (23, 44957), (24, 44948),

Gene: PhineBark_74 Start: 46396, Stop: 46127, Start Num: 12
Candidate Starts for PhineBark_74:
(Start: 12 @46396 has 200 MA's), (16, 46294), (19, 46222), (23, 46141),

Gene: Phlippers_75 Start: 48575, Stop: 48306, Start Num: 12
Candidate Starts for Phlippers_75:
(Start: 12 @48575 has 200 MA's), (16, 48473), (19, 48401), (23, 48320), (24, 48311),

Gene: PhrostyMug_80 Start: 49311, Stop: 49042, Start Num: 12
Candidate Starts for PhrostyMug_80:
(Start: 12 @49311 has 200 MA's), (16, 49209), (19, 49137), (23, 49056), (24, 49047),

Gene: PinkPlastic_73 Start: 45860, Stop: 45591, Start Num: 12
Candidate Starts for PinkPlastic_73:
(Start: 12 @45860 has 200 MA's), (16, 45758), (19, 45686), (23, 45605),

Gene: Pinto_77 Start: 47723, Stop: 47454, Start Num: 12
Candidate Starts for Pinto_77:
(Start: 12 @47723 has 200 MA's), (16, 47621), (19, 47549), (23, 47468), (24, 47459),

Gene: Pippin_78 Start: 47365, Stop: 47096, Start Num: 12
Candidate Starts for Pippin_78:
(7, 47506), (Start: 12 @47365 has 200 MA's), (13, 47326), (16, 47263), (19, 47191), (21, 47173), (23, 47110), (24, 47101),

Gene: Pita2_79 Start: 47538, Stop: 47269, Start Num: 12
Candidate Starts for Pita2_79:
(Start: 12 @47538 has 200 MA's), (16, 47436), (19, 47364), (23, 47283),

Gene: PowerRanger_73 Start: 47298, Stop: 47029, Start Num: 12
Candidate Starts for PowerRanger_73:
(Start: 12 @47298 has 200 MA's), (16, 47196), (19, 47124), (23, 47043), (24, 47034),

Gene: QTRlifeCrisis_77 Start: 46897, Stop: 46619, Start Num: 12
Candidate Starts for QTRlifeCrisis_77:
(Start: 12 @46897 has 200 MA's), (16, 46795), (23, 46642), (24, 46633),

Gene: Raid_76 Start: 46764, Stop: 46495, Start Num: 12
Candidate Starts for Raid_76:
(Start: 12 @46764 has 200 MA's), (16, 46662), (19, 46590), (23, 46509), (24, 46500),

Gene: Rajelicia_79 Start: 49546, Stop: 49277, Start Num: 12
Candidate Starts for Rajelicia_79:
(6, 49735), (Start: 12 @49546 has 200 MA's), (16, 49444), (19, 49372), (23, 49291), (24, 49282),

Gene: Rhynn_74 Start: 47488, Stop: 47219, Start Num: 12
Candidate Starts for Rhynn_74:
(Start: 12 @47488 has 200 MA's), (16, 47386), (19, 47314), (22, 47242), (23, 47233), (24, 47224),

Gene: Ringer_78 Start: 48455, Stop: 48186, Start Num: 12
Candidate Starts for Ringer_78:
(Start: 12 @48455 has 200 MA's), (16, 48353), (19, 48281), (23, 48200), (24, 48191),

Gene: Rohr_80 Start: 49329, Stop: 49060, Start Num: 12
Candidate Starts for Rohr_80:
(Start: 12 @49329 has 200 MA's), (16, 49227), (19, 49155), (21, 49137), (23, 49074), (24, 49065),

Gene: Rubeus_78 Start: 45829, Stop: 45560, Start Num: 12
Candidate Starts for Rubeus_78:
(Start: 12 @45829 has 200 MA's), (16, 45727), (19, 45655), (23, 45574), (24, 45565),

Gene: Rufus_80 Start: 48518, Stop: 48249, Start Num: 12
Candidate Starts for Rufus_80:
(Start: 12 @48518 has 200 MA's), (16, 48416), (19, 48344), (21, 48326), (23, 48263), (24, 48254),

Gene: Ruotula_82 Start: 49201, Stop: 48932, Start Num: 12
Candidate Starts for Ruotula_82:
(7, 49342), (Start: 12 @49201 has 200 MA's), (16, 49099), (19, 49027), (23, 48946), (24, 48937),

Gene: Rutherferd_80 Start: 48283, Stop: 48014, Start Num: 12
Candidate Starts for Rutherferd_80:
(6, 48472), (Start: 12 @48283 has 200 MA's), (15, 48223), (16, 48181), (19, 48109), (23, 48028), (24, 48019),

Gene: STLscum_84 Start: 48312, Stop: 48043, Start Num: 12
Candidate Starts for STLscum_84:
(Start: 12 @48312 has 200 MA's), (16, 48210), (19, 48138), (23, 48057),

Gene: Sagefire_74 Start: 47188, Stop: 46919, Start Num: 12
Candidate Starts for Sagefire_74:
(Start: 12 @47188 has 200 MA's), (16, 47086), (19, 47014), (23, 46933), (24, 46924),

Gene: SarFire_81 Start: 49162, Stop: 48893, Start Num: 12
Candidate Starts for SarFire_81:
(Start: 12 @49162 has 200 MA's), (16, 49060), (19, 48988), (23, 48907),

Gene: Scowl_78 Start: 47485, Stop: 47216, Start Num: 12
Candidate Starts for Scowl_78:
(Start: 12 @47485 has 200 MA's), (16, 47383), (19, 47311), (21, 47293), (23, 47230), (24, 47221),

Gene: Seabiscuit_78 Start: 46585, Stop: 46316, Start Num: 12
Candidate Starts for Seabiscuit_78:
(Start: 12 @46585 has 200 MA's), (16, 46483), (19, 46411), (23, 46330),

Gene: Seanderson_77 Start: 48889, Stop: 48620, Start Num: 12
Candidate Starts for Seanderson_77:
(Start: 12 @48889 has 200 MA's), (16, 48787), (19, 48715), (23, 48634), (24, 48625),

Gene: Sibs6_78 Start: 45006, Stop: 44737, Start Num: 12
Candidate Starts for Sibs6_78:
(Start: 12 @45006 has 200 MA's), (16, 44904), (19, 44832), (23, 44751),

Gene: SkiPole_86 Start: 48493, Stop: 48221, Start Num: 12
Candidate Starts for SkiPole_86:
(9, 48595), (11, 48535), (Start: 12 @48493 has 200 MA's), (14, 48433), (16, 48388), (19, 48316), (23, 48235),

Gene: Slagathor_78 Start: 48349, Stop: 48077, Start Num: 12
Candidate Starts for Slagathor_78:
(Start: 12 @48349 has 200 MA's), (16, 48244), (19, 48172), (23, 48091),

Gene: Smairt_83 Start: 50328, Stop: 50059, Start Num: 12
Candidate Starts for Smairt_83:
(Start: 12 @50328 has 200 MA's), (16, 50226), (19, 50154), (23, 50073), (24, 50064),

Gene: Snazzy_78 Start: 47997, Stop: 47728, Start Num: 12
Candidate Starts for Snazzy_78:
(Start: 12 @47997 has 200 MA's), (16, 47895), (19, 47823), (23, 47742),

Gene: Solon_73 Start: 45632, Stop: 45363, Start Num: 12
Candidate Starts for Solon_73:
(Start: 12 @45632 has 200 MA's), (16, 45530), (19, 45458), (23, 45377), (24, 45368),

Gene: Sorpresa_77 Start: 47698, Stop: 47429, Start Num: 12
Candidate Starts for Sorpresa_77:
(Start: 12 @47698 has 200 MA's), (16, 47596), (19, 47524), (21, 47506), (23, 47443), (24, 47434),

Gene: SpikeBT_75 Start: 46626, Stop: 46357, Start Num: 12
Candidate Starts for SpikeBT_75:
(Start: 12 @46626 has 200 MA's), (16, 46524), (19, 46452), (23, 46371),

Gene: Squee_78 Start: 47070, Stop: 46801, Start Num: 12
Candidate Starts for Squee_78:
(6, 47259), (Start: 12 @47070 has 200 MA's), (16, 46968), (19, 46896), (23, 46815),

Gene: StewieG_74 Start: 44776, Stop: 44507, Start Num: 12
Candidate Starts for StewieG_74:
(Start: 12 @44776 has 200 MA's), (16, 44674), (19, 44602), (23, 44521),

Gene: StrongArm_73 Start: 47002, Stop: 46733, Start Num: 12
Candidate Starts for StrongArm_73:
(Start: 12 @47002 has 200 MA's), (16, 46900), (19, 46828), (23, 46747), (24, 46738),

Gene: Sumter_75 Start: 48350, Stop: 48081, Start Num: 12
Candidate Starts for Sumter_75:
(Start: 12 @48350 has 200 MA's), (16, 48248), (19, 48176), (23, 48095), (24, 48086),

Gene: Sunshine924_80 Start: 47137, Stop: 46868, Start Num: 12
Candidate Starts for Sunshine924_80:
(6, 47326), (Start: 12 @47137 has 200 MA's), (16, 47035), (19, 46963), (21, 46945), (23, 46882), (24, 46873),

Gene: SwissCheese_82 Start: 47689, Stop: 47420, Start Num: 12
Candidate Starts for SwissCheese_82:
(Start: 12 @47689 has 200 MA's), (16, 47587), (19, 47515), (23, 47434), (24, 47425),

Gene: Switzer_76 Start: 47461, Stop: 47192, Start Num: 12
Candidate Starts for Switzer_76:
(6, 47650), (Start: 12 @47461 has 200 MA's), (16, 47359), (22, 47215), (23, 47206), (24, 47197),

Gene: Swole_79 Start: 47448, Stop: 47179, Start Num: 12
Candidate Starts for Swole_79:
(Start: 12 @47448 has 200 MA's), (16, 47346), (19, 47274), (23, 47193),

Gene: Target_77 Start: 46094, Stop: 45825, Start Num: 12
Candidate Starts for Target_77:
(Start: 12 @46094 has 200 MA's), (16, 45992), (19, 45920), (23, 45839), (24, 45830),

Gene: Tasp14_77 Start: 47736, Stop: 47467, Start Num: 12
Candidate Starts for Tasp14_77:
(Start: 12 @47736 has 200 MA's), (16, 47634), (23, 47481), (24, 47472),

Gene: TheloniousMonk_79 Start: 48786, Stop: 48517, Start Num: 12
Candidate Starts for TheloniousMonk_79:
(Start: 12 @48786 has 200 MA's), (16, 48684), (19, 48612), (21, 48594), (22, 48540), (23, 48531), (24, 48522),

Gene: Thor_81 Start: 48520, Stop: 48251, Start Num: 12
Candidate Starts for Thor_81:
(Start: 12 @48520 has 200 MA's), (16, 48418), (19, 48346), (23, 48265),

Gene: Topgun_73 Start: 45738, Stop: 45469, Start Num: 12
Candidate Starts for Topgun_73:
(Start: 12 @45738 has 200 MA's), (16, 45636), (19, 45564), (23, 45483), (24, 45474),

Gene: Tote_74 Start: 44716, Stop: 44447, Start Num: 12
Candidate Starts for Tote_74:
(Start: 12 @44716 has 200 MA's), (16, 44614), (19, 44542), (23, 44461),

Gene: Traft412_77 Start: 47819, Stop: 47550, Start Num: 12
Candidate Starts for Traft412_77:
(6, 48008), (Start: 12 @47819 has 200 MA's), (16, 47717), (19, 47645), (23, 47564), (24, 47555),

Gene: Treddle_79 Start: 48549, Stop: 48280, Start Num: 12
Candidate Starts for Treddle_79:
(Start: 12 @48549 has 200 MA's), (16, 48447), (19, 48375), (23, 48294), (24, 48285),

Gene: Tripl3t_81 Start: 50261, Stop: 49992, Start Num: 12
Candidate Starts for Tripl3t_81:
(Start: 12 @50261 has 200 MA's), (16, 50159), (19, 50087), (23, 50006), (24, 49997),

Gene: Trouble_78 Start: 47927, Stop: 47658, Start Num: 12
Candidate Starts for Trouble_78:
(Start: 12 @47927 has 200 MA's), (16, 47825), (19, 47753), (23, 47672), (24, 47663),

Gene: Turj99_74 Start: 47279, Stop: 47010, Start Num: 12
Candidate Starts for Turj99_74:
(Start: 12 @47279 has 200 MA's), (16, 47177), (19, 47105), (23, 47024), (24, 47015),

Gene: TwoPeat_77 Start: 47081, Stop: 46812, Start Num: 12
Candidate Starts for TwoPeat_77:
(6, 47270), (Start: 12 @47081 has 200 MA's), (16, 46979), (17, 46949), (19, 46907), (21, 46889), (23, 46826), (24, 46817),

Gene: U2_72 Start: 47490, Stop: 47221, Start Num: 12
Candidate Starts for U2_72:
(Start: 12 @47490 has 200 MA's), (16, 47388), (19, 47316), (23, 47235), (24, 47226),

Gene: Violet_72 Start: 47713, Stop: 47444, Start Num: 12
Candidate Starts for Violet_72:
(Start: 12 @47713 has 200 MA's), (16, 47611), (19, 47539), (21, 47521), (22, 47467), (23, 47458), (24, 47449),

Gene: Watermelon_81 Start: 48795, Stop: 48526, Start Num: 12
Candidate Starts for Watermelon_81:
(Start: 12 @48795 has 200 MA's), (16, 48693), (19, 48621), (21, 48603), (23, 48540), (24, 48531),

Gene: Wheeler_83 Start: 49524, Stop: 49246, Start Num: 12
Candidate Starts for Wheeler_83:
(Start: 12 @49524 has 200 MA's), (16, 49422), (19, 49350), (21, 49332), (23, 49269), (24, 49260),

Gene: Wilkins_74 Start: 45668, Stop: 45399, Start Num: 12
Candidate Starts for Wilkins_74:
(Start: 12 @45668 has 200 MA's), (16, 45566), (19, 45494), (23, 45413), (24, 45404),

Gene: Zeeculate_74 Start: 47613, Stop: 47344, Start Num: 12
Candidate Starts for Zeeculate_74:
(Start: 12 @47613 has 200 MA's), (16, 47511), (19, 47439), (23, 47358), (24, 47349),

Gene: Zephyr_79 Start: 47713, Stop: 47444, Start Num: 12
Candidate Starts for Zephyr_79:
(Start: 12 @47713 has 200 MA's), (16, 47611), (19, 47539), (23, 47458), (24, 47449),