

Pham 304641



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 304641 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304641 has 336 members, 49 are drafts.

Phages represented in each track:

- Track 1 : Greg_59, Jerm2_59, Kykar_58, Nhonho_57, DirtDevil_57, NEHalo_56, Hermia_58, HermioneGrange_59, Papez_61, MrGordo_58, Magnar_56, Ciao_57, BeesKnees_61, Watermelon_59, Paphu_57, Hope4ever_60, Forsytheast_57, Kugel_58, Lesedi_54, KBG_59, Swole_59, PhrostyMug_58, GrecoEtereo_58, Sagefire_60, Fushigi_55, JuliaChild_59, Rohr_59, Smairt_61, Abbyshoes_61, Fajezeel_59, Mkhuseleli_56, Jorgensen_59, Perseus_58, RidgeCB_58, Inyanga_53, BigPaolini_57, Bigchungji_58, Rutherford_59, Rhynn_56, McSinger_58, Crispicious1_55, Solon_56, Sanya_54, SwissCheese_59, CactusRose_56, LunarLander_59, Museum_59, Marcell_55, Oogway_57, Sibs6_60, Dexes_58, JackSparrow_61, Rufus_59, Fenn_61, Monet_61, Slagathor_60, BarrowTuph_59, Buttons_56, Raid_57, Zeeculate_56, Tripl3t_60, Big3_57, Marge_57, Violet_56, BK1_52, Gandalf20_61, Levia_56, AFIS_55, Zephyr_59, Fascinus_54, Chanagan_54, Hami1_53, BluSpix_56, Wheeler_58, Eyeball_59, BPBiabs31_60, Phlippers_56, Sumter_54, Snazzy_57, PattyP_60, PacerPaul_58, Puppet_57, Magnito_57, Altman_61, McGuire_60, TheloniousMonk_59, StewieG_55, IgnatiusPatJac_58, Squee_59, Blesser_55, Tasp14_61, DrFeelGood_56, Arlo_56, Edtherson_57, Bob3_57, Lopton_58, Petruchio_57, GMonster_55, Molly_59, Agaliana_53, Applejack_53, ConceptII_61, Briton15_62, Pippin_59, Aeneas_61, KikiBouba_58, MPlant7149_57, Francis47_57, Tote_54, Gyzlar_54, Ajay_59, Abrogate_570, Burton_58, Target_59, Blue_57, Peterson_62, Kenmech_63, Niza_60, Treddle_59, A6_52, PowerRanger_56, CatBus_56, Moose_57, Mule_56, Kanely_60, GroundGoblin_57, Petp2012_59, Aldrich_56, Noxious_58, PhineBark_58, Rajelicia_59, Adahisdi_58, PascalRango_58, Trouble_60, Ringer_58, BigMau_60, Bigfoot_52, Wilkins_57, Topgun_57, HanShotFirst_59, Espresso_57, Bruns_57, ILeeKay_61, Payneful_58, Marchy_53, Naira_61, Nerujay_60, HarryOW_57, Marsha_57, ShortQueendom_53, PinkPlastic_58, Maroc7_56, Dussy_60, Arcanine_60, Bxb1_53, Zeuska_57, TwoPeat_60, Acme_59, Seabiscuit_62, Iqorha_53, BaconJack_63, Lamina13_60
- Track 2 : MetalQZJ_56, Corvo_59, MaryBeth_57, Switzer_59, Pepe_55, STLscum_61, Dynamix_60, SkiPole_63
- Track 3 : QTRlifeCrisis_58, PSullivan_58, FrogHopper_55, Manatee_59, MilleFeuille_58, CartmannCramer_57, Pita2_61, Scowl_59, Anglerfish_59, Paraselene_56, Sunshine924_60, Marco3_62, Euphoria_56
- Track 4 : Whitspit_55, Killigrew_58
- Track 5 : EnzoK_58, Alvin_57, Parliament_58, Barriga_59, Teodoridan_56, Gompeii16_57, Bircsak_57, Mryolo_55

- Track 6 : Makemake_59, DD5_57, Gachnar_57, Blackflame_55, Homines_50, KyMonks1A_61, SarFire_55, KSSJEB_58, Turj99_56, LilBib_58, Sorpresa_56, Lockley_56, Thor_55, ProMouse_58, Sandaddy_55
- Track 7 : Ichabod_62, U2_57
- Track 8 : DreamCatcher_62
- Track 9 : Carlyle_57
- Track 10 : Atkinbua_62, Pinto_59, Rubeus_58
- Track 11 : Michley_58
- Track 12 : Alsfro_63
- Track 13 : Smeagol_60
- Track 14 : ChristmasHams_52
- Track 15 : Jeeves_69, Gail_67
- Track 16 : Luchador_68
- Track 17 : SororFago_67
- Track 18 : Elle_64
- Track 19 : Anon_68
- Track 20 : MyraDee_64
- Track 21 : Chargerpower_63
- Track 22 : Benedict_61
- Track 23 : Chadwick_60
- Track 24 : Jabiru_59
- Track 25 : Naca_58
- Track 26 : EITiger69_60
- Track 27 : UnionJack_59
- Track 28 : Sachima_64, Phaeder_68, Tubs_68, Pioneer_69, Lilleskat_64, Beemo_69, Catalina_70, RyeScarlet_70, EdogawaKiddo_66, PackMan_67, Aliter_69, Phonnegut_69, HortumSL17_69, Onglai_66, Myxus_68
- Track 29 : Vanisoa_66
- Track 30 : Yecey3_69
- Track 31 : Keziacharles14_66
- Track 32 : DreamTeam1_64, Charm_64
- Track 33 : Celestialunch_64, MegTheThird_64
- Track 34 : SheaKeira_63
- Track 35 : Arissanae_65
- Track 36 : Breezona_99, Miley16_99, Winky_99
- Track 37 : LilDestine_97, Vetric_97, Gabriela_99, MkaliMitinis3_101, Underpass_91, Gardann_99, Faith1_99, Loadrie_98, BobsGarage_98, BigCheese_99, OverPar_101, GuuelaD_96, Finemlucis_100, Lynnae_100, Kahlid_98, Lewan_100, Netyap_98, Itos_99, Nicholasp3_99, SoJulia_101, Wigglewiggles_99, Rumpelstiltskin_95, Zakai_100
- Track 38 : DanBing_98
- Track 39 : Bazzle_96, Archie_96, Crossroads_99
- Track 40 : DHan_102, Claus_98, Hafay_100, ZhongYanYuan_96
- Track 41 : DrSeegs_98
- Track 42 : Sarshaun_100, Soap141_99
- Track 43 : Baoshan_99
- Track 44 : Rossetti_99
- Track 45 : Wilder_100
- Track 46 : Tourach_100
- Track 47 : KirDoubleO7_94, BourbonZero_97, MiniLon_101, Ellson_95, DuncansLeg_97, LiyuLake_95, Lolly9_96
- Track 48 : Kingsolomon_94, Jubie_95, Moostard_93, TriFive_97, Snenia_95, Jobypre_96, Finnry_96, Clautastrophe_94, Bellis_96, Red305_97, Nicholas_94,

- MsGreen_96, Samty_95, Lumos_96
- Track 49 : Krypton555_99, Whirlwind_98
 - Track 50 : MiniMac_101
 - Track 51 : Douzhi_100, FarmResident_101, BrainDrainer_101
 - Track 52 : DyoEdafos_103
 - Track 53 : Bromden_100
 - Track 54 : Sheng711_101, PYPDinur_100
 - Track 55 : Kropertea_96
 - Track 56 : ChutneyChips_101
 - Track 57 : Chaser_99
 - Track 58 : Douge_100
 - Track 59 : Quby_100
 - Track 60 : Baudelaire_107, Aegeus_107

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

The start number called the most often in the published annotations is 30, it was called in 161 of the 287 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A6_52, AFIS_55, Abbyshoes_61, Abrogate_570, Acme_59, Adahisdi_58, Aeneas_61, Agaliana_53, Ajay_59, Aldrich_56, Altman_61, Alvin_57, Applejack_53, Arcanine_60, Arlo_56, BK1_52, BPBiebs31_60, BaconJack_63, Barriga_59, BarrowTuph_59, BeesKnees_61, Big3_57, BigMau_60, BigPaolini_57, Bigchungi_58, Bigfoot_52, Bircsak_57, Blessner_55, BluSpix_56, Blue_57, Bob3_57, Briton15_62, Bruns_57, Burton_58, Buttons_56, Bxb1_53, CactusRose_56, CatBus_56, Chanagan_54, ChristmasHams_52, Ciao_57, ConceptII_61, Crispicious1_55, Dexes_58, DirtDevil_57, DrFeelGood_56, DreamCatcher_62, Dussy_60, Edtherson_57, EnzoK_58, Espresso_57, Eyeball_59, Fajezeel_59, Fascinus_54, Fenn_61, Forsytheast_57, Francis47_57, Fushigi_55, GMonster_55, Gandalf20_61, Gompeii16_57, GrecoEtereo_58, Greg_59, GroundGoblin_57, Gyzlar_54, Hami1_53, HanShotFirst_59, HarryOW_57, Hermia_58, HermioneGrange_59, Hope4ever_60, ILeeKay_61, IgnatiusPatJac_58, Inyanga_53, Iqorha_53, JackSparrow_61, Jerm2_59, Jorgensen_59, JuliaChild_59, KBG_59, Kanely_60, Kenmech_63, KikiBouba_58, Killigrew_58, Kugel_58, Kykar_58, Lamina13_60, Lesedi_54, Levia_56, Lopton_58, LunarLander_59, MPlant7149_57, Magnar_56, Magnito_57, Marcell_55, Marchy_53, Marge_57, Maroc7_56, Marsha_57, McGuire_60, McSinger_58, Michley_58, Mkhuseleli_56, Molly_59, Monet_61, Moose_57, MrGordo_58, Mryolo_55, Mule_56, Museum_59, NEHalo_56, Naira_61, Nerujay_60, Nhonho_57, Niza_60, Noxious_58, Oogway_57, PacerPaul_58, Papez_61, Paphu_57, Parliament_58, PascalRango_58, PattyP_60, Payneful_58, Perseus_58, Peterson_62, Petp2012_59, Petruchio_57, PhineBark_58, Phlippers_56, PhrostyMug_58, PinkPlastic_58, Pippin_59, PowerRanger_56, Puppet_57, Raid_57, Rajelicia_59, Rhynn_56, RidgeCB_58, Ringer_58, Rohr_59, Rufus_59, Rutherford_59, Sagefire_60, Sanya_54, Seabiscuit_62, ShortQueendom_53, Sibs6_60, Slagathor_60, Smairt_61, Smeagol_60, Snazzy_57, Solon_56, Squee_59, StewieG_55, Sumter_54, SwissCheese_59, Swole_59, Target_59, Tasp14_61, Teodoridan_56, TheloniousMonk_59, Topgun_57, Tote_54, Treddle_59, Trip13t_60, Trouble_60, TwoPeat_60, Violet_56, Watermelon_59, Wheeler_58, Whitspit_55, Wilkins_57, Zeeculate_56, Zephyr_59, Zeuska_57,

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

- Atkinbua_62, Pinto_59, Rubeus_58,

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

- Aegeus_107, Aliter_69, Alsfro_63, Anglerfish_59, Anon_68, Archie_96, Arissanae_65, Baoshan_99, Baudelaire_107, Bazzle_96, Beemo_69, Bellis_96, Benedict_61, BigCheese_99, Blackflame_55, BobsGarage_98, BourbonZero_97, BrainDrainer_101, Breezona_99, Bromden_100, Carlyle_57, CartmannCramer_57, Catalina_70, Celestiallunch_64, Chadwick_60, Chargerpower_63, Charm_64, Chaser_99, ChutneyChips_101, Claus_98, Clautastrophe_94, Corvo_59, Crossroads_99, DD5_57, DHan_102, DanBing_98, Douge_100, Douzhi_100, DrSeegs_98, DreamTeam1_64, DuncansLeg_97, Dynamix_60, DyoEdafos_103, EdogawaKiddo_66, ElTiger69_60, Elle_64, Ellson_95, Euphoria_56, Faith1_99, FarmResident_101, Finemlucis_100, Finnry_96, Froghopper_55, Gabriela_99, Gachnar_57, Gail_67, Gardann_99, GuuelaD_96, Hafay_100, Homines_50, HortumSL17_69, Ichabod_62, Itos_99, Jabiru_59, Jeeves_69, Jobypre_96, Jubie_95, KSSJEB_58, Kahlid_98, Keziacharles14_66, Kingsolomon_94, KirDoubleO7_94, Kropertea_96, Krypton555_99, KyMonks1A_61, Lewan_100, LilBib_58, LilDestine_97, Lilleskat_64, LiyuLake_95, Loadrie_98, Lockley_56, Lolly9_96, Luchador_68, Lumos_96, Lynnae_100, Makemake_59, Manatee_59, Marco3_62, MaryBeth_57, MegTheThird_64, MetalQZJ_56, Miley16_99, MilleFeuille_58, MiniLon_101, MiniMac_101, MkaliMitinis3_101, Moostard_93, MsGreen_96, MyraDee_64, Myxus_68, Naca_58, Netyap_98, Nicholas_94, Nicholasp3_99, Onglai_66, OverPar_101, PSullivan_58, PYPDinur_100, PackMan_67, Paraselene_56, Pepe_55, Phaeder_68, Phonnegut_69, Pioneer_69, Pita2_61, ProMouse_58, QTRlifeCrisis_58, Quby_100, Red305_97, Rossetti_99, Rumpelstiltskin_95, RyeScarlet_70, STLscum_61, Sachima_64, Samty_95, Sandaddy_55, SarFire_55, Sarshaun_100, Scowl_59, SheaKeira_63, Sheng711_101, SkiPole_63, Snenia_95, SoJulia_101, Soap141_99, SororFago_67, Sorpresa_56, Sunshine924_60, Switzer_59, Thor_55, Tourach_100, TriFive_97, Tubs_68, Turj99_56, U2_57, Underpass_91, UnionJack_59, Vanisoa_66, Vetrix_97, Whirlwind_98, Wigglewiggle_99, Wilder_100, Winky_99, Yecey3_69, Zakai_100, ZhongYanYuan_96,

Summary by start number:

Start 8:

- Found in 1 of 336 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 287
- Called 100.0% of time when present
- Phage (with cluster) where this start called: UnionJack_59 (A5),

Start 13:

- Found in 1 of 336 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elle_64 (A15),

Start 15:

- Found in 6 of 336 (1.8%) of genes in pham
- Manual Annotations of this start: 5 of 287
- Called 83.3% of time when present

- Phage (with cluster) where this start called: Benedict_61 (A5), Chadwick_60 (A5), EITiger69_60 (A5), Jabiru_59 (A5), Naca_58 (A5),

Start 20:

- Found in 1 of 336 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 287
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee_64 (A18),

Start 21:

- Found in 2 of 336 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 287
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Anon_68 (A15),

Start 25:

- Found in 41 of 336 (12.2%) of genes in pham
- Manual Annotations of this start: 36 of 287
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsfro_63 (A1), Anglerfish_59 (A1), Blackflame_55 (A1), Carlyle_57 (A1), CartmannCramer_57 (A1), Corvo_59 (A1), DD5_57 (A1), Dynamix_60 (A1), Euphoria_56 (A1), Froghopper_55 (A1), Gachnar_57 (A1), Homines_50 (A1), Ichabod_62 (A1), KSSJEB_58 (A1), KyMonks1A_61 (A1), LilBib_58 (A1), Lockley_56 (A1), Makemake_59 (A1), Manatee_59 (A1), Marco3_62 (A1), MaryBeth_57 (A1), MetalQZJ_56 (A1), MilleFeuille_58 (A1), PSullivan_58 (A1), Paraselene_56 (A1), Pepe_55 (A1), Pita2_61 (A1), ProMouse_58 (A1), QTRlifeCrisis_58 (A1), STLscum_61 (A1), Sandaddy_55 (A1), SarFire_55 (A1), Scowl_59 (A1), SkiPole_63 (A1), Sorpresa_56 (A1), Sunshine924_60 (A1), Switzer_59 (A1), Thor_55 (A1), Turj99_56 (A1), U2_57 (A1), Yecey3_69 (A9),

Start 26:

- Found in 31 of 336 (9.2%) of genes in pham
- Manual Annotations of this start: 21 of 287
- Called 90.3% of time when present
- Phage (with cluster) where this start called: Aliter_69 (A9), Arissanae_65 (A9), Beemo_69 (A9), Catalina_70 (A9), Celestiallunch_64 (A9), Chargerpower_63 (A22), Charm_64 (A9), DreamTeam1_64 (A9), EdogawaKiddo_66 (A9), Gail_67 (A14), HortumSL17_69 (A9), Jeeves_69 (A14), Keziacharles14_66 (A9), Lilleskat_64 (A9), Luchador_68 (A14), MegTheThird_64 (A9), Myxus_68 (A9), Onglai_66 (A9), PackMan_67 (A9), Phaeder_68 (A9), Phonnegut_69 (A9), Pioneer_69 (A9), RyeScarlet_70 (A9), Sachima_64 (A9), SheaKeira_63 (A9), SororFago_67 (A14), Tubs_68 (A9), Vanisoa_66 (A9),

Start 27:

- Found in 4 of 336 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 287
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Atkinbua_62 (A1), Pinto_59 (A1), Rubeus_58 (A1),

Start 28:

- Found in 4 of 336 (1.2%) of genes in pham

- Manual Annotations of this start: 2 of 287
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Aegeus_107 (L5), Baudelaire_107 (L5),

Start 29:

- Found in 8 of 336 (2.4%) of genes in pham
- Manual Annotations of this start: 3 of 287
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Breezona_99 (L2), Miley16_99 (L2), Winky_99 (L2),

Start 30:

- Found in 179 of 336 (53.3%) of genes in pham
- Manual Annotations of this start: 161 of 287
- Called 98.3% of time when present
- Phage (with cluster) where this start called: A6_52 (A1), AFIS_55 (A1), Abbyshoes_61 (A1), Abrogate_570 (A1), Acme_59 (A1), Adahisdi_58 (A1), Aeneas_61 (A1), Agaliana_53 (A1), Ajay_59 (A1), Aldrich_56 (A1), Altman_61 (A1), Alvin_57 (A1), Applejack_53 (A1), Arcanine_60 (A1), Arlo_56 (A1), BK1_52 (A1), BPBiEbs31_60 (A1), BaconJack_63 (A1), Barriga_59 (A1), BarrowTuph_59 (A1), BeesKnees_61 (A1), Big3_57 (A1), BigMau_60 (A1), BigPaolini_57 (A1), Bigchung_58 (A1), Bigfoot_52 (A1), Bircsak_57 (A1), Blessers_55 (A1), BluSpix_56 (A1), Blue_57 (A1), Bob3_57 (A1), Briton15_62 (A1), Bruns_57 (A1), Burton_58 (A1), Buttons_56 (A1), Bxb1_53 (A1), CactusRose_56 (A1), CatBus_56 (A1), Chanagan_54 (A1), ChristmasHams_52 (A1), Ciao_57 (A1), Conceptll_61 (A1), Crispicious1_55 (A1), Dexes_58 (A1), DirtDevil_57 (A1), DrFeelGood_56 (A1), DreamCatcher_62 (A1), Dussy_60 (A1), Edtherson_57 (A1), EnzoK_58 (A1), Espresso_57 (A1), Eyeball_59 (A1), Fajezeel_59 (A1), Fascinus_54 (A1), Fenn_61 (A1), Forsytheast_57 (A1), Francis47_57 (A1), Fushigi_55 (A1), GMonster_55 (A1), Gandalf20_61 (A1), Gompeii16_57 (A1), GrecoEtereo_58 (A1), Greg_59 (A1), GroundGoblin_57 (A1), Gyzzlar_54 (A1), Hami1_53 (A1), HanShotFirst_59 (A1), HarryOW_57 (A1), Hermia_58 (A1), HermioneGrange_59 (A1), Hope4ever_60 (A1), ILeeKay_61 (A1), IgnatiusPatJac_58 (A1), Inyanga_53 (A1), Iqorha_53 (A1), JackSparrow_61 (A1), Jerm2_59 (A1), Jorgensen_59 (A1), JuliaChild_59 (A1), KBG_59 (A1), Kanely_60 (A1), Kenmech_63 (A1), KikiBouba_58 (A1), Killigrew_58 (A1), Kugel_58 (A1), Kykar_58 (A1), Lamina13_60 (A1), Lesedi_54 (A1), Levia_56 (A1), Lopton_58 (A1), LunarLander_59 (A1), MPlant7149_57 (A1), Magnar_56 (A1), Magnito_57 (A1), Marcell_55 (A1), Marchy_53 (A1), Marge_57 (A1), Maroc7_56 (A1), Marsha_57 (A1), McGuire_60 (A1), McSinger_58 (A1), Michley_58 (A1), Mkhuseleli_56 (A1), Molly_59 (A1), Monet_61 (A1), Moose_57 (A1), MrGordo_58 (A1), Mryolo_55 (A1), Mule_56 (A1), Museum_59 (A1), NEHalo_56 (A1), Naira_61 (A1), Nerujay_60 (A1), Nhonho_57 (A1), Niza_60 (A1), Noxious_58 (A1), Oogway_57 (A1), PacerPaul_58 (A1), Papez_61 (A1), Paphu_57 (A1), Parliament_58 (A1), PascalRango_58 (A1), PattyP_60 (A1), Payneful_58 (A1), Perseus_58 (A1), Peterson_62 (A1), Petp2012_59 (A1), Petruccio_57 (A1), PhineBark_58 (A1), Phlippers_56 (A1), PhrostyMug_58 (A1), PinkPlastic_58 (A1), Pippin_59 (A1), PowerRanger_56 (A1), Puppet_57 (A1), Raid_57 (A1), Rajelicia_59 (A1), Rhynn_56 (A1), RidgeCB_58 (A1), Ringer_58 (A1), Rohr_59 (A1), Rufus_59 (A1), Rutherford_59 (A1), Sagefire_60 (A1), Sanya_54 (A1), Seabiscuit_62 (A1), ShortQueendom_53 (A1), Sibs6_60 (A1), Slagathor_60 (A1), Smairt_61 (A1), Smeagol_60 (A1), Snazzy_57 (A1), Solon_56 (A1), Squee_59 (A1), StewieG_55 (A1), Sumter_54 (A1), SwissCheese_59 (A1), Swole_59 (A1), Target_59 (A1), Tasp14_61 (A1), Teodoridan_56 (A1), TheloniousMonk_59 (A1), Topgun_57 (A1),

Tote_54 (A1), Treddle_59 (A1), Tripl3t_60 (A1), Trouble_60 (A1), TwoPeat_60 (A1), Violet_56 (A1), Watermelon_59 (A1), Wheeler_58 (A1), Whitspit_55 (A1), Wilkins_57 (A1), Zeecculate_56 (A1), Zephyr_59 (A1), Zeuska_57 (A1),

Start 31:

- Found in 53 of 336 (15.8%) of genes in pham
- Manual Annotations of this start: 34 of 287
- Called 94.3% of time when present
- Phage (with cluster) where this start called: Archie_96 (L2), Baoshan_99 (L2), Bazzle_96 (L2), BigCheese_99 (L2), BobsGarage_98 (L2), BrainDrainer_101 (L4), Bromden_100 (L4), Chaser_99 (L4), ChutneyChips_101 (L4), Claus_98 (L2), Crossroads_99 (L2), DHan_102 (L2), DanBing_98 (L2), Douge_100 (L4), Douzhi_100 (L4), DrSeegs_98 (L2), DyoEdafos_103 (L4), Faith1_99 (L2), FarmResident_101 (L4), Finemlucis_100 (L2), Gabriela_99 (L2), Gardann_99 (L2), GuuelaD_96 (L2), Hafay_100 (L2), Itos_99 (L2), Kahlid_98 (L2), Kropertea_96 (L4), Lewan_100 (L2), LilDestine_97 (L2), Loadrie_98 (L2), Lynnae_100 (L2), MkaliMitinis3_101 (L2), Netyap_98 (L2), Nicholasp3_99 (L2), OverPar_101 (L2), PYPDinur_100 (L4), Quby_100 (L4), Rossetti_99 (L2), Rumpelstiltskin_95 (L2), Sarshaun_100 (L2), Sheng711_101 (L4), SoJulia_101 (L2), Soap141_99 (L2), Tourach_100 (L2), Underpass_91 (L2), Vetrix_97 (L2), Wigglewiggle_99 (L2), Wilder_100 (L2), Zakai_100 (L2), ZhongYanYuan_96 (L2),

Start 35:

- Found in 25 of 336 (7.4%) of genes in pham
- Manual Annotations of this start: 1 of 287
- Called 4.0% of time when present
- Phage (with cluster) where this start called: MiniMac_101 (L3),

Start 38:

- Found in 72 of 336 (21.4%) of genes in pham
- Manual Annotations of this start: 18 of 287
- Called 31.9% of time when present
- Phage (with cluster) where this start called: Bellis_96 (L3), BourbonZero_97 (L3), Clautastrophe_94 (L3), DuncansLeg_97 (L3), Ellson_95 (L3), Finnry_96 (L3), Jobypre_96 (L3), Jubie_95 (L3), Kingsolomon_94 (L3), KirDoubleO7_94 (L3), Krypton555_99 (L3), LiyuLake_95 (L3), Lolly9_96 (L3), Lumos_96 (L3), MiniLon_101 (L3), Moostard_93 (L3), MsGreen_96 (L3), Nicholas_94 (L3), Red305_97 (L3), Samty_95 (L3), Snenia_95 (L3), TriFive_97 (L3), Whirlwind_98 (L3),

Summary by clusters:

There are 11 clusters represented in this pham: A15, A14, A22, A18, A1, L4, L5, A5, L3, A9, L2,

Info for manual annotations of cluster A1:

- Start number 25 was manually annotated 35 times for cluster A1.
- Start number 27 was manually annotated 3 times for cluster A1.
- Start number 30 was manually annotated 161 times for cluster A1.

Info for manual annotations of cluster A14:

- Start number 26 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A15:

- Start number 21 was manually annotated 1 time for cluster A15.

Info for manual annotations of cluster A18:

- Start number 20 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A22:

- Start number 26 was manually annotated 1 time for cluster A22.

Info for manual annotations of cluster A5:

- Start number 8 was manually annotated 1 time for cluster A5.
- Start number 15 was manually annotated 5 times for cluster A5.

Info for manual annotations of cluster A9:

- Start number 25 was manually annotated 1 time for cluster A9.
- Start number 26 was manually annotated 16 times for cluster A9.

Info for manual annotations of cluster L2:

- Start number 29 was manually annotated 3 times for cluster L2.
- Start number 31 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:

- Start number 35 was manually annotated 1 time for cluster L3.
- Start number 38 was manually annotated 18 times for cluster L3.

Info for manual annotations of cluster L4:

- Start number 31 was manually annotated 6 times for cluster L4.

Info for manual annotations of cluster L5:

- Start number 28 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: A6_52 Start: 38092, Stop: 37958, Start Num: 30

Candidate Starts for A6_52:

(Start: 30 @38092 has 161 MA's), (53, 37990),

Gene: AFIS_55 Start: 38799, Stop: 38665, Start Num: 30

Candidate Starts for AFIS_55:

(Start: 30 @38799 has 161 MA's), (53, 38697),

Gene: Abbysshoes_61 Start: 40860, Stop: 40726, Start Num: 30

Candidate Starts for Abbysshoes_61:

(Start: 30 @40860 has 161 MA's), (53, 40758),

Gene: Abrogate_570 Start: 40665, Stop: 40531, Start Num: 30

Candidate Starts for Abrogate_570:

(Start: 30 @40665 has 161 MA's), (53, 40563),

Gene: Acme_59 Start: 39262, Stop: 39128, Start Num: 30

Candidate Starts for Acme_59:

(Start: 30 @39262 has 161 MA's), (53, 39160),

Gene: Adahisdi_58 Start: 40395, Stop: 40261, Start Num: 30
Candidate Starts for Adahisdi_58:
(Start: 30 @40395 has 161 MA's), (53, 40293),

Gene: Aegeus_107 Start: 62949, Stop: 63086, Start Num: 28
Candidate Starts for Aegeus_107:
(Start: 26 @62946 has 21 MA's), (Start: 28 @62949 has 2 MA's), (34, 62976), (37, 62991), (Start: 38 @62994 has 18 MA's), (42, 63009), (51, 63039), (55, 63063), (56, 63066),

Gene: Aeneas_61 Start: 41102, Stop: 40968, Start Num: 30
Candidate Starts for Aeneas_61:
(Start: 30 @41102 has 161 MA's), (53, 41000),

Gene: Agaliana_53 Start: 37073, Stop: 36939, Start Num: 30
Candidate Starts for Agaliana_53:
(Start: 30 @37073 has 161 MA's), (53, 36971),

Gene: Ajay_59 Start: 40476, Stop: 40342, Start Num: 30
Candidate Starts for Ajay_59:
(Start: 30 @40476 has 161 MA's), (53, 40374),

Gene: Aldrich_56 Start: 39960, Stop: 39826, Start Num: 30
Candidate Starts for Aldrich_56:
(Start: 30 @39960 has 161 MA's), (53, 39858),

Gene: Aliter_69 Start: 40655, Stop: 40506, Start Num: 26
Candidate Starts for Aliter_69:
(Start: 26 @40655 has 21 MA's), (33, 40637), (41, 40589),

Gene: Alsfro_63 Start: 40052, Stop: 39909, Start Num: 25
Candidate Starts for Alsfro_63:
(Start: 25 @40052 has 36 MA's),

Gene: Altman_61 Start: 40582, Stop: 40448, Start Num: 30
Candidate Starts for Altman_61:
(Start: 30 @40582 has 161 MA's), (53, 40480),

Gene: Alvin_57 Start: 39789, Stop: 39655, Start Num: 30
Candidate Starts for Alvin_57:
(Start: 30 @39789 has 161 MA's),

Gene: Anglerfish_59 Start: 40711, Stop: 40568, Start Num: 25
Candidate Starts for Anglerfish_59:
(Start: 25 @40711 has 36 MA's),

Gene: Anon_68 Start: 39528, Stop: 39328, Start Num: 21
Candidate Starts for Anon_68:
(Start: 21 @39528 has 1 MA's),

Gene: Applejack_53 Start: 36632, Stop: 36498, Start Num: 30
Candidate Starts for Applejack_53:
(Start: 30 @36632 has 161 MA's), (53, 36530),

Gene: Arcanine_60 Start: 40322, Stop: 40188, Start Num: 30

Candidate Starts for Arcanine_60:

(Start: 30 @40322 has 161 MA's), (53, 40220),

Gene: Archie_96 Start: 60983, Stop: 61165, Start Num: 31

Candidate Starts for Archie_96:

(Start: 31 @60983 has 34 MA's), (36, 61019), (Start: 38 @61025 has 18 MA's), (43, 61052), (47, 61076), (50, 61106), (51, 61118), (53, 61133),

Gene: Arissanae_65 Start: 40920, Stop: 40774, Start Num: 26

Candidate Starts for Arissanae_65:

(Start: 26 @40920 has 21 MA's), (33, 40902), (41, 40854), (55, 40794),

Gene: Arlo_56 Start: 38792, Stop: 38658, Start Num: 30

Candidate Starts for Arlo_56:

(Start: 30 @38792 has 161 MA's), (53, 38690),

Gene: Atkinbua_62 Start: 40268, Stop: 40131, Start Num: 27

Candidate Starts for Atkinbua_62:

(Start: 27 @40268 has 3 MA's), (Start: 30 @40265 has 161 MA's), (53, 40163),

Gene: BK1_52 Start: 38092, Stop: 37958, Start Num: 30

Candidate Starts for BK1_52:

(Start: 30 @38092 has 161 MA's), (53, 37990),

Gene: BPBiebs31_60 Start: 40754, Stop: 40620, Start Num: 30

Candidate Starts for BPBiebs31_60:

(Start: 30 @40754 has 161 MA's), (53, 40652),

Gene: BaconJack_63 Start: 41853, Stop: 41719, Start Num: 30

Candidate Starts for BaconJack_63:

(Start: 30 @41853 has 161 MA's), (53, 41751),

Gene: Baoshan_99 Start: 61599, Stop: 61781, Start Num: 31

Candidate Starts for Baoshan_99:

(Start: 31 @61599 has 34 MA's), (32, 61608), (Start: 35 @61626 has 1 MA's), (36, 61635), (43, 61668), (47, 61692), (50, 61722), (51, 61734), (53, 61749),

Gene: Barriga_59 Start: 38979, Stop: 38845, Start Num: 30

Candidate Starts for Barriga_59:

(Start: 30 @38979 has 161 MA's),

Gene: BarrowTuph_59 Start: 39907, Stop: 39773, Start Num: 30

Candidate Starts for BarrowTuph_59:

(Start: 30 @39907 has 161 MA's), (53, 39805),

Gene: Baudelaire_107 Start: 62949, Stop: 63086, Start Num: 28

Candidate Starts for Baudelaire_107:

(Start: 26 @62946 has 21 MA's), (Start: 28 @62949 has 2 MA's), (34, 62976), (37, 62991), (Start: 38 @62994 has 18 MA's), (42, 63009), (51, 63039), (55, 63063), (56, 63066),

Gene: Bazzle_96 Start: 61539, Stop: 61721, Start Num: 31

Candidate Starts for Bazzle_96:

(Start: 31 @61539 has 34 MA's), (36, 61575), (Start: 38 @61581 has 18 MA's), (43, 61608), (47, 61632), (50, 61662), (51, 61674), (53, 61689),

Gene: Beemo_69 Start: 40825, Stop: 40676, Start Num: 26

Candidate Starts for Beemo_69:

(Start: 26 @40825 has 21 MA's), (33, 40807), (41, 40759),

Gene: BeesKnees_61 Start: 39847, Stop: 39713, Start Num: 30

Candidate Starts for BeesKnees_61:

(Start: 30 @39847 has 161 MA's), (53, 39745),

Gene: Bellis_96 Start: 61101, Stop: 61235, Start Num: 38

Candidate Starts for Bellis_96:

(Start: 38 @61101 has 18 MA's), (45, 61137), (46, 61140), (48, 61152), (53, 61203),

Gene: Benedict_61 Start: 39533, Stop: 39267, Start Num: 15

Candidate Starts for Benedict_61:

(Start: 15 @39533 has 5 MA's), (24, 39500), (51, 39314),

Gene: Big3_57 Start: 40553, Stop: 40419, Start Num: 30

Candidate Starts for Big3_57:

(Start: 30 @40553 has 161 MA's), (53, 40451),

Gene: BigCheese_99 Start: 61757, Stop: 61939, Start Num: 31

Candidate Starts for BigCheese_99:

(Start: 31 @61757 has 34 MA's), (36, 61793), (Start: 38 @61799 has 18 MA's), (43, 61826), (44, 61832), (47, 61850), (50, 61880), (51, 61892),

Gene: BigMau_60 Start: 39207, Stop: 39073, Start Num: 30

Candidate Starts for BigMau_60:

(Start: 30 @39207 has 161 MA's), (53, 39105),

Gene: BigPaolini_57 Start: 38390, Stop: 38256, Start Num: 30

Candidate Starts for BigPaolini_57:

(Start: 30 @38390 has 161 MA's), (53, 38288),

Gene: Bigchungji_58 Start: 39152, Stop: 39018, Start Num: 30

Candidate Starts for Bigchungji_58:

(Start: 30 @39152 has 161 MA's), (53, 39050),

Gene: Bigfoot_52 Start: 39345, Stop: 39211, Start Num: 30

Candidate Starts for Bigfoot_52:

(Start: 30 @39345 has 161 MA's), (53, 39243),

Gene: Bircsak_57 Start: 40580, Stop: 40446, Start Num: 30

Candidate Starts for Bircsak_57:

(Start: 30 @40580 has 161 MA's),

Gene: Blackflame_55 Start: 39548, Stop: 39405, Start Num: 25

Candidate Starts for Blackflame_55:

(Start: 25 @39548 has 36 MA's), (53, 39437),

Gene: Blesser_55 Start: 39373, Stop: 39239, Start Num: 30
Candidate Starts for Blesser_55:
(Start: 30 @39373 has 161 MA's), (53, 39271),

Gene: BluSpix_56 Start: 35839, Stop: 35705, Start Num: 30
Candidate Starts for BluSpix_56:
(Start: 30 @35839 has 161 MA's), (53, 35737),

Gene: Blue_57 Start: 40422, Stop: 40288, Start Num: 30
Candidate Starts for Blue_57:
(Start: 30 @40422 has 161 MA's), (53, 40320),

Gene: Bob3_57 Start: 38473, Stop: 38339, Start Num: 30
Candidate Starts for Bob3_57:
(Start: 30 @38473 has 161 MA's), (53, 38371),

Gene: BobsGarage_98 Start: 61757, Stop: 61939, Start Num: 31
Candidate Starts for BobsGarage_98:
(Start: 31 @61757 has 34 MA's), (36, 61793), (Start: 38 @61799 has 18 MA's), (43, 61826), (44, 61832), (47, 61850), (50, 61880), (51, 61892),

Gene: BourbonZero_97 Start: 61299, Stop: 61433, Start Num: 38
Candidate Starts for BourbonZero_97:
(Start: 35 @61284 has 1 MA's), (Start: 38 @61299 has 18 MA's), (45, 61335), (46, 61338), (48, 61350), (53, 61401),

Gene: BrainDrainer_101 Start: 61531, Stop: 61704, Start Num: 31
Candidate Starts for BrainDrainer_101:
(9, 61438), (11, 61453), (14, 61477), (18, 61489), (Start: 31 @61531 has 34 MA's), (34, 61555), (Start: 38 @61573 has 18 MA's), (41, 61585), (43, 61600), (44, 61606), (50, 61645), (53, 61672),

Gene: Breezona_99 Start: 61842, Stop: 62027, Start Num: 29
Candidate Starts for Breezona_99:
(Start: 29 @61842 has 3 MA's), (Start: 31 @61845 has 34 MA's), (34, 61869), (36, 61881), (Start: 38 @61887 has 18 MA's), (47, 61938), (50, 61968), (51, 61980), (53, 61995),

Gene: Briton15_62 Start: 40265, Stop: 40131, Start Num: 30
Candidate Starts for Briton15_62:
(Start: 30 @40265 has 161 MA's), (53, 40163),

Gene: Bromden_100 Start: 62267, Stop: 62440, Start Num: 31
Candidate Starts for Bromden_100:
(Start: 31 @62267 has 34 MA's), (34, 62291), (Start: 38 @62309 has 18 MA's), (41, 62321), (43, 62336), (44, 62342), (50, 62381), (51, 62393), (53, 62408),

Gene: Bruns_57 Start: 38964, Stop: 38830, Start Num: 30
Candidate Starts for Bruns_57:
(Start: 30 @38964 has 161 MA's), (53, 38862),

Gene: Burton_58 Start: 40146, Stop: 40012, Start Num: 30
Candidate Starts for Burton_58:
(Start: 30 @40146 has 161 MA's), (53, 40044),

Gene: Buttons_56 Start: 37913, Stop: 37779, Start Num: 30
Candidate Starts for Buttons_56:
(Start: 30 @37913 has 161 MA's), (53, 37811),

Gene: Bxb1_53 Start: 38664, Stop: 38530, Start Num: 30
Candidate Starts for Bxb1_53:
(Start: 30 @38664 has 161 MA's), (53, 38562),

Gene: CactusRose_56 Start: 39341, Stop: 39207, Start Num: 30
Candidate Starts for CactusRose_56:
(Start: 30 @39341 has 161 MA's), (53, 39239),

Gene: Carlyle_57 Start: 37358, Stop: 37215, Start Num: 25
Candidate Starts for Carlyle_57:
(Start: 25 @37358 has 36 MA's), (53, 37247),

Gene: CartmannCramer_57 Start: 41747, Stop: 41604, Start Num: 25
Candidate Starts for CartmannCramer_57:
(Start: 25 @41747 has 36 MA's),

Gene: CatBus_56 Start: 40152, Stop: 40018, Start Num: 30
Candidate Starts for CatBus_56:
(Start: 30 @40152 has 161 MA's), (53, 40050),

Gene: Catalina_70 Start: 40728, Stop: 40579, Start Num: 26
Candidate Starts for Catalina_70:
(Start: 26 @40728 has 21 MA's), (33, 40710), (41, 40662),

Gene: Celestiallunch_64 Start: 40002, Stop: 39859, Start Num: 26
Candidate Starts for Celestiallunch_64:
(16, 40035), (Start: 26 @40002 has 21 MA's), (33, 39984), (37, 39951), (40, 39939),

Gene: Chadwick_60 Start: 39218, Stop: 38952, Start Num: 15
Candidate Starts for Chadwick_60:
(4, 39320), (Start: 15 @39218 has 5 MA's), (50, 39011),

Gene: Chanagan_54 Start: 37998, Stop: 37864, Start Num: 30
Candidate Starts for Chanagan_54:
(Start: 30 @37998 has 161 MA's), (53, 37896),

Gene: Chargerpower_63 Start: 38909, Stop: 38718, Start Num: 26
Candidate Starts for Chargerpower_63:
(7, 39011), (16, 38939), (Start: 26 @38909 has 21 MA's), (33, 38891), (Start: 35 @38870 has 1 MA's),
(44, 38822), (50, 38777),

Gene: Charm_64 Start: 40061, Stop: 39918, Start Num: 26
Candidate Starts for Charm_64:
(5, 40181), (6, 40175), (10, 40136), (16, 40094), (Start: 26 @40061 has 21 MA's), (33, 40043), (Start:
35 @40022 has 1 MA's), (37, 40010), (40, 39998), (57, 39926),

Gene: Chaser_99 Start: 60883, Stop: 61056, Start Num: 31
Candidate Starts for Chaser_99:

(9, 60790), (11, 60805), (12, 60820), (Start: 31 @60883 has 34 MA's), (34, 60907), (Start: 38 @60925 has 18 MA's), (41, 60937), (43, 60952), (44, 60958), (50, 60997),

Gene: ChristmasHams_52 Start: 37478, Stop: 37344, Start Num: 30
Candidate Starts for ChristmasHams_52:
(19, 37508), (Start: 30 @37478 has 161 MA's),

Gene: ChutneyChips_101 Start: 61397, Stop: 61570, Start Num: 31
Candidate Starts for ChutneyChips_101:
(Start: 31 @61397 has 34 MA's), (34, 61421), (Start: 38 @61439 has 18 MA's), (41, 61451), (43, 61466), (44, 61472), (50, 61511), (53, 61538),

Gene: Ciao_57 Start: 39371, Stop: 39237, Start Num: 30
Candidate Starts for Ciao_57:
(Start: 30 @39371 has 161 MA's), (53, 39269),

Gene: Claus_98 Start: 61500, Stop: 61682, Start Num: 31
Candidate Starts for Claus_98:
(17, 61455), (Start: 29 @61497 has 3 MA's), (Start: 31 @61500 has 34 MA's), (Start: 35 @61527 has 1 MA's), (36, 61536), (43, 61569), (47, 61593), (50, 61623), (51, 61635), (53, 61650),

Gene: Clautastrophe_94 Start: 61096, Stop: 61230, Start Num: 38
Candidate Starts for Clautastrophe_94:
(Start: 38 @61096 has 18 MA's), (45, 61132), (46, 61135), (48, 61147), (53, 61198),

Gene: ConceptII_61 Start: 41437, Stop: 41303, Start Num: 30
Candidate Starts for ConceptII_61:
(Start: 30 @41437 has 161 MA's), (53, 41335),

Gene: Corvo_59 Start: 40902, Stop: 40759, Start Num: 25
Candidate Starts for Corvo_59:
(Start: 25 @40902 has 36 MA's),

Gene: Crispicious1_55 Start: 38394, Stop: 38260, Start Num: 30
Candidate Starts for Crispicious1_55:
(Start: 30 @38394 has 161 MA's), (53, 38292),

Gene: Crossroads_99 Start: 61475, Stop: 61657, Start Num: 31
Candidate Starts for Crossroads_99:
(Start: 31 @61475 has 34 MA's), (36, 61511), (Start: 38 @61517 has 18 MA's), (43, 61544), (47, 61568), (50, 61598), (51, 61610), (53, 61625),

Gene: DD5_57 Start: 40238, Stop: 40095, Start Num: 25
Candidate Starts for DD5_57:
(Start: 25 @40238 has 36 MA's), (53, 40127),

Gene: DHan_102 Start: 61776, Stop: 61958, Start Num: 31
Candidate Starts for DHan_102:
(17, 61731), (Start: 29 @61773 has 3 MA's), (Start: 31 @61776 has 34 MA's), (Start: 35 @61803 has 1 MA's), (36, 61812), (43, 61845), (47, 61869), (50, 61899), (51, 61911), (53, 61926),

Gene: DanBing_98 Start: 61291, Stop: 61473, Start Num: 31
Candidate Starts for DanBing_98:

(Start: 31 @61291 has 34 MA's), (32, 61300), (Start: 35 @61318 has 1 MA's), (36, 61327), (40, 61342), (43, 61360), (47, 61384), (50, 61414), (51, 61426), (53, 61441),

Gene: Dexes_58 Start: 40275, Stop: 40141, Start Num: 30
Candidate Starts for Dexes_58:
(Start: 30 @40275 has 161 MA's), (53, 40173),

Gene: DirtDevil_57 Start: 39960, Stop: 39826, Start Num: 30
Candidate Starts for DirtDevil_57:
(Start: 30 @39960 has 161 MA's), (53, 39858),

Gene: Douge_100 Start: 60951, Stop: 61124, Start Num: 31
Candidate Starts for Douge_100:
(9, 60858), (11, 60873), (18, 60909), (Start: 31 @60951 has 34 MA's), (34, 60975), (Start: 38 @60993 has 18 MA's), (41, 61005), (43, 61020), (44, 61026), (50, 61065), (53, 61092),

Gene: Douzhi_100 Start: 61220, Stop: 61393, Start Num: 31
Candidate Starts for Douzhi_100:
(9, 61127), (11, 61142), (14, 61166), (18, 61178), (Start: 31 @61220 has 34 MA's), (34, 61244), (Start: 38 @61262 has 18 MA's), (41, 61274), (43, 61289), (44, 61295), (50, 61334), (53, 61361),

Gene: DrFeelGood_56 Start: 39234, Stop: 39100, Start Num: 30
Candidate Starts for DrFeelGood_56:
(Start: 30 @39234 has 161 MA's), (53, 39132),

Gene: DrSeegs_98 Start: 61845, Stop: 62027, Start Num: 31
Candidate Starts for DrSeegs_98:
(Start: 29 @61842 has 3 MA's), (Start: 31 @61845 has 34 MA's), (34, 61869), (36, 61881), (Start: 38 @61887 has 18 MA's), (47, 61938), (50, 61968), (51, 61980), (53, 61995),

Gene: DreamCatcher_62 Start: 40897, Stop: 40763, Start Num: 30
Candidate Starts for DreamCatcher_62:
(Start: 27 @40900 has 3 MA's), (Start: 30 @40897 has 161 MA's), (53, 40795),

Gene: DreamTeam1_64 Start: 39893, Stop: 39750, Start Num: 26
Candidate Starts for DreamTeam1_64:
(5, 40013), (6, 40007), (10, 39968), (16, 39926), (Start: 26 @39893 has 21 MA's), (33, 39875), (Start: 35 @39854 has 1 MA's), (37, 39842), (40, 39830), (57, 39758),

Gene: DuncansLeg_97 Start: 61287, Stop: 61421, Start Num: 38
Candidate Starts for DuncansLeg_97:
(Start: 35 @61272 has 1 MA's), (Start: 38 @61287 has 18 MA's), (45, 61323), (46, 61326), (48, 61338), (53, 61389),

Gene: Dussy_60 Start: 40880, Stop: 40746, Start Num: 30
Candidate Starts for Dussy_60:
(Start: 30 @40880 has 161 MA's), (53, 40778),

Gene: Dynamix_60 Start: 39645, Stop: 39502, Start Num: 25
Candidate Starts for Dynamix_60:
(Start: 25 @39645 has 36 MA's),

Gene: DyoEdafos_103 Start: 61511, Stop: 61684, Start Num: 31

Candidate Starts for DyoEdafos_103:

(Start: 28 @61508 has 2 MA's), (Start: 31 @61511 has 34 MA's), (34, 61535), (36, 61547), (Start: 38 @61553 has 18 MA's), (40, 61562), (41, 61565), (43, 61580), (50, 61625), (53, 61652),

Gene: EdogawaKiddo_66 Start: 40695, Stop: 40546, Start Num: 26

Candidate Starts for EdogawaKiddo_66:

(Start: 26 @40695 has 21 MA's), (33, 40677), (41, 40629),

Gene: Edtherson_57 Start: 39654, Stop: 39520, Start Num: 30

Candidate Starts for Edtherson_57:

(Start: 30 @39654 has 161 MA's), (53, 39552),

Gene: EITiger69_60 Start: 39467, Stop: 39201, Start Num: 15

Candidate Starts for EITiger69_60:

(Start: 15 @39467 has 5 MA's), (24, 39434), (51, 39248),

Gene: Elle_64 Start: 38131, Stop: 37913, Start Num: 13

Candidate Starts for Elle_64:

(13, 38131), (Start: 21 @38113 has 1 MA's), (23, 38107), (34, 38056), (Start: 35 @38053 has 1 MA's), (51, 37957),

Gene: Ellson_95 Start: 61602, Stop: 61736, Start Num: 38

Candidate Starts for Ellson_95:

(Start: 35 @61587 has 1 MA's), (Start: 38 @61602 has 18 MA's), (45, 61638), (46, 61641), (48, 61653), (53, 61704),

Gene: EnzoK_58 Start: 37486, Stop: 37352, Start Num: 30

Candidate Starts for EnzoK_58:

(Start: 30 @37486 has 161 MA's),

Gene: Espresso_57 Start: 40290, Stop: 40156, Start Num: 30

Candidate Starts for Espresso_57:

(Start: 30 @40290 has 161 MA's), (53, 40188),

Gene: Euphoria_56 Start: 39547, Stop: 39404, Start Num: 25

Candidate Starts for Euphoria_56:

(Start: 25 @39547 has 36 MA's),

Gene: Eyeball_59 Start: 39749, Stop: 39615, Start Num: 30

Candidate Starts for Eyeball_59:

(Start: 30 @39749 has 161 MA's), (53, 39647),

Gene: Faith1_99 Start: 61400, Stop: 61582, Start Num: 31

Candidate Starts for Faith1_99:

(Start: 31 @61400 has 34 MA's), (36, 61436), (Start: 38 @61442 has 18 MA's), (43, 61469), (44, 61475), (47, 61493), (50, 61523), (51, 61535),

Gene: Fajezeel_59 Start: 39720, Stop: 39586, Start Num: 30

Candidate Starts for Fajezeel_59:

(Start: 30 @39720 has 161 MA's), (53, 39618),

Gene: FarmResident_101 Start: 61107, Stop: 61280, Start Num: 31

Candidate Starts for FarmResident_101:

(9, 61014), (11, 61029), (14, 61053), (18, 61065), (Start: 31 @61107 has 34 MA's), (34, 61131), (Start: 38 @61149 has 18 MA's), (41, 61161), (43, 61176), (44, 61182), (50, 61221), (53, 61248),

Gene: Fascinus_54 Start: 39859, Stop: 39725, Start Num: 30
Candidate Starts for Fascinus_54:
(Start: 30 @39859 has 161 MA's), (53, 39757),

Gene: Fenn_61 Start: 41648, Stop: 41514, Start Num: 30
Candidate Starts for Fenn_61:
(Start: 30 @41648 has 161 MA's), (53, 41546),

Gene: Finemlucis_100 Start: 62460, Stop: 62642, Start Num: 31
Candidate Starts for Finemlucis_100:
(Start: 31 @62460 has 34 MA's), (36, 62496), (Start: 38 @62502 has 18 MA's), (43, 62529), (44, 62535), (47, 62553), (50, 62583), (51, 62595),

Gene: Finnry_96 Start: 61449, Stop: 61583, Start Num: 38
Candidate Starts for Finnry_96:
(Start: 38 @61449 has 18 MA's), (45, 61485), (46, 61488), (48, 61500), (53, 61551),

Gene: Forsytheast_57 Start: 39132, Stop: 38998, Start Num: 30
Candidate Starts for Forsytheast_57:
(Start: 30 @39132 has 161 MA's), (53, 39030),

Gene: Francis47_57 Start: 40917, Stop: 40783, Start Num: 30
Candidate Starts for Francis47_57:
(Start: 30 @40917 has 161 MA's), (53, 40815),

Gene: Froghopper_55 Start: 38579, Stop: 38436, Start Num: 25
Candidate Starts for Froghopper_55:
(Start: 25 @38579 has 36 MA's),

Gene: Fushigi_55 Start: 38393, Stop: 38259, Start Num: 30
Candidate Starts for Fushigi_55:
(Start: 30 @38393 has 161 MA's), (53, 38291),

Gene: GMonster_55 Start: 38356, Stop: 38222, Start Num: 30
Candidate Starts for GMonster_55:
(Start: 30 @38356 has 161 MA's), (53, 38254),

Gene: Gabriela_99 Start: 60746, Stop: 60928, Start Num: 31
Candidate Starts for Gabriela_99:
(Start: 31 @60746 has 34 MA's), (36, 60782), (Start: 38 @60788 has 18 MA's), (43, 60815), (44, 60821), (47, 60839), (50, 60869), (51, 60881),

Gene: Gachnar_57 Start: 39213, Stop: 39070, Start Num: 25
Candidate Starts for Gachnar_57:
(Start: 25 @39213 has 36 MA's), (53, 39102),

Gene: Gail_67 Start: 41407, Stop: 41258, Start Num: 26
Candidate Starts for Gail_67:
(Start: 26 @41407 has 21 MA's), (33, 41389), (Start: 35 @41368 has 1 MA's),

Gene: Gandalf20_61 Start: 41575, Stop: 41441, Start Num: 30
Candidate Starts for Gandalf20_61:
(Start: 30 @41575 has 161 MA's), (53, 41473),

Gene: Gardann_99 Start: 61193, Stop: 61375, Start Num: 31
Candidate Starts for Gardann_99:
(Start: 31 @61193 has 34 MA's), (36, 61229), (Start: 38 @61235 has 18 MA's), (43, 61262), (44, 61268), (47, 61286), (50, 61316), (51, 61328),

Gene: Gompeii16_57 Start: 40581, Stop: 40447, Start Num: 30
Candidate Starts for Gompeii16_57:
(Start: 30 @40581 has 161 MA's),

Gene: GrecoEtereo_58 Start: 39479, Stop: 39345, Start Num: 30
Candidate Starts for GrecoEtereo_58:
(Start: 30 @39479 has 161 MA's), (53, 39377),

Gene: Greg_59 Start: 39720, Stop: 39586, Start Num: 30
Candidate Starts for Greg_59:
(Start: 30 @39720 has 161 MA's), (53, 39618),

Gene: GroundGoblin_57 Start: 40102, Stop: 39968, Start Num: 30
Candidate Starts for GroundGoblin_57:
(Start: 30 @40102 has 161 MA's), (53, 40000),

Gene: GuuelaD_96 Start: 61359, Stop: 61541, Start Num: 31
Candidate Starts for GuuelaD_96:
(Start: 31 @61359 has 34 MA's), (36, 61395), (Start: 38 @61401 has 18 MA's), (43, 61428), (44, 61434), (47, 61452), (50, 61482), (51, 61494),

Gene: Gyzlar_54 Start: 37793, Stop: 37659, Start Num: 30
Candidate Starts for Gyzlar_54:
(Start: 30 @37793 has 161 MA's), (53, 37691),

Gene: Hafay_100 Start: 61495, Stop: 61677, Start Num: 31
Candidate Starts for Hafay_100:
(17, 61450), (Start: 29 @61492 has 3 MA's), (Start: 31 @61495 has 34 MA's), (Start: 35 @61522 has 1 MA's), (36, 61531), (43, 61564), (47, 61588), (50, 61618), (51, 61630), (53, 61645),

Gene: Hami1_53 Start: 34833, Stop: 34699, Start Num: 30
Candidate Starts for Hami1_53:
(Start: 30 @34833 has 161 MA's), (53, 34731),

Gene: HanShotFirst_59 Start: 40295, Stop: 40161, Start Num: 30
Candidate Starts for HanShotFirst_59:
(Start: 30 @40295 has 161 MA's), (53, 40193),

Gene: HarryOW_57 Start: 38977, Stop: 38843, Start Num: 30
Candidate Starts for HarryOW_57:
(Start: 30 @38977 has 161 MA's), (53, 38875),

Gene: Hermia_58 Start: 40152, Stop: 40018, Start Num: 30
Candidate Starts for Hermia_58:

(Start: 30 @40152 has 161 MA's), (53, 40050),

Gene: HermioneGrange_59 Start: 39701, Stop: 39567, Start Num: 30

Candidate Starts for HermioneGrange_59:

(Start: 30 @39701 has 161 MA's), (53, 39599),

Gene: Homines_50 Start: 35670, Stop: 35527, Start Num: 25

Candidate Starts for Homines_50:

(Start: 25 @35670 has 36 MA's), (53, 35559),

Gene: Hope4ever_60 Start: 40461, Stop: 40327, Start Num: 30

Candidate Starts for Hope4ever_60:

(Start: 30 @40461 has 161 MA's), (53, 40359),

Gene: HortumSL17_69 Start: 40727, Stop: 40578, Start Num: 26

Candidate Starts for HortumSL17_69:

(Start: 26 @40727 has 21 MA's), (33, 40709), (41, 40661),

Gene: ILeeKay_61 Start: 40319, Stop: 40185, Start Num: 30

Candidate Starts for ILeeKay_61:

(Start: 30 @40319 has 161 MA's), (53, 40217),

Gene: Ichabod_62 Start: 41147, Stop: 41004, Start Num: 25

Candidate Starts for Ichabod_62:

(Start: 25 @41147 has 36 MA's), (53, 41036),

Gene: IgnatiusPatJac_58 Start: 39784, Stop: 39650, Start Num: 30

Candidate Starts for IgnatiusPatJac_58:

(Start: 30 @39784 has 161 MA's), (53, 39682),

Gene: Inyanga_53 Start: 38018, Stop: 37884, Start Num: 30

Candidate Starts for Inyanga_53:

(Start: 30 @38018 has 161 MA's), (53, 37916),

Gene: Iqorha_53 Start: 38017, Stop: 37883, Start Num: 30

Candidate Starts for Iqorha_53:

(Start: 30 @38017 has 161 MA's), (53, 37915),

Gene: Itos_99 Start: 60306, Stop: 60488, Start Num: 31

Candidate Starts for Itos_99:

(Start: 31 @60306 has 34 MA's), (36, 60342), (Start: 38 @60348 has 18 MA's), (43, 60375), (44, 60381), (47, 60399), (50, 60429), (51, 60441),

Gene: Jabiru_59 Start: 39387, Stop: 39121, Start Num: 15

Candidate Starts for Jabiru_59:

(Start: 15 @39387 has 5 MA's), (22, 39363), (24, 39354), (51, 39168),

Gene: JackSparrow_61 Start: 40371, Stop: 40237, Start Num: 30

Candidate Starts for JackSparrow_61:

(Start: 30 @40371 has 161 MA's), (53, 40269),

Gene: Jeeves_69 Start: 40401, Stop: 40252, Start Num: 26

Candidate Starts for Jeeves_69:

(Start: 26 @40401 has 21 MA's), (33, 40383), (Start: 35 @40362 has 1 MA's),

Gene: Jerm2_59 Start: 39956, Stop: 39822, Start Num: 30

Candidate Starts for Jerm2_59:

(Start: 30 @39956 has 161 MA's), (53, 39854),

Gene: Jobypre_96 Start: 61096, Stop: 61230, Start Num: 38

Candidate Starts for Jobypre_96:

(Start: 38 @61096 has 18 MA's), (45, 61132), (46, 61135), (48, 61147), (53, 61198),

Gene: Jorgensen_59 Start: 39780, Stop: 39646, Start Num: 30

Candidate Starts for Jorgensen_59:

(Start: 30 @39780 has 161 MA's), (53, 39678),

Gene: Jubie_95 Start: 61231, Stop: 61365, Start Num: 38

Candidate Starts for Jubie_95:

(Start: 38 @61231 has 18 MA's), (45, 61267), (46, 61270), (48, 61282), (53, 61333),

Gene: JuliaChild_59 Start: 39638, Stop: 39504, Start Num: 30

Candidate Starts for JuliaChild_59:

(Start: 30 @39638 has 161 MA's), (53, 39536),

Gene: KBG_59 Start: 41762, Stop: 41628, Start Num: 30

Candidate Starts for KBG_59:

(Start: 30 @41762 has 161 MA's), (53, 41660),

Gene: KSSJEB_58 Start: 39422, Stop: 39279, Start Num: 25

Candidate Starts for KSSJEB_58:

(Start: 25 @39422 has 36 MA's), (53, 39311),

Gene: Kahlid_98 Start: 61111, Stop: 61293, Start Num: 31

Candidate Starts for Kahlid_98:

(Start: 31 @61111 has 34 MA's), (36, 61147), (Start: 38 @61153 has 18 MA's), (43, 61180), (44, 61186), (47, 61204), (50, 61234), (51, 61246),

Gene: Kanely_60 Start: 40359, Stop: 40225, Start Num: 30

Candidate Starts for Kanely_60:

(Start: 30 @40359 has 161 MA's), (53, 40257),

Gene: Kenmech_63 Start: 42006, Stop: 41872, Start Num: 30

Candidate Starts for Kenmech_63:

(Start: 30 @42006 has 161 MA's), (53, 41904),

Gene: Keziacharles14_66 Start: 41498, Stop: 41355, Start Num: 26

Candidate Starts for Keziacharles14_66:

(Start: 26 @41498 has 21 MA's), (33, 41480), (37, 41447), (57, 41363),

Gene: KikiBouba_58 Start: 39961, Stop: 39827, Start Num: 30

Candidate Starts for KikiBouba_58:

(Start: 30 @39961 has 161 MA's), (53, 39859),

Gene: Killigrew_58 Start: 40539, Stop: 40405, Start Num: 30

Candidate Starts for Killigrew_58:

(Start: 30 @40539 has 161 MA's), (53, 40437),

Gene: Kingsolomon_94 Start: 61205, Stop: 61339, Start Num: 38

Candidate Starts for Kingsolomon_94:

(Start: 38 @61205 has 18 MA's), (45, 61241), (46, 61244), (48, 61256), (53, 61307),

Gene: KirDoubleO7_94 Start: 61289, Stop: 61423, Start Num: 38

Candidate Starts for KirDoubleO7_94:

(Start: 35 @61274 has 1 MA's), (Start: 38 @61289 has 18 MA's), (45, 61325), (46, 61328), (48, 61340), (53, 61391),

Gene: Kropertea_96 Start: 60713, Stop: 60886, Start Num: 31

Candidate Starts for Kropertea_96:

(Start: 31 @60713 has 34 MA's), (34, 60737), (Start: 38 @60755 has 18 MA's), (40, 60764), (41, 60767), (43, 60782), (50, 60827), (53, 60854),

Gene: Krypton555_99 Start: 61780, Stop: 61914, Start Num: 38

Candidate Starts for Krypton555_99:

(Start: 35 @61765 has 1 MA's), (Start: 38 @61780 has 18 MA's), (45, 61816), (46, 61819), (48, 61831), (53, 61882), (54, 61888),

Gene: Kugel_58 Start: 40607, Stop: 40473, Start Num: 30

Candidate Starts for Kugel_58:

(Start: 30 @40607 has 161 MA's), (53, 40505),

Gene: KyMonks1A_61 Start: 40000, Stop: 39857, Start Num: 25

Candidate Starts for KyMonks1A_61:

(Start: 25 @40000 has 36 MA's), (53, 39889),

Gene: Kykar_58 Start: 39437, Stop: 39303, Start Num: 30

Candidate Starts for Kykar_58:

(Start: 30 @39437 has 161 MA's), (53, 39335),

Gene: Lamina13_60 Start: 39739, Stop: 39605, Start Num: 30

Candidate Starts for Lamina13_60:

(Start: 30 @39739 has 161 MA's), (53, 39637),

Gene: Lesedi_54 Start: 38344, Stop: 38210, Start Num: 30

Candidate Starts for Lesedi_54:

(Start: 30 @38344 has 161 MA's), (53, 38242),

Gene: Levia_56 Start: 39458, Stop: 39324, Start Num: 30

Candidate Starts for Levia_56:

(Start: 30 @39458 has 161 MA's), (53, 39356),

Gene: Lewan_100 Start: 61399, Stop: 61581, Start Num: 31

Candidate Starts for Lewan_100:

(Start: 31 @61399 has 34 MA's), (36, 61435), (Start: 38 @61441 has 18 MA's), (43, 61468), (44, 61474), (47, 61492), (50, 61522), (51, 61534),

Gene: LilBib_58 Start: 41131, Stop: 40988, Start Num: 25

Candidate Starts for LilBib_58:

(Start: 25 @41131 has 36 MA's), (53, 41020),

Gene: LilDestine_97 Start: 61070, Stop: 61252, Start Num: 31

Candidate Starts for LilDestine_97:

(Start: 31 @61070 has 34 MA's), (36, 61106), (Start: 38 @61112 has 18 MA's), (43, 61139), (44, 61145), (47, 61163), (50, 61193), (51, 61205),

Gene: Lilleskat_64 Start: 40511, Stop: 40362, Start Num: 26

Candidate Starts for Lilleskat_64:

(Start: 26 @40511 has 21 MA's), (33, 40493), (41, 40445),

Gene: LiyuLake_95 Start: 61362, Stop: 61496, Start Num: 38

Candidate Starts for LiyuLake_95:

(Start: 35 @61347 has 1 MA's), (Start: 38 @61362 has 18 MA's), (45, 61398), (46, 61401), (48, 61413), (53, 61464),

Gene: Loadrie_98 Start: 61561, Stop: 61743, Start Num: 31

Candidate Starts for Loadrie_98:

(Start: 31 @61561 has 34 MA's), (36, 61597), (Start: 38 @61603 has 18 MA's), (43, 61630), (44, 61636), (47, 61654), (50, 61684), (51, 61696),

Gene: Lockley_56 Start: 39400, Stop: 39257, Start Num: 25

Candidate Starts for Lockley_56:

(Start: 25 @39400 has 36 MA's), (53, 39289),

Gene: Lolly9_96 Start: 61453, Stop: 61587, Start Num: 38

Candidate Starts for Lolly9_96:

(Start: 35 @61438 has 1 MA's), (Start: 38 @61453 has 18 MA's), (45, 61489), (46, 61492), (48, 61504), (53, 61555),

Gene: Lopton_58 Start: 41812, Stop: 41678, Start Num: 30

Candidate Starts for Lopton_58:

(Start: 30 @41812 has 161 MA's), (53, 41710),

Gene: Luchador_68 Start: 41978, Stop: 41829, Start Num: 26

Candidate Starts for Luchador_68:

(16, 42008), (Start: 26 @41978 has 21 MA's), (33, 41960), (Start: 35 @41939 has 1 MA's),

Gene: Lumos_96 Start: 61093, Stop: 61227, Start Num: 38

Candidate Starts for Lumos_96:

(Start: 38 @61093 has 18 MA's), (45, 61129), (46, 61132), (48, 61144), (53, 61195),

Gene: LunarLander_59 Start: 39641, Stop: 39507, Start Num: 30

Candidate Starts for LunarLander_59:

(Start: 30 @39641 has 161 MA's), (53, 39539),

Gene: Lynnae_100 Start: 61171, Stop: 61353, Start Num: 31

Candidate Starts for Lynnae_100:

(Start: 31 @61171 has 34 MA's), (36, 61207), (Start: 38 @61213 has 18 MA's), (43, 61240), (44, 61246), (47, 61264), (50, 61294), (51, 61306),

Gene: MPlant7149_57 Start: 38517, Stop: 38383, Start Num: 30

Candidate Starts for MPlant7149_57:

(Start: 30 @38517 has 161 MA's), (53, 38415),

Gene: Magnar_56 Start: 39959, Stop: 39825, Start Num: 30
Candidate Starts for Magnar_56:
(Start: 30 @39959 has 161 MA's), (53, 39857),

Gene: Magnito_57 Start: 39684, Stop: 39550, Start Num: 30
Candidate Starts for Magnito_57:
(Start: 30 @39684 has 161 MA's), (53, 39582),

Gene: Makemake_59 Start: 40359, Stop: 40216, Start Num: 25
Candidate Starts for Makemake_59:
(Start: 25 @40359 has 36 MA's), (53, 40248),

Gene: Manatee_59 Start: 40057, Stop: 39914, Start Num: 25
Candidate Starts for Manatee_59:
(Start: 25 @40057 has 36 MA's),

Gene: Marcell_55 Start: 38966, Stop: 38832, Start Num: 30
Candidate Starts for Marcell_55:
(Start: 30 @38966 has 161 MA's), (53, 38864),

Gene: Marchy_53 Start: 37054, Stop: 36920, Start Num: 30
Candidate Starts for Marchy_53:
(Start: 30 @37054 has 161 MA's), (53, 36952),

Gene: Marco3_62 Start: 41738, Stop: 41595, Start Num: 25
Candidate Starts for Marco3_62:
(Start: 25 @41738 has 36 MA's),

Gene: Marge_57 Start: 39855, Stop: 39721, Start Num: 30
Candidate Starts for Marge_57:
(Start: 30 @39855 has 161 MA's), (53, 39753),

Gene: Maroc7_56 Start: 40254, Stop: 40120, Start Num: 30
Candidate Starts for Maroc7_56:
(Start: 30 @40254 has 161 MA's), (53, 40152),

Gene: Marsha_57 Start: 40396, Stop: 40262, Start Num: 30
Candidate Starts for Marsha_57:
(Start: 30 @40396 has 161 MA's), (53, 40294),

Gene: MaryBeth_57 Start: 40279, Stop: 40136, Start Num: 25
Candidate Starts for MaryBeth_57:
(Start: 25 @40279 has 36 MA's),

Gene: McGuire_60 Start: 39619, Stop: 39485, Start Num: 30
Candidate Starts for McGuire_60:
(Start: 30 @39619 has 161 MA's), (53, 39517),

Gene: McSinger_58 Start: 39589, Stop: 39455, Start Num: 30
Candidate Starts for McSinger_58:
(Start: 30 @39589 has 161 MA's), (53, 39487),

Gene: MegTheThird_64 Start: 40001, Stop: 39861, Start Num: 26
Candidate Starts for MegTheThird_64:
(16, 40034), (Start: 26 @40001 has 21 MA's), (33, 39983), (37, 39950), (40, 39938),

Gene: MetalQZJ_56 Start: 40279, Stop: 40136, Start Num: 25
Candidate Starts for MetalQZJ_56:
(Start: 25 @40279 has 36 MA's),

Gene: Michley_58 Start: 39990, Stop: 39856, Start Num: 30
Candidate Starts for Michley_58:
(19, 40020), (Start: 30 @39990 has 161 MA's), (53, 39888),

Gene: Miley16_99 Start: 61842, Stop: 62027, Start Num: 29
Candidate Starts for Miley16_99:
(Start: 29 @61842 has 3 MA's), (Start: 31 @61845 has 34 MA's), (34, 61869), (36, 61881), (Start: 38 @61887 has 18 MA's), (47, 61938), (50, 61968), (51, 61980), (53, 61995),

Gene: MilleFeuille_58 Start: 39432, Stop: 39289, Start Num: 25
Candidate Starts for MilleFeuille_58:
(Start: 25 @39432 has 36 MA's),

Gene: MiniLon_101 Start: 61454, Stop: 61588, Start Num: 38
Candidate Starts for MiniLon_101:
(Start: 35 @61439 has 1 MA's), (Start: 38 @61454 has 18 MA's), (45, 61490), (46, 61493), (48, 61505), (53, 61556),

Gene: MiniMac_101 Start: 61434, Stop: 61583, Start Num: 35
Candidate Starts for MiniMac_101:
(Start: 35 @61434 has 1 MA's), (Start: 38 @61449 has 18 MA's), (45, 61485), (46, 61488), (48, 61500), (53, 61551),

Gene: MkaliMitinis3_101 Start: 61525, Stop: 61707, Start Num: 31
Candidate Starts for MkaliMitinis3_101:
(Start: 31 @61525 has 34 MA's), (36, 61561), (Start: 38 @61567 has 18 MA's), (43, 61594), (44, 61600), (47, 61618), (50, 61648), (51, 61660),

Gene: Mkhuseli_56 Start: 38717, Stop: 38583, Start Num: 30
Candidate Starts for Mkhuseli_56:
(Start: 30 @38717 has 161 MA's), (53, 38615),

Gene: Molly_59 Start: 38935, Stop: 38801, Start Num: 30
Candidate Starts for Molly_59:
(Start: 30 @38935 has 161 MA's), (53, 38833),

Gene: Monet_61 Start: 41021, Stop: 40887, Start Num: 30
Candidate Starts for Monet_61:
(Start: 30 @41021 has 161 MA's), (53, 40919),

Gene: Moose_57 Start: 39132, Stop: 38998, Start Num: 30
Candidate Starts for Moose_57:
(Start: 30 @39132 has 161 MA's), (53, 39030),

Gene: Moostard_93 Start: 61200, Stop: 61334, Start Num: 38

Candidate Starts for Moostard_93:

(Start: 38 @61200 has 18 MA's), (45, 61236), (46, 61239), (48, 61251), (53, 61302),

Gene: MrGordo_58 Start: 39793, Stop: 39659, Start Num: 30

Candidate Starts for MrGordo_58:

(Start: 30 @39793 has 161 MA's), (53, 39691),

Gene: Mryolo_55 Start: 39838, Stop: 39704, Start Num: 30

Candidate Starts for Mryolo_55:

(Start: 30 @39838 has 161 MA's),

Gene: MsGreen_96 Start: 61095, Stop: 61229, Start Num: 38

Candidate Starts for MsGreen_96:

(Start: 38 @61095 has 18 MA's), (45, 61131), (46, 61134), (48, 61146), (53, 61197),

Gene: Mule_56 Start: 38388, Stop: 38254, Start Num: 30

Candidate Starts for Mule_56:

(Start: 30 @38388 has 161 MA's), (53, 38286),

Gene: Museum_59 Start: 40085, Stop: 39951, Start Num: 30

Candidate Starts for Museum_59:

(Start: 30 @40085 has 161 MA's), (53, 39983),

Gene: MyraDee_64 Start: 37954, Stop: 37787, Start Num: 20

Candidate Starts for MyraDee_64:

(1, 38476), (2, 38458), (3, 38206), (Start: 20 @37954 has 1 MA's), (Start: 26 @37930 has 21 MA's),
(Start: 38 @37882 has 18 MA's), (49, 37846), (52, 37825),

Gene: Myxus_68 Start: 40727, Stop: 40578, Start Num: 26

Candidate Starts for Myxus_68:

(Start: 26 @40727 has 21 MA's), (33, 40709), (41, 40661),

Gene: NEHalo_56 Start: 39867, Stop: 39733, Start Num: 30

Candidate Starts for NEHalo_56:

(Start: 30 @39867 has 161 MA's), (53, 39765),

Gene: Naca_58 Start: 39771, Stop: 39505, Start Num: 15

Candidate Starts for Naca_58:

(Start: 15 @39771 has 5 MA's), (50, 39564),

Gene: Naira_61 Start: 41695, Stop: 41561, Start Num: 30

Candidate Starts for Naira_61:

(Start: 30 @41695 has 161 MA's), (53, 41593),

Gene: Nerujay_60 Start: 40434, Stop: 40300, Start Num: 30

Candidate Starts for Nerujay_60:

(Start: 30 @40434 has 161 MA's), (53, 40332),

Gene: Netyap_98 Start: 61401, Stop: 61583, Start Num: 31

Candidate Starts for Netyap_98:

(Start: 31 @61401 has 34 MA's), (36, 61437), (Start: 38 @61443 has 18 MA's), (43, 61470), (44, 61476), (47, 61494), (50, 61524), (51, 61536),

Gene: Nhonho_57 Start: 40780, Stop: 40646, Start Num: 30

Candidate Starts for Nhonho_57:

(Start: 30 @40780 has 161 MA's), (53, 40678),

Gene: Nicholas_94 Start: 61205, Stop: 61339, Start Num: 38

Candidate Starts for Nicholas_94:

(Start: 38 @61205 has 18 MA's), (45, 61241), (46, 61244), (48, 61256), (53, 61307),

Gene: Nicholasp3_99 Start: 61193, Stop: 61375, Start Num: 31

Candidate Starts for Nicholasp3_99:

(Start: 31 @61193 has 34 MA's), (36, 61229), (Start: 38 @61235 has 18 MA's), (43, 61262), (44, 61268), (47, 61286), (50, 61316), (51, 61328),

Gene: Niza_60 Start: 41442, Stop: 41308, Start Num: 30

Candidate Starts for Niza_60:

(Start: 30 @41442 has 161 MA's), (53, 41340),

Gene: Noxious_58 Start: 40152, Stop: 40018, Start Num: 30

Candidate Starts for Noxious_58:

(Start: 30 @40152 has 161 MA's), (53, 40050),

Gene: Onglai_66 Start: 38931, Stop: 38782, Start Num: 26

Candidate Starts for Onglai_66:

(Start: 26 @38931 has 21 MA's), (33, 38913), (41, 38865),

Gene: Oogway_57 Start: 39790, Stop: 39656, Start Num: 30

Candidate Starts for Oogway_57:

(Start: 30 @39790 has 161 MA's), (53, 39688),

Gene: OverPar_101 Start: 61561, Stop: 61743, Start Num: 31

Candidate Starts for OverPar_101:

(Start: 31 @61561 has 34 MA's), (36, 61597), (Start: 38 @61603 has 18 MA's), (43, 61630), (44, 61636), (47, 61654), (50, 61684), (51, 61696),

Gene: PSullivan_58 Start: 38828, Stop: 38685, Start Num: 25

Candidate Starts for PSullivan_58:

(Start: 25 @38828 has 36 MA's),

Gene: PYPDinur_100 Start: 61783, Stop: 61956, Start Num: 31

Candidate Starts for PYPDinur_100:

(9, 61690), (11, 61705), (14, 61729), (Start: 31 @61783 has 34 MA's), (34, 61807), (Start: 38 @61825 has 18 MA's), (41, 61837), (43, 61852), (44, 61858), (50, 61897), (53, 61924),

Gene: PacerPaul_58 Start: 40284, Stop: 40150, Start Num: 30

Candidate Starts for PacerPaul_58:

(Start: 30 @40284 has 161 MA's), (53, 40182),

Gene: PackMan_67 Start: 40602, Stop: 40453, Start Num: 26

Candidate Starts for PackMan_67:

(Start: 26 @40602 has 21 MA's), (33, 40584), (41, 40536),

Gene: Papez_61 Start: 41812, Stop: 41678, Start Num: 30

Candidate Starts for Papez_61:

(Start: 30 @41812 has 161 MA's), (53, 41710),

Gene: Paphu_57 Start: 39421, Stop: 39287, Start Num: 30

Candidate Starts for Paphu_57:

(Start: 30 @39421 has 161 MA's), (53, 39319),

Gene: Paraselene_56 Start: 40336, Stop: 40193, Start Num: 25

Candidate Starts for Paraselene_56:

(Start: 25 @40336 has 36 MA's),

Gene: Parliament_58 Start: 40049, Stop: 39915, Start Num: 30

Candidate Starts for Parliament_58:

(Start: 30 @40049 has 161 MA's),

Gene: PascalRango_58 Start: 40088, Stop: 39954, Start Num: 30

Candidate Starts for PascalRango_58:

(Start: 30 @40088 has 161 MA's), (53, 39986),

Gene: PattyP_60 Start: 40478, Stop: 40344, Start Num: 30

Candidate Starts for PattyP_60:

(Start: 30 @40478 has 161 MA's), (53, 40376),

Gene: Payneful_58 Start: 39771, Stop: 39637, Start Num: 30

Candidate Starts for Payneful_58:

(Start: 30 @39771 has 161 MA's), (53, 39669),

Gene: Pepe_55 Start: 38549, Stop: 38406, Start Num: 25

Candidate Starts for Pepe_55:

(Start: 25 @38549 has 36 MA's),

Gene: Perseus_58 Start: 40793, Stop: 40659, Start Num: 30

Candidate Starts for Perseus_58:

(Start: 30 @40793 has 161 MA's), (53, 40691),

Gene: Peterson_62 Start: 42031, Stop: 41897, Start Num: 30

Candidate Starts for Peterson_62:

(Start: 30 @42031 has 161 MA's), (53, 41929),

Gene: Petp2012_59 Start: 40827, Stop: 40693, Start Num: 30

Candidate Starts for Petp2012_59:

(Start: 30 @40827 has 161 MA's), (53, 40725),

Gene: Petruccio_57 Start: 39237, Stop: 39103, Start Num: 30

Candidate Starts for Petruccio_57:

(Start: 30 @39237 has 161 MA's), (53, 39135),

Gene: Phaeder_68 Start: 40602, Stop: 40453, Start Num: 26

Candidate Starts for Phaeder_68:

(Start: 26 @40602 has 21 MA's), (33, 40584), (41, 40536),

Gene: PhineBark_58 Start: 40476, Stop: 40342, Start Num: 30

Candidate Starts for PhineBark_58:

(Start: 30 @40476 has 161 MA's), (53, 40374),

Gene: Phlippers_56 Start: 40591, Stop: 40457, Start Num: 30

Candidate Starts for Phlippers_56:

(Start: 30 @40591 has 161 MA's), (53, 40489),

Gene: Phonnegut_69 Start: 40824, Stop: 40675, Start Num: 26

Candidate Starts for Phonnegut_69:

(Start: 26 @40824 has 21 MA's), (33, 40806), (41, 40758),

Gene: PhrostyMug_58 Start: 40562, Stop: 40428, Start Num: 30

Candidate Starts for PhrostyMug_58:

(Start: 30 @40562 has 161 MA's), (53, 40460),

Gene: PinkPlastic_58 Start: 39549, Stop: 39415, Start Num: 30

Candidate Starts for PinkPlastic_58:

(Start: 30 @39549 has 161 MA's), (53, 39447),

Gene: Pinto_59 Start: 40150, Stop: 40013, Start Num: 27

Candidate Starts for Pinto_59:

(Start: 27 @40150 has 3 MA's), (Start: 30 @40147 has 161 MA's), (53, 40045),

Gene: Pioneer_69 Start: 40824, Stop: 40675, Start Num: 26

Candidate Starts for Pioneer_69:

(Start: 26 @40824 has 21 MA's), (33, 40806), (41, 40758),

Gene: Pippin_59 Start: 39764, Stop: 39630, Start Num: 30

Candidate Starts for Pippin_59:

(Start: 30 @39764 has 161 MA's), (53, 39662),

Gene: Pita2_61 Start: 40325, Stop: 40182, Start Num: 25

Candidate Starts for Pita2_61:

(Start: 25 @40325 has 36 MA's),

Gene: PowerRanger_56 Start: 40985, Stop: 40851, Start Num: 30

Candidate Starts for PowerRanger_56:

(Start: 30 @40985 has 161 MA's), (53, 40883),

Gene: ProMouse_58 Start: 40099, Stop: 39956, Start Num: 25

Candidate Starts for ProMouse_58:

(Start: 25 @40099 has 36 MA's), (53, 39988),

Gene: Puppet_57 Start: 40265, Stop: 40131, Start Num: 30

Candidate Starts for Puppet_57:

(Start: 30 @40265 has 161 MA's), (53, 40163),

Gene: QTRlifeCrisis_58 Start: 40342, Stop: 40199, Start Num: 25

Candidate Starts for QTRlifeCrisis_58:

(Start: 25 @40342 has 36 MA's),

Gene: Quby_100 Start: 61112, Stop: 61285, Start Num: 31

Candidate Starts for Quby_100:

(Start: 28 @61109 has 2 MA's), (Start: 31 @61112 has 34 MA's), (34, 61136), (Start: 38 @61154 has 18 MA's), (41, 61166), (43, 61181), (44, 61187), (50, 61226), (53, 61253),

Gene: Raid_57 Start: 39512, Stop: 39378, Start Num: 30

Candidate Starts for Raid_57:

(Start: 30 @39512 has 161 MA's), (53, 39410),

Gene: Rajelicia_59 Start: 40856, Stop: 40722, Start Num: 30

Candidate Starts for Rajelicia_59:

(Start: 30 @40856 has 161 MA's), (53, 40754),

Gene: Red305_97 Start: 61096, Stop: 61230, Start Num: 38

Candidate Starts for Red305_97:

(Start: 38 @61096 has 18 MA's), (45, 61132), (46, 61135), (48, 61147), (53, 61198),

Gene: Rhynn_56 Start: 38880, Stop: 38746, Start Num: 30

Candidate Starts for Rhynn_56:

(Start: 30 @38880 has 161 MA's), (53, 38778),

Gene: RidgeCB_58 Start: 40123, Stop: 39989, Start Num: 30

Candidate Starts for RidgeCB_58:

(Start: 30 @40123 has 161 MA's), (53, 40021),

Gene: Ringer_58 Start: 41030, Stop: 40896, Start Num: 30

Candidate Starts for Ringer_58:

(Start: 30 @41030 has 161 MA's), (53, 40928),

Gene: Rohr_59 Start: 40002, Stop: 39868, Start Num: 30

Candidate Starts for Rohr_59:

(Start: 30 @40002 has 161 MA's), (53, 39900),

Gene: Rossetti_99 Start: 61561, Stop: 61743, Start Num: 31

Candidate Starts for Rossetti_99:

(Start: 31 @61561 has 34 MA's), (36, 61597), (Start: 38 @61603 has 18 MA's), (40, 61612), (43, 61630), (47, 61654), (50, 61684), (51, 61696), (53, 61711),

Gene: Rubeus_58 Start: 37943, Stop: 37806, Start Num: 27

Candidate Starts for Rubeus_58:

(Start: 27 @37943 has 3 MA's), (Start: 30 @37940 has 161 MA's), (53, 37838),

Gene: Rufus_59 Start: 39468, Stop: 39334, Start Num: 30

Candidate Starts for Rufus_59:

(Start: 30 @39468 has 161 MA's), (53, 39366),

Gene: Rumpelstiltskin_95 Start: 60986, Stop: 61168, Start Num: 31

Candidate Starts for Rumpelstiltskin_95:

(Start: 31 @60986 has 34 MA's), (36, 61022), (Start: 38 @61028 has 18 MA's), (43, 61055), (44, 61061), (47, 61079), (50, 61109), (51, 61121),

Gene: Rutherferd_59 Start: 40099, Stop: 39965, Start Num: 30

Candidate Starts for Rutherferd_59:

(Start: 30 @40099 has 161 MA's), (53, 39997),

Gene: RyeScarlet_70 Start: 40799, Stop: 40650, Start Num: 26

Candidate Starts for RyeScarlet_70:

(Start: 26 @40799 has 21 MA's), (33, 40781), (41, 40733),

Gene: STLscum_61 Start: 40923, Stop: 40780, Start Num: 25

Candidate Starts for STLscum_61:

(Start: 25 @40923 has 36 MA's),

Gene: Sachima_64 Start: 40628, Stop: 40479, Start Num: 26

Candidate Starts for Sachima_64:

(Start: 26 @40628 has 21 MA's), (33, 40610), (41, 40562),

Gene: Sagefire_60 Start: 40676, Stop: 40542, Start Num: 30

Candidate Starts for Sagefire_60:

(Start: 30 @40676 has 161 MA's), (53, 40574),

Gene: Samty_95 Start: 61193, Stop: 61327, Start Num: 38

Candidate Starts for Samty_95:

(Start: 38 @61193 has 18 MA's), (45, 61229), (46, 61232), (48, 61244), (53, 61295),

Gene: Sandaddy_55 Start: 39509, Stop: 39366, Start Num: 25

Candidate Starts for Sandaddy_55:

(Start: 25 @39509 has 36 MA's), (53, 39398),

Gene: Sanya_54 Start: 39790, Stop: 39656, Start Num: 30

Candidate Starts for Sanya_54:

(Start: 30 @39790 has 161 MA's), (53, 39688),

Gene: SarFire_55 Start: 39071, Stop: 38928, Start Num: 25

Candidate Starts for SarFire_55:

(Start: 25 @39071 has 36 MA's), (53, 38960),

Gene: Sarshaun_100 Start: 62153, Stop: 62335, Start Num: 31

Candidate Starts for Sarshaun_100:

(Start: 31 @62153 has 34 MA's), (36, 62189), (Start: 38 @62195 has 18 MA's), (43, 62222), (44, 62228), (47, 62246), (50, 62276), (51, 62288),

Gene: Scowl_59 Start: 39900, Stop: 39757, Start Num: 25

Candidate Starts for Scowl_59:

(Start: 25 @39900 has 36 MA's),

Gene: Seabiscuit_62 Start: 39881, Stop: 39747, Start Num: 30

Candidate Starts for Seabiscuit_62:

(Start: 30 @39881 has 161 MA's), (53, 39779),

Gene: SheaKeira_63 Start: 39912, Stop: 39769, Start Num: 26

Candidate Starts for SheaKeira_63:

(Start: 26 @39912 has 21 MA's), (33, 39894), (37, 39861), (40, 39849), (57, 39777),

Gene: Sheng711_101 Start: 61307, Stop: 61480, Start Num: 31

Candidate Starts for Sheng711_101:

(9, 61214), (11, 61229), (14, 61253), (Start: 31 @61307 has 34 MA's), (34, 61331), (Start: 38 @61349 has 18 MA's), (41, 61361), (43, 61376), (44, 61382), (50, 61421), (53, 61448),

Gene: ShortQueendom_53 Start: 36829, Stop: 36695, Start Num: 30

Candidate Starts for ShortQueendom_53:
(Start: 30 @36829 has 161 MA's), (53, 36727),

Gene: Sibs6_60 Start: 38579, Stop: 38445, Start Num: 30
Candidate Starts for Sibs6_60:
(Start: 30 @38579 has 161 MA's), (53, 38477),

Gene: SkiPole_63 Start: 40593, Stop: 40450, Start Num: 25
Candidate Starts for SkiPole_63:
(Start: 25 @40593 has 36 MA's),

Gene: Slagathor_60 Start: 40909, Stop: 40775, Start Num: 30
Candidate Starts for Slagathor_60:
(Start: 30 @40909 has 161 MA's), (53, 40807),

Gene: Smairt_61 Start: 41555, Stop: 41421, Start Num: 30
Candidate Starts for Smairt_61:
(Start: 30 @41555 has 161 MA's), (53, 41453),

Gene: Smeagol_60 Start: 41059, Stop: 40925, Start Num: 30
Candidate Starts for Smeagol_60:
(Start: 30 @41059 has 161 MA's), (49, 40984), (53, 40957),

Gene: Snazzy_57 Start: 39444, Stop: 39310, Start Num: 30
Candidate Starts for Snazzy_57:
(Start: 30 @39444 has 161 MA's), (53, 39342),

Gene: Snenia_95 Start: 61097, Stop: 61231, Start Num: 38
Candidate Starts for Snenia_95:
(Start: 38 @61097 has 18 MA's), (45, 61133), (46, 61136), (48, 61148), (53, 61199),

Gene: SoJulia_101 Start: 62917, Stop: 63099, Start Num: 31
Candidate Starts for SoJulia_101:
(Start: 31 @62917 has 34 MA's), (36, 62953), (Start: 38 @62959 has 18 MA's), (43, 62986), (44, 62992), (47, 63010), (50, 63040), (51, 63052),

Gene: Soap141_99 Start: 62153, Stop: 62335, Start Num: 31
Candidate Starts for Soap141_99:
(Start: 31 @62153 has 34 MA's), (36, 62189), (Start: 38 @62195 has 18 MA's), (43, 62222), (44, 62228), (47, 62246), (50, 62276), (51, 62288),

Gene: Solon_56 Start: 39316, Stop: 39182, Start Num: 30
Candidate Starts for Solon_56:
(Start: 30 @39316 has 161 MA's), (53, 39214),

Gene: SororFago_67 Start: 41621, Stop: 41472, Start Num: 26
Candidate Starts for SororFago_67:
(16, 41651), (Start: 26 @41621 has 21 MA's), (33, 41603), (Start: 35 @41582 has 1 MA's), (41, 41555),

Gene: Sorpresa_56 Start: 39511, Stop: 39368, Start Num: 25
Candidate Starts for Sorpresa_56:
(Start: 25 @39511 has 36 MA's), (53, 39400),

Gene: Squee_59 Start: 40162, Stop: 40028, Start Num: 30
Candidate Starts for Squee_59:
(Start: 30 @40162 has 161 MA's), (53, 40060),

Gene: StewieG_55 Start: 36836, Stop: 36702, Start Num: 30
Candidate Starts for StewieG_55:
(Start: 30 @36836 has 161 MA's), (53, 36734),

Gene: Sumter_54 Start: 40052, Stop: 39918, Start Num: 30
Candidate Starts for Sumter_54:
(Start: 30 @40052 has 161 MA's), (53, 39950),

Gene: Sunshine924_60 Start: 39199, Stop: 39056, Start Num: 25
Candidate Starts for Sunshine924_60:
(Start: 25 @39199 has 36 MA's),

Gene: SwissCheese_59 Start: 39632, Stop: 39498, Start Num: 30
Candidate Starts for SwissCheese_59:
(Start: 30 @39632 has 161 MA's), (53, 39530),

Gene: Switzer_59 Start: 41665, Stop: 41522, Start Num: 25
Candidate Starts for Switzer_59:
(Start: 25 @41665 has 36 MA's),

Gene: Swole_59 Start: 39113, Stop: 38979, Start Num: 30
Candidate Starts for Swole_59:
(Start: 30 @39113 has 161 MA's), (53, 39011),

Gene: Target_59 Start: 38402, Stop: 38268, Start Num: 30
Candidate Starts for Target_59:
(Start: 30 @38402 has 161 MA's), (53, 38300),

Gene: Tasp14_61 Start: 40363, Stop: 40229, Start Num: 30
Candidate Starts for Tasp14_61:
(Start: 30 @40363 has 161 MA's), (53, 40261),

Gene: Teodoridan_56 Start: 39136, Stop: 39002, Start Num: 30
Candidate Starts for Teodoridan_56:
(Start: 30 @39136 has 161 MA's),

Gene: TheloniousMonk_59 Start: 41765, Stop: 41631, Start Num: 30
Candidate Starts for TheloniousMonk_59:
(Start: 30 @41765 has 161 MA's), (53, 41663),

Gene: Thor_55 Start: 38429, Stop: 38286, Start Num: 25
Candidate Starts for Thor_55:
(Start: 25 @38429 has 36 MA's), (53, 38318),

Gene: Topgun_57 Start: 39202, Stop: 39068, Start Num: 30
Candidate Starts for Topgun_57:
(Start: 30 @39202 has 161 MA's), (53, 39100),

Gene: Tote_54 Start: 36380, Stop: 36246, Start Num: 30

Candidate Starts for Tote_54:
(Start: 30 @36380 has 161 MA's), (53, 36278),

Gene: Tourach_100 Start: 62232, Stop: 62414, Start Num: 31
Candidate Starts for Tourach_100:
(9, 62139), (12, 62169), (Start: 31 @62232 has 34 MA's), (32, 62241), (Start: 35 @62259 has 1 MA's),
(36, 62268), (43, 62301), (47, 62325), (50, 62355), (51, 62367), (53, 62382),

Gene: Treddle_59 Start: 40533, Stop: 40399, Start Num: 30
Candidate Starts for Treddle_59:
(Start: 30 @40533 has 161 MA's), (53, 40431),

Gene: TriFive_97 Start: 61209, Stop: 61343, Start Num: 38
Candidate Starts for TriFive_97:
(Start: 38 @61209 has 18 MA's), (45, 61245), (46, 61248), (48, 61260), (53, 61311),

Gene: Tripl3t_60 Start: 41504, Stop: 41370, Start Num: 30
Candidate Starts for Tripl3t_60:
(Start: 30 @41504 has 161 MA's), (53, 41402),

Gene: Trouble_60 Start: 40856, Stop: 40722, Start Num: 30
Candidate Starts for Trouble_60:
(Start: 30 @40856 has 161 MA's), (53, 40754),

Gene: Tubs_68 Start: 40602, Stop: 40453, Start Num: 26
Candidate Starts for Tubs_68:
(Start: 26 @40602 has 21 MA's), (33, 40584), (41, 40536),

Gene: Turj99_56 Start: 40896, Stop: 40753, Start Num: 25
Candidate Starts for Turj99_56:
(Start: 25 @40896 has 36 MA's), (53, 40785),

Gene: TwoPeat_60 Start: 39599, Stop: 39465, Start Num: 30
Candidate Starts for TwoPeat_60:
(Start: 30 @39599 has 161 MA's), (53, 39497),

Gene: U2_57 Start: 40613, Stop: 40470, Start Num: 25
Candidate Starts for U2_57:
(Start: 25 @40613 has 36 MA's), (53, 40502),

Gene: Underpass_91 Start: 56229, Stop: 56411, Start Num: 31
Candidate Starts for Underpass_91:
(Start: 31 @56229 has 34 MA's), (36, 56265), (Start: 38 @56271 has 18 MA's), (43, 56298), (44,
56304), (47, 56322), (50, 56352), (51, 56364),

Gene: UnionJack_59 Start: 39159, Stop: 38842, Start Num: 8
Candidate Starts for UnionJack_59:
(Start: 8 @39159 has 1 MA's), (Start: 15 @39108 has 5 MA's), (24, 39075), (51, 38889),

Gene: Vanisoa_66 Start: 41485, Stop: 41339, Start Num: 26
Candidate Starts for Vanisoa_66:
(Start: 26 @41485 has 21 MA's), (33, 41467), (39, 41425), (55, 41359),

Gene: Vetric_97 Start: 61015, Stop: 61197, Start Num: 31
Candidate Starts for Vetric_97:
(Start: 31 @61015 has 34 MA's), (36, 61051), (Start: 38 @61057 has 18 MA's), (43, 61084), (44, 61090), (47, 61108), (50, 61138), (51, 61150),

Gene: Violet_56 Start: 40459, Stop: 40325, Start Num: 30
Candidate Starts for Violet_56:
(Start: 30 @40459 has 161 MA's), (53, 40357),

Gene: Watermelon_59 Start: 39819, Stop: 39685, Start Num: 30
Candidate Starts for Watermelon_59:
(Start: 30 @39819 has 161 MA's), (53, 39717),

Gene: Wheeler_58 Start: 39624, Stop: 39490, Start Num: 30
Candidate Starts for Wheeler_58:
(Start: 30 @39624 has 161 MA's), (53, 39522),

Gene: Whirlwind_98 Start: 61608, Stop: 61742, Start Num: 38
Candidate Starts for Whirlwind_98:
(Start: 35 @61593 has 1 MA's), (Start: 38 @61608 has 18 MA's), (45, 61644), (46, 61647), (48, 61659), (53, 61710), (54, 61716),

Gene: Whitspit_55 Start: 37367, Stop: 37233, Start Num: 30
Candidate Starts for Whitspit_55:
(Start: 30 @37367 has 161 MA's), (53, 37265),

Gene: Wigglewigg_99 Start: 61323, Stop: 61505, Start Num: 31
Candidate Starts for Wigglewigg_99:
(Start: 31 @61323 has 34 MA's), (36, 61359), (Start: 38 @61365 has 18 MA's), (43, 61392), (44, 61398), (47, 61416), (50, 61446), (51, 61458),

Gene: Wilder_100 Start: 61159, Stop: 61341, Start Num: 31
Candidate Starts for Wilder_100:
(Start: 31 @61159 has 34 MA's), (36, 61195), (43, 61228), (44, 61234), (47, 61252), (50, 61282), (51, 61294), (53, 61309),

Gene: Wilkins_57 Start: 39132, Stop: 38998, Start Num: 30
Candidate Starts for Wilkins_57:
(Start: 30 @39132 has 161 MA's), (53, 39030),

Gene: Winky_99 Start: 61842, Stop: 62027, Start Num: 29
Candidate Starts for Winky_99:
(Start: 29 @61842 has 3 MA's), (Start: 31 @61845 has 34 MA's), (34, 61869), (36, 61881), (Start: 38 @61887 has 18 MA's), (47, 61938), (50, 61968), (51, 61980), (53, 61995),

Gene: Yecey3_69 Start: 40709, Stop: 40557, Start Num: 25
Candidate Starts for Yecey3_69:
(Start: 25 @40709 has 36 MA's), (33, 40688), (55, 40580), (57, 40565),

Gene: Zakai_100 Start: 61802, Stop: 61984, Start Num: 31
Candidate Starts for Zakai_100:
(Start: 31 @61802 has 34 MA's), (36, 61838), (Start: 38 @61844 has 18 MA's), (43, 61871), (44, 61877), (47, 61895), (50, 61925), (51, 61937),

Gene: Zeeculate_56 Start: 40569, Stop: 40435, Start Num: 30
Candidate Starts for Zeeculate_56:
(Start: 30 @40569 has 161 MA's), (53, 40467),

Gene: Zephyr_59 Start: 39575, Stop: 39441, Start Num: 30
Candidate Starts for Zephyr_59:
(Start: 30 @39575 has 161 MA's), (53, 39473),

Gene: Zeuska_57 Start: 40195, Stop: 40061, Start Num: 30
Candidate Starts for Zeuska_57:
(Start: 30 @40195 has 161 MA's), (53, 40093),

Gene: ZhongYanYuan_96 Start: 61296, Stop: 61478, Start Num: 31
Candidate Starts for ZhongYanYuan_96:
(17, 61251), (Start: 29 @61293 has 3 MA's), (Start: 31 @61296 has 34 MA's), (Start: 35 @61323 has 1 MA's), (36, 61332), (43, 61365), (47, 61389), (50, 61419), (51, 61431), (53, 61446),