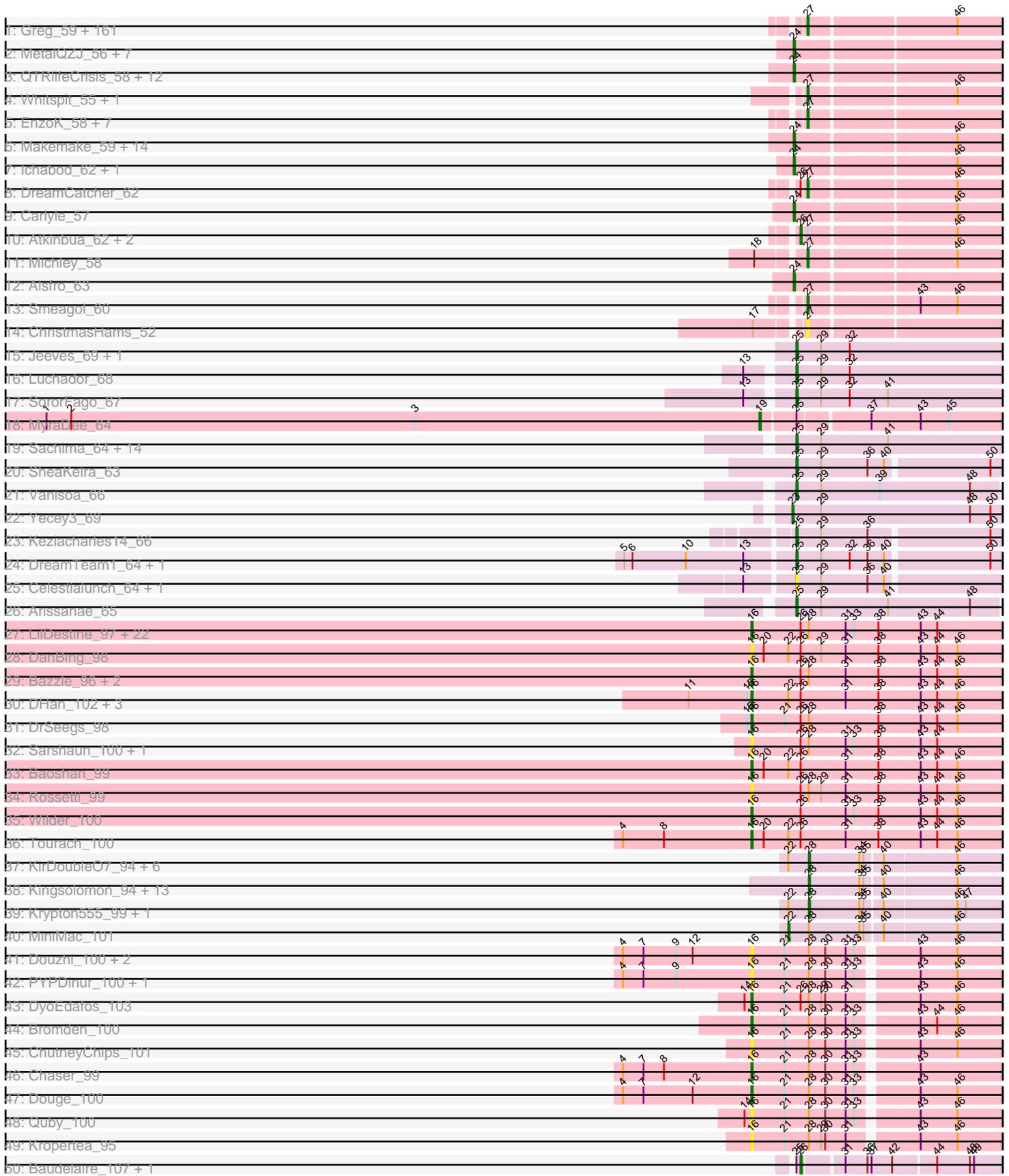# Pham 290759

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 290759 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290759 has 324 members, 57 are drafts.

Phages represented in each track:
• Track 1 : Greg_59, Jerm2_59, Kykar_58, Nhonho_57, DirtDevil_57, Fushigi_55, NEHalo_56, Hermia_58, HermioneGrange_59, Papez_61, MrGordo_58, Magnar_56, Ciao_57, Watermelon_59, Paphu_57, Hope4ever_60, Forsytheast_57, Kugel_58, Lesedi_54, KBG_59, Swole_59, PhrostyMug_58, GrecoEtereo_58, Sagefire_60, Gyzlar_54, JuliaChild_59, Rohr_59, Smairt_61, Abbyshoes_61, Fajezeel_59, Mkhuseli_56, Jorgensen_59, Perseus_58, RidgeCB_58, Fascinus_54, Inyanga_53, BigPaolini_57, Bigchungi_58, Rutherferd_59, KikiBouba_57, McSinger_58, Crispicous1_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, BeesKnees_61, Marge_57, Violet_56, BK1_52, Gandalf20_61, Levia_56, Zephyr_59, Chanagan_54, Hami1_53, Wheeler_58, Eyeball_59, BPBiebs31_60, Phlippers_56, PinkPlastic_58, Sumter_54, Snazzy_57, 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, Applejack_53, ConceptII_61, Briton15_62, Rhynn_56, Pippin_59, Aeneas_61, MPlant7149_57, Francis47_57, Tote_54, GroundGoblin_57, Ajay_59, Abrogate_570, Burton_58, Target_59, Blue_57, Peterson_62, Kenmech_63, Niza_60, Treddle_59, Acme_59, A6_52, PowerRanger_56, CatBus_56, Moose_57, Mule_56, Kanely_60, Noxious_56, Petp2012_59, Aldrich_56, PhineBark_58, Rajelicia_59, Adahisdi_58, PascalRango_58, Trouble_60, Ringer_58, BigMau_60, Bigfoot_52, Wilkins_57, Seabiscuit_62, Dussy_60, Topgun_57, HanShotFirst_59, Espresso_57, Bruns_57, ILeeKay_61, Payneful_58, Marchy_53, Naira_61, Nerujay_60, AFIS_55, HarryOW_57, Marsha_57, ShortQueendom_51, PattyP_60, Maroc7_56, Agaliana_53, Arcanine_60, Bxb1_53, Zeuska_57, TwoPeat_60, Iqorha_53, BaconJack_63, BluSpix_56, 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, Manatee_59, MilleFeuille_53, Froghopper_55, 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 : MyraDee_64
- Track 19 : 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 20 : SheaKeira_63
- Track 21 : Vanisoa_66
- Track 22 : Yecey3_69
- Track 23 : Keziacharles14_66
- Track 24 : DreamTeam1_64, Charm_64
- Track 25 : Celestialunch_64, MegTheThird_64
- Track 26 : Arissanae_65
- Track 27 : LilDestine_97, Gabriela_99, MkaliMitinis3_101, Underpass_91, Faith1_99, Loadrie_98, BobsGarage_98, BigCheese_99, OverPar_101, GuuelaD_96, Finemlucis_100, Lynnae_100, Kahlid_98, Lewan_100, Vetrix_97, Netyap_98, Itos_99, Nicholasp3_99, SoJulia_101, Wigglewiggle_99, Rumpelstiltskin_95, Zakai_100, Gardann_99
- Track 28 : DanBing_98
- Track 29 : Bazzle_96, Archie_96, Crossroads_99
- Track 30 : DHan_102, Claus_98, Hafay_100, ZhongYanYuan_96
- Track 31 : DrSeegs_98
- Track 32 : Sarshaun_100, Soap141_99
- Track 33 : Baoshan_99
- Track 34 : Rossetti_99
- Track 35 : Wilder_100
- Track 36 : Tourach_100
- Track 37 : KirDoubleO7_94, BourbonZero_97, MiniLon_101, Ellson_95, DuncansLeg_97, LiyuLake_95, Lolly9_96
- Track 38 : 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 39 : Krypton555_99, Whirlwind_98
- Track 40 : MiniMac_101
- Track 41 : Douzhi_100, FarmResident_101, BrainDrainer_101
- Track 42 : PYPDinur_100, Sheng711_101
- Track 43 : DyoEdafos_103
- Track 44 : Bromden_100
- Track 45 : ChutneyChips_101
- Track 46 : Chaser_99
- Track 47 : Douge_100

• Track 48 : Quby_100
• Track 49 : Kropertea_95
• Track 50 : 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 27, it was called in 155 of the 267 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, Blesser_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, Crispicous1_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_57, 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, Mkhuseli_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_56, 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, Rutherferd_59, Sagefire_60, Sanya_54, Seabiscuit_62, ShortQueendom_51, 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, Tripl3t_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, Archie_96, Arissanae_65, Baoshan_99, Baudelaire_107, Bazzle_96, Beemo_69, Bellis_96, BigCheese_99, Blackflame_55, BobsGarage_98, BourbonZero_97, BrainDrainer_101, Bromden_100, Carlyle_57, CartmannCramer_57, Catalina_70, Celestialunch_64, 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, 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, Jeeves_69, Jobypre_96, Jubie_95, KSSJEB_58, Kahlid_98, Keziacharles14_66, Kingsolomon_94, KirDoubleO7_94, Kropertea_95, 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, MilleFeuille_53, MiniLon_101, MiniMac_101, MkaliMitinis3_101, Moostard_93, MsGreen_96, MyraDee_64, Myxus_68, 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, Vanisoa_66, Vetrix_97, Whirlwind_98, Wigglewiggle_99, Wilder_100, Yecey3_69, Zakai_100, ZhongYanYuan_96,

Summary by start number:

Start 16:
• Found in 50 of 324 (15.4%) of genes in pham
• Manual Annotations of this start: 32 of 267
• Called 100.0% 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_95 (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 19:
• Found in 1 of 324 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 100.0% of time when present
• Phage (with cluster) where this start called: MyraDee_64 (A18),

Start 22:
• Found in 17 of 324 (5.2%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 5.9% of time when present

• Phage (with cluster) where this start called: MiniMac_101 (L3),

Start 23:
• Found in 1 of 324 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 267
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Yecey3_69 (A9),

Start 24:
• Found in 40 of 324 (12.3%) of genes in pham
• Manual Annotations of this start: 34 of 267
• 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_53 (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),

Start 25:
• Found in 30 of 324 (9.3%) of genes in pham
• Manual Annotations of this start: 20 of 267
• Called 90.0% of time when present
• Phage (with cluster) where this start called: Aliter_69 (A9), Arissanae_65 (A9), Beemo_69 (A9), Catalina_70 (A9), Celestialunch_64 (A9), 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 26:
• Found in 45 of 324 (13.9%) of genes in pham
• Manual Annotations of this start: 5 of 267
• Called 11.1% of time when present
• Phage (with cluster) where this start called: Aegeus_107 (L5), Atkinbua_62 (A1), Baudelaire_107 (L5), Pinto_59 (A1), Rubeus_58 (A1),

Start 27:
• Found in 179 of 324 (55.2%) of genes in pham
• Manual Annotations of this start: 155 of 267
• 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),

Bigchungi_58 (A1), Bigfoot_52 (A1), Bircsak_57 (A1), Blesser_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), ConceptII_61 (A1), Crispicous1_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), Gyzlar_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_57 (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), Mkhuseli_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_56 (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), Petruchio_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), Rutherferd_59 (A1), Sagefire_60 (A1), Sanya_54 (A1), Seabiscuit_62 (A1), ShortQueendom_51 (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), Zeeculate_56 (A1), Zephyr_59 (A1), Zeuska_57 (A1),

Start 28:
• Found in 66 of 324 (20.4%) of genes in pham
• Manual Annotations of this start: 18 of 267
• Called 34.8% 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 8 clusters represented in this pham: A14, A18, A1, L4, L5, L2, L3, A9,

Info for manual annotations of cluster A1:
•Start number 24 was manually annotated 34 times for cluster A1.

•Start number 26 was manually annotated 3 times for cluster A1.
•Start number 27 was manually annotated 155 times for cluster A1.

Info for manual annotations of cluster A14:
•Start number 25 was manually annotated 4 times for cluster A14.

Info for manual annotations of cluster A18:
•Start number 19 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A9:
•Start number 23 was manually annotated 1 time for cluster A9.
•Start number 25 was manually annotated 16 times for cluster A9.

Info for manual annotations of cluster L2:
•Start number 16 was manually annotated 28 times for cluster L2.

Info for manual annotations of cluster L3:
•Start number 22 was manually annotated 1 time for cluster L3.
•Start number 28 was manually annotated 18 times for cluster L3.

Info for manual annotations of cluster L4:
•Start number 16 was manually annotated 4 times for cluster L4.

Info for manual annotations of cluster L5:
•Start number 26 was manually annotated 2 times for cluster L5.

Gene Information:

Gene: A6_52 Start: 38092, Stop: 37958, Start Num: 27
Candidate Starts for A6_52:
(Start: 27 @38092 has 155 MA's), (46, 37990),

Gene: AFIS_55 Start: 38799, Stop: 38665, Start Num: 27
Candidate Starts for AFIS_55:
(Start: 27 @38799 has 155 MA's), (46, 38697),

Gene: Abbyshoes_61 Start: 40860, Stop: 40726, Start Num: 27
Candidate Starts for Abbyshoes_61:
(Start: 27 @40860 has 155 MA's), (46, 40758),

Gene: Abrogate_570 Start: 40665, Stop: 40531, Start Num: 27
Candidate Starts for Abrogate_570:
(Start: 27 @40665 has 155 MA's), (46, 40563),

Gene: Acme_59 Start: 39262, Stop: 39128, Start Num: 27
Candidate Starts for Acme_59:
(Start: 27 @39262 has 155 MA's), (46, 39160),

Gene: Adahisdi_58 Start: 40395, Stop: 40261, Start Num: 27
Candidate Starts for Adahisdi_58:
(Start: 27 @40395 has 155 MA's), (46, 40293),

Gene: Aegeus_107 Start: 62949, Stop: 63086, Start Num: 26
Candidate Starts for Aegeus_107:
(Start: 25 @62946 has 20 MA's), (Start: 26 @62949 has 5 MA's), (31, 62976), (36, 62991), (37, 62994),
(42, 63009), (44, 63039), (48, 63063), (49, 63066),

Gene: Aeneas_61 Start: 41102, Stop: 40968, Start Num: 27
Candidate Starts for Aeneas_61:
(Start: 27 @41102 has 155 MA's), (46, 41000),

Gene: Agaliana_53 Start: 37073, Stop: 36939, Start Num: 27
Candidate Starts for Agaliana_53:
(Start: 27 @37073 has 155 MA's), (46, 36971),

Gene: Ajay_59 Start: 40476, Stop: 40342, Start Num: 27
Candidate Starts for Ajay_59:
(Start: 27 @40476 has 155 MA's), (46, 40374),

Gene: Aldrich_56 Start: 39960, Stop: 39826, Start Num: 27
Candidate Starts for Aldrich_56:
(Start: 27 @39960 has 155 MA's), (46, 39858),

Gene: Aliter_69 Start: 40655, Stop: 40506, Start Num: 25
Candidate Starts for Aliter_69:
(Start: 25 @40655 has 20 MA's), (29, 40637), (41, 40589),

Gene: Alsfro_63 Start: 40052, Stop: 39909, Start Num: 24
Candidate Starts for Alsfro_63:
(Start: 24 @40052 has 34 MA's),

Gene: Altman_61 Start: 40582, Stop: 40448, Start Num: 27
Candidate Starts for Altman_61:
(Start: 27 @40582 has 155 MA's), (46, 40480),

Gene: Alvin_57 Start: 39789, Stop: 39655, Start Num: 27
Candidate Starts for Alvin_57:
(Start: 27 @39789 has 155 MA's),

Gene: Anglerfish_59 Start: 40711, Stop: 40568, Start Num: 24
Candidate Starts for Anglerfish_59:
(Start: 24 @40711 has 34 MA's),

Gene: Applejack_53 Start: 36632, Stop: 36498, Start Num: 27
Candidate Starts for Applejack_53:
(Start: 27 @36632 has 155 MA's), (46, 36530),

Gene: Arcanine_60 Start: 40322, Stop: 40188, Start Num: 27
Candidate Starts for Arcanine_60:
(Start: 27 @40322 has 155 MA's), (46, 40220),

Gene: Archie_96 Start: 60983, Stop: 61165, Start Num: 16
Candidate Starts for Archie_96:

(Start: 16 @60983 has 32 MA's), (Start: 26 @61019 has 5 MA's), (Start: 28 @61025 has 18 MA's), (31, 61052), (38, 61076), (43, 61106), (44, 61118), (46, 61133),

Gene: Arissanae_65 Start: 40920, Stop: 40774, Start Num: 25
Candidate Starts for Arissanae_65:
(Start: 25 @40920 has 20 MA's), (29, 40902), (41, 40854), (48, 40794),

Gene: Arlo_56 Start: 38792, Stop: 38658, Start Num: 27
Candidate Starts for Arlo_56:
(Start: 27 @38792 has 155 MA's), (46, 38690),

Gene: Atkinbua_62 Start: 40268, Stop: 40131, Start Num: 26
Candidate Starts for Atkinbua_62:
(Start: 26 @40268 has 5 MA's), (Start: 27 @40265 has 155 MA's), (46, 40163),

Gene: BK1_52 Start: 38092, Stop: 37958, Start Num: 27
Candidate Starts for BK1_52:
(Start: 27 @38092 has 155 MA's), (46, 37990),

Gene: BPBiebs31_60 Start: 40754, Stop: 40620, Start Num: 27
Candidate Starts for BPBiebs31_60:
(Start: 27 @40754 has 155 MA's), (46, 40652),

Gene: BaconJack_63 Start: 41853, Stop: 41719, Start Num: 27
Candidate Starts for BaconJack_63:
(Start: 27 @41853 has 155 MA's), (46, 41751),

Gene: Baoshan_99 Start: 61599, Stop: 61781, Start Num: 16
Candidate Starts for Baoshan_99:
(Start: 16 @61599 has 32 MA's), (20, 61608), (Start: 22 @61626 has 1 MA's), (Start: 26 @61635 has 5 MA's), (31, 61668), (38, 61692), (43, 61722), (44, 61734), (46, 61749),

Gene: Barriga_59 Start: 38979, Stop: 38845, Start Num: 27
Candidate Starts for Barriga_59:
(Start: 27 @38979 has 155 MA's),

Gene: BarrowTuph_59 Start: 39907, Stop: 39773, Start Num: 27
Candidate Starts for BarrowTuph_59:
(Start: 27 @39907 has 155 MA's), (46, 39805),

Gene: Baudelaire_107 Start: 62949, Stop: 63086, Start Num: 26
Candidate Starts for Baudelaire_107:
(Start: 25 @62946 has 20 MA's), (Start: 26 @62949 has 5 MA's), (31, 62976), (36, 62991), (37, 62994), (42, 63009), (44, 63039), (48, 63063), (49, 63066),

Gene: Bazzle_96 Start: 61539, Stop: 61721, Start Num: 16
Candidate Starts for Bazzle_96:
(Start: 16 @61539 has 32 MA's), (Start: 26 @61575 has 5 MA's), (Start: 28 @61581 has 18 MA's), (31, 61608), (38, 61632), (43, 61662), (44, 61674), (46, 61689),

Gene: Beemo_69 Start: 40825, Stop: 40676, Start Num: 25
Candidate Starts for Beemo_69:
(Start: 25 @40825 has 20 MA's), (29, 40807), (41, 40759),

Gene: BeesKnees_61 Start: 39847, Stop: 39713, Start Num: 27
Candidate Starts for BeesKnees_61:
(Start: 27 @39847 has 155 MA's), (46, 39745),

Gene: Bellis_96 Start: 61101, Stop: 61235, Start Num: 28
Candidate Starts for Bellis_96:
(Start: 28 @61101 has 18 MA's), (34, 61137), (35, 61140), (40, 61152), (46, 61203),

Gene: Big3_57 Start: 40553, Stop: 40419, Start Num: 27
Candidate Starts for Big3_57:
(Start: 27 @40553 has 155 MA's), (46, 40451),

Gene: BigCheese_99 Start: 61757, Stop: 61939, Start Num: 16
Candidate Starts for BigCheese_99:
(Start: 16 @61757 has 32 MA's), (Start: 26 @61793 has 5 MA's), (Start: 28 @61799 has 18 MA's), (31, 61826), (33, 61832), (38, 61850), (43, 61880), (44, 61892),

Gene: BigMau_60 Start: 39207, Stop: 39073, Start Num: 27
Candidate Starts for BigMau_60:
(Start: 27 @39207 has 155 MA's), (46, 39105),

Gene: BigPaolini_57 Start: 38390, Stop: 38256, Start Num: 27
Candidate Starts for BigPaolini_57:
(Start: 27 @38390 has 155 MA's), (46, 38288),

Gene: Bigchungi_58 Start: 39152, Stop: 39018, Start Num: 27
Candidate Starts for Bigchungi_58:
(Start: 27 @39152 has 155 MA's), (46, 39050),

Gene: Bigfoot_52 Start: 39345, Stop: 39211, Start Num: 27
Candidate Starts for Bigfoot_52:
(Start: 27 @39345 has 155 MA's), (46, 39243),

Gene: Bircsak_57 Start: 40580, Stop: 40446, Start Num: 27
Candidate Starts for Bircsak_57:
(Start: 27 @40580 has 155 MA's),

Gene: Blackflame_55 Start: 39548, Stop: 39405, Start Num: 24
Candidate Starts for Blackflame_55:
(Start: 24 @39548 has 34 MA's), (46, 39437),

Gene: Blesser_55 Start: 39373, Stop: 39239, Start Num: 27
Candidate Starts for Blesser_55:
(Start: 27 @39373 has 155 MA's), (46, 39271),

Gene: BluSpix_56 Start: 35839, Stop: 35705, Start Num: 27
Candidate Starts for BluSpix_56:
(Start: 27 @35839 has 155 MA's), (46, 35737),

Gene: Blue_57 Start: 40422, Stop: 40288, Start Num: 27
Candidate Starts for Blue_57:
(Start: 27 @40422 has 155 MA's), (46, 40320),

Gene: Bob3_57 Start: 38473, Stop: 38339, Start Num: 27
Candidate Starts for Bob3_57:
(Start: 27 @38473 has 155 MA's), (46, 38371),

Gene: BobsGarage_98 Start: 61757, Stop: 61939, Start Num: 16
Candidate Starts for BobsGarage_98:
(Start: 16 @61757 has 32 MA's), (Start: 26 @61793 has 5 MA's), (Start: 28 @61799 has 18 MA's), (31, 61826), (33, 61832), (38, 61850), (43, 61880), (44, 61892),

Gene: BourbonZero_97 Start: 61299, Stop: 61433, Start Num: 28
Candidate Starts for BourbonZero_97:
(Start: 22 @61284 has 1 MA's), (Start: 28 @61299 has 18 MA's), (34, 61335), (35, 61338), (40, 61350), (46, 61401),

Gene: BrainDrainer_101 Start: 61531, Stop: 61704, Start Num: 16
Candidate Starts for BrainDrainer_101:
(4, 61438), (7, 61453), (9, 61477), (12, 61489), (Start: 16 @61531 has 32 MA's), (21, 61555), (Start: 28 @61573 has 18 MA's), (30, 61585), (31, 61600), (33, 61606), (43, 61645), (46, 61672),

Gene: Briton15_62 Start: 40265, Stop: 40131, Start Num: 27
Candidate Starts for Briton15_62:
(Start: 27 @40265 has 155 MA's), (46, 40163),

Gene: Bromden_100 Start: 62267, Stop: 62440, Start Num: 16
Candidate Starts for Bromden_100:
(Start: 16 @62267 has 32 MA's), (21, 62291), (Start: 28 @62309 has 18 MA's), (30, 62321), (31, 62336), (33, 62342), (43, 62381), (44, 62393), (46, 62408),

Gene: Bruns_57 Start: 38964, Stop: 38830, Start Num: 27
Candidate Starts for Bruns_57:
(Start: 27 @38964 has 155 MA's), (46, 38862),

Gene: Burton_58 Start: 40146, Stop: 40012, Start Num: 27
Candidate Starts for Burton_58:
(Start: 27 @40146 has 155 MA's), (46, 40044),

Gene: Buttons_56 Start: 37913, Stop: 37779, Start Num: 27
Candidate Starts for Buttons_56:
(Start: 27 @37913 has 155 MA's), (46, 37811),

Gene: Bxb1_53 Start: 38664, Stop: 38530, Start Num: 27
Candidate Starts for Bxb1_53:
(Start: 27 @38664 has 155 MA's), (46, 38562),

Gene: CactusRose_56 Start: 39341, Stop: 39207, Start Num: 27
Candidate Starts for CactusRose_56:
(Start: 27 @39341 has 155 MA's), (46, 39239),

Gene: Carlyle_57 Start: 37358, Stop: 37215, Start Num: 24
Candidate Starts for Carlyle_57:
(Start: 24 @37358 has 34 MA's), (46, 37247),

Gene: CartmannCramer_57 Start: 41747, Stop: 41604, Start Num: 24
Candidate Starts for CartmannCramer_57:
(Start: 24 @41747 has 34 MA's),

Gene: CatBus_56 Start: 40152, Stop: 40018, Start Num: 27
Candidate Starts for CatBus_56:
(Start: 27 @40152 has 155 MA's), (46, 40050),

Gene: Catalina_70 Start: 40728, Stop: 40579, Start Num: 25
Candidate Starts for Catalina_70:
(Start: 25 @40728 has 20 MA's), (29, 40710), (41, 40662),

Gene: Celestialunch_64 Start: 40002, Stop: 39859, Start Num: 25
Candidate Starts for Celestialunch_64:
(13, 40035), (Start: 25 @40002 has 20 MA's), (29, 39984), (36, 39951), (40, 39939),

Gene: Chanagan_54 Start: 37998, Stop: 37864, Start Num: 27
Candidate Starts for Chanagan_54:
(Start: 27 @37998 has 155 MA's), (46, 37896),

Gene: Charm_64 Start: 40061, Stop: 39918, Start Num: 25
Candidate Starts for Charm_64:
(5, 40181), (6, 40175), (10, 40136), (13, 40094), (Start: 25 @40061 has 20 MA's), (29, 40043), (32, 40022), (36, 40010), (40, 39998), (50, 39926),

Gene: Chaser_99 Start: 60883, Stop: 61056, Start Num: 16
Candidate Starts for Chaser_99:
(4, 60790), (7, 60805), (8, 60820), (Start: 16 @60883 has 32 MA's), (21, 60907), (Start: 28 @60925 has 18 MA's), (30, 60937), (31, 60952), (33, 60958), (43, 60997),

Gene: ChristmasHams_52 Start: 37478, Stop: 37344, Start Num: 27
Candidate Starts for ChristmasHams_52:
(17, 37508), (Start: 27 @37478 has 155 MA's),

Gene: ChutneyChips_101 Start: 61397, Stop: 61570, Start Num: 16
Candidate Starts for ChutneyChips_101:
(Start: 16 @61397 has 32 MA's), (21, 61421), (Start: 28 @61439 has 18 MA's), (30, 61451), (31, 61466), (33, 61472), (43, 61511), (46, 61538),

Gene: Ciao_57 Start: 39371, Stop: 39237, Start Num: 27
Candidate Starts for Ciao_57:
(Start: 27 @39371 has 155 MA's), (46, 39269),

Gene: Claus_98 Start: 61500, Stop: 61682, Start Num: 16
Candidate Starts for Claus_98:
(11, 61455), (15, 61497), (Start: 16 @61500 has 32 MA's), (Start: 22 @61527 has 1 MA's), (Start: 26 @61536 has 5 MA's), (31, 61569), (38, 61593), (43, 61623), (44, 61635), (46, 61650),

Gene: Clautastrophe_94 Start: 61096, Stop: 61230, Start Num: 28
Candidate Starts for Clautastrophe_94:
(Start: 28 @61096 has 18 MA's), (34, 61132), (35, 61135), (40, 61147), (46, 61198),

Gene: ConceptII_61 Start: 41437, Stop: 41303, Start Num: 27

Candidate Starts for ConceptII_61:
(Start: 27 @41437 has 155 MA's), (46, 41335),

Gene: Corvo_59 Start: 40902, Stop: 40759, Start Num: 24
Candidate Starts for Corvo_59:
(Start: 24 @40902 has 34 MA's),

Gene: Crispicous1_55 Start: 38394, Stop: 38260, Start Num: 27
Candidate Starts for Crispicous1_55:
(Start: 27 @38394 has 155 MA's), (46, 38292),

Gene: Crossroads_99 Start: 61475, Stop: 61657, Start Num: 16
Candidate Starts for Crossroads_99:
(Start: 16 @61475 has 32 MA's), (Start: 26 @61511 has 5 MA's), (Start: 28 @61517 has 18 MA's), (31, 61544), (38, 61568), (43, 61598), (44, 61610), (46, 61625),

Gene: DD5_57 Start: 40238, Stop: 40095, Start Num: 24
Candidate Starts for DD5_57:
(Start: 24 @40238 has 34 MA's), (46, 40127),

Gene: DHan_102 Start: 61776, Stop: 61958, Start Num: 16
Candidate Starts for DHan_102:
(11, 61731), (15, 61773), (Start: 16 @61776 has 32 MA's), (Start: 22 @61803 has 1 MA's), (Start: 26 @61812 has 5 MA's), (31, 61845), (38, 61869), (43, 61899), (44, 61911), (46, 61926),

Gene: DanBing_98 Start: 61291, Stop: 61473, Start Num: 16
Candidate Starts for DanBing_98:
(Start: 16 @61291 has 32 MA's), (20, 61300), (Start: 22 @61318 has 1 MA's), (Start: 26 @61327 has 5 MA's), (29, 61342), (31, 61360), (38, 61384), (43, 61414), (44, 61426), (46, 61441),

Gene: Dexes_58 Start: 40275, Stop: 40141, Start Num: 27
Candidate Starts for Dexes_58:
(Start: 27 @40275 has 155 MA's), (46, 40173),

Gene: DirtDevil_57 Start: 39960, Stop: 39826, Start Num: 27
Candidate Starts for DirtDevil_57:
(Start: 27 @39960 has 155 MA's), (46, 39858),

Gene: Douge_100 Start: 60951, Stop: 61124, Start Num: 16
Candidate Starts for Douge_100:
(4, 60858), (7, 60873), (12, 60909), (Start: 16 @60951 has 32 MA's), (21, 60975), (Start: 28 @60993 has 18 MA's), (30, 61005), (31, 61020), (33, 61026), (43, 61065), (46, 61092),

Gene: Douzhi_100 Start: 61220, Stop: 61393, Start Num: 16
Candidate Starts for Douzhi_100:
(4, 61127), (7, 61142), (9, 61166), (12, 61178), (Start: 16 @61220 has 32 MA's), (21, 61244), (Start: 28 @61262 has 18 MA's), (30, 61274), (31, 61289), (33, 61295), (43, 61334), (46, 61361),

Gene: DrFeelGood_56 Start: 39234, Stop: 39100, Start Num: 27
Candidate Starts for DrFeelGood_56:
(Start: 27 @39234 has 155 MA's), (46, 39132),

Gene: DrSeegs_98 Start: 61845, Stop: 62027, Start Num: 16

Candidate Starts for DrSeegs_98:
(15, 61842), (Start: 16 @61845 has 32 MA's), (21, 61869), (Start: 26 @61881 has 5 MA's), (Start: 28 @61887 has 18 MA's), (38, 61938), (43, 61968), (44, 61980), (46, 61995),

Gene: DreamCatcher_62 Start: 40897, Stop: 40763, Start Num: 27
Candidate Starts for DreamCatcher_62:
(Start: 26 @40900 has 5 MA's), (Start: 27 @40897 has 155 MA's), (46, 40795),

Gene: DreamTeam1_64 Start: 39893, Stop: 39750, Start Num: 25
Candidate Starts for DreamTeam1_64:
(5, 40013), (6, 40007), (10, 39968), (13, 39926), (Start: 25 @39893 has 20 MA's), (29, 39875), (32, 39854), (36, 39842), (40, 39830), (50, 39758),

Gene: DuncansLeg_97 Start: 61287, Stop: 61421, Start Num: 28
Candidate Starts for DuncansLeg_97:
(Start: 22 @61272 has 1 MA's), (Start: 28 @61287 has 18 MA's), (34, 61323), (35, 61326), (40, 61338), (46, 61389),

Gene: Dussy_60 Start: 40880, Stop: 40746, Start Num: 27
Candidate Starts for Dussy_60:
(Start: 27 @40880 has 155 MA's), (46, 40778),

Gene: Dynamix_60 Start: 39645, Stop: 39502, Start Num: 24
Candidate Starts for Dynamix_60:
(Start: 24 @39645 has 34 MA's),

Gene: DyoEdafos_103 Start: 61511, Stop: 61684, Start Num: 16
Candidate Starts for DyoEdafos_103:
(14, 61508), (Start: 16 @61511 has 32 MA's), (21, 61535), (Start: 26 @61547 has 5 MA's), (Start: 28 @61553 has 18 MA's), (29, 61562), (30, 61565), (31, 61580), (43, 61625), (46, 61652),

Gene: EdogawaKiddo_66 Start: 40695, Stop: 40546, Start Num: 25
Candidate Starts for EdogawaKiddo_66:
(Start: 25 @40695 has 20 MA's), (29, 40677), (41, 40629),

Gene: Edtherson_57 Start: 39654, Stop: 39520, Start Num: 27
Candidate Starts for Edtherson_57:
(Start: 27 @39654 has 155 MA's), (46, 39552),

Gene: Ellson_95 Start: 61602, Stop: 61736, Start Num: 28
Candidate Starts for Ellson_95:
(Start: 22 @61587 has 1 MA's), (Start: 28 @61602 has 18 MA's), (34, 61638), (35, 61641), (40, 61653), (46, 61704),

Gene: EnzoK_58 Start: 37486, Stop: 37352, Start Num: 27
Candidate Starts for EnzoK_58:
(Start: 27 @37486 has 155 MA's),

Gene: Espresso_57 Start: 40290, Stop: 40156, Start Num: 27
Candidate Starts for Espresso_57:
(Start: 27 @40290 has 155 MA's), (46, 40188),

Gene: Euphoria_56 Start: 39547, Stop: 39404, Start Num: 24

Candidate Starts for Euphoria_56:
(Start: 24 @39547 has 34 MA's),

Gene: Eyeball_59 Start: 39749, Stop: 39615, Start Num: 27
Candidate Starts for Eyeball_59:
(Start: 27 @39749 has 155 MA's), (46, 39647),

Gene: Faith1_99 Start: 61400, Stop: 61582, Start Num: 16
Candidate Starts for Faith1_99:
(Start: 16 @61400 has 32 MA's), (Start: 26 @61436 has 5 MA's), (Start: 28 @61442 has 18 MA's), (31, 61469), (33, 61475), (38, 61493), (43, 61523), (44, 61535),

Gene: Fajezeel_59 Start: 39720, Stop: 39586, Start Num: 27
Candidate Starts for Fajezeel_59:
(Start: 27 @39720 has 155 MA's), (46, 39618),

Gene: FarmResident_101 Start: 61107, Stop: 61280, Start Num: 16
Candidate Starts for FarmResident_101:
(4, 61014), (7, 61029), (9, 61053), (12, 61065), (Start: 16 @61107 has 32 MA's), (21, 61131), (Start: 28 @61149 has 18 MA's), (30, 61161), (31, 61176), (33, 61182), (43, 61221), (46, 61248),

Gene: Fascinus_54 Start: 39859, Stop: 39725, Start Num: 27
Candidate Starts for Fascinus_54:
(Start: 27 @39859 has 155 MA's), (46, 39757),

Gene: Fenn_61 Start: 41648, Stop: 41514, Start Num: 27
Candidate Starts for Fenn_61:
(Start: 27 @41648 has 155 MA's), (46, 41546),

Gene: Finemlucis_100 Start: 62460, Stop: 62642, Start Num: 16
Candidate Starts for Finemlucis_100:
(Start: 16 @62460 has 32 MA's), (Start: 26 @62496 has 5 MA's), (Start: 28 @62502 has 18 MA's), (31, 62529), (33, 62535), (38, 62553), (43, 62583), (44, 62595),

Gene: Finnry_96 Start: 61449, Stop: 61583, Start Num: 28
Candidate Starts for Finnry_96:
(Start: 28 @61449 has 18 MA's), (34, 61485), (35, 61488), (40, 61500), (46, 61551),

Gene: Forsytheast_57 Start: 39132, Stop: 38998, Start Num: 27
Candidate Starts for Forsytheast_57:
(Start: 27 @39132 has 155 MA's), (46, 39030),

Gene: Francis47_57 Start: 40917, Stop: 40783, Start Num: 27
Candidate Starts for Francis47_57:
(Start: 27 @40917 has 155 MA's), (46, 40815),

Gene: Froghopper_55 Start: 38579, Stop: 38436, Start Num: 24
Candidate Starts for Froghopper_55:
(Start: 24 @38579 has 34 MA's),

Gene: Fushigi_55 Start: 38393, Stop: 38259, Start Num: 27
Candidate Starts for Fushigi_55:
(Start: 27 @38393 has 155 MA's), (46, 38291),

Gene: GMonster_55 Start: 38356, Stop: 38222, Start Num: 27
Candidate Starts for GMonster_55:
(Start: 27 @38356 has 155 MA's), (46, 38254),

Gene: Gabriela_99 Start: 60746, Stop: 60928, Start Num: 16
Candidate Starts for Gabriela_99:
(Start: 16 @60746 has 32 MA's), (Start: 26 @60782 has 5 MA's), (Start: 28 @60788 has 18 MA's), (31, 60815), (33, 60821), (38, 60839), (43, 60869), (44, 60881),

Gene: Gachnar_57 Start: 39213, Stop: 39070, Start Num: 24
Candidate Starts for Gachnar_57:
(Start: 24 @39213 has 34 MA's), (46, 39102),

Gene: Gail_67 Start: 41407, Stop: 41258, Start Num: 25
Candidate Starts for Gail_67:
(Start: 25 @41407 has 20 MA's), (29, 41389), (32, 41368),

Gene: Gandalf20_61 Start: 41575, Stop: 41441, Start Num: 27
Candidate Starts for Gandalf20_61:
(Start: 27 @41575 has 155 MA's), (46, 41473),

Gene: Gardann_99 Start: 61193, Stop: 61375, Start Num: 16
Candidate Starts for Gardann_99:
(Start: 16 @61193 has 32 MA's), (Start: 26 @61229 has 5 MA's), (Start: 28 @61235 has 18 MA's), (31, 61262), (33, 61268), (38, 61286), (43, 61316), (44, 61328),

Gene: Gompeii16_57 Start: 40581, Stop: 40447, Start Num: 27
Candidate Starts for Gompeii16_57:
(Start: 27 @40581 has 155 MA's),

Gene: GrecoEtereo_58 Start: 39479, Stop: 39345, Start Num: 27
Candidate Starts for GrecoEtereo_58:
(Start: 27 @39479 has 155 MA's), (46, 39377),

Gene: Greg_59 Start: 39720, Stop: 39586, Start Num: 27
Candidate Starts for Greg_59:
(Start: 27 @39720 has 155 MA's), (46, 39618),

Gene: GroundGoblin_57 Start: 40102, Stop: 39968, Start Num: 27
Candidate Starts for GroundGoblin_57:
(Start: 27 @40102 has 155 MA's), (46, 40000),

Gene: GuuelaD_96 Start: 61359, Stop: 61541, Start Num: 16
Candidate Starts for GuuelaD_96:
(Start: 16 @61359 has 32 MA's), (Start: 26 @61395 has 5 MA's), (Start: 28 @61401 has 18 MA's), (31, 61428), (33, 61434), (38, 61452), (43, 61482), (44, 61494),

Gene: Gyzlar_54 Start: 37793, Stop: 37659, Start Num: 27
Candidate Starts for Gyzlar_54:
(Start: 27 @37793 has 155 MA's), (46, 37691),

Gene: Hafay_100 Start: 61495, Stop: 61677, Start Num: 16

Candidate Starts for Hafay_100:
(11, 61450), (15, 61492), (Start: 16 @61495 has 32 MA's), (Start: 22 @61522 has 1 MA's), (Start: 26 @61531 has 5 MA's), (31, 61564), (38, 61588), (43, 61618), (44, 61630), (46, 61645),

Gene: Hami1_53 Start: 34833, Stop: 34699, Start Num: 27
Candidate Starts for Hami1_53:
(Start: 27 @34833 has 155 MA's), (46, 34731),

Gene: HanShotFirst_59 Start: 40295, Stop: 40161, Start Num: 27
Candidate Starts for HanShotFirst_59:
(Start: 27 @40295 has 155 MA's), (46, 40193),

Gene: HarryOW_57 Start: 38977, Stop: 38843, Start Num: 27
Candidate Starts for HarryOW_57:
(Start: 27 @38977 has 155 MA's), (46, 38875),

Gene: Hermia_58 Start: 40152, Stop: 40018, Start Num: 27
Candidate Starts for Hermia_58:
(Start: 27 @40152 has 155 MA's), (46, 40050),

Gene: HermioneGrange_59 Start: 39701, Stop: 39567, Start Num: 27
Candidate Starts for HermioneGrange_59:
(Start: 27 @39701 has 155 MA's), (46, 39599),

Gene: Homines_50 Start: 35670, Stop: 35527, Start Num: 24
Candidate Starts for Homines_50:
(Start: 24 @35670 has 34 MA's), (46, 35559),

Gene: Hope4ever_60 Start: 40461, Stop: 40327, Start Num: 27
Candidate Starts for Hope4ever_60:
(Start: 27 @40461 has 155 MA's), (46, 40359),

Gene: HortumSL17_69 Start: 40727, Stop: 40578, Start Num: 25
Candidate Starts for HortumSL17_69:
(Start: 25 @40727 has 20 MA's), (29, 40709), (41, 40661),

Gene: ILeeKay_61 Start: 40319, Stop: 40185, Start Num: 27
Candidate Starts for ILeeKay_61:
(Start: 27 @40319 has 155 MA's), (46, 40217),

Gene: Ichabod_62 Start: 41147, Stop: 41004, Start Num: 24
Candidate Starts for Ichabod_62:
(Start: 24 @41147 has 34 MA's), (46, 41036),

Gene: IgnatiusPatJac_58 Start: 39784, Stop: 39650, Start Num: 27
Candidate Starts for IgnatiusPatJac_58:
(Start: 27 @39784 has 155 MA's), (46, 39682),

Gene: Inyanga_53 Start: 38018, Stop: 37884, Start Num: 27
Candidate Starts for Inyanga_53:
(Start: 27 @38018 has 155 MA's), (46, 37916),

Gene: Iqorha_53 Start: 38017, Stop: 37883, Start Num: 27

Candidate Starts for Iqorha_53:
(Start: 27 @38017 has 155 MA's), (46, 37915),

Gene: Itos_99 Start: 60306, Stop: 60488, Start Num: 16
Candidate Starts for Itos_99:
(Start: 16 @60306 has 32 MA's), (Start: 26 @60342 has 5 MA's), (Start: 28 @60348 has 18 MA's), (31, 60375), (33, 60381), (38, 60399), (43, 60429), (44, 60441),

Gene: JackSparrow_61 Start: 40371, Stop: 40237, Start Num: 27
Candidate Starts for JackSparrow_61:
(Start: 27 @40371 has 155 MA's), (46, 40269),

Gene: Jeeves_69 Start: 40401, Stop: 40252, Start Num: 25
Candidate Starts for Jeeves_69:
(Start: 25 @40401 has 20 MA's), (29, 40383), (32, 40362),

Gene: Jerm2_59 Start: 39956, Stop: 39822, Start Num: 27
Candidate Starts for Jerm2_59:
(Start: 27 @39956 has 155 MA's), (46, 39854),

Gene: Jobypre_96 Start: 61096, Stop: 61230, Start Num: 28
Candidate Starts for Jobypre_96:
(Start: 28 @61096 has 18 MA's), (34, 61132), (35, 61135), (40, 61147), (46, 61198),

Gene: Jorgensen_59 Start: 39780, Stop: 39646, Start Num: 27
Candidate Starts for Jorgensen_59:
(Start: 27 @39780 has 155 MA's), (46, 39678),

Gene: Jubie_95 Start: 61231, Stop: 61365, Start Num: 28
Candidate Starts for Jubie_95:
(Start: 28 @61231 has 18 MA's), (34, 61267), (35, 61270), (40, 61282), (46, 61333),

Gene: JuliaChild_59 Start: 39638, Stop: 39504, Start Num: 27
Candidate Starts for JuliaChild_59:
(Start: 27 @39638 has 155 MA's), (46, 39536),

Gene: KBG_59 Start: 41762, Stop: 41628, Start Num: 27
Candidate Starts for KBG_59:
(Start: 27 @41762 has 155 MA's), (46, 41660),

Gene: KSSJEB_58 Start: 39422, Stop: 39279, Start Num: 24
Candidate Starts for KSSJEB_58:
(Start: 24 @39422 has 34 MA's), (46, 39311),

Gene: Kahlid_98 Start: 61111, Stop: 61293, Start Num: 16
Candidate Starts for Kahlid_98:
(Start: 16 @61111 has 32 MA's), (Start: 26 @61147 has 5 MA's), (Start: 28 @61153 has 18 MA's), (31, 61180), (33, 61186), (38, 61204), (43, 61234), (44, 61246),

Gene: Kanely_60 Start: 40359, Stop: 40225, Start Num: 27
Candidate Starts for Kanely_60:
(Start: 27 @40359 has 155 MA's), (46, 40257),

Gene: Kenmech_63 Start: 42006, Stop: 41872, Start Num: 27
Candidate Starts for Kenmech_63:
(Start: 27 @42006 has 155 MA's), (46, 41904),

Gene: Keziacharles14_66 Start: 41498, Stop: 41355, Start Num: 25
Candidate Starts for Keziacharles14_66:
(Start: 25 @41498 has 20 MA's), (29, 41480), (36, 41447), (50, 41363),

Gene: KikiBouba_57 Start: 39961, Stop: 39827, Start Num: 27
Candidate Starts for KikiBouba_57:
(Start: 27 @39961 has 155 MA's), (46, 39859),

Gene: Killigrew_58 Start: 40539, Stop: 40405, Start Num: 27
Candidate Starts for Killigrew_58:
(Start: 27 @40539 has 155 MA's), (46, 40437),

Gene: Kingsolomon_94 Start: 61205, Stop: 61339, Start Num: 28
Candidate Starts for Kingsolomon_94:
(Start: 28 @61205 has 18 MA's), (34, 61241), (35, 61244), (40, 61256), (46, 61307),

Gene: KirDoubleO7_94 Start: 61289, Stop: 61423, Start Num: 28
Candidate Starts for KirDoubleO7_94:
(Start: 22 @61274 has 1 MA's), (Start: 28 @61289 has 18 MA's), (34, 61325), (35, 61328), (40, 61340), (46, 61391),

Gene: Kropertea_95 Start: 60713, Stop: 60886, Start Num: 16
Candidate Starts for Kropertea_95:
(Start: 16 @60713 has 32 MA's), (21, 60737), (Start: 28 @60755 has 18 MA's), (29, 60764), (30, 60767), (31, 60782), (43, 60827), (46, 60854),

Gene: Krypton555_99 Start: 61780, Stop: 61914, Start Num: 28
Candidate Starts for Krypton555_99:
(Start: 22 @61765 has 1 MA's), (Start: 28 @61780 has 18 MA's), (34, 61816), (35, 61819), (40, 61831), (46, 61882), (47, 61888),

Gene: Kugel_58 Start: 40607, Stop: 40473, Start Num: 27
Candidate Starts for Kugel_58:
(Start: 27 @40607 has 155 MA's), (46, 40505),

Gene: KyMonks1A_61 Start: 40000, Stop: 39857, Start Num: 24
Candidate Starts for KyMonks1A_61:
(Start: 24 @40000 has 34 MA's), (46, 39889),

Gene: Kykar_58 Start: 39437, Stop: 39303, Start Num: 27
Candidate Starts for Kykar_58:
(Start: 27 @39437 has 155 MA's), (46, 39335),

Gene: Lamina13_60 Start: 39739, Stop: 39605, Start Num: 27
Candidate Starts for Lamina13_60:
(Start: 27 @39739 has 155 MA's), (46, 39637),

Gene: Lesedi_54 Start: 38344, Stop: 38210, Start Num: 27
Candidate Starts for Lesedi_54:

(Start: 27 @38344 has 155 MA's), (46, 38242),

Gene: Levia_56 Start: 39458, Stop: 39324, Start Num: 27
Candidate Starts for Levia_56:
(Start: 27 @39458 has 155 MA's), (46, 39356),

Gene: Lewan_100 Start: 61399, Stop: 61581, Start Num: 16
Candidate Starts for Lewan_100:
(Start: 16 @61399 has 32 MA's), (Start: 26 @61435 has 5 MA's), (Start: 28 @61441 has 18 MA's), (31, 61468), (33, 61474), (38, 61492), (43, 61522), (44, 61534),

Gene: LilBib_58 Start: 41131, Stop: 40988, Start Num: 24
Candidate Starts for LilBib_58:
(Start: 24 @41131 has 34 MA's), (46, 41020),

Gene: LilDestine_97 Start: 61070, Stop: 61252, Start Num: 16
Candidate Starts for LilDestine_97:
(Start: 16 @61070 has 32 MA's), (Start: 26 @61106 has 5 MA's), (Start: 28 @61112 has 18 MA's), (31, 61139), (33, 61145), (38, 61163), (43, 61193), (44, 61205),

Gene: Lilleskat_64 Start: 40511, Stop: 40362, Start Num: 25
Candidate Starts for Lilleskat_64:
(Start: 25 @40511 has 20 MA's), (29, 40493), (41, 40445),

Gene: LiyuLake_95 Start: 61362, Stop: 61496, Start Num: 28
Candidate Starts for LiyuLake_95:
(Start: 22 @61347 has 1 MA's), (Start: 28 @61362 has 18 MA's), (34, 61398), (35, 61401), (40, 61413), (46, 61464),

Gene: Loadrie_98 Start: 61561, Stop: 61743, Start Num: 16
Candidate Starts for Loadrie_98:
(Start: 16 @61561 has 32 MA's), (Start: 26 @61597 has 5 MA's), (Start: 28 @61603 has 18 MA's), (31, 61630), (33, 61636), (38, 61654), (43, 61684), (44, 61696),

Gene: Lockley_56 Start: 39400, Stop: 39257, Start Num: 24
Candidate Starts for Lockley_56:
(Start: 24 @39400 has 34 MA's), (46, 39289),

Gene: Lolly9_96 Start: 61453, Stop: 61587, Start Num: 28
Candidate Starts for Lolly9_96:
(Start: 22 @61438 has 1 MA's), (Start: 28 @61453 has 18 MA's), (34, 61489), (35, 61492), (40, 61504), (46, 61555),

Gene: Lopton_58 Start: 41812, Stop: 41678, Start Num: 27
Candidate Starts for Lopton_58:
(Start: 27 @41812 has 155 MA's), (46, 41710),

Gene: Luchador_68 Start: 41978, Stop: 41829, Start Num: 25
Candidate Starts for Luchador_68:
(13, 42008), (Start: 25 @41978 has 20 MA's), (29, 41960), (32, 41939),

Gene: Lumos_96 Start: 61093, Stop: 61227, Start Num: 28
Candidate Starts for Lumos_96:

(Start: 28 @61093 has 18 MA's), (34, 61129), (35, 61132), (40, 61144), (46, 61195),

Gene: LunarLander_59 Start: 39641, Stop: 39507, Start Num: 27
Candidate Starts for LunarLander_59:
(Start: 27 @39641 has 155 MA's), (46, 39539),

Gene: Lynnae_100 Start: 61171, Stop: 61353, Start Num: 16
Candidate Starts for Lynnae_100:
(Start: 16 @61171 has 32 MA's), (Start: 26 @61207 has 5 MA's), (Start: 28 @61213 has 18 MA's), (31, 61240), (33, 61246), (38, 61264), (43, 61294), (44, 61306),

Gene: MPlant7149_57 Start: 38517, Stop: 38383, Start Num: 27
Candidate Starts for MPlant7149_57:
(Start: 27 @38517 has 155 MA's), (46, 38415),

Gene: Magnar_56 Start: 39959, Stop: 39825, Start Num: 27
Candidate Starts for Magnar_56:
(Start: 27 @39959 has 155 MA's), (46, 39857),

Gene: Magnito_57 Start: 39684, Stop: 39550, Start Num: 27
Candidate Starts for Magnito_57:
(Start: 27 @39684 has 155 MA's), (46, 39582),

Gene: Makemake_59 Start: 40359, Stop: 40216, Start Num: 24
Candidate Starts for Makemake_59:
(Start: 24 @40359 has 34 MA's), (46, 40248),

Gene: Manatee_59 Start: 40057, Stop: 39914, Start Num: 24
Candidate Starts for Manatee_59:
(Start: 24 @40057 has 34 MA's),

Gene: Marcell_55 Start: 38966, Stop: 38832, Start Num: 27
Candidate Starts for Marcell_55:
(Start: 27 @38966 has 155 MA's), (46, 38864),

Gene: Marchy_53 Start: 37054, Stop: 36920, Start Num: 27
Candidate Starts for Marchy_53:
(Start: 27 @37054 has 155 MA's), (46, 36952),

Gene: Marco3_62 Start: 41738, Stop: 41595, Start Num: 24
Candidate Starts for Marco3_62:
(Start: 24 @41738 has 34 MA's),

Gene: Marge_57 Start: 39855, Stop: 39721, Start Num: 27
Candidate Starts for Marge_57:
(Start: 27 @39855 has 155 MA's), (46, 39753),

Gene: Maroc7_56 Start: 40254, Stop: 40120, Start Num: 27
Candidate Starts for Maroc7_56:
(Start: 27 @40254 has 155 MA's), (46, 40152),

Gene: Marsha_57 Start: 40396, Stop: 40262, Start Num: 27
Candidate Starts for Marsha_57:

(Start: 27 @40396 has 155 MA's), (46, 40294),

Gene: MaryBeth_57 Start: 40279, Stop: 40136, Start Num: 24
Candidate Starts for MaryBeth_57:
(Start: 24 @40279 has 34 MA's),

Gene: McGuire_60 Start: 39619, Stop: 39485, Start Num: 27
Candidate Starts for McGuire_60:
(Start: 27 @39619 has 155 MA's), (46, 39517),

Gene: McSinger_58 Start: 39589, Stop: 39455, Start Num: 27
Candidate Starts for McSinger_58:
(Start: 27 @39589 has 155 MA's), (46, 39487),

Gene: MegTheThird_64 Start: 40001, Stop: 39861, Start Num: 25
Candidate Starts for MegTheThird_64:
(13, 40034), (Start: 25 @40001 has 20 MA's), (29, 39983), (36, 39950), (40, 39938),

Gene: MetalQZJ_56 Start: 40279, Stop: 40136, Start Num: 24
Candidate Starts for MetalQZJ_56:
(Start: 24 @40279 has 34 MA's),

Gene: Michley_58 Start: 39990, Stop: 39856, Start Num: 27
Candidate Starts for Michley_58:
(18, 40020), (Start: 27 @39990 has 155 MA's), (46, 39888),

Gene: MilleFeuille_53 Start: 39432, Stop: 39289, Start Num: 24
Candidate Starts for MilleFeuille_53:
(Start: 24 @39432 has 34 MA's),

Gene: MiniLon_101 Start: 61454, Stop: 61588, Start Num: 28
Candidate Starts for MiniLon_101:
(Start: 22 @61439 has 1 MA's), (Start: 28 @61454 has 18 MA's), (34, 61490), (35, 61493), (40, 61505), (46, 61556),

Gene: MiniMac_101 Start: 61434, Stop: 61583, Start Num: 22
Candidate Starts for MiniMac_101:
(Start: 22 @61434 has 1 MA's), (Start: 28 @61449 has 18 MA's), (34, 61485), (35, 61488), (40, 61500), (46, 61551),

Gene: MkaliMitinis3_101 Start: 61525, Stop: 61707, Start Num: 16
Candidate Starts for MkaliMitinis3_101:
(Start: 16 @61525 has 32 MA's), (Start: 26 @61561 has 5 MA's), (Start: 28 @61567 has 18 MA's), (31, 61594), (33, 61600), (38, 61618), (43, 61648), (44, 61660),

Gene: Mkhuseli_56 Start: 38717, Stop: 38583, Start Num: 27
Candidate Starts for Mkhuseli_56:
(Start: 27 @38717 has 155 MA's), (46, 38615),

Gene: Molly_59 Start: 38935, Stop: 38801, Start Num: 27
Candidate Starts for Molly_59:
(Start: 27 @38935 has 155 MA's), (46, 38833),

Gene: Monet_61 Start: 41021, Stop: 40887, Start Num: 27
Candidate Starts for Monet_61:
(Start: 27 @41021 has 155 MA's), (46, 40919),

Gene: Moose_57 Start: 39132, Stop: 38998, Start Num: 27
Candidate Starts for Moose_57:
(Start: 27 @39132 has 155 MA's), (46, 39030),

Gene: Moostard_93 Start: 61200, Stop: 61334, Start Num: 28
Candidate Starts for Moostard_93:
(Start: 28 @61200 has 18 MA's), (34, 61236), (35, 61239), (40, 61251), (46, 61302),

Gene: MrGordo_58 Start: 39793, Stop: 39659, Start Num: 27
Candidate Starts for MrGordo_58:
(Start: 27 @39793 has 155 MA's), (46, 39691),

Gene: Mryolo_55 Start: 39838, Stop: 39704, Start Num: 27
Candidate Starts for Mryolo_55:
(Start: 27 @39838 has 155 MA's),

Gene: MsGreen_96 Start: 61095, Stop: 61229, Start Num: 28
Candidate Starts for MsGreen_96:
(Start: 28 @61095 has 18 MA's), (34, 61131), (35, 61134), (40, 61146), (46, 61197),

Gene: Mule_56 Start: 38388, Stop: 38254, Start Num: 27
Candidate Starts for Mule_56:
(Start: 27 @38388 has 155 MA's), (46, 38286),

Gene: Museum_59 Start: 40085, Stop: 39951, Start Num: 27
Candidate Starts for Museum_59:
(Start: 27 @40085 has 155 MA's), (46, 39983),

Gene: MyraDee_64 Start: 37954, Stop: 37787, Start Num: 19
Candidate Starts for MyraDee_64:
(1, 38476), (2, 38458), (3, 38206), (Start: 19 @37954 has 1 MA's), (Start: 25 @37930 has 20 MA's),
(37, 37882), (43, 37846), (45, 37825),

Gene: Myxus_68 Start: 40727, Stop: 40578, Start Num: 25
Candidate Starts for Myxus_68:
(Start: 25 @40727 has 20 MA's), (29, 40709), (41, 40661),

Gene: NEHalo_56 Start: 39867, Stop: 39733, Start Num: 27
Candidate Starts for NEHalo_56:
(Start: 27 @39867 has 155 MA's), (46, 39765),

Gene: Naira_61 Start: 41695, Stop: 41561, Start Num: 27
Candidate Starts for Naira_61:
(Start: 27 @41695 has 155 MA's), (46, 41593),

Gene: Nerujay_60 Start: 40434, Stop: 40300, Start Num: 27
Candidate Starts for Nerujay_60:
(Start: 27 @40434 has 155 MA's), (46, 40332),

Gene: Netyap_98 Start: 61401, Stop: 61583, Start Num: 16
Candidate Starts for Netyap_98:
(Start: 16 @61401 has 32 MA's), (Start: 26 @61437 has 5 MA's), (Start: 28 @61443 has 18 MA's), (31, 61470), (33, 61476), (38, 61494), (43, 61524), (44, 61536),

Gene: Nhonho_57 Start: 40780, Stop: 40646, Start Num: 27
Candidate Starts for Nhonho_57:
(Start: 27 @40780 has 155 MA's), (46, 40678),

Gene: Nicholas_94 Start: 61205, Stop: 61339, Start Num: 28
Candidate Starts for Nicholas_94:
(Start: 28 @61205 has 18 MA's), (34, 61241), (35, 61244), (40, 61256), (46, 61307),

Gene: Nicholasp3_99 Start: 61193, Stop: 61375, Start Num: 16
Candidate Starts for Nicholasp3_99:
(Start: 16 @61193 has 32 MA's), (Start: 26 @61229 has 5 MA's), (Start: 28 @61235 has 18 MA's), (31, 61262), (33, 61268), (38, 61286), (43, 61316), (44, 61328),

Gene: Niza_60 Start: 41442, Stop: 41308, Start Num: 27
Candidate Starts for Niza_60:
(Start: 27 @41442 has 155 MA's), (46, 41340),

Gene: Noxious_56 Start: 40152, Stop: 40018, Start Num: 27
Candidate Starts for Noxious_56:
(Start: 27 @40152 has 155 MA's), (46, 40050),

Gene: Onglai_66 Start: 38931, Stop: 38782, Start Num: 25
Candidate Starts for Onglai_66:
(Start: 25 @38931 has 20 MA's), (29, 38913), (41, 38865),

Gene: Oogway_57 Start: 39790, Stop: 39656, Start Num: 27
Candidate Starts for Oogway_57:
(Start: 27 @39790 has 155 MA's), (46, 39688),

Gene: OverPar_101 Start: 61561, Stop: 61743, Start Num: 16
Candidate Starts for OverPar_101:
(Start: 16 @61561 has 32 MA's), (Start: 26 @61597 has 5 MA's), (Start: 28 @61603 has 18 MA's), (31, 61630), (33, 61636), (38, 61654), (43, 61684), (44, 61696),

Gene: PSullivan_58 Start: 38828, Stop: 38685, Start Num: 24
Candidate Starts for PSullivan_58:
(Start: 24 @38828 has 34 MA's),

Gene: PYPDinur_100 Start: 61783, Stop: 61956, Start Num: 16
Candidate Starts for PYPDinur_100:
(4, 61690), (7, 61705), (9, 61729), (Start: 16 @61783 has 32 MA's), (21, 61807), (Start: 28 @61825 has 18 MA's), (30, 61837), (31, 61852), (33, 61858), (43, 61897), (46, 61924),

Gene: PacerPaul_58 Start: 40284, Stop: 40150, Start Num: 27
Candidate Starts for PacerPaul_58:
(Start: 27 @40284 has 155 MA's), (46, 40182),

Gene: PackMan_67 Start: 40602, Stop: 40453, Start Num: 25

Candidate Starts for PackMan_67:
(Start: 25 @40602 has 20 MA's), (29, 40584), (41, 40536),

Gene: Papez_61 Start: 41812, Stop: 41678, Start Num: 27
Candidate Starts for Papez_61:
(Start: 27 @41812 has 155 MA's), (46, 41710),

Gene: Paphu_57 Start: 39421, Stop: 39287, Start Num: 27
Candidate Starts for Paphu_57:
(Start: 27 @39421 has 155 MA's), (46, 39319),

Gene: Paraselene_56 Start: 40336, Stop: 40193, Start Num: 24
Candidate Starts for Paraselene_56:
(Start: 24 @40336 has 34 MA's),

Gene: Parliament_58 Start: 40049, Stop: 39915, Start Num: 27
Candidate Starts for Parliament_58:
(Start: 27 @40049 has 155 MA's),

Gene: PascalRango_58 Start: 40088, Stop: 39954, Start Num: 27
Candidate Starts for PascalRango_58:
(Start: 27 @40088 has 155 MA's), (46, 39986),

Gene: PattyP_60 Start: 40478, Stop: 40344, Start Num: 27
Candidate Starts for PattyP_60:
(Start: 27 @40478 has 155 MA's), (46, 40376),

Gene: Payneful_58 Start: 39771, Stop: 39637, Start Num: 27
Candidate Starts for Payneful_58:
(Start: 27 @39771 has 155 MA's), (46, 39669),

Gene: Pepe_55 Start: 38549, Stop: 38406, Start Num: 24
Candidate Starts for Pepe_55:
(Start: 24 @38549 has 34 MA's),

Gene: Perseus_58 Start: 40793, Stop: 40659, Start Num: 27
Candidate Starts for Perseus_58:
(Start: 27 @40793 has 155 MA's), (46, 40691),

Gene: Peterson_62 Start: 42031, Stop: 41897, Start Num: 27
Candidate Starts for Peterson_62:
(Start: 27 @42031 has 155 MA's), (46, 41929),

Gene: Petp2012_59 Start: 40827, Stop: 40693, Start Num: 27
Candidate Starts for Petp2012_59:
(Start: 27 @40827 has 155 MA's), (46, 40725),

Gene: Petruchio_57 Start: 39237, Stop: 39103, Start Num: 27
Candidate Starts for Petruchio_57:
(Start: 27 @39237 has 155 MA's), (46, 39135),

Gene: Phaeder_68 Start: 40602, Stop: 40453, Start Num: 25
Candidate Starts for Phaeder_68:

(Start: 25 @40602 has 20 MA's), (29, 40584), (41, 40536),

Gene: PhineBark_58 Start: 40476, Stop: 40342, Start Num: 27
Candidate Starts for PhineBark_58:
(Start: 27 @40476 has 155 MA's), (46, 40374),

Gene: Phlippers_56 Start: 40591, Stop: 40457, Start Num: 27
Candidate Starts for Phlippers_56:
(Start: 27 @40591 has 155 MA's), (46, 40489),

Gene: Phonnegut_69 Start: 40824, Stop: 40675, Start Num: 25
Candidate Starts for Phonnegut_69:
(Start: 25 @40824 has 20 MA's), (29, 40806), (41, 40758),

Gene: PhrostyMug_58 Start: 40562, Stop: 40428, Start Num: 27
Candidate Starts for PhrostyMug_58:
(Start: 27 @40562 has 155 MA's), (46, 40460),

Gene: PinkPlastic_58 Start: 39549, Stop: 39415, Start Num: 27
Candidate Starts for PinkPlastic_58:
(Start: 27 @39549 has 155 MA's), (46, 39447),

Gene: Pinto_59 Start: 40150, Stop: 40013, Start Num: 26
Candidate Starts for Pinto_59:
(Start: 26 @40150 has 5 MA's), (Start: 27 @40147 has 155 MA's), (46, 40045),

Gene: Pioneer_69 Start: 40824, Stop: 40675, Start Num: 25
Candidate Starts for Pioneer_69:
(Start: 25 @40824 has 20 MA's), (29, 40806), (41, 40758),

Gene: Pippin_59 Start: 39764, Stop: 39630, Start Num: 27
Candidate Starts for Pippin_59:
(Start: 27 @39764 has 155 MA's), (46, 39662),

Gene: Pita2_61 Start: 40325, Stop: 40182, Start Num: 24
Candidate Starts for Pita2_61:
(Start: 24 @40325 has 34 MA's),

Gene: PowerRanger_56 Start: 40985, Stop: 40851, Start Num: 27
Candidate Starts for PowerRanger_56:
(Start: 27 @40985 has 155 MA's), (46, 40883),

Gene: ProMouse_58 Start: 40099, Stop: 39956, Start Num: 24
Candidate Starts for ProMouse_58:
(Start: 24 @40099 has 34 MA's), (46, 39988),

Gene: Puppet_57 Start: 40265, Stop: 40131, Start Num: 27
Candidate Starts for Puppet_57:
(Start: 27 @40265 has 155 MA's), (46, 40163),

Gene: QTRlifeCrisis_58 Start: 40342, Stop: 40199, Start Num: 24
Candidate Starts for QTRlifeCrisis_58:
(Start: 24 @40342 has 34 MA's),

Gene: Quby_100 Start: 61112, Stop: 61285, Start Num: 16
Candidate Starts for Quby_100:
(14, 61109), (Start: 16 @61112 has 32 MA's), (21, 61136), (Start: 28 @61154 has 18 MA's), (30, 61166), (31, 61181), (33, 61187), (43, 61226), (46, 61253),

Gene: Raid_57 Start: 39512, Stop: 39378, Start Num: 27
Candidate Starts for Raid_57:
(Start: 27 @39512 has 155 MA's), (46, 39410),

Gene: Rajelicia_59 Start: 40856, Stop: 40722, Start Num: 27
Candidate Starts for Rajelicia_59:
(Start: 27 @40856 has 155 MA's), (46, 40754),

Gene: Red305_97 Start: 61096, Stop: 61230, Start Num: 28
Candidate Starts for Red305_97:
(Start: 28 @61096 has 18 MA's), (34, 61132), (35, 61135), (40, 61147), (46, 61198),

Gene: Rhynn_56 Start: 38880, Stop: 38746, Start Num: 27
Candidate Starts for Rhynn_56:
(Start: 27 @38880 has 155 MA's), (46, 38778),

Gene: RidgeCB_58 Start: 40123, Stop: 39989, Start Num: 27
Candidate Starts for RidgeCB_58:
(Start: 27 @40123 has 155 MA's), (46, 40021),

Gene: Ringer_58 Start: 41030, Stop: 40896, Start Num: 27
Candidate Starts for Ringer_58:
(Start: 27 @41030 has 155 MA's), (46, 40928),

Gene: Rohr_59 Start: 40002, Stop: 39868, Start Num: 27
Candidate Starts for Rohr_59:
(Start: 27 @40002 has 155 MA's), (46, 39900),

Gene: Rossetti_99 Start: 61561, Stop: 61743, Start Num: 16
Candidate Starts for Rossetti_99:
(Start: 16 @61561 has 32 MA's), (Start: 26 @61597 has 5 MA's), (Start: 28 @61603 has 18 MA's), (29, 61612), (31, 61630), (38, 61654), (43, 61684), (44, 61696), (46, 61711),

Gene: Rubeus_58 Start: 37943, Stop: 37806, Start Num: 26
Candidate Starts for Rubeus_58:
(Start: 26 @37943 has 5 MA's), (Start: 27 @37940 has 155 MA's), (46, 37838),

Gene: Rufus_59 Start: 39468, Stop: 39334, Start Num: 27
Candidate Starts for Rufus_59:
(Start: 27 @39468 has 155 MA's), (46, 39366),

Gene: Rumpelstiltskin_95 Start: 60986, Stop: 61168, Start Num: 16
Candidate Starts for Rumpelstiltskin_95:
(Start: 16 @60986 has 32 MA's), (Start: 26 @61022 has 5 MA's), (Start: 28 @61028 has 18 MA's), (31, 61055), (33, 61061), (38, 61079), (43, 61109), (44, 61121),

Gene: Rutherferd_59 Start: 40099, Stop: 39965, Start Num: 27

Candidate Starts for Rutherferd_59:
(Start: 27 @40099 has 155 MA's), (46, 39997),

Gene: RyeScarlet_70 Start: 40799, Stop: 40650, Start Num: 25
Candidate Starts for RyeScarlet_70:
(Start: 25 @40799 has 20 MA's), (29, 40781), (41, 40733),

Gene: STLscum_61 Start: 40923, Stop: 40780, Start Num: 24
Candidate Starts for STLscum_61:
(Start: 24 @40923 has 34 MA's),

Gene: Sachima_64 Start: 40628, Stop: 40479, Start Num: 25
Candidate Starts for Sachima_64:
(Start: 25 @40628 has 20 MA's), (29, 40610), (41, 40562),

Gene: Sagefire_60 Start: 40676, Stop: 40542, Start Num: 27
Candidate Starts for Sagefire_60:
(Start: 27 @40676 has 155 MA's), (46, 40574),

Gene: Samty_95 Start: 61193, Stop: 61327, Start Num: 28
Candidate Starts for Samty_95:
(Start: 28 @61193 has 18 MA's), (34, 61229), (35, 61232), (40, 61244), (46, 61295),

Gene: Sandaddy_55 Start: 39509, Stop: 39366, Start Num: 24
Candidate Starts for Sandaddy_55:
(Start: 24 @39509 has 34 MA's), (46, 39398),

Gene: Sanya_54 Start: 39790, Stop: 39656, Start Num: 27
Candidate Starts for Sanya_54:
(Start: 27 @39790 has 155 MA's), (46, 39688),

Gene: SarFire_55 Start: 39071, Stop: 38928, Start Num: 24
Candidate Starts for SarFire_55:
(Start: 24 @39071 has 34 MA's), (46, 38960),

Gene: Sarshaun_100 Start: 62153, Stop: 62335, Start Num: 16
Candidate Starts for Sarshaun_100:
(Start: 16 @62153 has 32 MA's), (Start: 26 @62189 has 5 MA's), (Start: 28 @62195 has 18 MA's), (31, 62222), (33, 62228), (38, 62246), (43, 62276), (44, 62288),

Gene: Scowl_59 Start: 39900, Stop: 39757, Start Num: 24
Candidate Starts for Scowl_59:
(Start: 24 @39900 has 34 MA's),

Gene: Seabiscuit_62 Start: 39881, Stop: 39747, Start Num: 27
Candidate Starts for Seabiscuit_62:
(Start: 27 @39881 has 155 MA's), (46, 39779),

Gene: SheaKeira_63 Start: 39912, Stop: 39769, Start Num: 25
Candidate Starts for SheaKeira_63:
(Start: 25 @39912 has 20 MA's), (29, 39894), (36, 39861), (40, 39849), (50, 39777),

Gene: Sheng711_101 Start: 61307, Stop: 61480, Start Num: 16

Candidate Starts for Sheng711_101:
(4, 61214), (7, 61229), (9, 61253), (Start: 16 @61307 has 32 MA's), (21, 61331), (Start: 28 @61349 has 18 MA's), (30, 61361), (31, 61376), (33, 61382), (43, 61421), (46, 61448),

Gene: ShortQueendom_51 Start: 36829, Stop: 36695, Start Num: 27
Candidate Starts for ShortQueendom_51:
(Start: 27 @36829 has 155 MA's), (46, 36727),

Gene: Sibs6_60 Start: 38579, Stop: 38445, Start Num: 27
Candidate Starts for Sibs6_60:
(Start: 27 @38579 has 155 MA's), (46, 38477),

Gene: SkiPole_63 Start: 40593, Stop: 40450, Start Num: 24
Candidate Starts for SkiPole_63:
(Start: 24 @40593 has 34 MA's),

Gene: Slagathor_60 Start: 40909, Stop: 40775, Start Num: 27
Candidate Starts for Slagathor_60:
(Start: 27 @40909 has 155 MA's), (46, 40807),

Gene: Smairt_61 Start: 41555, Stop: 41421, Start Num: 27
Candidate Starts for Smairt_61:
(Start: 27 @41555 has 155 MA's), (46, 41453),

Gene: Smeagol_60 Start: 41059, Stop: 40925, Start Num: 27
Candidate Starts for Smeagol_60:
(Start: 27 @41059 has 155 MA's), (43, 40984), (46, 40957),

Gene: Snazzy_57 Start: 39444, Stop: 39310, Start Num: 27
Candidate Starts for Snazzy_57:
(Start: 27 @39444 has 155 MA's), (46, 39342),

Gene: Snenia_95 Start: 61097, Stop: 61231, Start Num: 28
Candidate Starts for Snenia_95:
(Start: 28 @61097 has 18 MA's), (34, 61133), (35, 61136), (40, 61148), (46, 61199),

Gene: SoJulia_101 Start: 62917, Stop: 63099, Start Num: 16
Candidate Starts for SoJulia_101:
(Start: 16 @62917 has 32 MA's), (Start: 26 @62953 has 5 MA's), (Start: 28 @62959 has 18 MA's), (31, 62986), (33, 62992), (38, 63010), (43, 63040), (44, 63052),

Gene: Soap141_99 Start: 62153, Stop: 62335, Start Num: 16
Candidate Starts for Soap141_99:
(Start: 16 @62153 has 32 MA's), (Start: 26 @62189 has 5 MA's), (Start: 28 @62195 has 18 MA's), (31, 62222), (33, 62228), (38, 62246), (43, 62276), (44, 62288),

Gene: Solon_56 Start: 39316, Stop: 39182, Start Num: 27
Candidate Starts for Solon_56:
(Start: 27 @39316 has 155 MA's), (46, 39214),

Gene: SororFago_67 Start: 41621, Stop: 41472, Start Num: 25
Candidate Starts for SororFago_67:
(13, 41651), (Start: 25 @41621 has 20 MA's), (29, 41603), (32, 41582), (41, 41555),

Gene: Sorpresa_56 Start: 39511, Stop: 39368, Start Num: 24
Candidate Starts for Sorpresa_56:
(Start: 24 @39511 has 34 MA's), (46, 39400),

Gene: Squee_59 Start: 40162, Stop: 40028, Start Num: 27
Candidate Starts for Squee_59:
(Start: 27 @40162 has 155 MA's), (46, 40060),

Gene: StewieG_55 Start: 36836, Stop: 36702, Start Num: 27
Candidate Starts for StewieG_55:
(Start: 27 @36836 has 155 MA's), (46, 36734),

Gene: Sumter_54 Start: 40052, Stop: 39918, Start Num: 27
Candidate Starts for Sumter_54:
(Start: 27 @40052 has 155 MA's), (46, 39950),

Gene: Sunshine924_60 Start: 39199, Stop: 39056, Start Num: 24
Candidate Starts for Sunshine924_60:
(Start: 24 @39199 has 34 MA's),

Gene: SwissCheese_59 Start: 39632, Stop: 39498, Start Num: 27
Candidate Starts for SwissCheese_59:
(Start: 27 @39632 has 155 MA's), (46, 39530),

Gene: Switzer_59 Start: 41665, Stop: 41522, Start Num: 24
Candidate Starts for Switzer_59:
(Start: 24 @41665 has 34 MA's),

Gene: Swole_59 Start: 39113, Stop: 38979, Start Num: 27
Candidate Starts for Swole_59:
(Start: 27 @39113 has 155 MA's), (46, 39011),

Gene: Target_59 Start: 38402, Stop: 38268, Start Num: 27
Candidate Starts for Target_59:
(Start: 27 @38402 has 155 MA's), (46, 38300),

Gene: Tasp14_61 Start: 40363, Stop: 40229, Start Num: 27
Candidate Starts for Tasp14_61:
(Start: 27 @40363 has 155 MA's), (46, 40261),

Gene: Teodoridan_56 Start: 39136, Stop: 39002, Start Num: 27
Candidate Starts for Teodoridan_56:
(Start: 27 @39136 has 155 MA's),

Gene: TheloniousMonk_59 Start: 41765, Stop: 41631, Start Num: 27
Candidate Starts for TheloniousMonk_59:
(Start: 27 @41765 has 155 MA's), (46, 41663),

Gene: Thor_55 Start: 38429, Stop: 38286, Start Num: 24
Candidate Starts for Thor_55:
(Start: 24 @38429 has 34 MA's), (46, 38318),

Gene: Topgun_57 Start: 39202, Stop: 39068, Start Num: 27
Candidate Starts for Topgun_57:
(Start: 27 @39202 has 155 MA's), (46, 39100),

Gene: Tote_54 Start: 36380, Stop: 36246, Start Num: 27
Candidate Starts for Tote_54:
(Start: 27 @36380 has 155 MA's), (46, 36278),

Gene: Tourach_100 Start: 62232, Stop: 62414, Start Num: 16
Candidate Starts for Tourach_100:
(4, 62139), (8, 62169), (Start: 16 @62232 has 32 MA's), (20, 62241), (Start: 22 @62259 has 1 MA's),
(Start: 26 @62268 has 5 MA's), (31, 62301), (38, 62325), (43, 62355), (44, 62367), (46, 62382),

Gene: Treddle_59 Start: 40533, Stop: 40399, Start Num: 27
Candidate Starts for Treddle_59:
(Start: 27 @40533 has 155 MA's), (46, 40431),

Gene: TriFive_97 Start: 61209, Stop: 61343, Start Num: 28
Candidate Starts for TriFive_97:
(Start: 28 @61209 has 18 MA's), (34, 61245), (35, 61248), (40, 61260), (46, 61311),

Gene: Tripl3t_60 Start: 41504, Stop: 41370, Start Num: 27
Candidate Starts for Tripl3t_60:
(Start: 27 @41504 has 155 MA's), (46, 41402),

Gene: Trouble_60 Start: 40856, Stop: 40722, Start Num: 27
Candidate Starts for Trouble_60:
(Start: 27 @40856 has 155 MA's), (46, 40754),

Gene: Tubs_68 Start: 40602, Stop: 40453, Start Num: 25
Candidate Starts for Tubs_68:
(Start: 25 @40602 has 20 MA's), (29, 40584), (41, 40536),

Gene: Turj99_56 Start: 40896, Stop: 40753, Start Num: 24
Candidate Starts for Turj99_56:
(Start: 24 @40896 has 34 MA's), (46, 40785),

Gene: TwoPeat_60 Start: 39599, Stop: 39465, Start Num: 27
Candidate Starts for TwoPeat_60:
(Start: 27 @39599 has 155 MA's), (46, 39497),

Gene: U2_57 Start: 40613, Stop: 40470, Start Num: 24
Candidate Starts for U2_57:
(Start: 24 @40613 has 34 MA's), (46, 40502),

Gene: Underpass_91 Start: 56229, Stop: 56411, Start Num: 16
Candidate Starts for Underpass_91:
(Start: 16 @56229 has 32 MA's), (Start: 26 @56265 has 5 MA's), (Start: 28 @56271 has 18 MA's), (31,
56298), (33, 56304), (38, 56322), (43, 56352), (44, 56364),

Gene: Vanisoa_66 Start: 41485, Stop: 41339, Start Num: 25
Candidate Starts for Vanisoa_66:
(Start: 25 @41485 has 20 MA's), (29, 41467), (39, 41425), (48, 41359),

Gene: Vetrix_97 Start: 61015, Stop: 61197, Start Num: 16
Candidate Starts for Vetrix_97:
(Start: 16 @61015 has 32 MA's), (Start: 26 @61051 has 5 MA's), (Start: 28 @61057 has 18 MA's), (31, 61084), (33, 61090), (38, 61108), (43, 61138), (44, 61150),

Gene: Violet_56 Start: 40459, Stop: 40325, Start Num: 27
Candidate Starts for Violet_56:
(Start: 27 @40459 has 155 MA's), (46, 40357),

Gene: Watermelon_59 Start: 39819, Stop: 39685, Start Num: 27
Candidate Starts for Watermelon_59:
(Start: 27 @39819 has 155 MA's), (46, 39717),

Gene: Wheeler_58 Start: 39624, Stop: 39490, Start Num: 27
Candidate Starts for Wheeler_58:
(Start: 27 @39624 has 155 MA's), (46, 39522),

Gene: Whirlwind_98 Start: 61608, Stop: 61742, Start Num: 28
Candidate Starts for Whirlwind_98:
(Start: 22 @61593 has 1 MA's), (Start: 28 @61608 has 18 MA's), (34, 61644), (35, 61647), (40, 61659), (46, 61710), (47, 61716),

Gene: Whitspit_55 Start: 37367, Stop: 37233, Start Num: 27
Candidate Starts for Whitspit_55:
(Start: 27 @37367 has 155 MA's), (46, 37265),

Gene: Wigglewiggle_99 Start: 61323, Stop: 61505, Start Num: 16
Candidate Starts for Wigglewiggle_99:
(Start: 16 @61323 has 32 MA's), (Start: 26 @61359 has 5 MA's), (Start: 28 @61365 has 18 MA's), (31, 61392), (33, 61398), (38, 61416), (43, 61446), (44, 61458),

Gene: Wilder_100 Start: 61159, Stop: 61341, Start Num: 16
Candidate Starts for Wilder_100:
(Start: 16 @61159 has 32 MA's), (Start: 26 @61195 has 5 MA's), (31, 61228), (33, 61234), (38, 61252), (43, 61282), (44, 61294), (46, 61309),

Gene: Wilkins_57 Start: 39132, Stop: 38998, Start Num: 27
Candidate Starts for Wilkins_57:
(Start: 27 @39132 has 155 MA's), (46, 39030),

Gene: Yecey3_69 Start: 40709, Stop: 40557, Start Num: 23
Candidate Starts for Yecey3_69:
(Start: 23 @40709 has 1 MA's), (29, 40688), (48, 40580), (50, 40565),

Gene: Zakai_100 Start: 61802, Stop: 61984, Start Num: 16
Candidate Starts for Zakai_100:
(Start: 16 @61802 has 32 MA's), (Start: 26 @61838 has 5 MA's), (Start: 28 @61844 has 18 MA's), (31, 61871), (33, 61877), (38, 61895), (43, 61925), (44, 61937),

Gene: Zeeculate_56 Start: 40569, Stop: 40435, Start Num: 27
Candidate Starts for Zeeculate_56:
(Start: 27 @40569 has 155 MA's), (46, 40467),

Gene: Zephyr_59 Start: 39575, Stop: 39441, Start Num: 27
Candidate Starts for Zephyr_59:
(Start: 27 @39575 has 155 MA's), (46, 39473),

Gene: Zeuska_57 Start: 40195, Stop: 40061, Start Num: 27
Candidate Starts for Zeuska_57:
(Start: 27 @40195 has 155 MA's), (46, 40093),

Gene: ZhongYanYuan_96 Start: 61296, Stop: 61478, Start Num: 16
Candidate Starts for ZhongYanYuan_96:
(11, 61251), (15, 61293), (Start: 16 @61296 has 32 MA's), (Start: 22 @61323 has 1 MA's), (Start: 26 @61332 has 5 MA's), (31, 61365), (38, 61389), (43, 61419), (44, 61431), (46, 61446),