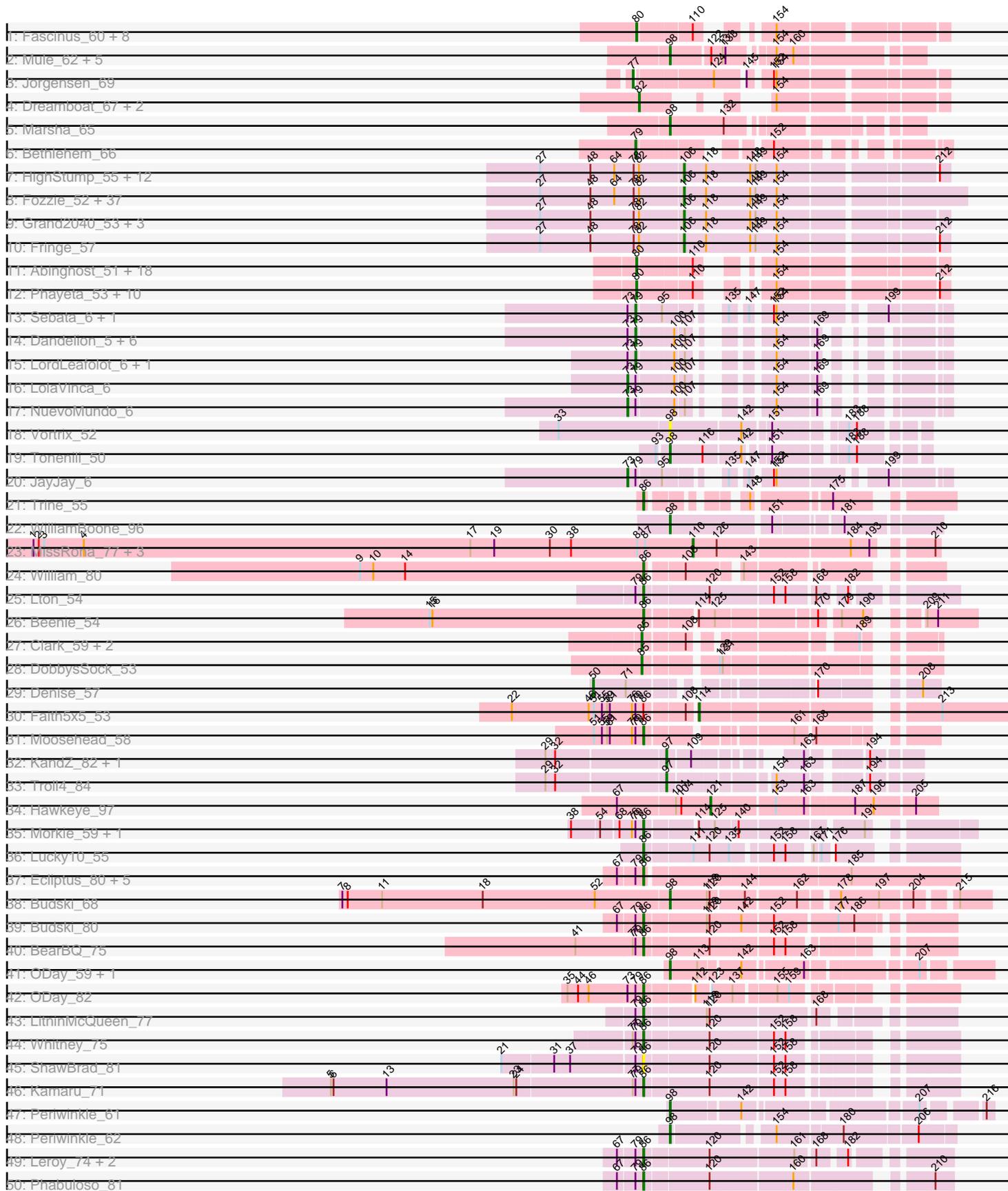
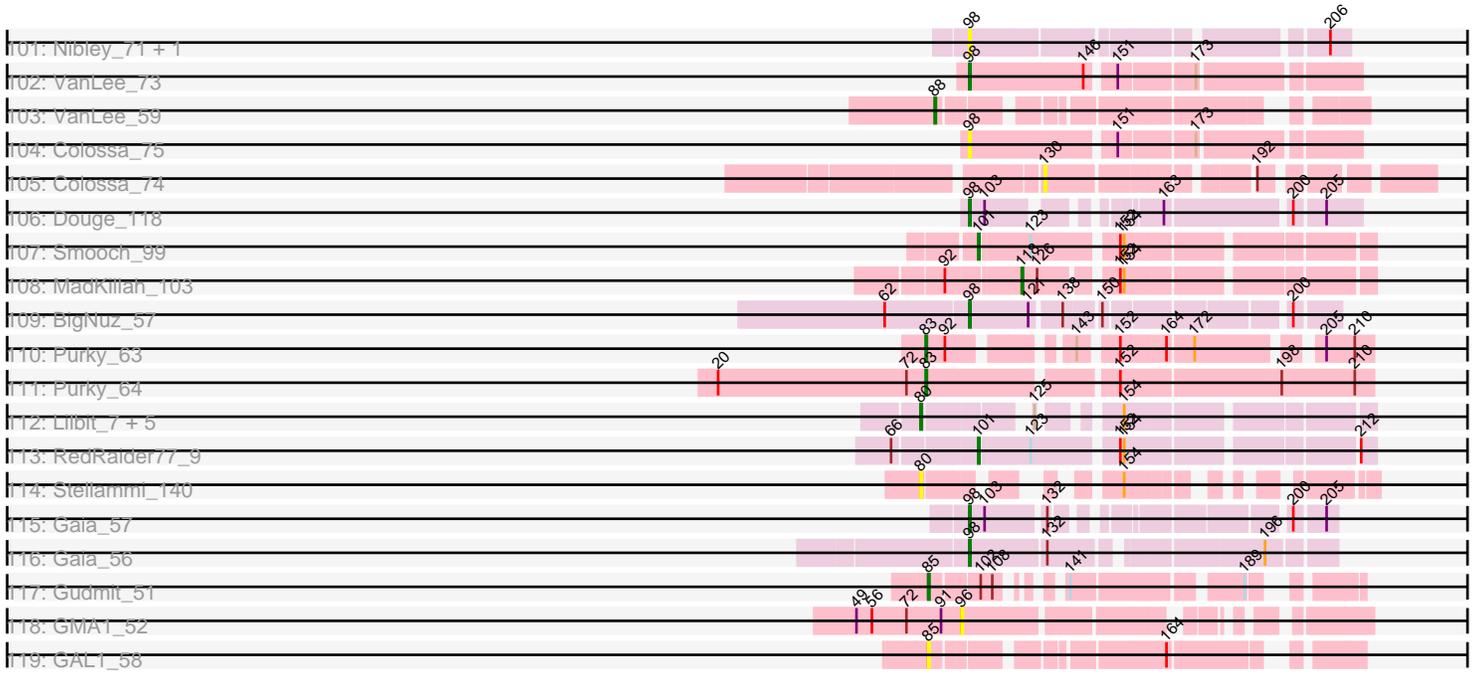


Pham 283395



Pham 283395



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 283395 Report

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

Pham number 283395 has 358 members, 26 are drafts.

Phages represented in each track:

- Track 1 : Fascinus_60, Paraselene_66, Carlyle_66, CactusRose_66, Maroc7_64, Blue_65, Makemake_71, Graduation_70, Bigfoot_58
- Track 2 : Mule_62, Smairt_67, Aeneas_68, PhrostyMug_65, Sunshine924_70, BaconJack_70
- Track 3 : Jorgensen_69
- Track 4 : Dreamboat_67, PherrisBueller_66, Jasper_66
- Track 5 : Marsha_65
- Track 6 : Bethlehem_66
- Track 7 : HighStump_55, Kahve_53, Orwigg_53, Childish_53, Soile_54, Nicole21_54, DaddyDaniels_55, Iridessa_54, Longacauda_54, Craff_56, Legolas_55, Brilliant_55, HenryJackson_53
- Track 8 : Fozzie_52, CamL_53, Mosaic_52, Sophia_52, Serendipity_53, Cosmolli16_54, TallGrassMM_53, Surely_53, Chorkpop_53, Squid_53, MrPhizzler_55, Morgushi_53, Solosis_52, Timmi_52, MitKao_53, Maru_53, Rimu_54, Lasso_53, Haleema_52, QueenBeane_53, Mana_52, Daffy_53, LeeLot_53, Oosterbaan_53, TomBombadil_53, Hertubise_53, Zelda_53, Cannibal_53, Kwadwo_52, Thora_53, Samaymay_53, SassyCat97_52, Vortex_53, Puhltonio_53, Xavier_52, Held_53, Potter_52, Banjo_52
- Track 9 : Grand2040_53, Mesh1_54, Lumine_54, Giraffe_54
- Track 10 : Fringe_57
- Track 11 : Abinghost_51, Neos5_51, SynergyX_51, Baloo_51, GlenHope_52, Audrey_51, Nozo_51, Daisy_51, Athena_52, ChaChing_51, Philly_50, Corofin_51, Glubnar_52, Halfpint_50, OrangeOswald_51, Akoma_51, Kamiyu_51, Phlyer_51, Chandler_51
- Track 12 : Phayeta_53, Chentzyk_52, Kronus_51, Gervas_52, Mortcellus_51, Ben11_51, Casbah_51, TinyTerror_52, Rita1961_52, MmasiCarm_52, Obutu_52
- Track 13 : Sebata_6, LinStu_6
- Track 14 : Dandelion_5, DTDevon_6, Pier_6, Specks_6, Tyke_6, Nappy_5, Drazdys_6
- Track 15 : LordLeafolot_6, FrayBell_6
- Track 16 : LolaVinca_6
- Track 17 : NuevoMundo_6
- Track 18 : Vortrix_52
- Track 19 : Tonenili_50
- Track 20 : JayJay_6
- Track 21 : Trine_55
- Track 22 : WilliamBoone_96

- Track 23 : MissRona_77, Blueberry_76, Azula_77, Gambino_79
- Track 24 : William_80
- Track 25 : Lton_54
- Track 26 : Beenie_54
- Track 27 : Clark_59, Invectra_62, Samman98_60
- Track 28 : DobbysSock_53
- Track 29 : Denise_57
- Track 30 : Faith5x5_53
- Track 31 : Moosehead_58
- Track 32 : KandZ_82, Helpful_87
- Track 33 : Troll4_84
- Track 34 : Hawkeye_97
- Track 35 : Morkie_59, PhorbesPhlower_55
- Track 36 : Lucky10_55
- Track 37 : Ecliptus_80, BENtherdunthat_78, Frickyeah_80, BotCity_80, Asapag_74, Birdsong_73
- Track 38 : Budski_68
- Track 39 : Budski_80
- Track 40 : BearBQ_75
- Track 41 : ODay_59, ShawBrad_59
- Track 42 : ODay_82
- Track 43 : LitninMcQueen_77
- Track 44 : Whitney_75
- Track 45 : ShawBrad_81
- Track 46 : Kamaru_71
- Track 47 : Periwinkle_61
- Track 48 : Periwinkle_62
- Track 49 : Leroy_74, Holliday_79, OneDirection_52
- Track 50 : Phabuloso_81
- Track 51 : Kenna_71, Lutum_77
- Track 52 : CheeseTouch_80
- Track 53 : Getalong_78
- Track 54 : Spooky_78
- Track 55 : Crater_73, Horus_75, Phistory_72
- Track 56 : Apricot_73
- Track 57 : Kuwabara_76
- Track 58 : Sixama_7
- Track 59 : GMA2_107
- Track 60 : DonkeyMan_58, Tarzan_58
- Track 61 : Heinz_57
- Track 62 : DLane_48, Mova_53, VRedHorse_52, XFactor_50, PhesterPhotato_54, Hamulus_53, Ardmore_44, Moonbeam_48, Batiatus_50, Melissauren88_50, Emma_52, Royals2015_55, Phalconet_51, CaptainTrips_49, MinionDave_51, Tweety_52, Madiba_50
- Track 63 : Gandalph_55, Polka14_51
- Track 64 : StAnnes_51, Medindi_50, Filuzino_50, IMpilo_49
- Track 65 : Estave1_55, Eish_57, DoRead_54
- Track 66 : Dante_53, Inventum_47, DaWorst_54, DaddyRickover_52, Sassafras_50
- Track 67 : PMC_49, Boomer_57, Rockne_53
- Track 68 : Mozy_62
- Track 69 : Bipolar_49, SuperGrey_52, ShroomBoi_52, KristaRAM_51, Kenuha5_50
- Track 70 : TDanisky_60, Ogopogo_57, Chuckly_55, Phasih_51, Clank_57, Sparkdehlily_60, Aubs_53

- Track 71 : Maravista_54
- Track 72 : Zerg_52, Che8_55, Firehouse51_53, ArcusAngelus_56, Mwanjiwa_58, Chevrolet_59, RockyHorror_53, Doug_55
- Track 73 : GigiOuiOui_49, OwlsT2W_53, Doomphist_52, Poenanya_52, Cornucopia_55, DotProduct_48
- Track 74 : Madiba_63, Optimus_84, Minerva_89, BAKA_91, Mova_66, EricMillard_83, MadMen_50
- Track 75 : QuickMath_66, Kimberlium_67
- Track 76 : Phanphagia_47
- Track 77 : Topiatin_58
- Track 78 : Byougenkin_50
- Track 79 : Donkeykong_53
- Track 80 : Job42_55
- Track 81 : Whatsapiecost_53
- Track 82 : Shauna1_47
- Track 83 : Juniper1_50
- Track 84 : Violac_55
- Track 85 : Pollywog_50
- Track 86 : JalFarm20_60
- Track 87 : SG4_49
- Track 88 : Yoshi_64
- Track 89 : Demsculpinboyz_62
- Track 90 : Renaud18_58, Taj_56, Wee_55, DeadP_58
- Track 91 : Renaud18_70
- Track 92 : Renaud18_71
- Track 93 : Toron_84
- Track 94 : Bagrid_146, ThreeRngTarjay_140, Halley_147, Pound_137, DmpstrDiver_146, Ejimix_138, Phoebus_145, Optimus_136, BAKA_145, EricMillard_137, Hughesyang_144, Constella_139, Duke13_141, Dallas_146, Schatzie_141
- Track 95 : Dallas_89, DmpstrDiver_90, ThreeRngTarjay_87, Hughesyang_90, Kalah2_84, Yeet_83, Zelink_87, Dove_75, Phoebus_92, Schatzie_85, Halley_91, Bombitas_78, Bagrid_89, NihilNomen_91, Beem_90, JuicyJay_87, Odette_88, Constella_75, HokkenD_79
- Track 96 : Dove_131, NihilNomen_147, HokkenD_138, Yeet_139, Odette_149, Kalah2_136, Redno2_140, JuicyJay_141, Klein_143, Beem_147, KashFlow_144, Bombitas_133
- Track 97 : Courthouse_78, MiaZeal_83, Ariel_82, Lucky2013_80, Porcelain_82, Squint_83
- Track 98 : Wanda_94, Klein_90
- Track 99 : Porcelain_141, MiaZeal_144, Lucky2013_137
- Track 100 : Xiaokay_141
- Track 101 : Nibley_71, Nekros_77
- Track 102 : VanLee_73
- Track 103 : VanLee_59
- Track 104 : Colossa_75
- Track 105 : Colossa_74
- Track 106 : Douge_118
- Track 107 : Smooch_99
- Track 108 : MadKillah_103
- Track 109 : BigNuz_57
- Track 110 : Purky_63
- Track 111 : Purky_64

- Track 112 : Lilbit_7, VasuNzinga_8, Pringar_6, Beelzebub_8, FeliMaine_7, Clarkson_7
- Track 113 : RedRaider77_9
- Track 114 : Stellammi_140
- Track 115 : Gaia_57
- Track 116 : Gaia_56
- Track 117 : Gudmit_51
- Track 118 : GMA1_52
- Track 119 : GAL1_58

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

The start number called the most often in the published annotations is 80, it was called in 86 of the 332 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abinghost_51, Akoma_51, Ariel_82, Athena_52, Audrey_51, BAKA_91, Bagrid_89, Baloo_51, Beelzebub_8, Beem_90, Ben11_51, Bigfoot_58, Blue_65, Bombitas_78, CactusRose_66, Carlyle_66, Casbah_51, ChaChing_51, Chandler_51, Chentzyk_52, Clarkson_7, Constella_75, Corofin_51, Courthouse_78, Daisy_51, Dallas_89, Demsculpinboyz_62, DmpstrDiver_90, DoRead_54, Donkeykong_53, Dove_75, Eish_57, EricMillard_83, Estave1_55, Fascinus_60, FeliMaine_7, Gervas_52, GlenHope_52, Glubnar_52, Graduation_70, Halfpint_50, Halley_91, HokkenD_79, Hughesyang_90, JuicyJay_87, Juniper1_50, Kalah2_84, Kamiyu_51, Klein_90, Kronus_51, Lilbit_7, Lucky2013_80, MadMen_50, Madiba_63, Makemake_71, Maravista_54, Maroc7_64, MiaZeal_83, Minerva_89, MmasiCarm_52, Mortcellus_51, Mova_66, Neos5_51, NihilNomen_91, Nozo_51, Obutu_52, Odette_88, Optimus_84, OrangeOswald_51, Paraselene_66, Phayeta_53, Philly_50, Phlyer_51, Phoebus_92, Porcelain_82, Pringar_6, Renaud18_70, Rita1961_52, Schatzie_85, Shauna1_47, Squint_83, Stellammi_140, SynergyX_51, ThreeRngTarjay_87, TinyTerror_52, VasuNzinga_8, Wanda_94, Yeet_83, Zelink_87,

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

-

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

- Aeneas_68, Apricot_73, ArcusAngelus_56, Ardmore_44, Asapag_74, Aubs_53, Azula_77, BAKA_145, BENtherdunthat_78, BaconJack_70, Bagrid_146, Banjo_52, Batiatus_50, BearBQ_75, Beem_147, Beenie_54, Bethlehem_66, BigNuz_57, Bipolar_49, Birdsong_73, Blueberry_76, Bombitas_133, Boomer_57, BotCity_80, Brilliant_55, Budski_68, Budski_80, Byougenkin_50, CamL_53, Cannibal_53, CaptainTrips_49, Che8_55, CheeseTouch_80, Chevrolet_59, Childish_53, Chorkpop_53, Chuckly_55, Clank_57, Clark_59, Colossa_74, Colossa_75, Constella_139, Cornucopia_55, Cosmolli16_54, Craff_56, Crater_73, DLane_48, DTDevon_6, DaWorst_54, DaddyDaniels_55, DaddyRickover_52, Daffy_53, Dallas_146, Dandelion_5, Dante_53, DeadP_58, Denise_57, DmpstrDiver_146, DobbysSock_53, DonkeyMan_58, Doomphist_52, DotProduct_48, Doug_55, Douge_118, Dove_131, Drazdys_6, Dreamboat_67, Duke13_141, Ecliptus_80, Ejimix_138, Emma_52, EricMillard_137, Faith5x5_53, Filuzino_50, Firehouse51_53, Fozzie_52, FrayBell_6, Frickyeah_80, Fringe_57, GAL1_58, GMA1_52, GMA2_107,

Gaia_56, Gaia_57, Gambino_79, Gandolph_55, Getalong_78, GigiOuiOui_49, Giraffe_54, Grand2040_53, Gudmit_51, Haleema_52, Halley_147, Hamulus_53, Hawkeye_97, Heinz_57, Held_53, Helpful_87, HenryJackson_53, Hertubise_53, HighStump_55, HokkenD_138, Holliday_79, Horus_75, Hughesyang_144, IMpilo_49, Invectra_62, Inventum_47, Iridessa_54, JalFarm20_60, Jasper_66, JayJay_6, Job42_55, Jorgensen_69, JuicyJay_141, Kahve_53, Kalah2_136, Kamaru_71, KandZ_82, KashFlow_144, Kenna_71, Kenuha5_50, Kimberlium_67, Klein_143, KristaRAM_51, Kuwabara_76, Kwadwo_52, Lasso_53, LeeLot_53, Legolas_55, Leroy_74, LinStu_6, LitninMcQueen_77, LolaVinca_6, Longacauda_54, LordLeafolot_6, Lton_54, Lucky10_55, Lucky2013_137, Lumine_54, Lutum_77, MadKillah_103, Madiba_50, Mana_52, Marsha_65, Maru_53, Medindi_50, Melissauren88_50, Mesh1_54, MiaZeal_144, MinionDave_51, MissRona_77, MitKao_53, Moonbeam_48, Moosehead_58, Morgushi_53, Morkie_59, Mosaic_52, Mova_53, Mozy_62, MrPhizzler_55, Mule_62, Mwanjiwa_58, Nappy_5, Nekros_77, Nibley_71, Nicole21_54, NihilNomen_147, NuevoMundo_6, ODay_59, ODay_82, Odette_149, Ogopogo_57, OneDirection_52, Oosterbaan_53, Optimus_136, Orwigg_53, OwlsT2W_53, PMC_49, Periwinkle_61, Periwinkle_62, Phabuloso_81, Phalconet_51, Phanphagia_47, Phasih_51, PherrisBueller_66, PhesterPhotato_54, Phistory_72, Phoebus_145, PhorbesPhlower_55, PhrostyMug_65, Pier_6, Poenanya_52, Polka14_51, Pollywog_50, Porcelain_141, Potter_52, Pound_137, Puhltonio_53, Purky_63, Purky_64, QueenBeane_53, QuickMath_66, RedRaider77_9, Redno2_140, Renaud18_58, Renaud18_71, Rimu_54, Rockne_53, RockyHorror_53, Royals2015_55, SG4_49, Samaymay_53, Samman98_60, Sassafras_50, SassyCat97_52, Schatzie_141, Sebata_6, Serendipity_53, ShawBrad_59, ShawBrad_81, ShroomBoi_52, Sixama_7, Smairt_67, Smooch_99, Soile_54, Solosis_52, Sophia_52, Sparkdehlily_60, Specks_6, Spooky_78, Squid_53, StAnnes_51, Sunshine924_70, SuperGrey_52, Surely_53, TDanisky_60, Taj_56, TallGrassMM_53, Tarzan_58, Thora_53, ThreeRngTarjay_140, Timmi_52, TomBombadil_53, Tonenili_50, Topiatin_58, Toron_84, Trine_55, Troll4_84, Tweety_52, Tyke_6, VRedHorse_52, VanLee_59, VanLee_73, Violac_55, Vortex_53, Vortrix_52, Wee_55, Whatsapiecost_53, Whitney_75, WilliamBoone_96, William_80, XFactor_50, Xavier_52, Xiaokay_141, Yeet_139, Yoshi_64, Zelda_53, Zerg_52,

Summary by start number:

Start 50:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Denise_57 (CZ5),

Start 60:

- Found in 50 of 358 (14.0%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 2.0% of time when present
- Phage (with cluster) where this start called: Byougenkin_50 (F1),

Start 73:

- Found in 15 of 358 (4.2%) of genes in pham
- Manual Annotations of this start: 3 of 332
- Called 20.0% of time when present
- Phage (with cluster) where this start called: JayJay_6 (C1), LolaVinca_6 (C1), NuevoMundo_6 (C1),

Start 77:

- Found in 4 of 358 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Jorgensen_69 (A1),

Start 79:

- Found in 113 of 358 (31.6%) of genes in pham
- Manual Annotations of this start: 75 of 332
- Called 70.8% of time when present
- Phage (with cluster) where this start called: Apricot_73 (DN3), ArcusAngelus_56 (F1), Ardmore_44 (F1), Aubs_53 (F1), Batiatus_50 (F1), Bethlehem_66 (A1), Bipolar_49 (F1), CaptainTrips_49 (F1), Che8_55 (F1), CheeseTouch_80 (DN1), Chevrolet_59 (F1), Chuckly_55 (F1), Clank_57 (F), Cornucopia_55 (F1), Crater_73 (DN3), DLane_48 (F1), DTDevon_6 (C1), DaWorst_54 (F1), DaddyRickover_52 (F1), Dandelion_5 (C1), Dante_53 (F1), DeadP_58 (F1), Doomphist_52 (F1), DotProduct_48 (F1), Doug_55 (F1), Drazdys_6 (C1), Emma_52 (F1), Firehouse51_53 (F1), FrayBell_6 (C1), Gandolph_55 (F1), GigiOuiOui_49 (F1), Hamulus_53 (F1), Horus_75 (DN1), Inventum_47 (F1), JalFarm20_60 (F1), Job42_55 (F1), Kenuha5_50 (F1), KristaRAM_51 (F1), LinStu_6 (C1), LordLeafolot_6 (C1), Madiba_50 (F1), Melissauren88_50 (F1), MinionDave_51 (F1), Moonbeam_48 (F1), Mova_53 (F1), Mozy_62 (F1), Mwanjiwa_58 (F1), Nappy_5 (C1), Ogopogo_57 (F1), OwisT2W_53 (F1), Phalconet_51 (F1), Phanphagia_47 (F1), Phasih_51 (F1), PhesterPhotato_54 (F1), Phistory_72 (DN1), Pier_6 (C1), Poenanya_52 (F1), Polka14_51 (F1), Renaud18_58 (F4), RockyHorror_53 (F1), Royals2015_55 (F1), SG4_49 (F1), Sassafras_50 (F1), Sebata_6 (C1), ShroomBoi_52 (F1), Sparkdehlily_60 (F1), Specks_6 (C1), SuperGrey_52 (F1), TDanisky_60 (F1), Taj_56 (F1), Topiatin_58 (F1), Tweety_52 (F1), Tyke_6 (C1), VRedHorse_52 (F1), Violac_55 (F1), Wee_55 (F1), Whatsapiecost_53 (F1), XFactor_50 (F1), Yoshi_64 (F2), Zerg_52 (F1),

Start 80:

- Found in 89 of 358 (24.9%) of genes in pham
- Manual Annotations of this start: 86 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abinghost_51 (B3), Akoma_51 (B3), Ariel_82 (J), Athena_52 (B3), Audrey_51 (B3), BAKA_91 (J), Bagrid_89 (J), Baloo_51 (B3), Beelzebub_8 (S), Beem_90 (J), Ben11_51 (B3), Bigfoot_58 (A1), Blue_65 (A1), Bombitas_78 (J), CactusRose_66 (A1), Carlyle_66 (A1), Casbah_51 (B3), ChaChing_51 (B3), Chandler_51 (B3), Chentzyk_52 (B3), Clarkson_7 (S), Constella_75 (J), Corofin_51 (B3), Courthouse_78 (J), Daisy_51 (B3), Dallas_89 (J), Demsculpinboyz_62 (F2), DmpstrDiver_90 (J), DoRead_54 (F1), Donkeykong_53 (F1), Dove_75 (J), Eish_57 (F1), EricMillard_83 (J), Estave1_55 (F1), Fascinus_60 (A1), FeliMaine_7 (S), Gervas_52 (B3), GlenHope_52 (B3), Glubnar_52 (B3), Graduation_70 (A1), Halfpint_50 (B3), Halley_91 (J), HokkenD_79 (J), Hughesyang_90 (J), JuicyJay_87 (J), Juniper1_50 (F1), Kalah2_84 (J), Kamiyu_51 (B3), Klein_90 (J), Kronus_51 (B3), Lilbit_7 (S), Lucky2013_80 (J), MadMen_50 (F1), Madiba_63 (F1), Makemake_71 (A1), Maravista_54 (F1), Maroc7_64 (A1), MiaZeal_83 (J), Minerva_89 (J), MmasiCarm_52 (B3), Mortcellus_51 (B3), Mova_66 (F1), Neos5_51 (B3), NihilNomen_91 (J), Nozo_51 (B3), Obutu_52 (B3), Odette_88 (J), Optimus_84 (J), OrangeOswald_51 (B3), Paraselene_66 (A1), Phayeta_53 (B3), Philly_50 (B3), Phlyer_51 (B3), Phoebus_92 (J), Porcelain_82 (J), Pringar_6 (S), Renaud18_70 (F4), Rita1961_52 (B3), Schatzie_85 (J), Shauna1_47 (F1), Squint_83

(J), Stellammi_140 (UNK), SynergyX_51 (B3), ThreeRngTarjay_87 (J), TinyTerror_52 (B3), VasuNzinga_8 (S), Wanda_94 (J), Yeet_83 (J), Zelink_87 (J),

Start 82:

- Found in 59 of 358 (16.5%) of genes in pham
- Manual Annotations of this start: 3 of 332
- Called 5.1% of time when present
- Phage (with cluster) where this start called: Dreamboat_67 (A1), Jasper_66 (A1), PherrisBueller_66 (A1),

Start 83:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Purky_63 (P6), Purky_64 (P6), Toron_84 (F6),

Start 84:

- Found in 1 of 358 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sixama_7 (DS),

Start 85:

- Found in 7 of 358 (2.0%) of genes in pham
- Manual Annotations of this start: 6 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Clark_59 (CZ4), DobbysSock_53 (CZ4), GAL1_58 (singleton), Gudmit_51 (singleton), Invectra_62 (CZ4), Samman98_60 (CZ4), Spooky_78 (DN2),

Start 86:

- Found in 31 of 358 (8.7%) of genes in pham
- Manual Annotations of this start: 27 of 332
- Called 93.5% of time when present
- Phage (with cluster) where this start called: Asapag_74 (DN1), BENtherdunthat_78 (DN1), BearBQ_75 (DN), Beenie_54 (CZ4), Birdsong_73 (DN), BotCity_80 (DN), Budski_80 (DN), Ecliptus_80 (DN), Frickyeah_80 (DN1), Getalong_78 (DN1), Holliday_79 (DN1), Kamaru_71 (DN1), Kenna_71 (DN1), Kuwabara_76 (DN4), Leroy_74 (DN1), LitninMcQueen_77 (DN1), Lton_54 (CZ), Lucky10_55 (DH), Lutum_77 (DN1), Moosehead_58 (CZ6), Morkie_59 (DH), ODay_82 (DN), OneDirection_52 (CZ6), Phabuloso_81 (DN1), PhorbesPhlower_55 (DH), ShawBrad_81 (DN1), Trine_55 (CD), Whitney_75 (DN1), William_80 (CV),

Start 88:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 50.0% of time when present
- Phage (with cluster) where this start called: VanLee_59 (KA),

Start 90:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 332

- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan_58 (DY), Heinz_57 (DY), Tarzan_58 (DY),

Start 96:

- Found in 33 of 358 (9.2%) of genes in pham
- No Manual Annotations of this start.
- Called 6.1% of time when present
- Phage (with cluster) where this start called: GMA1_52 (singleton), GMA2_107 (DS),

Start 97:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 3 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Helpful_87 (D1), KandZ_82 (D1), Troll4_84 (D1),

Start 98:

- Found in 30 of 358 (8.4%) of genes in pham
- Manual Annotations of this start: 25 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aeneas_68 (A1), BaconJack_70 (A1), BigNuz_57 (P4), Boomer_57 (F1), Budski_68 (DN), Colossa_75 (KA), Douge_118 (L4), Gaia_56 (X), Gaia_57 (X), Kimberlium_67 (F1), Marsha_65 (A1), Mule_62 (A1), Nekros_77 (J), Nibley_71 (J), ODay_59 (DN), PMC_49 (F1), Periwinkle_61 (DN1), Periwinkle_62 (DN1), PhrostyMug_65 (A1), Pollywog_50 (F1), QuickMath_66 (F1), Renaud18_71 (F4), Rockne_53 (F1), ShawBrad_59 (DN1), Smairt_67 (A1), Sunshine924_70 (A1), Tonenili_50 (C1), VanLee_73 (KA), Vortrix_52 (C1), WilliamBoone_96 (CQ1),

Start 100:

- Found in 34 of 358 (9.5%) of genes in pham
- Manual Annotations of this start: 2 of 332
- Called 11.8% of time when present
- Phage (with cluster) where this start called: Filuzino_50 (F1), IMpilo_49 (F1), Medindi_50 (F1), StAnnes_51 (F1),

Start 101:

- Found in 3 of 358 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 332
- Called 66.7% of time when present
- Phage (with cluster) where this start called: RedRaider77_9 (S), Smooch_99 (O),

Start 106:

- Found in 56 of 358 (15.6%) of genes in pham
- Manual Annotations of this start: 56 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Banjo_52 (B1), Brilliant_55 (B1), CamL_53 (B1), Cannibal_53 (B1), Childish_53 (B1), Chorkpop_53 (B1), Cosmolli16_54 (B1), Craff_56 (B1), DaddyDaniels_55 (B1), Daffy_53 (B1), Fozzie_52 (B1), Fringe_57 (B1), Giraffe_54 (B1), Grand2040_53 (B1), Haleema_52 (B1), Held_53 (B1), HenryJackson_53 (B1), Hertubise_53 (B1), HighStump_55 (B1), Iridessa_54 (B1), Kahve_53 (B1), Kwadwo_52 (B1), Lasso_53 (B1), LeeLot_53 (B1),

Legolas_55 (B1), Longacauda_54 (B1), Lumine_54 (B1), Mana_52 (B1), Maru_53 (B1), Mesh1_54 (B1), MitKao_53 (B1), Morgushi_53 (B1), Mosaic_52 (B1), MrPhizzler_55 (B1), Nicole21_54 (B1), Oosterbaan_53 (B1), Orwigg_53 (B1), Potter_52 (B1), Puhltonio_53 (B1), QueenBeane_53 (B1), Rimu_54 (B1), Samaymay_53 (B1), SassyCat97_52 (B1), Serendipity_53 (B1), Soile_54 (B1), Solosis_52 (B1), Sophia_52 (B1), Squid_53 (B1), Surely_53 (B1), TallGrassMM_53 (B1), Thora_53 (B1), Timmi_52 (B1), TomBombadil_53 (B1), Vortex_53 (B1), Xavier_52 (B1), Zelda_53 (B1),

Start 110:

- Found in 51 of 358 (14.2%) of genes in pham
- Manual Annotations of this start: 4 of 332
- Called 7.8% of time when present
- Phage (with cluster) where this start called: Azula_77 (CV), Blueberry_76 (CV), Gambino_79 (CV), MissRona_77 (CV),

Start 114:

- Found in 4 of 358 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Faith5x5_53 (CZ6),

Start 117:

- Found in 31 of 358 (8.7%) of genes in pham
- Manual Annotations of this start: 28 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BAKA_145 (J), Bagrid_146 (J), Beem_147 (J), Bombitas_133 (J), Constella_139 (J), Dallas_146 (J), DmpstrDiver_146 (J), Dove_131 (J), Duke13_141 (J), Ejimix_138 (J), EricMillard_137 (J), Halley_147 (J), HokkenD_138 (J), Hughesyang_144 (J), JuicyJay_141 (J), Kalah2_136 (J), KashFlow_144 (J), Klein_143 (J), Lucky2013_137 (J), MiaZeal_144 (J), NihilNomen_147 (J), Odette_149 (J), Optimus_136 (J), Phoebus_145 (J), Porcelain_141 (J), Pound_137 (J), Redno2_140 (J), Schatzie_141 (J), ThreeRngTarjay_140 (J), Xiaokay_141 (J), Yeet_139 (J),

Start 118:

- Found in 57 of 358 (15.9%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 1.8% of time when present
- Phage (with cluster) where this start called: MadKillah_103 (O),

Start 121:

- Found in 2 of 358 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Hawkeye_97 (D2),

Start 130:

- Found in 1 of 358 (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: Colossa_74 (KA),

Summary by clusters:

There are 36 clusters represented in this pham: DN, singleton, DH, CZ6, CZ4, CZ5, DY, DS, CV, A1, DN4, DN1, DN3, DN2, CQ1, P6, P4, F, J, F2, O, CD, CZ, S, X, UNK, C1, F1, KA, F4, F6, L4, B1, B3, D2, D1,

Info for manual annotations of cluster A1:

- Start number 77 was manually annotated 1 time for cluster A1.
- Start number 79 was manually annotated 1 time for cluster A1.
- Start number 80 was manually annotated 9 times for cluster A1.
- Start number 82 was manually annotated 3 times for cluster A1.
- Start number 98 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster B1:

- Start number 106 was manually annotated 56 times for cluster B1.

Info for manual annotations of cluster B3:

- Start number 80 was manually annotated 30 times for cluster B3.

Info for manual annotations of cluster C1:

- Start number 73 was manually annotated 3 times for cluster C1.
- Start number 79 was manually annotated 11 times for cluster C1.
- Start number 98 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster CD:

- Start number 86 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CQ1:

- Start number 98 was manually annotated 1 time for cluster CQ1.

Info for manual annotations of cluster CV:

- Start number 86 was manually annotated 1 time for cluster CV.
- Start number 110 was manually annotated 4 times for cluster CV.

Info for manual annotations of cluster CZ:

- Start number 86 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ4:

- Start number 85 was manually annotated 4 times for cluster CZ4.
- Start number 86 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ5:

- Start number 50 was manually annotated 1 time for cluster CZ5.

Info for manual annotations of cluster CZ6:

- Start number 86 was manually annotated 2 times for cluster CZ6.
- Start number 114 was manually annotated 1 time for cluster CZ6.

Info for manual annotations of cluster D1:

- Start number 97 was manually annotated 3 times for cluster D1.

Info for manual annotations of cluster D2:

- Start number 121 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster DH:

- Start number 86 was manually annotated 3 times for cluster DH.

Info for manual annotations of cluster DN:

- Start number 86 was manually annotated 6 times for cluster DN.
- Start number 98 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 79 was manually annotated 3 times for cluster DN1.
- Start number 86 was manually annotated 11 times for cluster DN1.
- Start number 98 was manually annotated 2 times for cluster DN1.

Info for manual annotations of cluster DN2:

- Start number 85 was manually annotated 1 time for cluster DN2.

Info for manual annotations of cluster DN3:

- Start number 79 was manually annotated 2 times for cluster DN3.

Info for manual annotations of cluster DN4:

- Start number 86 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster DS:

- Start number 84 was manually annotated 1 time for cluster DS.

Info for manual annotations of cluster DY:

- Start number 90 was manually annotated 2 times for cluster DY.

Info for manual annotations of cluster F1:

- Start number 60 was manually annotated 1 time for cluster F1.
- Start number 79 was manually annotated 56 times for cluster F1.
- Start number 80 was manually annotated 10 times for cluster F1.
- Start number 98 was manually annotated 6 times for cluster F1.
- Start number 100 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 79 was manually annotated 1 time for cluster F2.
- Start number 80 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster F4:

- Start number 79 was manually annotated 1 time for cluster F4.
- Start number 80 was manually annotated 1 time for cluster F4.
- Start number 98 was manually annotated 1 time for cluster F4.

Info for manual annotations of cluster J:

- Start number 80 was manually annotated 29 times for cluster J.
- Start number 117 was manually annotated 28 times for cluster J.

Info for manual annotations of cluster KA:

- Start number 88 was manually annotated 1 time for cluster KA.
- Start number 98 was manually annotated 1 time for cluster KA.

Info for manual annotations of cluster L4:

- Start number 98 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster O:

- Start number 101 was manually annotated 1 time for cluster O.
- Start number 118 was manually annotated 1 time for cluster O.

Info for manual annotations of cluster P4:

- Start number 98 was manually annotated 1 time for cluster P4.

Info for manual annotations of cluster P6:

- Start number 83 was manually annotated 2 times for cluster P6.

Info for manual annotations of cluster S:

- Start number 80 was manually annotated 6 times for cluster S.
- Start number 101 was manually annotated 1 time for cluster S.

Info for manual annotations of cluster X:

- Start number 98 was manually annotated 2 times for cluster X.

Gene Information:

Gene: Abinghost_51 Start: 45404, Stop: 45135, Start Num: 80

Candidate Starts for Abinghost_51:

(Start: 80 @45404 has 86 MA's), (Start: 110 @45350 has 4 MA's), (154, 45302),

Gene: Aeneas_68 Start: 44278, Stop: 44033, Start Num: 98

Candidate Starts for Aeneas_68:

(Start: 98 @44278 has 25 MA's), (122, 44236), (131, 44224), (133, 44221), (154, 44182), (160, 44164),

Gene: Akoma_51 Start: 45415, Stop: 45146, Start Num: 80

Candidate Starts for Akoma_51:

(Start: 80 @45415 has 86 MA's), (Start: 110 @45361 has 4 MA's), (154, 45313),

Gene: Apricot_73 Start: 42951, Stop: 43250, Start Num: 79

Candidate Starts for Apricot_73:

(26, 42846), (48, 42906), (Start: 79 @42951 has 75 MA's), (120, 43029), (152, 43095), (158, 43107),

Gene: ArcusAngelus_56 Start: 38441, Stop: 38683, Start Num: 79

Candidate Starts for ArcusAngelus_56:

(Start: 60 @38411 has 1 MA's), (Start: 79 @38441 has 75 MA's), (154, 38552),

Gene: Ardmore_44 Start: 35217, Stop: 35447, Start Num: 79

Candidate Starts for Ardmore_44:

(Start: 60 @35187 has 1 MA's), (Start: 79 @35217 has 75 MA's), (Start: 100 @35253 has 2 MA's), (152, 35313), (154, 35316),

Gene: Ariel_82 Start: 49253, Stop: 48984, Start Num: 80

Candidate Starts for Ariel_82:

(Start: 80 @49253 has 86 MA's), (Start: 110 @49199 has 4 MA's), (154, 49151),

Gene: Asapag_74 Start: 43606, Stop: 43938, Start Num: 86

Candidate Starts for Asapag_74:

(67, 43579), (Start: 79 @43597 has 75 MA's), (Start: 86 @43606 has 27 MA's), (185, 43819),

Gene: Athena_52 Start: 46162, Stop: 45893, Start Num: 80

Candidate Starts for Athena_52:

(Start: 80 @46162 has 86 MA's), (Start: 110 @46108 has 4 MA's), (154, 46060),

Gene: Aubs_53 Start: 37222, Stop: 37464, Start Num: 79

Candidate Starts for Aubs_53:

(74, 37216), (Start: 79 @37222 has 75 MA's), (154, 37333),

Gene: Audrey_51 Start: 45410, Stop: 45141, Start Num: 80

Candidate Starts for Audrey_51:

(Start: 80 @45410 has 86 MA's), (Start: 110 @45356 has 4 MA's), (154, 45308),

Gene: Azula_77 Start: 48141, Stop: 48380, Start Num: 110

Candidate Starts for Azula_77:

(1, 47394), (2, 47400), (3, 47406), (4, 47451), (17, 47889), (19, 47916), (30, 47979), (38, 48003), (81, 48078), (87, 48087), (Start: 110 @48141 has 4 MA's), (126, 48168), (184, 48306), (193, 48327), (210, 48375),

Gene: BAKA_145 Start: 76447, Stop: 76692, Start Num: 117

Candidate Starts for BAKA_145:

(39, 76312), (89, 76387), (96, 76402), (Start: 117 @76447 has 28 MA's), (154, 76519), (156, 76522),

Gene: BAKA_91 Start: 56921, Stop: 57199, Start Num: 80

Candidate Starts for BAKA_91:

(75, 56915), (Start: 80 @56921 has 86 MA's), (154, 57032),

Gene: BENtherdunthat_78 Start: 44652, Stop: 44984, Start Num: 86

Candidate Starts for BENtherdunthat_78:

(67, 44625), (Start: 79 @44643 has 75 MA's), (Start: 86 @44652 has 27 MA's), (185, 44865),

Gene: BaconJack_70 Start: 45368, Stop: 45123, Start Num: 98

Candidate Starts for BaconJack_70:

(Start: 98 @45368 has 25 MA's), (122, 45326), (131, 45314), (133, 45311), (154, 45272), (160, 45254),

Gene: Bagrid_146 Start: 77142, Stop: 77387, Start Num: 117

Candidate Starts for Bagrid_146:

(39, 77007), (89, 77082), (96, 77097), (Start: 117 @77142 has 28 MA's), (154, 77214), (156, 77217),

Gene: Bagrid_89 Start: 55770, Stop: 56066, Start Num: 80

Candidate Starts for Bagrid_89:

(Start: 80 @55770 has 86 MA's), (124, 55848), (145, 55875), (154, 55899),

Gene: Baloo_51 Start: 45413, Stop: 45144, Start Num: 80

Candidate Starts for Baloo_51:

(Start: 80 @45413 has 86 MA's), (Start: 110 @45359 has 4 MA's), (154, 45311),

Gene: Banjo_52 Start: 47062, Stop: 46769, Start Num: 106

Candidate Starts for Banjo_52:

(27, 47221), (48, 47164), (64, 47137), (78, 47116), (Start: 82 @47110 has 3 MA's), (Start: 106 @47062 has 56 MA's), (Start: 118 @47038 has 1 MA's), (148, 46990), (149, 46984), (154, 46960),

Gene: Batiatus_50 Start: 37046, Stop: 37276, Start Num: 79

Candidate Starts for Batiatus_50:

(Start: 60 @37016 has 1 MA's), (Start: 79 @37046 has 75 MA's), (Start: 100 @37082 has 2 MA's), (152, 37142), (154, 37145),

Gene: BearBQ_75 Start: 45677, Stop: 45961, Start Num: 86

Candidate Starts for BearBQ_75:

(41, 45602), (Start: 77 @45665 has 1 MA's), (Start: 79 @45668 has 75 MA's), (Start: 86 @45677 has 27 MA's), (120, 45743), (152, 45809), (158, 45821),

Gene: Beelzebub_8 Start: 2535, Stop: 2807, Start Num: 80

Candidate Starts for Beelzebub_8:

(Start: 80 @2535 has 86 MA's), (125, 2598), (154, 2640),

Gene: Beem_90 Start: 56631, Stop: 56927, Start Num: 80

Candidate Starts for Beem_90:

(Start: 80 @56631 has 86 MA's), (124, 56709), (145, 56736), (154, 56760),

Gene: Beem_147 Start: 78045, Stop: 78290, Start Num: 117

Candidate Starts for Beem_147:

(39, 77910), (96, 78000), (Start: 117 @78045 has 28 MA's), (154, 78117), (156, 78120),

Gene: Beenie_54 Start: 39845, Stop: 40141, Start Num: 86

Candidate Starts for Beenie_54:

(15, 39605), (16, 39608), (Start: 86 @39845 has 27 MA's), (Start: 114 @39893 has 1 MA's), (125, 39911), (170, 40007), (179, 40025), (190, 40049), (209, 40085), (211, 40097),

Gene: Ben11_51 Start: 45695, Stop: 45426, Start Num: 80

Candidate Starts for Ben11_51:

(Start: 80 @45695 has 86 MA's), (Start: 110 @45641 has 4 MA's), (154, 45593), (212, 45437),

Gene: Bethlehem_66 Start: 44024, Stop: 43779, Start Num: 79

Candidate Starts for Bethlehem_66:

(Start: 79 @44024 has 75 MA's), (152, 43916),

Gene: BigNuz_57 Start: 39875, Stop: 40117, Start Num: 98

Candidate Starts for BigNuz_57:

(62, 39812), (Start: 98 @39875 has 25 MA's), (Start: 121 @39920 has 1 MA's), (138, 39941), (150, 39965), (200, 40085),

Gene: Bigfoot_58 Start: 41545, Stop: 41276, Start Num: 80

Candidate Starts for Bigfoot_58:

(Start: 80 @41545 has 86 MA's), (Start: 110 @41491 has 4 MA's), (154, 41443),

Gene: Bipolar_49 Start: 36854, Stop: 37099, Start Num: 79

Candidate Starts for Bipolar_49:

(34, 36770), (43, 36788), (64, 36830), (Start: 79 @36854 has 75 MA's), (154, 36965),

Gene: Birdsong_73 Start: 43342, Stop: 43674, Start Num: 86

Candidate Starts for Birdsong_73:

(67, 43315), (Start: 79 @43333 has 75 MA's), (Start: 86 @43342 has 27 MA's), (185, 43555),

Gene: Blue_65 Start: 43245, Stop: 42976, Start Num: 80

Candidate Starts for Blue_65:

(Start: 80 @43245 has 86 MA's), (Start: 110 @43191 has 4 MA's), (154, 43143),

Gene: Blueberry_76 Start: 48141, Stop: 48380, Start Num: 110

Candidate Starts for Blueberry_76:

(1, 47394), (2, 47400), (3, 47406), (4, 47451), (17, 47889), (19, 47916), (30, 47979), (38, 48003), (81, 48078), (87, 48087), (Start: 110 @48141 has 4 MA's), (126, 48168), (184, 48306), (193, 48327), (210, 48375),

Gene: Bombitas_78 Start: 53794, Stop: 54090, Start Num: 80

Candidate Starts for Bombitas_78:

(Start: 80 @53794 has 86 MA's), (124, 53872), (145, 53899), (154, 53923),

Gene: Bombitas_133 Start: 75456, Stop: 75701, Start Num: 117

Candidate Starts for Bombitas_133:

(39, 75321), (96, 75411), (Start: 117 @75456 has 28 MA's), (154, 75528), (156, 75531),

Gene: Boomer_57 Start: 38978, Stop: 39235, Start Num: 98

Candidate Starts for Boomer_57:

(36, 38864), (45, 38876), (62, 38912), (94, 38963), (Start: 98 @38978 has 25 MA's), (154, 39089), (164, 39119),

Gene: BotCity_80 Start: 46160, Stop: 46492, Start Num: 86

Candidate Starts for BotCity_80:

(67, 46133), (Start: 79 @46151 has 75 MA's), (Start: 86 @46160 has 27 MA's), (185, 46373),

Gene: Brilliant_55 Start: 47604, Stop: 47335, Start Num: 106

Candidate Starts for Brilliant_55:

(27, 47763), (48, 47706), (64, 47679), (78, 47658), (Start: 82 @47652 has 3 MA's), (Start: 106 @47604 has 56 MA's), (Start: 118 @47580 has 1 MA's), (148, 47532), (149, 47526), (154, 47502), (212, 47346),

Gene: Budski_68 Start: 41006, Stop: 41320, Start Num: 98

Candidate Starts for Budski_68:

(7, 40640), (8, 40646), (11, 40685), (18, 40799), (52, 40925), (Start: 98 @41006 has 25 MA's), (119, 41048), (120, 41051), (144, 41087), (162, 41138), (178, 41174), (197, 41216), (204, 41249), (215, 41285),

Gene: Budski_80 Start: 45490, Stop: 45795, Start Num: 86

Candidate Starts for Budski_80:

(67, 45463), (Start: 79 @45481 has 75 MA's), (Start: 86 @45490 has 27 MA's), (119, 45553), (120, 45556), (142, 45589), (152, 45622), (177, 45685), (186, 45703),

Gene: Byougenkin_50 Start: 36870, Stop: 37133, Start Num: 60

Candidate Starts for Byougenkin_50:

(Start: 60 @36870 has 1 MA's), (Start: 79 @36900 has 75 MA's), (95, 36924), (135, 36966), (147, 36981), (152, 36999), (154, 37002),

Gene: CactusRose_66 Start: 42565, Stop: 42296, Start Num: 80

Candidate Starts for CactusRose_66:
(Start: 80 @42565 has 86 MA's), (Start: 110 @42511 has 4 MA's), (154, 42463),

Gene: CamL_53 Start: 47369, Stop: 47076, Start Num: 106
Candidate Starts for CamL_53:
(27, 47528), (48, 47471), (64, 47444), (78, 47423), (Start: 82 @47417 has 3 MA's), (Start: 106 @47369 has 56 MA's), (Start: 118 @47345 has 1 MA's), (148, 47297), (149, 47291), (154, 47267),

Gene: Cannibal_53 Start: 47352, Stop: 47059, Start Num: 106
Candidate Starts for Cannibal_53:
(27, 47511), (48, 47454), (64, 47427), (78, 47406), (Start: 82 @47400 has 3 MA's), (Start: 106 @47352 has 56 MA's), (Start: 118 @47328 has 1 MA's), (148, 47280), (149, 47274), (154, 47250),

Gene: CaptainTrips_49 Start: 36066, Stop: 36296, Start Num: 79
Candidate Starts for CaptainTrips_49:
(Start: 60 @36036 has 1 MA's), (Start: 79 @36066 has 75 MA's), (Start: 100 @36102 has 2 MA's), (152, 36162), (154, 36165),

Gene: Carlyle_66 Start: 41351, Stop: 41082, Start Num: 80
Candidate Starts for Carlyle_66:
(Start: 80 @41351 has 86 MA's), (Start: 110 @41297 has 4 MA's), (154, 41249),

Gene: Casbah_51 Start: 45725, Stop: 45456, Start Num: 80
Candidate Starts for Casbah_51:
(Start: 80 @45725 has 86 MA's), (Start: 110 @45671 has 4 MA's), (154, 45623), (212, 45467),

Gene: ChaChing_51 Start: 45427, Stop: 45158, Start Num: 80
Candidate Starts for ChaChing_51:
(Start: 80 @45427 has 86 MA's), (Start: 110 @45373 has 4 MA's), (154, 45325),

Gene: Chandler_51 Start: 46194, Stop: 45925, Start Num: 80
Candidate Starts for Chandler_51:
(Start: 80 @46194 has 86 MA's), (Start: 110 @46140 has 4 MA's), (154, 46092),

Gene: Che8_55 Start: 38308, Stop: 38550, Start Num: 79
Candidate Starts for Che8_55:
(Start: 60 @38278 has 1 MA's), (Start: 79 @38308 has 75 MA's), (154, 38419),

Gene: CheeseTouch_80 Start: 40886, Stop: 41182, Start Num: 79
Candidate Starts for CheeseTouch_80:
(21, 40742), (31, 40799), (37, 40817), (Start: 79 @40886 has 75 MA's), (Start: 86 @40895 has 27 MA's), (120, 40961), (152, 41027), (158, 41039),

Gene: Chentzyk_52 Start: 46237, Stop: 45968, Start Num: 80
Candidate Starts for Chentzyk_52:
(Start: 80 @46237 has 86 MA's), (Start: 110 @46183 has 4 MA's), (154, 46135), (212, 45979),

Gene: Chevrolet_59 Start: 38442, Stop: 38684, Start Num: 79
Candidate Starts for Chevrolet_59:
(Start: 60 @38412 has 1 MA's), (Start: 79 @38442 has 75 MA's), (154, 38553),

Gene: Childish_53 Start: 47631, Stop: 47362, Start Num: 106
Candidate Starts for Childish_53:

(27, 47790), (48, 47733), (64, 47706), (78, 47685), (Start: 82 @47679 has 3 MA's), (Start: 106 @47631 has 56 MA's), (Start: 118 @47607 has 1 MA's), (148, 47559), (149, 47553), (154, 47529), (212, 47373),

Gene: Chorkpop_53 Start: 47108, Stop: 46815, Start Num: 106

Candidate Starts for Chorkpop_53:

(27, 47267), (48, 47210), (64, 47183), (78, 47162), (Start: 82 @47156 has 3 MA's), (Start: 106 @47108 has 56 MA's), (Start: 118 @47084 has 1 MA's), (148, 47036), (149, 47030), (154, 47006),

Gene: Chuckly_55 Start: 37799, Stop: 38041, Start Num: 79

Candidate Starts for Chuckly_55:

(74, 37793), (Start: 79 @37799 has 75 MA's), (154, 37910),

Gene: Clank_57 Start: 38129, Stop: 38371, Start Num: 79

Candidate Starts for Clank_57:

(74, 38123), (Start: 79 @38129 has 75 MA's), (154, 38240),

Gene: Clark_59 Start: 39693, Stop: 39938, Start Num: 85

Candidate Starts for Clark_59:

(Start: 85 @39693 has 6 MA's), (108, 39732), (189, 39882),

Gene: Clarkson_7 Start: 2311, Stop: 2583, Start Num: 80

Candidate Starts for Clarkson_7:

(Start: 80 @2311 has 86 MA's), (125, 2374), (154, 2416),

Gene: Colossa_75 Start: 44073, Stop: 44345, Start Num: 98

Candidate Starts for Colossa_75:

(Start: 98 @44073 has 25 MA's), (151, 44178), (173, 44232),

Gene: Colossa_74 Start: 43841, Stop: 44080, Start Num: 130

Candidate Starts for Colossa_74:

(130, 43841), (192, 43973),

Gene: Constella_139 Start: 76698, Stop: 76943, Start Num: 117

Candidate Starts for Constella_139:

(39, 76563), (89, 76638), (96, 76653), (Start: 117 @76698 has 28 MA's), (154, 76770), (156, 76773),

Gene: Constella_75 Start: 50768, Stop: 51064, Start Num: 80

Candidate Starts for Constella_75:

(Start: 80 @50768 has 86 MA's), (124, 50846), (145, 50873), (154, 50897),

Gene: Cornucopia_55 Start: 38144, Stop: 38386, Start Num: 79

Candidate Starts for Cornucopia_55:

(Start: 60 @38114 has 1 MA's), (Start: 79 @38144 has 75 MA's), (152, 38252),

Gene: Corofin_51 Start: 45437, Stop: 45168, Start Num: 80

Candidate Starts for Corofin_51:

(Start: 80 @45437 has 86 MA's), (Start: 110 @45383 has 4 MA's), (154, 45335),

Gene: Cosmolli16_54 Start: 47811, Stop: 47542, Start Num: 106

Candidate Starts for Cosmolli16_54:

(27, 47970), (48, 47913), (64, 47886), (78, 47865), (Start: 82 @47859 has 3 MA's), (Start: 106 @47811 has 56 MA's), (Start: 118 @47787 has 1 MA's), (148, 47739), (149, 47733), (154, 47709),

Gene: Courthouse_78 Start: 48853, Stop: 48584, Start Num: 80

Candidate Starts for Courthouse_78:

(Start: 80 @48853 has 86 MA's), (Start: 110 @48799 has 4 MA's), (154, 48751),

Gene: Craff_56 Start: 48056, Stop: 47787, Start Num: 106

Candidate Starts for Craff_56:

(27, 48215), (48, 48158), (64, 48131), (78, 48110), (Start: 82 @48104 has 3 MA's), (Start: 106 @48056 has 56 MA's), (Start: 118 @48032 has 1 MA's), (148, 47984), (149, 47978), (154, 47954), (212, 47798),

Gene: Crater_73 Start: 43346, Stop: 43687, Start Num: 79

Candidate Starts for Crater_73:

(26, 43241), (48, 43301), (Start: 79 @43346 has 75 MA's), (120, 43424), (152, 43490), (174, 43553),

Gene: DLane_48 Start: 36148, Stop: 36381, Start Num: 79

Candidate Starts for DLane_48:

(Start: 60 @36118 has 1 MA's), (Start: 79 @36148 has 75 MA's), (Start: 100 @36184 has 2 MA's), (152, 36244), (154, 36247),

Gene: DTDevon_6 Start: 1888, Stop: 2115, Start Num: 79

Candidate Starts for DTDevon_6:

(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: DaWorst_54 Start: 38043, Stop: 38276, Start Num: 79

Candidate Starts for DaWorst_54:

(Start: 60 @38013 has 1 MA's), (Start: 79 @38043 has 75 MA's), (95, 38067), (135, 38109), (147, 38124), (152, 38142), (154, 38145),

Gene: DaddyDaniels_55 Start: 47588, Stop: 47319, Start Num: 106

Candidate Starts for DaddyDaniels_55:

(27, 47747), (48, 47690), (64, 47663), (78, 47642), (Start: 82 @47636 has 3 MA's), (Start: 106 @47588 has 56 MA's), (Start: 118 @47564 has 1 MA's), (148, 47516), (149, 47510), (154, 47486), (212, 47330),

Gene: DaddyRickover_52 Start: 37670, Stop: 37903, Start Num: 79

Candidate Starts for DaddyRickover_52:

(Start: 60 @37640 has 1 MA's), (Start: 79 @37670 has 75 MA's), (95, 37694), (135, 37736), (147, 37751), (152, 37769), (154, 37772),

Gene: Daffy_53 Start: 47094, Stop: 46801, Start Num: 106

Candidate Starts for Daffy_53:

(27, 47253), (48, 47196), (64, 47169), (78, 47148), (Start: 82 @47142 has 3 MA's), (Start: 106 @47094 has 56 MA's), (Start: 118 @47070 has 1 MA's), (148, 47022), (149, 47016), (154, 46992),

Gene: Daisy_51 Start: 45439, Stop: 45170, Start Num: 80

Candidate Starts for Daisy_51:

(Start: 80 @45439 has 86 MA's), (Start: 110 @45385 has 4 MA's), (154, 45337),

Gene: Dallas_89 Start: 55552, Stop: 55848, Start Num: 80

Candidate Starts for Dallas_89:

(Start: 80 @55552 has 86 MA's), (124, 55630), (145, 55657), (154, 55681),

Gene: Dallas_146 Start: 77512, Stop: 77757, Start Num: 117

Candidate Starts for Dallas_146:

(39, 77377), (89, 77452), (96, 77467), (Start: 117 @77512 has 28 MA's), (154, 77584), (156, 77587),

Gene: Dandelion_5 Start: 1888, Stop: 2115, Start Num: 79

Candidate Starts for Dandelion_5:

(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: Dante_53 Start: 37036, Stop: 37266, Start Num: 79

Candidate Starts for Dante_53:

(Start: 60 @37006 has 1 MA's), (Start: 79 @37036 has 75 MA's), (95, 37060), (135, 37099), (147, 37114), (152, 37132), (154, 37135),

Gene: DeadP_58 Start: 38932, Stop: 39159, Start Num: 79

Candidate Starts for DeadP_58:

(Start: 60 @38902 has 1 MA's), (Start: 79 @38932 has 75 MA's), (99, 38965), (133, 38989), (152, 39022),

Gene: Demsculpinboyz_62 Start: 36874, Stop: 37140, Start Num: 80

Candidate Starts for Demsculpinboyz_62:

(57, 36844), (Start: 80 @36874 has 86 MA's), (95, 36898), (134, 36940), (148, 36955), (152, 36973), (154, 36976),

Gene: Denise_57 Start: 36623, Stop: 36913, Start Num: 50

Candidate Starts for Denise_57:

(Start: 50 @36623 has 1 MA's), (71, 36659), (170, 36815), (208, 36896),

Gene: DmpstrDiver_90 Start: 55966, Stop: 56262, Start Num: 80

Candidate Starts for DmpstrDiver_90:

(Start: 80 @55966 has 86 MA's), (124, 56044), (145, 56071), (154, 56095),

Gene: DmpstrDiver_146 Start: 77431, Stop: 77676, Start Num: 117

Candidate Starts for DmpstrDiver_146:

(39, 77296), (89, 77371), (96, 77386), (Start: 117 @77431 has 28 MA's), (154, 77503), (156, 77506),

Gene: DoRead_54 Start: 36172, Stop: 36447, Start Num: 80

Candidate Starts for DoRead_54:

(Start: 80 @36172 has 86 MA's), (154, 36283),

Gene: DobbysSock_53 Start: 39107, Stop: 39373, Start Num: 85

Candidate Starts for DobbysSock_53:

(Start: 85 @39107 has 6 MA's), (129, 39173), (131, 39176),

Gene: DonkeyMan_58 Start: 38401, Stop: 38625, Start Num: 90

Candidate Starts for DonkeyMan_58:

(Start: 90 @38401 has 2 MA's), (109, 38437), (166, 38530), (190, 38578),

Gene: Donkeykong_53 Start: 39067, Stop: 39345, Start Num: 80

Candidate Starts for Donkeykong_53:

(Start: 50 @39022 has 1 MA's), (62, 39043), (Start: 80 @39067 has 86 MA's), (154, 39178),

Gene: Doomphist_52 Start: 38179, Stop: 38421, Start Num: 79
Candidate Starts for Doomphist_52:
(Start: 60 @38149 has 1 MA's), (Start: 79 @38179 has 75 MA's), (152, 38287),

Gene: DotProduct_48 Start: 36209, Stop: 36451, Start Num: 79
Candidate Starts for DotProduct_48:
(Start: 60 @36179 has 1 MA's), (Start: 79 @36209 has 75 MA's), (152, 36317),

Gene: Doug_55 Start: 38300, Stop: 38542, Start Num: 79
Candidate Starts for Doug_55:
(Start: 60 @38270 has 1 MA's), (Start: 79 @38300 has 75 MA's), (154, 38411),

Gene: Douge_118 Start: 64670, Stop: 64912, Start Num: 98
Candidate Starts for Douge_118:
(Start: 98 @64670 has 25 MA's), (103, 64682), (163, 64778), (200, 64865), (205, 64886),

Gene: Dove_131 Start: 73030, Stop: 73275, Start Num: 117
Candidate Starts for Dove_131:
(39, 72895), (96, 72985), (Start: 117 @73030 has 28 MA's), (154, 73102), (156, 73105),

Gene: Dove_75 Start: 52060, Stop: 52356, Start Num: 80
Candidate Starts for Dove_75:
(Start: 80 @52060 has 86 MA's), (124, 52138), (145, 52165), (154, 52189),

Gene: Drazdys_6 Start: 1888, Stop: 2115, Start Num: 79
Candidate Starts for Drazdys_6:
(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: Dreamboat_67 Start: 41780, Stop: 41553, Start Num: 82
Candidate Starts for Dreamboat_67:
(Start: 82 @41780 has 3 MA's), (154, 41720),

Gene: Duke13_141 Start: 74732, Stop: 74977, Start Num: 117
Candidate Starts for Duke13_141:
(39, 74597), (89, 74672), (96, 74687), (Start: 117 @74732 has 28 MA's), (154, 74804), (156, 74807),

Gene: Ecliptus_80 Start: 46255, Stop: 46587, Start Num: 86
Candidate Starts for Ecliptus_80:
(67, 46228), (Start: 79 @46246 has 75 MA's), (Start: 86 @46255 has 27 MA's), (185, 46468),

Gene: Eish_57 Start: 38353, Stop: 38628, Start Num: 80
Candidate Starts for Eish_57:
(Start: 80 @38353 has 86 MA's), (154, 38464),

Gene: Ejimix_138 Start: 77580, Stop: 77825, Start Num: 117
Candidate Starts for Ejimix_138:
(39, 77445), (89, 77520), (96, 77535), (Start: 117 @77580 has 28 MA's), (154, 77652), (156, 77655),

Gene: Emma_52 Start: 36405, Stop: 36638, Start Num: 79
Candidate Starts for Emma_52:
(Start: 60 @36375 has 1 MA's), (Start: 79 @36405 has 75 MA's), (Start: 100 @36441 has 2 MA's), (152, 36501), (154, 36504),

Gene: EricMillard_137 Start: 76084, Stop: 76329, Start Num: 117
Candidate Starts for EricMillard_137:
(39, 75949), (89, 76024), (96, 76039), (Start: 117 @76084 has 28 MA's), (154, 76156), (156, 76159),

Gene: EricMillard_83 Start: 55716, Stop: 55994, Start Num: 80
Candidate Starts for EricMillard_83:
(75, 55710), (Start: 80 @55716 has 86 MA's), (154, 55827),

Gene: Estave1_55 Start: 37717, Stop: 37980, Start Num: 80
Candidate Starts for Estave1_55:
(Start: 80 @37717 has 86 MA's), (154, 37828),

Gene: Faith5x5_53 Start: 34268, Stop: 34585, Start Num: 114
Candidate Starts for Faith5x5_53:
(22, 34076), (46, 34163), (51, 34169), (55, 34178), (59, 34184), (61, 34187), (76, 34208), (Start: 79 @34211 has 75 MA's), (Start: 86 @34220 has 27 MA's), (108, 34259), (Start: 114 @34268 has 1 MA's), (213, 34496),

Gene: Fascinus_60 Start: 42059, Stop: 41790, Start Num: 80
Candidate Starts for Fascinus_60:
(Start: 80 @42059 has 86 MA's), (Start: 110 @42005 has 4 MA's), (154, 41957),

Gene: FeliMaine_7 Start: 2312, Stop: 2584, Start Num: 80
Candidate Starts for FeliMaine_7:
(Start: 80 @2312 has 86 MA's), (125, 2375), (154, 2417),

Gene: Filuzino_50 Start: 36021, Stop: 36323, Start Num: 100
Candidate Starts for Filuzino_50:
(Start: 60 @35955 has 1 MA's), (Start: 79 @35985 has 75 MA's), (Start: 100 @36021 has 2 MA's), (152, 36081), (154, 36084), (170, 36123), (187, 36144), (214, 36222),

Gene: Firehouse51_53 Start: 39958, Stop: 40203, Start Num: 79
Candidate Starts for Firehouse51_53:
(Start: 60 @39928 has 1 MA's), (Start: 79 @39958 has 75 MA's), (154, 40069),

Gene: Fozzie_52 Start: 47398, Stop: 47105, Start Num: 106
Candidate Starts for Fozzie_52:
(27, 47557), (48, 47500), (64, 47473), (78, 47452), (Start: 82 @47446 has 3 MA's), (Start: 106 @47398 has 56 MA's), (Start: 118 @47374 has 1 MA's), (148, 47326), (149, 47320), (154, 47296),

Gene: FrayBell_6 Start: 1888, Stop: 2115, Start Num: 79
Candidate Starts for FrayBell_6:
(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: Frickyeah_80 Start: 44783, Stop: 45115, Start Num: 86
Candidate Starts for Frickyeah_80:
(67, 44756), (Start: 79 @44774 has 75 MA's), (Start: 86 @44783 has 27 MA's), (185, 44996),

Gene: Fringe_57 Start: 48533, Stop: 48264, Start Num: 106
Candidate Starts for Fringe_57:

(27, 48692), (48, 48635), (78, 48587), (Start: 82 @48581 has 3 MA's), (Start: 106 @48533 has 56 MA's), (Start: 118 @48509 has 1 MA's), (148, 48461), (149, 48455), (154, 48431), (212, 48275),

Gene: GAL1_58 Start: 39448, Stop: 39708, Start Num: 85
Candidate Starts for GAL1_58:
(Start: 85 @39448 has 6 MA's), (164, 39592),

Gene: GMA1_52 Start: 32897, Stop: 33145, Start Num: 96
Candidate Starts for GMA1_52:
(49, 32816), (56, 32828), (72, 32855), (91, 32882), (96, 32897),

Gene: GMA2_107 Start: 94211, Stop: 93939, Start Num: 96
Candidate Starts for GMA2_107:
(96, 94211), (178, 94031),

Gene: Gaia_57 Start: 40635, Stop: 40414, Start Num: 98
Candidate Starts for Gaia_57:
(Start: 98 @40635 has 25 MA's), (103, 40623), (132, 40581), (200, 40443), (205, 40422),

Gene: Gaia_56 Start: 40287, Stop: 40042, Start Num: 98
Candidate Starts for Gaia_56:
(Start: 98 @40287 has 25 MA's), (132, 40230), (196, 40089),

Gene: Gambino_79 Start: 48141, Stop: 48380, Start Num: 110
Candidate Starts for Gambino_79:
(1, 47394), (2, 47400), (3, 47406), (4, 47451), (17, 47889), (19, 47916), (30, 47979), (38, 48003), (81, 48078), (87, 48087), (Start: 110 @48141 has 4 MA's), (126, 48168), (184, 48306), (193, 48327), (210, 48375),

Gene: Gandolph_55 Start: 37415, Stop: 37660, Start Num: 79
Candidate Starts for Gandolph_55:
(Start: 79 @37415 has 75 MA's), (152, 37523),

Gene: Gervas_52 Start: 45854, Stop: 45585, Start Num: 80
Candidate Starts for Gervas_52:
(Start: 80 @45854 has 86 MA's), (Start: 110 @45800 has 4 MA's), (154, 45752), (212, 45596),

Gene: Getalong_78 Start: 45864, Stop: 46163, Start Num: 86
Candidate Starts for Getalong_78:
(Start: 86 @45864 has 27 MA's), (115, 45918), (139, 45957), (160, 46014), (183, 46071),

Gene: GigiOuiOui_49 Start: 36354, Stop: 36596, Start Num: 79
Candidate Starts for GigiOuiOui_49:
(Start: 60 @36324 has 1 MA's), (Start: 79 @36354 has 75 MA's), (152, 36462),

Gene: Giraffe_54 Start: 47592, Stop: 47323, Start Num: 106
Candidate Starts for Giraffe_54:
(27, 47751), (48, 47694), (78, 47646), (Start: 82 @47640 has 3 MA's), (Start: 106 @47592 has 56 MA's), (Start: 118 @47568 has 1 MA's), (148, 47520), (149, 47514), (154, 47490),

Gene: GlenHope_52 Start: 45405, Stop: 45136, Start Num: 80
Candidate Starts for GlenHope_52:
(Start: 80 @45405 has 86 MA's), (Start: 110 @45351 has 4 MA's), (154, 45303),

Gene: Glubnar_52 Start: 45405, Stop: 45136, Start Num: 80
Candidate Starts for Glubnar_52:
(Start: 80 @45405 has 86 MA's), (Start: 110 @45351 has 4 MA's), (154, 45303),

Gene: Graduation_70 Start: 43891, Stop: 43622, Start Num: 80
Candidate Starts for Graduation_70:
(Start: 80 @43891 has 86 MA's), (Start: 110 @43837 has 4 MA's), (154, 43789),

Gene: Grand2040_53 Start: 47586, Stop: 47317, Start Num: 106
Candidate Starts for Grand2040_53:
(27, 47745), (48, 47688), (78, 47640), (Start: 82 @47634 has 3 MA's), (Start: 106 @47586 has 56 MA's), (Start: 118 @47562 has 1 MA's), (148, 47514), (149, 47508), (154, 47484),

Gene: Gudmit_51 Start: 32451, Stop: 32681, Start Num: 85
Candidate Starts for Gudmit_51:
(Start: 85 @32451 has 6 MA's), (102, 32481), (108, 32490), (141, 32514), (189, 32625),

Gene: Haleema_52 Start: 47090, Stop: 46797, Start Num: 106
Candidate Starts for Haleema_52:
(27, 47249), (48, 47192), (64, 47165), (78, 47144), (Start: 82 @47138 has 3 MA's), (Start: 106 @47090 has 56 MA's), (Start: 118 @47066 has 1 MA's), (148, 47018), (149, 47012), (154, 46988),

Gene: Halfpint_50 Start: 45230, Stop: 44961, Start Num: 80
Candidate Starts for Halfpint_50:
(Start: 80 @45230 has 86 MA's), (Start: 110 @45176 has 4 MA's), (154, 45128),

Gene: Halley_147 Start: 77896, Stop: 78141, Start Num: 117
Candidate Starts for Halley_147:
(39, 77761), (89, 77836), (96, 77851), (Start: 117 @77896 has 28 MA's), (154, 77968), (156, 77971),

Gene: Halley_91 Start: 56631, Stop: 56927, Start Num: 80
Candidate Starts for Halley_91:
(Start: 80 @56631 has 86 MA's), (124, 56709), (145, 56736), (154, 56760),

Gene: Hamulus_53 Start: 37796, Stop: 38026, Start Num: 79
Candidate Starts for Hamulus_53:
(Start: 60 @37766 has 1 MA's), (Start: 79 @37796 has 75 MA's), (Start: 100 @37832 has 2 MA's), (152, 37892), (154, 37895),

Gene: Hawkeye_97 Start: 61659, Stop: 61895, Start Num: 121
Candidate Starts for Hawkeye_97:
(67, 61557), (Start: 101 @61620 has 2 MA's), (104, 61626), (Start: 121 @61659 has 1 MA's), (153, 61728), (163, 61758), (187, 61809), (196, 61830), (205, 61872),

Gene: Heinz_57 Start: 37331, Stop: 37591, Start Num: 90
Candidate Starts for Heinz_57:
(Start: 90 @37331 has 2 MA's), (166, 37496), (190, 37544),

Gene: Held_53 Start: 47095, Stop: 46802, Start Num: 106
Candidate Starts for Held_53:
(27, 47254), (48, 47197), (64, 47170), (78, 47149), (Start: 82 @47143 has 3 MA's), (Start: 106 @47095 has 56 MA's), (Start: 118 @47071 has 1 MA's), (148, 47023), (149, 47017), (154, 46993),

Gene: Helpful_87 Start: 60143, Stop: 60346, Start Num: 97

Candidate Starts for Helpful_87:

(29, 60017), (32, 60026), (Start: 97 @60143 has 3 MA's), (109, 60167), (163, 60245), (194, 60296),

Gene: HenryJackson_53 Start: 47620, Stop: 47351, Start Num: 106

Candidate Starts for HenryJackson_53:

(27, 47779), (48, 47722), (64, 47695), (78, 47674), (Start: 82 @47668 has 3 MA's), (Start: 106 @47620 has 56 MA's), (Start: 118 @47596 has 1 MA's), (148, 47548), (149, 47542), (154, 47518), (212, 47362),

Gene: Hertubise_53 Start: 47387, Stop: 47094, Start Num: 106

Candidate Starts for Hertubise_53:

(27, 47546), (48, 47489), (64, 47462), (78, 47441), (Start: 82 @47435 has 3 MA's), (Start: 106 @47387 has 56 MA's), (Start: 118 @47363 has 1 MA's), (148, 47315), (149, 47309), (154, 47285),

Gene: HighStump_55 Start: 48156, Stop: 47887, Start Num: 106

Candidate Starts for HighStump_55:

(27, 48315), (48, 48258), (64, 48231), (78, 48210), (Start: 82 @48204 has 3 MA's), (Start: 106 @48156 has 56 MA's), (Start: 118 @48132 has 1 MA's), (148, 48084), (149, 48078), (154, 48054), (212, 47898),

Gene: HokkenD_138 Start: 77055, Stop: 77300, Start Num: 117

Candidate Starts for HokkenD_138:

(39, 76920), (96, 77010), (Start: 117 @77055 has 28 MA's), (154, 77127), (156, 77130),

Gene: HokkenD_79 Start: 54900, Stop: 55196, Start Num: 80

Candidate Starts for HokkenD_79:

(Start: 80 @54900 has 86 MA's), (124, 54978), (145, 55005), (154, 55029),

Gene: Holliday_79 Start: 47725, Stop: 48021, Start Num: 86

Candidate Starts for Holliday_79:

(67, 47698), (Start: 79 @47716 has 75 MA's), (Start: 86 @47725 has 27 MA's), (120, 47791), (161, 47878), (168, 47896), (182, 47923),

Gene: Horus_75 Start: 45413, Stop: 45754, Start Num: 79

Candidate Starts for Horus_75:

(26, 45308), (48, 45368), (Start: 79 @45413 has 75 MA's), (120, 45491), (152, 45557), (174, 45620),

Gene: Hughesyang_90 Start: 56589, Stop: 56885, Start Num: 80

Candidate Starts for Hughesyang_90:

(Start: 80 @56589 has 86 MA's), (124, 56667), (145, 56694), (154, 56718),

Gene: Hughesyang_144 Start: 77666, Stop: 77911, Start Num: 117

Candidate Starts for Hughesyang_144:

(39, 77531), (89, 77606), (96, 77621), (Start: 117 @77666 has 28 MA's), (154, 77738), (156, 77741),

Gene: IMpilo_49 Start: 35464, Stop: 35766, Start Num: 100

Candidate Starts for IMpilo_49:

(Start: 60 @35398 has 1 MA's), (Start: 79 @35428 has 75 MA's), (Start: 100 @35464 has 2 MA's), (152, 35524), (154, 35527), (170, 35566), (187, 35587), (214, 35665),

Gene: Invectra_62 Start: 41266, Stop: 41511, Start Num: 85

Candidate Starts for Invecetra_62:

(Start: 85 @41266 has 6 MA's), (108, 41305), (189, 41455),

Gene: Inventum_47 Start: 36162, Stop: 36395, Start Num: 79

Candidate Starts for Inventum_47:

(Start: 60 @36132 has 1 MA's), (Start: 79 @36162 has 75 MA's), (95, 36186), (135, 36228), (147, 36243), (152, 36261), (154, 36264),

Gene: Iridessa_54 Start: 47600, Stop: 47331, Start Num: 106

Candidate Starts for Iridessa_54:

(27, 47759), (48, 47702), (64, 47675), (78, 47654), (Start: 82 @47648 has 3 MA's), (Start: 106 @47600 has 56 MA's), (Start: 118 @47576 has 1 MA's), (148, 47528), (149, 47522), (154, 47498), (212, 47342),

Gene: JalFarm20_60 Start: 39595, Stop: 39840, Start Num: 79

Candidate Starts for JalFarm20_60:

(64, 39571), (Start: 79 @39595 has 75 MA's), (154, 39706),

Gene: Jasper_66 Start: 41666, Stop: 41439, Start Num: 82

Candidate Starts for Jasper_66:

(Start: 82 @41666 has 3 MA's), (154, 41606),

Gene: JayJay_6 Start: 1730, Stop: 1996, Start Num: 73

Candidate Starts for JayJay_6:

(Start: 73 @1730 has 3 MA's), (Start: 79 @1739 has 75 MA's), (95, 1763), (135, 1805), (147, 1820), (152, 1838), (154, 1841), (199, 1937),

Gene: Job42_55 Start: 39394, Stop: 39636, Start Num: 79

Candidate Starts for Job42_55:

(25, 39280), (28, 39292), (42, 39328), (69, 39379), (Start: 79 @39394 has 75 MA's), (154, 39505),

Gene: Jorgensen_69 Start: 42799, Stop: 42503, Start Num: 77

Candidate Starts for Jorgensen_69:

(Start: 77 @42799 has 1 MA's), (124, 42721), (145, 42694), (152, 42673), (154, 42670),

Gene: JuicyJay_141 Start: 79181, Stop: 79426, Start Num: 117

Candidate Starts for JuicyJay_141:

(39, 79046), (96, 79136), (Start: 117 @79181 has 28 MA's), (154, 79253), (156, 79256),

Gene: JuicyJay_87 Start: 57765, Stop: 58061, Start Num: 80

Candidate Starts for JuicyJay_87:

(Start: 80 @57765 has 86 MA's), (124, 57843), (145, 57870), (154, 57894),

Gene: Juniper1_50 Start: 36588, Stop: 36851, Start Num: 80

Candidate Starts for Juniper1_50:

(58, 36558), (Start: 80 @36588 has 86 MA's), (154, 36699), (202, 36819),

Gene: Kahve_53 Start: 47617, Stop: 47348, Start Num: 106

Candidate Starts for Kahve_53:

(27, 47776), (48, 47719), (64, 47692), (78, 47671), (Start: 82 @47665 has 3 MA's), (Start: 106 @47617 has 56 MA's), (Start: 118 @47593 has 1 MA's), (148, 47545), (149, 47539), (154, 47515), (212, 47359),

Gene: Kalah2_84 Start: 55924, Stop: 56220, Start Num: 80
Candidate Starts for Kalah2_84:
(Start: 80 @55924 has 86 MA's), (124, 56002), (145, 56029), (154, 56053),

Gene: Kalah2_136 Start: 76787, Stop: 77032, Start Num: 117
Candidate Starts for Kalah2_136:
(39, 76652), (96, 76742), (Start: 117 @76787 has 28 MA's), (154, 76859), (156, 76862),

Gene: Kamaru_71 Start: 43317, Stop: 43604, Start Num: 86
Candidate Starts for Kamaru_71:
(5, 42969), (6, 42972), (13, 43032), (23, 43176), (24, 43179), (Start: 77 @43305 has 1 MA's), (Start: 79 @43308 has 75 MA's), (Start: 86 @43317 has 27 MA's), (120, 43383), (152, 43449), (158, 43461),

Gene: Kamiyu_51 Start: 45383, Stop: 45114, Start Num: 80
Candidate Starts for Kamiyu_51:
(Start: 80 @45383 has 86 MA's), (Start: 110 @45329 has 4 MA's), (154, 45281),

Gene: KandZ_82 Start: 59971, Stop: 60174, Start Num: 97
Candidate Starts for KandZ_82:
(29, 59845), (32, 59854), (Start: 97 @59971 has 3 MA's), (109, 59995), (163, 60073), (194, 60124),

Gene: KashFlow_144 Start: 76087, Stop: 76332, Start Num: 117
Candidate Starts for KashFlow_144:
(39, 75952), (96, 76042), (Start: 117 @76087 has 28 MA's), (154, 76159), (156, 76162),

Gene: Kenna_71 Start: 43390, Stop: 43677, Start Num: 86
Candidate Starts for Kenna_71:
(65, 43363), (Start: 79 @43381 has 75 MA's), (Start: 86 @43390 has 27 MA's), (120, 43456), (152, 43522), (158, 43534),

Gene: Kenuha5_50 Start: 36123, Stop: 36365, Start Num: 79
Candidate Starts for Kenuha5_50:
(34, 36039), (43, 36057), (64, 36099), (Start: 79 @36123 has 75 MA's), (154, 36234),

Gene: Kimberlium_67 Start: 43095, Stop: 43343, Start Num: 98
Candidate Starts for Kimberlium_67:
(Start: 98 @43095 has 25 MA's), (136, 43158), (157, 43200),

Gene: Klein_90 Start: 55600, Stop: 55896, Start Num: 80
Candidate Starts for Klein_90:
(75, 55594), (Start: 80 @55600 has 86 MA's), (124, 55678), (145, 55705), (154, 55729),

Gene: Klein_143 Start: 75389, Stop: 75634, Start Num: 117
Candidate Starts for Klein_143:
(39, 75254), (96, 75344), (Start: 117 @75389 has 28 MA's), (154, 75461), (156, 75464),

Gene: KristaRAM_51 Start: 38223, Stop: 38468, Start Num: 79
Candidate Starts for KristaRAM_51:
(34, 38139), (43, 38157), (64, 38199), (Start: 79 @38223 has 75 MA's), (154, 38334),

Gene: Kronus_51 Start: 46457, Stop: 46188, Start Num: 80
Candidate Starts for Kronus_51:
(Start: 80 @46457 has 86 MA's), (Start: 110 @46403 has 4 MA's), (154, 46355), (212, 46199),

Gene: Kuwabara_76 Start: 45678, Stop: 45968, Start Num: 86

Candidate Starts for Kuwabara_76:

(Start: 79 @45669 has 75 MA's), (Start: 86 @45678 has 27 MA's), (120, 45744), (152, 45810), (158, 45822), (167, 45843), (171, 45849), (176, 45858),

Gene: Kwadwo_52 Start: 47069, Stop: 46776, Start Num: 106

Candidate Starts for Kwadwo_52:

(27, 47228), (48, 47171), (64, 47144), (78, 47123), (Start: 82 @47117 has 3 MA's), (Start: 106 @47069 has 56 MA's), (Start: 118 @47045 has 1 MA's), (148, 46997), (149, 46991), (154, 46967),

Gene: Lasso_53 Start: 47344, Stop: 47051, Start Num: 106

Candidate Starts for Lasso_53:

(27, 47503), (48, 47446), (64, 47419), (78, 47398), (Start: 82 @47392 has 3 MA's), (Start: 106 @47344 has 56 MA's), (Start: 118 @47320 has 1 MA's), (148, 47272), (149, 47266), (154, 47242),

Gene: LeeLot_53 Start: 47396, Stop: 47103, Start Num: 106

Candidate Starts for LeeLot_53:

(27, 47555), (48, 47498), (64, 47471), (78, 47450), (Start: 82 @47444 has 3 MA's), (Start: 106 @47396 has 56 MA's), (Start: 118 @47372 has 1 MA's), (148, 47324), (149, 47318), (154, 47294),

Gene: Legolas_55 Start: 48053, Stop: 47784, Start Num: 106

Candidate Starts for Legolas_55:

(27, 48212), (48, 48155), (64, 48128), (78, 48107), (Start: 82 @48101 has 3 MA's), (Start: 106 @48053 has 56 MA's), (Start: 118 @48029 has 1 MA's), (148, 47981), (149, 47975), (154, 47951), (212, 47795),

Gene: Leroy_74 Start: 43665, Stop: 43955, Start Num: 86

Candidate Starts for Leroy_74:

(67, 43638), (Start: 79 @43656 has 75 MA's), (Start: 86 @43665 has 27 MA's), (120, 43731), (161, 43818), (168, 43836), (182, 43863),

Gene: Lilbit_7 Start: 2312, Stop: 2584, Start Num: 80

Candidate Starts for Lilbit_7:

(Start: 80 @2312 has 86 MA's), (125, 2375), (154, 2417),

Gene: LinStu_6 Start: 2738, Stop: 2995, Start Num: 79

Candidate Starts for LinStu_6:

(Start: 73 @2729 has 3 MA's), (Start: 79 @2738 has 75 MA's), (95, 2762), (135, 2804), (147, 2819), (152, 2837), (154, 2840), (199, 2936),

Gene: LitninMcQueen_77 Start: 44377, Stop: 44670, Start Num: 86

Candidate Starts for LitninMcQueen_77:

(Start: 79 @44368 has 75 MA's), (Start: 86 @44377 has 27 MA's), (119, 44440), (120, 44443), (168, 44548),

Gene: LolaVinca_6 Start: 1879, Stop: 2115, Start Num: 73

Candidate Starts for LolaVinca_6:

(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: Longacauda_54 Start: 48016, Stop: 47747, Start Num: 106

Candidate Starts for Longacauda_54:

(27, 48175), (48, 48118), (64, 48091), (78, 48070), (Start: 82 @48064 has 3 MA's), (Start: 106 @48016 has 56 MA's), (Start: 118 @47992 has 1 MA's), (148, 47944), (149, 47938), (154, 47914), (212, 47758),

Gene: LordLeafolot_6 Start: 1888, Stop: 2115, Start Num: 79

Candidate Starts for LordLeafolot_6:

(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: Lton_54 Start: 33162, Stop: 33458, Start Num: 86

Candidate Starts for Lton_54:

(Start: 79 @33153 has 75 MA's), (Start: 86 @33162 has 27 MA's), (120, 33228), (152, 33294), (158, 33306), (168, 33333), (182, 33360),

Gene: Lucky10_55 Start: 35945, Stop: 36226, Start Num: 86

Candidate Starts for Lucky10_55:

(Start: 86 @35945 has 27 MA's), (111, 35993), (120, 36011), (135, 36032), (152, 36068), (158, 36080), (167, 36101), (171, 36107), (176, 36116),

Gene: Lucky2013_137 Start: 73141, Stop: 73386, Start Num: 117

Candidate Starts for Lucky2013_137:

(39, 73006), (89, 73081), (96, 73096), (Start: 117 @73141 has 28 MA's), (154, 73213), (156, 73216), (157, 73219),

Gene: Lucky2013_80 Start: 49269, Stop: 49000, Start Num: 80

Candidate Starts for Lucky2013_80:

(Start: 80 @49269 has 86 MA's), (Start: 110 @49215 has 4 MA's), (154, 49167),

Gene: Lumine_54 Start: 47804, Stop: 47535, Start Num: 106

Candidate Starts for Lumine_54:

(27, 47963), (48, 47906), (78, 47858), (Start: 82 @47852 has 3 MA's), (Start: 106 @47804 has 56 MA's), (Start: 118 @47780 has 1 MA's), (148, 47732), (149, 47726), (154, 47702),

Gene: Lutum_77 Start: 44553, Stop: 44840, Start Num: 86

Candidate Starts for Lutum_77:

(65, 44526), (Start: 79 @44544 has 75 MA's), (Start: 86 @44553 has 27 MA's), (120, 44619), (152, 44685), (158, 44697),

Gene: MadKillah_103 Start: 62045, Stop: 61815, Start Num: 118

Candidate Starts for MadKillah_103:

(92, 62096), (Start: 118 @62045 has 1 MA's), (126, 62033), (152, 61985), (154, 61982),

Gene: MadMen_50 Start: 36869, Stop: 37144, Start Num: 80

Candidate Starts for MadMen_50:

(75, 36863), (Start: 80 @36869 has 86 MA's), (154, 36980),

Gene: Madiba_63 Start: 40537, Stop: 40815, Start Num: 80

Candidate Starts for Madiba_63:

(75, 40531), (Start: 80 @40537 has 86 MA's), (154, 40648),

Gene: Madiba_50 Start: 35664, Stop: 35894, Start Num: 79

Candidate Starts for Madiba_50:

(Start: 60 @35634 has 1 MA's), (Start: 79 @35664 has 75 MA's), (Start: 100 @35700 has 2 MA's),
(152, 35760), (154, 35763),

Gene: Makemake_71 Start: 44586, Stop: 44317, Start Num: 80

Candidate Starts for Makemake_71:

(Start: 80 @44586 has 86 MA's), (Start: 110 @44532 has 4 MA's), (154, 44484),

Gene: Mana_52 Start: 47084, Stop: 46791, Start Num: 106

Candidate Starts for Mana_52:

(27, 47243), (48, 47186), (64, 47159), (78, 47138), (Start: 82 @47132 has 3 MA's), (Start: 106 @47084
has 56 MA's), (Start: 118 @47060 has 1 MA's), (148, 47012), (149, 47006), (154, 46982),

Gene: Maravista_54 Start: 38807, Stop: 39082, Start Num: 80

Candidate Starts for Maravista_54:

(58, 38777), (Start: 80 @38807 has 86 MA's), (154, 38918),

Gene: Maroc7_64 Start: 43049, Stop: 42780, Start Num: 80

Candidate Starts for Maroc7_64:

(Start: 80 @43049 has 86 MA's), (Start: 110 @42995 has 4 MA's), (154, 42947),

Gene: Marsha_65 Start: 43596, Stop: 43360, Start Num: 98

Candidate Starts for Marsha_65:

(Start: 98 @43596 has 25 MA's), (132, 43536),

Gene: Maru_53 Start: 47523, Stop: 47254, Start Num: 106

Candidate Starts for Maru_53:

(27, 47682), (48, 47625), (64, 47598), (78, 47577), (Start: 82 @47571 has 3 MA's), (Start: 106 @47523
has 56 MA's), (Start: 118 @47499 has 1 MA's), (148, 47451), (149, 47445), (154, 47421),

Gene: Medindi_50 Start: 35302, Stop: 35604, Start Num: 100

Candidate Starts for Medindi_50:

(Start: 60 @35236 has 1 MA's), (Start: 79 @35266 has 75 MA's), (Start: 100 @35302 has 2 MA's),
(152, 35362), (154, 35365), (170, 35404), (187, 35425), (214, 35503),

Gene: Melissauren88_50 Start: 36304, Stop: 36534, Start Num: 79

Candidate Starts for Melissauren88_50:

(Start: 60 @36274 has 1 MA's), (Start: 79 @36304 has 75 MA's), (Start: 100 @36340 has 2 MA's),
(152, 36400), (154, 36403),

Gene: Mesh1_54 Start: 47616, Stop: 47323, Start Num: 106

Candidate Starts for Mesh1_54:

(27, 47775), (48, 47718), (78, 47670), (Start: 82 @47664 has 3 MA's), (Start: 106 @47616 has 56
MA's), (Start: 118 @47592 has 1 MA's), (148, 47544), (149, 47538), (154, 47514),

Gene: MiaZeal_144 Start: 74280, Stop: 74525, Start Num: 117

Candidate Starts for MiaZeal_144:

(39, 74145), (89, 74220), (96, 74235), (Start: 117 @74280 has 28 MA's), (154, 74352), (156, 74355),
(157, 74358),

Gene: MiaZeal_83 Start: 49925, Stop: 49656, Start Num: 80

Candidate Starts for MiaZeal_83:

(Start: 80 @49925 has 86 MA's), (Start: 110 @49871 has 4 MA's), (154, 49823),

Gene: Minerva_89 Start: 56566, Stop: 56844, Start Num: 80

Candidate Starts for Minerva_89:

(75, 56560), (Start: 80 @56566 has 86 MA's), (154, 56677),

Gene: MinionDave_51 Start: 36841, Stop: 37071, Start Num: 79

Candidate Starts for MinionDave_51:

(Start: 60 @36811 has 1 MA's), (Start: 79 @36841 has 75 MA's), (Start: 100 @36877 has 2 MA's), (152, 36937), (154, 36940),

Gene: MissRona_77 Start: 48142, Stop: 48381, Start Num: 110

Candidate Starts for MissRona_77:

(1, 47395), (2, 47401), (3, 47407), (4, 47452), (17, 47890), (19, 47917), (30, 47980), (38, 48004), (81, 48079), (87, 48088), (Start: 110 @48142 has 4 MA's), (126, 48169), (184, 48307), (193, 48328), (210, 48376),

Gene: MitKao_53 Start: 47094, Stop: 46801, Start Num: 106

Candidate Starts for MitKao_53:

(27, 47253), (48, 47196), (64, 47169), (78, 47148), (Start: 82 @47142 has 3 MA's), (Start: 106 @47094 has 56 MA's), (Start: 118 @47070 has 1 MA's), (148, 47022), (149, 47016), (154, 46992),

Gene: MmasiCarm_52 Start: 45904, Stop: 45635, Start Num: 80

Candidate Starts for MmasiCarm_52:

(Start: 80 @45904 has 86 MA's), (Start: 110 @45850 has 4 MA's), (154, 45802), (212, 45646),

Gene: Moonbeam_48 Start: 36361, Stop: 36591, Start Num: 79

Candidate Starts for Moonbeam_48:

(Start: 60 @36331 has 1 MA's), (Start: 79 @36361 has 75 MA's), (Start: 100 @36397 has 2 MA's), (152, 36457), (154, 36460),

Gene: Moosehead_58 Start: 34673, Stop: 34924, Start Num: 86

Candidate Starts for Moosehead_58:

(51, 34622), (55, 34631), (59, 34637), (61, 34640), (76, 34661), (Start: 79 @34664 has 75 MA's), (Start: 86 @34673 has 27 MA's), (161, 34805), (168, 34823),

Gene: Morgushi_53 Start: 47083, Stop: 46790, Start Num: 106

Candidate Starts for Morgushi_53:

(27, 47242), (48, 47185), (64, 47158), (78, 47137), (Start: 82 @47131 has 3 MA's), (Start: 106 @47083 has 56 MA's), (Start: 118 @47059 has 1 MA's), (148, 47011), (149, 47005), (154, 46981),

Gene: Morkie_59 Start: 36074, Stop: 36376, Start Num: 86

Candidate Starts for Morkie_59:

(38, 36002), (54, 36032), (68, 36050), (76, 36062), (Start: 79 @36065 has 75 MA's), (Start: 86 @36074 has 27 MA's), (Start: 114 @36122 has 1 MA's), (125, 36140), (140, 36161), (191, 36284),

Gene: Mortcellus_51 Start: 46511, Stop: 46242, Start Num: 80

Candidate Starts for Mortcellus_51:

(Start: 80 @46511 has 86 MA's), (Start: 110 @46457 has 4 MA's), (154, 46409), (212, 46253),

Gene: Mosaic_52 Start: 47088, Stop: 46795, Start Num: 106

Candidate Starts for Mosaic_52:

(27, 47247), (48, 47190), (64, 47163), (78, 47142), (Start: 82 @47136 has 3 MA's), (Start: 106 @47088 has 56 MA's), (Start: 118 @47064 has 1 MA's), (148, 47016), (149, 47010), (154, 46986),

Gene: Mova_53 Start: 36684, Stop: 36917, Start Num: 79
Candidate Starts for Mova_53:
(Start: 60 @36654 has 1 MA's), (Start: 79 @36684 has 75 MA's), (Start: 100 @36720 has 2 MA's),
(152, 36780), (154, 36783),

Gene: Mova_66 Start: 41041, Stop: 41319, Start Num: 80
Candidate Starts for Mova_66:
(75, 41035), (Start: 80 @41041 has 86 MA's), (154, 41152),

Gene: Mozy_62 Start: 39946, Stop: 40173, Start Num: 79
Candidate Starts for Mozy_62:
(Start: 60 @39916 has 1 MA's), (Start: 79 @39946 has 75 MA's), (95, 39970), (135, 40012), (147,
40027), (152, 40045), (154, 40048), (165, 40078),

Gene: MrPhizzler_55 Start: 47550, Stop: 47281, Start Num: 106
Candidate Starts for MrPhizzler_55:
(27, 47709), (48, 47652), (64, 47625), (78, 47604), (Start: 82 @47598 has 3 MA's), (Start: 106 @47550
has 56 MA's), (Start: 118 @47526 has 1 MA's), (148, 47478), (149, 47472), (154, 47448),

Gene: Mule_62 Start: 41651, Stop: 41406, Start Num: 98
Candidate Starts for Mule_62:
(Start: 98 @41651 has 25 MA's), (122, 41609), (131, 41597), (133, 41594), (154, 41555), (160, 41537),

Gene: Mwanjiwa_58 Start: 37785, Stop: 38027, Start Num: 79
Candidate Starts for Mwanjiwa_58:
(Start: 60 @37755 has 1 MA's), (Start: 79 @37785 has 75 MA's), (154, 37896),

Gene: Nappy_5 Start: 1734, Stop: 1961, Start Num: 79
Candidate Starts for Nappy_5:
(Start: 73 @1725 has 3 MA's), (Start: 79 @1734 has 75 MA's), (Start: 100 @1770 has 2 MA's), (107,
1779), (154, 1833), (169, 1872),

Gene: Nekros_77 Start: 50383, Stop: 50132, Start Num: 98
Candidate Starts for Nekros_77:
(Start: 98 @50383 has 25 MA's), (206, 50146),

Gene: Neos5_51 Start: 46209, Stop: 45940, Start Num: 80
Candidate Starts for Neos5_51:
(Start: 80 @46209 has 86 MA's), (Start: 110 @46155 has 4 MA's), (154, 46107),

Gene: Nibley_71 Start: 47231, Stop: 46980, Start Num: 98
Candidate Starts for Nibley_71:
(Start: 98 @47231 has 25 MA's), (206, 46994),

Gene: Nicole21_54 Start: 47889, Stop: 47620, Start Num: 106
Candidate Starts for Nicole21_54:
(27, 48048), (48, 47991), (64, 47964), (78, 47943), (Start: 82 @47937 has 3 MA's), (Start: 106 @47889
has 56 MA's), (Start: 118 @47865 has 1 MA's), (148, 47817), (149, 47811), (154, 47787), (212,
47631),

Gene: NihilNomen_147 Start: 77126, Stop: 77371, Start Num: 117
Candidate Starts for NihilNomen_147:
(39, 76991), (96, 77081), (Start: 117 @77126 has 28 MA's), (154, 77198), (156, 77201),

Gene: NihilNomen_91 Start: 56718, Stop: 57014, Start Num: 80
Candidate Starts for NihilNomen_91:
(Start: 80 @56718 has 86 MA's), (124, 56796), (145, 56823), (154, 56847),

Gene: Nozo_51 Start: 46173, Stop: 45904, Start Num: 80
Candidate Starts for Nozo_51:
(Start: 80 @46173 has 86 MA's), (Start: 110 @46119 has 4 MA's), (154, 46071),

Gene: NuevoMundo_6 Start: 1876, Stop: 2112, Start Num: 73
Candidate Starts for NuevoMundo_6:
(Start: 73 @1876 has 3 MA's), (Start: 79 @1885 has 75 MA's), (Start: 100 @1921 has 2 MA's), (107, 1930), (154, 1984), (169, 2023),

Gene: ODay_59 Start: 38000, Stop: 38302, Start Num: 98
Candidate Starts for ODay_59:
(Start: 98 @38000 has 25 MA's), (113, 38030), (142, 38072), (163, 38129), (207, 38234),

Gene: ODay_82 Start: 46976, Stop: 47251, Start Num: 86
Candidate Starts for ODay_82:
(35, 46892), (44, 46904), (46, 46916), (Start: 73 @46958 has 3 MA's), (Start: 79 @46967 has 75 MA's),
(Start: 86 @46976 has 27 MA's), (112, 47021), (123, 47036), (137, 47057), (155, 47099), (159, 47111),

Gene: Obutu_52 Start: 45859, Stop: 45590, Start Num: 80
Candidate Starts for Obutu_52:
(Start: 80 @45859 has 86 MA's), (Start: 110 @45805 has 4 MA's), (154, 45757), (212, 45601),

Gene: Odette_149 Start: 79269, Stop: 79514, Start Num: 117
Candidate Starts for Odette_149:
(39, 79134), (96, 79224), (Start: 117 @79269 has 28 MA's), (154, 79341), (156, 79344),

Gene: Odette_88 Start: 55760, Stop: 56056, Start Num: 80
Candidate Starts for Odette_88:
(Start: 80 @55760 has 86 MA's), (124, 55838), (145, 55865), (154, 55889),

Gene: Ogopogo_57 Start: 37928, Stop: 38170, Start Num: 79
Candidate Starts for Ogopogo_57:
(74, 37922), (Start: 79 @37928 has 75 MA's), (154, 38039),

Gene: OneDirection_52 Start: 33066, Stop: 33362, Start Num: 86
Candidate Starts for OneDirection_52:
(67, 33039), (Start: 79 @33057 has 75 MA's), (Start: 86 @33066 has 27 MA's), (120, 33132), (161, 33219), (168, 33237), (182, 33264),

Gene: Oosterbaan_53 Start: 47374, Stop: 47081, Start Num: 106
Candidate Starts for Oosterbaan_53:
(27, 47533), (48, 47476), (64, 47449), (78, 47428), (Start: 82 @47422 has 3 MA's), (Start: 106 @47374 has 56 MA's), (Start: 118 @47350 has 1 MA's), (148, 47302), (149, 47296), (154, 47272),

Gene: Optimus_136 Start: 74406, Stop: 74651, Start Num: 117
Candidate Starts for Optimus_136:
(39, 74271), (89, 74346), (96, 74361), (Start: 117 @74406 has 28 MA's), (154, 74478), (156, 74481),

Gene: Optimus_84 Start: 55270, Stop: 55548, Start Num: 80
Candidate Starts for Optimus_84:
(75, 55264), (Start: 80 @55270 has 86 MA's), (154, 55381),

Gene: OrangeOswald_51 Start: 45414, Stop: 45145, Start Num: 80
Candidate Starts for OrangeOswald_51:
(Start: 80 @45414 has 86 MA's), (Start: 110 @45360 has 4 MA's), (154, 45312),

Gene: Orwigg_53 Start: 47574, Stop: 47305, Start Num: 106
Candidate Starts for Orwigg_53:
(27, 47733), (48, 47676), (64, 47649), (78, 47628), (Start: 82 @47622 has 3 MA's), (Start: 106 @47574 has 56 MA's), (Start: 118 @47550 has 1 MA's), (148, 47502), (149, 47496), (154, 47472), (212, 47316),

Gene: OwlsT2W_53 Start: 37646, Stop: 37888, Start Num: 79
Candidate Starts for OwlsT2W_53:
(Start: 60 @37616 has 1 MA's), (Start: 79 @37646 has 75 MA's), (152, 37754),

Gene: PMC_49 Start: 37214, Stop: 37471, Start Num: 98
Candidate Starts for PMC_49:
(36, 37100), (45, 37112), (62, 37148), (94, 37199), (Start: 98 @37214 has 25 MA's), (154, 37325), (164, 37355),

Gene: Paraselene_66 Start: 43378, Stop: 43109, Start Num: 80
Candidate Starts for Paraselene_66:
(Start: 80 @43378 has 86 MA's), (Start: 110 @43324 has 4 MA's), (154, 43276),

Gene: Periwinkle_61 Start: 37796, Stop: 38092, Start Num: 98
Candidate Starts for Periwinkle_61:
(Start: 98 @37796 has 25 MA's), (142, 37868), (207, 38030), (216, 38084),

Gene: Periwinkle_62 Start: 38089, Stop: 38367, Start Num: 98
Candidate Starts for Periwinkle_62:
(Start: 98 @38089 has 25 MA's), (154, 38185), (180, 38251), (206, 38329),

Gene: Phabuloso_81 Start: 45523, Stop: 45816, Start Num: 86
Candidate Starts for Phabuloso_81:
(67, 45496), (Start: 79 @45514 has 75 MA's), (Start: 86 @45523 has 27 MA's), (120, 45589), (160, 45676), (210, 45799),

Gene: Phalconet_51 Start: 36608, Stop: 36838, Start Num: 79
Candidate Starts for Phalconet_51:
(Start: 60 @36578 has 1 MA's), (Start: 79 @36608 has 75 MA's), (Start: 100 @36644 has 2 MA's), (152, 36704), (154, 36707),

Gene: Phanphagia_47 Start: 36555, Stop: 36800, Start Num: 79
Candidate Starts for Phanphagia_47:
(53, 36510), (64, 36531), (Start: 79 @36555 has 75 MA's), (154, 36666),

Gene: Phasih_51 Start: 37693, Stop: 37935, Start Num: 79
Candidate Starts for Phasih_51:
(74, 37687), (Start: 79 @37693 has 75 MA's), (154, 37804),

Gene: Phayeta_53 Start: 45741, Stop: 45472, Start Num: 80
Candidate Starts for Phayeta_53:
(Start: 80 @45741 has 86 MA's), (Start: 110 @45687 has 4 MA's), (154, 45639), (212, 45483),

Gene: PherrisBueller_66 Start: 41317, Stop: 41090, Start Num: 82
Candidate Starts for PherrisBueller_66:
(Start: 82 @41317 has 3 MA's), (154, 41257),

Gene: PhesterPhotato_54 Start: 37593, Stop: 37826, Start Num: 79
Candidate Starts for PhesterPhotato_54:
(Start: 60 @37563 has 1 MA's), (Start: 79 @37593 has 75 MA's), (Start: 100 @37629 has 2 MA's),
(152, 37689), (154, 37692),

Gene: Philly_50 Start: 45265, Stop: 44996, Start Num: 80
Candidate Starts for Philly_50:
(Start: 80 @45265 has 86 MA's), (Start: 110 @45211 has 4 MA's), (154, 45163),

Gene: Phistory_72 Start: 42511, Stop: 42852, Start Num: 79
Candidate Starts for Phistory_72:
(26, 42406), (48, 42466), (Start: 79 @42511 has 75 MA's), (120, 42589), (152, 42655), (174, 42718),

Gene: Phlyer_51 Start: 46154, Stop: 45885, Start Num: 80
Candidate Starts for Phlyer_51:
(Start: 80 @46154 has 86 MA's), (Start: 110 @46100 has 4 MA's), (154, 46052),

Gene: Phoebus_92 Start: 57900, Stop: 58196, Start Num: 80
Candidate Starts for Phoebus_92:
(Start: 80 @57900 has 86 MA's), (124, 57978), (145, 58005), (154, 58029),

Gene: Phoebus_145 Start: 79020, Stop: 79265, Start Num: 117
Candidate Starts for Phoebus_145:
(39, 78885), (89, 78960), (96, 78975), (Start: 117 @79020 has 28 MA's), (154, 79092), (156, 79095),

Gene: PhorbesPhlower_55 Start: 35141, Stop: 35443, Start Num: 86
Candidate Starts for PhorbesPhlower_55:
(38, 35069), (54, 35099), (68, 35117), (76, 35129), (Start: 79 @35132 has 75 MA's), (Start: 86 @35141
has 27 MA's), (Start: 114 @35189 has 1 MA's), (125, 35207), (140, 35228), (191, 35351),

Gene: PhrostyMug_65 Start: 43825, Stop: 43580, Start Num: 98
Candidate Starts for PhrostyMug_65:
(Start: 98 @43825 has 25 MA's), (122, 43783), (131, 43771), (133, 43768), (154, 43729), (160, 43711),

Gene: Pier_6 Start: 1888, Stop: 2115, Start Num: 79
Candidate Starts for Pier_6:
(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107,
1933), (154, 1987), (169, 2026),

Gene: Poenanya_52 Start: 38179, Stop: 38421, Start Num: 79
Candidate Starts for Poenanya_52:
(Start: 60 @38149 has 1 MA's), (Start: 79 @38179 has 75 MA's), (152, 38287),

Gene: Polka14_51 Start: 36782, Stop: 37027, Start Num: 79
Candidate Starts for Polka14_51:

(Start: 79 @36782 has 75 MA's), (152, 36890),

Gene: Pollywog_50 Start: 37066, Stop: 37320, Start Num: 98

Candidate Starts for Pollywog_50:

(70, 37018), (Start: 88 @37042 has 1 MA's), (Start: 98 @37066 has 25 MA's), (157, 37177),

Gene: Porcelain_141 Start: 74087, Stop: 74332, Start Num: 117

Candidate Starts for Porcelain_141:

(39, 73952), (89, 74027), (96, 74042), (Start: 117 @74087 has 28 MA's), (154, 74159), (156, 74162), (157, 74165),

Gene: Porcelain_82 Start: 49925, Stop: 49656, Start Num: 80

Candidate Starts for Porcelain_82:

(Start: 80 @49925 has 86 MA's), (Start: 110 @49871 has 4 MA's), (154, 49823),

Gene: Potter_52 Start: 47105, Stop: 46812, Start Num: 106

Candidate Starts for Potter_52:

(27, 47264), (48, 47207), (64, 47180), (78, 47159), (Start: 82 @47153 has 3 MA's), (Start: 106 @47105 has 56 MA's), (Start: 118 @47081 has 1 MA's), (148, 47033), (149, 47027), (154, 47003),

Gene: Pound_137 Start: 76839, Stop: 77084, Start Num: 117

Candidate Starts for Pound_137:

(39, 76704), (89, 76779), (96, 76794), (Start: 117 @76839 has 28 MA's), (154, 76911), (156, 76914),

Gene: Pringar_6 Start: 1866, Stop: 2138, Start Num: 80

Candidate Starts for Pringar_6:

(Start: 80 @1866 has 86 MA's), (125, 1929), (154, 1971),

Gene: Puhltonio_53 Start: 47379, Stop: 47086, Start Num: 106

Candidate Starts for Puhltonio_53:

(27, 47538), (48, 47481), (64, 47454), (78, 47433), (Start: 82 @47427 has 3 MA's), (Start: 106 @47379 has 56 MA's), (Start: 118 @47355 has 1 MA's), (148, 47307), (149, 47301), (154, 47277),

Gene: Purky_63 Start: 41280, Stop: 41552, Start Num: 83

Candidate Starts for Purky_63:

(Start: 83 @41280 has 2 MA's), (92, 41295), (143, 41364), (152, 41388), (164, 41421), (172, 41439), (205, 41517), (210, 41538),

Gene: Purky_64 Start: 41545, Stop: 41862, Start Num: 83

Candidate Starts for Purky_64:

(20, 41383), (72, 41530), (Start: 83 @41545 has 2 MA's), (152, 41677), (198, 41794), (210, 41848),

Gene: QueenBeane_53 Start: 47369, Stop: 47076, Start Num: 106

Candidate Starts for QueenBeane_53:

(27, 47528), (48, 47471), (64, 47444), (78, 47423), (Start: 82 @47417 has 3 MA's), (Start: 106 @47369 has 56 MA's), (Start: 118 @47345 has 1 MA's), (148, 47297), (149, 47291), (154, 47267),

Gene: QuickMath_66 Start: 43318, Stop: 43566, Start Num: 98

Candidate Starts for QuickMath_66:

(Start: 98 @43318 has 25 MA's), (136, 43381), (157, 43423),

Gene: RedRaider77_9 Start: 2886, Stop: 3152, Start Num: 101

Candidate Starts for RedRaider77_9:

(66, 2829), (Start: 101 @2886 has 2 MA's), (123, 2922), (152, 2982), (154, 2985), (212, 3141),

Gene: Redno2_140 Start: 75128, Stop: 75373, Start Num: 117

Candidate Starts for Redno2_140:

(39, 74993), (96, 75083), (Start: 117 @75128 has 28 MA's), (154, 75200), (156, 75203),

Gene: Renaud18_58 Start: 38221, Stop: 38445, Start Num: 79

Candidate Starts for Renaud18_58:

(Start: 60 @38191 has 1 MA's), (Start: 79 @38221 has 75 MA's), (99, 38254), (133, 38278), (152, 38311),

Gene: Renaud18_70 Start: 41973, Stop: 42221, Start Num: 80

Candidate Starts for Renaud18_70:

(63, 41946), (Start: 80 @41973 has 86 MA's), (143, 42069), (152, 42093), (165, 42126),

Gene: Renaud18_71 Start: 42261, Stop: 42503, Start Num: 98

Candidate Starts for Renaud18_71:

(Start: 98 @42261 has 25 MA's), (105, 42276), (154, 42354), (176, 42414),

Gene: Rimu_54 Start: 47570, Stop: 47301, Start Num: 106

Candidate Starts for Rimu_54:

(27, 47729), (48, 47672), (64, 47645), (78, 47624), (Start: 82 @47618 has 3 MA's), (Start: 106 @47570 has 56 MA's), (Start: 118 @47546 has 1 MA's), (148, 47498), (149, 47492), (154, 47468),

Gene: Rita1961_52 Start: 45860, Stop: 45591, Start Num: 80

Candidate Starts for Rita1961_52:

(Start: 80 @45860 has 86 MA's), (Start: 110 @45806 has 4 MA's), (154, 45758), (212, 45602),

Gene: Rockne_53 Start: 37214, Stop: 37471, Start Num: 98

Candidate Starts for Rockne_53:

(36, 37100), (45, 37112), (62, 37148), (94, 37199), (Start: 98 @37214 has 25 MA's), (154, 37325), (164, 37355),

Gene: RockyHorror_53 Start: 37057, Stop: 37299, Start Num: 79

Candidate Starts for RockyHorror_53:

(Start: 60 @37027 has 1 MA's), (Start: 79 @37057 has 75 MA's), (154, 37168),

Gene: Royals2015_55 Start: 37315, Stop: 37545, Start Num: 79

Candidate Starts for Royals2015_55:

(Start: 60 @37285 has 1 MA's), (Start: 79 @37315 has 75 MA's), (Start: 100 @37351 has 2 MA's), (152, 37411), (154, 37414),

Gene: SG4_49 Start: 36037, Stop: 36267, Start Num: 79

Candidate Starts for SG4_49:

(58, 36004), (Start: 60 @36007 has 1 MA's), (Start: 79 @36037 has 75 MA's), (Start: 100 @36073 has 2 MA's), (152, 36133), (154, 36136),

Gene: Samaymay_53 Start: 47369, Stop: 47076, Start Num: 106

Candidate Starts for Samaymay_53:

(27, 47528), (48, 47471), (64, 47444), (78, 47423), (Start: 82 @47417 has 3 MA's), (Start: 106 @47369 has 56 MA's), (Start: 118 @47345 has 1 MA's), (148, 47297), (149, 47291), (154, 47267),

Gene: Samman98_60 Start: 39796, Stop: 40041, Start Num: 85

Candidate Starts for Samman98_60:
(Start: 85 @39796 has 6 MA's), (108, 39835), (189, 39985),

Gene: Sassafras_50 Start: 36161, Stop: 36394, Start Num: 79
Candidate Starts for Sassafras_50:
(Start: 60 @36131 has 1 MA's), (Start: 79 @36161 has 75 MA's), (95, 36185), (135, 36227), (147, 36242), (152, 36260), (154, 36263),

Gene: SassyCat97_52 Start: 47096, Stop: 46803, Start Num: 106
Candidate Starts for SassyCat97_52:
(27, 47255), (48, 47198), (64, 47171), (78, 47150), (Start: 82 @47144 has 3 MA's), (Start: 106 @47096 has 56 MA's), (Start: 118 @47072 has 1 MA's), (148, 47024), (149, 47018), (154, 46994),

Gene: Schatzie_85 Start: 55507, Stop: 55803, Start Num: 80
Candidate Starts for Schatzie_85:
(Start: 80 @55507 has 86 MA's), (124, 55585), (145, 55612), (154, 55636),

Gene: Schatzie_141 Start: 77688, Stop: 77933, Start Num: 117
Candidate Starts for Schatzie_141:
(39, 77553), (89, 77628), (96, 77643), (Start: 117 @77688 has 28 MA's), (154, 77760), (156, 77763),

Gene: Sebata_6 Start: 2738, Stop: 2995, Start Num: 79
Candidate Starts for Sebata_6:
(Start: 73 @2729 has 3 MA's), (Start: 79 @2738 has 75 MA's), (95, 2762), (135, 2804), (147, 2819), (152, 2837), (154, 2840), (199, 2936),

Gene: Serendipity_53 Start: 47393, Stop: 47100, Start Num: 106
Candidate Starts for Serendipity_53:
(27, 47552), (48, 47495), (64, 47468), (78, 47447), (Start: 82 @47441 has 3 MA's), (Start: 106 @47393 has 56 MA's), (Start: 118 @47369 has 1 MA's), (148, 47321), (149, 47315), (154, 47291),

Gene: Shauna1_47 Start: 36503, Stop: 36781, Start Num: 80
Candidate Starts for Shauna1_47:
(33, 36419), (40, 36437), (62, 36479), (Start: 80 @36503 has 86 MA's), (154, 36614),

Gene: ShawBrad_81 Start: 44287, Stop: 44574, Start Num: 86
Candidate Starts for ShawBrad_81:
(21, 44134), (31, 44191), (37, 44209), (Start: 79 @44278 has 75 MA's), (Start: 86 @44287 has 27 MA's), (120, 44353), (152, 44419), (158, 44431),

Gene: ShawBrad_59 Start: 36376, Stop: 36678, Start Num: 98
Candidate Starts for ShawBrad_59:
(Start: 98 @36376 has 25 MA's), (113, 36406), (142, 36448), (163, 36505), (207, 36610),

Gene: ShroomBoi_52 Start: 36993, Stop: 37238, Start Num: 79
Candidate Starts for ShroomBoi_52:
(34, 36909), (43, 36927), (64, 36969), (Start: 79 @36993 has 75 MA's), (154, 37104),

Gene: Sixama_7 Start: 2706, Stop: 2383, Start Num: 84
Candidate Starts for Sixama_7:
(Start: 84 @2706 has 1 MA's), (Start: 110 @2649 has 4 MA's), (128, 2619), (148, 2592), (180, 2502),

Gene: Smairt_67 Start: 44819, Stop: 44574, Start Num: 98

Candidate Starts for Smairt_67:

(Start: 98 @44819 has 25 MA's), (122, 44777), (131, 44765), (133, 44762), (154, 44723), (160, 44705),

Gene: Smooch_99 Start: 62468, Stop: 62202, Start Num: 101

Candidate Starts for Smooch_99:

(Start: 101 @62468 has 2 MA's), (123, 62432), (152, 62372), (154, 62369),

Gene: Soile_54 Start: 47617, Stop: 47348, Start Num: 106

Candidate Starts for Soile_54:

(27, 47776), (48, 47719), (64, 47692), (78, 47671), (Start: 82 @47665 has 3 MA's), (Start: 106 @47617 has 56 MA's), (Start: 118 @47593 has 1 MA's), (148, 47545), (149, 47539), (154, 47515), (212, 47359),

Gene: Solosis_52 Start: 47090, Stop: 46797, Start Num: 106

Candidate Starts for Solosis_52:

(27, 47249), (48, 47192), (64, 47165), (78, 47144), (Start: 82 @47138 has 3 MA's), (Start: 106 @47090 has 56 MA's), (Start: 118 @47066 has 1 MA's), (148, 47018), (149, 47012), (154, 46988),

Gene: Sophia_52 Start: 47084, Stop: 46791, Start Num: 106

Candidate Starts for Sophia_52:

(27, 47243), (48, 47186), (64, 47159), (78, 47138), (Start: 82 @47132 has 3 MA's), (Start: 106 @47084 has 56 MA's), (Start: 118 @47060 has 1 MA's), (148, 47012), (149, 47006), (154, 46982),

Gene: Sparkdehlily_60 Start: 38797, Stop: 39039, Start Num: 79

Candidate Starts for Sparkdehlily_60:

(74, 38791), (Start: 79 @38797 has 75 MA's), (154, 38908),

Gene: Specks_6 Start: 1888, Stop: 2115, Start Num: 79

Candidate Starts for Specks_6:

(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: Spooky_78 Start: 45719, Stop: 45976, Start Num: 85

Candidate Starts for Spooky_78:

(Start: 85 @45719 has 6 MA's), (102, 45749), (108, 45758), (127, 45782),

Gene: Squid_53 Start: 47096, Stop: 46803, Start Num: 106

Candidate Starts for Squid_53:

(27, 47255), (48, 47198), (64, 47171), (78, 47150), (Start: 82 @47144 has 3 MA's), (Start: 106 @47096 has 56 MA's), (Start: 118 @47072 has 1 MA's), (148, 47024), (149, 47018), (154, 46994),

Gene: Squint_83 Start: 50044, Stop: 49775, Start Num: 80

Candidate Starts for Squint_83:

(Start: 80 @50044 has 86 MA's), (Start: 110 @49990 has 4 MA's), (154, 49942),

Gene: StAnnes_51 Start: 37319, Stop: 37621, Start Num: 100

Candidate Starts for StAnnes_51:

(Start: 60 @37253 has 1 MA's), (Start: 79 @37283 has 75 MA's), (Start: 100 @37319 has 2 MA's), (152, 37379), (154, 37382), (170, 37421), (187, 37442), (214, 37520),

Gene: Stellammi_140 Start: 62378, Stop: 62599, Start Num: 80

Candidate Starts for Stellammi_140:

(Start: 80 @62378 has 86 MA's), (154, 62471),

Gene: Sunshine924_70 Start: 43095, Stop: 42850, Start Num: 98
Candidate Starts for Sunshine924_70:
(Start: 98 @43095 has 25 MA's), (122, 43053), (131, 43041), (133, 43038), (154, 42999), (160, 42981),

Gene: SuperGrey_52 Start: 37962, Stop: 38207, Start Num: 79
Candidate Starts for SuperGrey_52:
(34, 37878), (43, 37896), (64, 37938), (Start: 79 @37962 has 75 MA's), (154, 38073),

Gene: Surely_53 Start: 47386, Stop: 47093, Start Num: 106
Candidate Starts for Surely_53:
(27, 47545), (48, 47488), (64, 47461), (78, 47440), (Start: 82 @47434 has 3 MA's), (Start: 106 @47386 has 56 MA's), (Start: 118 @47362 has 1 MA's), (148, 47314), (149, 47308), (154, 47284),

Gene: SynergyX_51 Start: 45415, Stop: 45146, Start Num: 80
Candidate Starts for SynergyX_51:
(Start: 80 @45415 has 86 MA's), (Start: 110 @45361 has 4 MA's), (154, 45313),

Gene: TDanisky_60 Start: 38797, Stop: 39039, Start Num: 79
Candidate Starts for TDanisky_60:
(74, 38791), (Start: 79 @38797 has 75 MA's), (154, 38908),

Gene: Taj_56 Start: 38142, Stop: 38369, Start Num: 79
Candidate Starts for Taj_56:
(Start: 60 @38112 has 1 MA's), (Start: 79 @38142 has 75 MA's), (99, 38175), (133, 38199), (152, 38232),

Gene: TallGrassMM_53 Start: 47000, Stop: 46707, Start Num: 106
Candidate Starts for TallGrassMM_53:
(27, 47159), (48, 47102), (64, 47075), (78, 47054), (Start: 82 @47048 has 3 MA's), (Start: 106 @47000 has 56 MA's), (Start: 118 @46976 has 1 MA's), (148, 46928), (149, 46922), (154, 46898),

Gene: Tarzan_58 Start: 37656, Stop: 37880, Start Num: 90
Candidate Starts for Tarzan_58:
(Start: 90 @37656 has 2 MA's), (109, 37692), (166, 37785), (190, 37833),

Gene: Thora_53 Start: 47382, Stop: 47089, Start Num: 106
Candidate Starts for Thora_53:
(27, 47541), (48, 47484), (64, 47457), (78, 47436), (Start: 82 @47430 has 3 MA's), (Start: 106 @47382 has 56 MA's), (Start: 118 @47358 has 1 MA's), (148, 47310), (149, 47304), (154, 47280),

Gene: ThreeRngTarjay_140 Start: 77611, Stop: 77856, Start Num: 117
Candidate Starts for ThreeRngTarjay_140:
(39, 77476), (89, 77551), (96, 77566), (Start: 117 @77611 has 28 MA's), (154, 77683), (156, 77686),

Gene: ThreeRngTarjay_87 Start: 56792, Stop: 57088, Start Num: 80
Candidate Starts for ThreeRngTarjay_87:
(Start: 80 @56792 has 86 MA's), (124, 56870), (145, 56897), (154, 56921),

Gene: Timmi_52 Start: 47085, Stop: 46792, Start Num: 106
Candidate Starts for Timmi_52:
(27, 47244), (48, 47187), (64, 47160), (78, 47139), (Start: 82 @47133 has 3 MA's), (Start: 106 @47085 has 56 MA's), (Start: 118 @47061 has 1 MA's), (148, 47013), (149, 47007), (154, 46983),

Gene: TinyTerror_52 Start: 45907, Stop: 45638, Start Num: 80

Candidate Starts for TinyTerror_52:

(Start: 80 @45907 has 86 MA's), (Start: 110 @45853 has 4 MA's), (154, 45805), (212, 45649),

Gene: TomBombadil_53 Start: 47370, Stop: 47077, Start Num: 106

Candidate Starts for TomBombadil_53:

(27, 47529), (48, 47472), (64, 47445), (78, 47424), (Start: 82 @47418 has 3 MA's), (Start: 106 @47370 has 56 MA's), (Start: 118 @47346 has 1 MA's), (148, 47298), (149, 47292), (154, 47268),

Gene: Tonenili_50 Start: 15803, Stop: 16036, Start Num: 98

Candidate Starts for Tonenili_50:

(93, 15797), (Start: 98 @15803 has 25 MA's), (116, 15839), (142, 15875), (151, 15896), (183, 15962), (188, 15971),

Gene: Topiatin_58 Start: 38825, Stop: 39058, Start Num: 79

Candidate Starts for Topiatin_58:

(Start: 60 @38795 has 1 MA's), (Start: 79 @38825 has 75 MA's), (Start: 110 @38879 has 4 MA's), (154, 38927),

Gene: Toron_84 Start: 50886, Stop: 51176, Start Num: 83

Candidate Starts for Toron_84:

(47, 50841), (Start: 83 @50886 has 2 MA's), (92, 50901), (95, 50910), (152, 51018), (195, 51111), (210, 51162),

Gene: Trine_55 Start: 39935, Stop: 39684, Start Num: 86

Candidate Starts for Trine_55:

(Start: 86 @39935 has 27 MA's), (148, 39860), (175, 39788),

Gene: Troll4_84 Start: 59937, Stop: 60161, Start Num: 97

Candidate Starts for Troll4_84:

(29, 59811), (32, 59820), (Start: 97 @59937 has 3 MA's), (154, 60033), (163, 60060), (194, 60111),

Gene: Tweety_52 Start: 37774, Stop: 38004, Start Num: 79

Candidate Starts for Tweety_52:

(Start: 60 @37744 has 1 MA's), (Start: 79 @37774 has 75 MA's), (Start: 100 @37810 has 2 MA's), (152, 37870), (154, 37873),

Gene: Tyke_6 Start: 1888, Stop: 2115, Start Num: 79

Candidate Starts for Tyke_6:

(Start: 73 @1879 has 3 MA's), (Start: 79 @1888 has 75 MA's), (Start: 100 @1924 has 2 MA's), (107, 1933), (154, 1987), (169, 2026),

Gene: VRedHorse_52 Start: 36525, Stop: 36758, Start Num: 79

Candidate Starts for VRedHorse_52:

(Start: 60 @36495 has 1 MA's), (Start: 79 @36525 has 75 MA's), (Start: 100 @36561 has 2 MA's), (152, 36621), (154, 36624),

Gene: VanLee_73 Start: 43882, Stop: 44154, Start Num: 98

Candidate Starts for VanLee_73:

(Start: 98 @43882 has 25 MA's), (146, 43969), (151, 43987), (173, 44041),

Gene: VanLee_59 Start: 39559, Stop: 39819, Start Num: 88

Candidate Starts for VanLee_59:
(Start: 88 @39559 has 1 MA's),

Gene: VasuNzinga_8 Start: 2535, Stop: 2807, Start Num: 80
Candidate Starts for VasuNzinga_8:
(Start: 80 @2535 has 86 MA's), (125, 2598), (154, 2640),

Gene: Violac_55 Start: 38665, Stop: 39003, Start Num: 79
Candidate Starts for Violac_55:
(Start: 60 @38635 has 1 MA's), (Start: 79 @38665 has 75 MA's), (Start: 100 @38701 has 2 MA's),
(152, 38761), (154, 38764), (170, 38803), (187, 38824), (214, 38902),

Gene: Vortex_53 Start: 47080, Stop: 46787, Start Num: 106
Candidate Starts for Vortex_53:
(27, 47239), (48, 47182), (64, 47155), (78, 47134), (Start: 82 @47128 has 3 MA's), (Start: 106 @47080
has 56 MA's), (Start: 118 @47056 has 1 MA's), (148, 47008), (149, 47002), (154, 46978),

Gene: Vortrix_52 Start: 16078, Stop: 16320, Start Num: 98
Candidate Starts for Vortrix_52:
(33, 15955), (Start: 98 @16078 has 25 MA's), (142, 16153), (151, 16180), (183, 16246), (188, 16255),

Gene: Wanda_94 Start: 55909, Stop: 56205, Start Num: 80
Candidate Starts for Wanda_94:
(75, 55903), (Start: 80 @55909 has 86 MA's), (124, 55987), (145, 56014), (154, 56038),

Gene: Wee_55 Start: 38414, Stop: 38641, Start Num: 79
Candidate Starts for Wee_55:
(Start: 60 @38384 has 1 MA's), (Start: 79 @38414 has 75 MA's), (99, 38447), (133, 38471), (152,
38504),

Gene: Whatsapiecost_53 Start: 36689, Stop: 36931, Start Num: 79
Candidate Starts for Whatsapiecost_53:
(Start: 79 @36689 has 75 MA's), (154, 36800),

Gene: Whitney_75 Start: 45513, Stop: 45800, Start Num: 86
Candidate Starts for Whitney_75:
(Start: 77 @45501 has 1 MA's), (Start: 79 @45504 has 75 MA's), (Start: 86 @45513 has 27 MA's),
(120, 45579), (152, 45645), (158, 45657),

Gene: William_80 Start: 49369, Stop: 49632, Start Num: 86
Candidate Starts for William_80:
(9, 49048), (10, 49063), (14, 49099), (Start: 86 @49369 has 27 MA's), (108, 49405), (143, 49456),

Gene: WilliamBoone_96 Start: 57383, Stop: 57652, Start Num: 98
Candidate Starts for WilliamBoone_96:
(Start: 98 @57383 has 25 MA's), (151, 57488), (181, 57554),

Gene: XFactor_50 Start: 36012, Stop: 36242, Start Num: 79
Candidate Starts for XFactor_50:
(Start: 60 @35982 has 1 MA's), (Start: 79 @36012 has 75 MA's), (Start: 100 @36048 has 2 MA's),
(152, 36108), (154, 36111),

Gene: Xavier_52 Start: 47087, Stop: 46794, Start Num: 106

Candidate Starts for Xavier_52:

(27, 47246), (48, 47189), (64, 47162), (78, 47141), (Start: 82 @47135 has 3 MA's), (Start: 106 @47087 has 56 MA's), (Start: 118 @47063 has 1 MA's), (148, 47015), (149, 47009), (154, 46985),

Gene: Xiaokay_141 Start: 77151, Stop: 77429, Start Num: 117

Candidate Starts for Xiaokay_141:

(12, 76800), (39, 77016), (96, 77106), (Start: 117 @77151 has 28 MA's), (154, 77223), (156, 77226), (201, 77334), (203, 77346),

Gene: Yeet_83 Start: 55009, Stop: 55305, Start Num: 80

Candidate Starts for Yeet_83:

(Start: 80 @55009 has 86 MA's), (124, 55087), (145, 55114), (154, 55138),

Gene: Yeet_139 Start: 77084, Stop: 77329, Start Num: 117

Candidate Starts for Yeet_139:

(39, 76949), (96, 77039), (Start: 117 @77084 has 28 MA's), (154, 77156), (156, 77159),

Gene: Yoshi_64 Start: 38747, Stop: 38995, Start Num: 79

Candidate Starts for Yoshi_64:

(Start: 60 @38717 has 1 MA's), (Start: 79 @38747 has 75 MA's), (143, 38843), (152, 38867), (165, 38900),

Gene: Zelda_53 Start: 47424, Stop: 47131, Start Num: 106

Candidate Starts for Zelda_53:

(27, 47583), (48, 47526), (64, 47499), (78, 47478), (Start: 82 @47472 has 3 MA's), (Start: 106 @47424 has 56 MA's), (Start: 118 @47400 has 1 MA's), (148, 47352), (149, 47346), (154, 47322),

Gene: Zelink_87 Start: 57104, Stop: 57400, Start Num: 80

Candidate Starts for Zelink_87:

(Start: 80 @57104 has 86 MA's), (124, 57182), (145, 57209), (154, 57233),

Gene: Zerg_52 Start: 37166, Stop: 37408, Start Num: 79

Candidate Starts for Zerg_52:

(Start: 60 @37136 has 1 MA's), (Start: 79 @37166 has 75 MA's), (154, 37277),