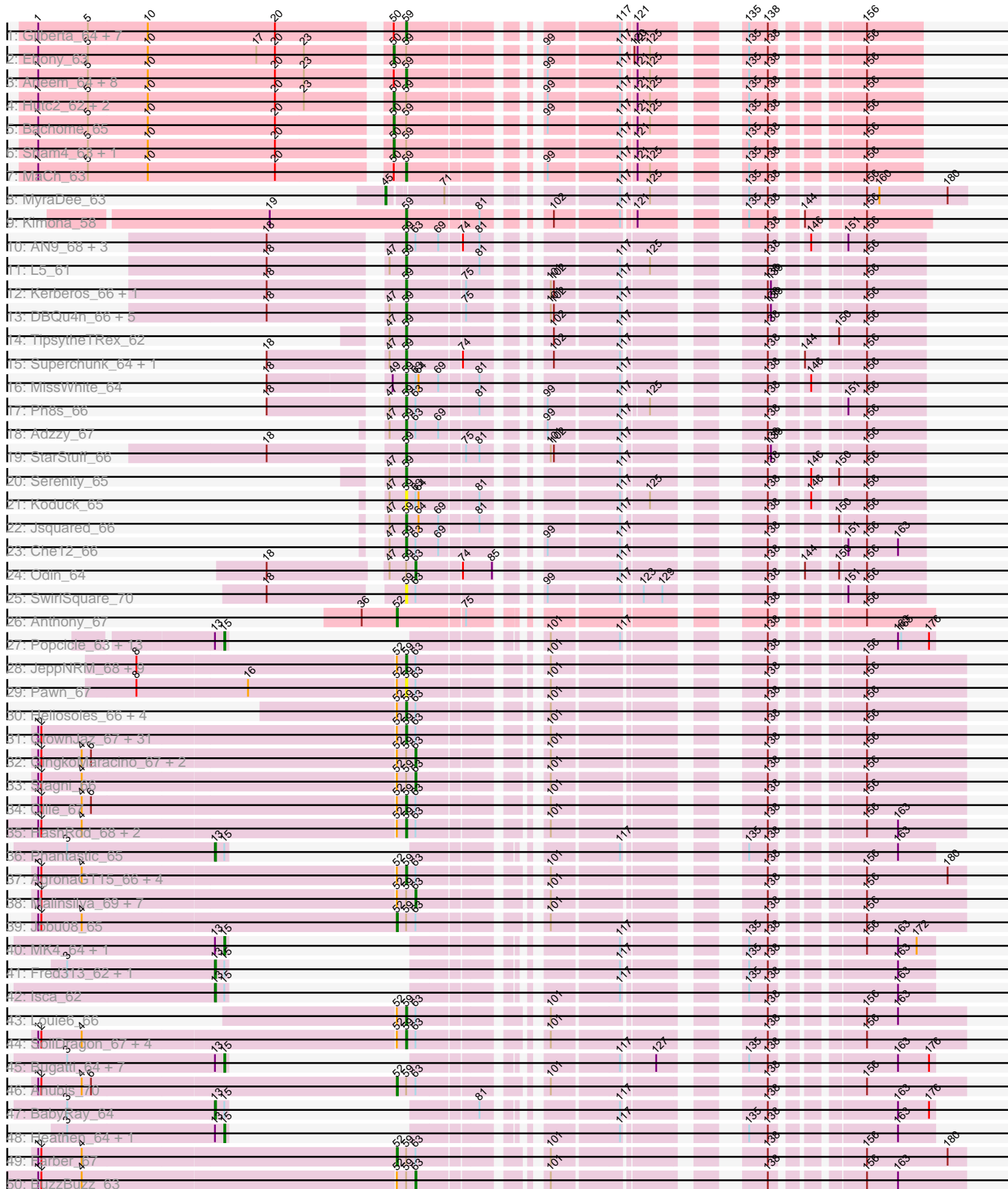
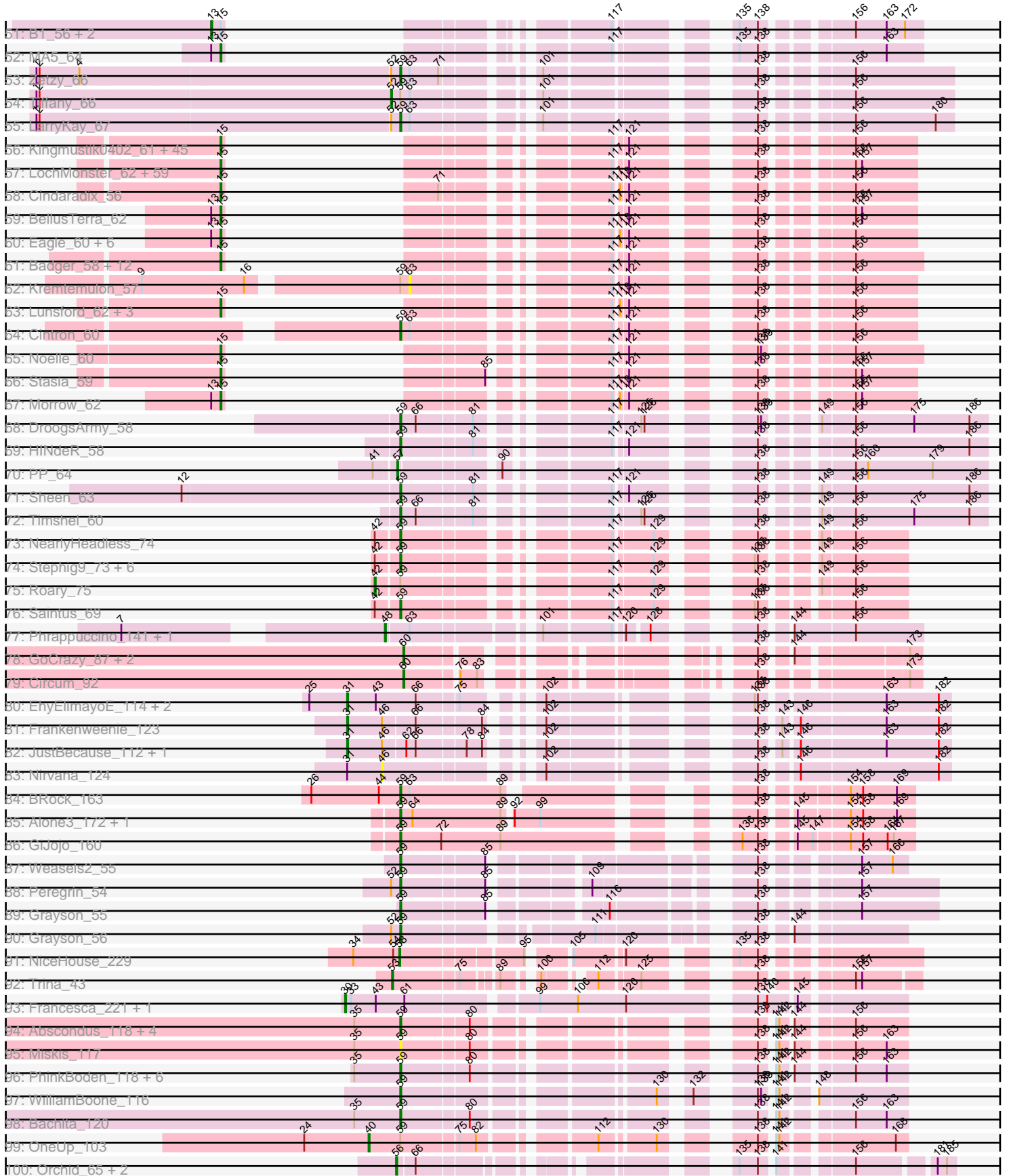


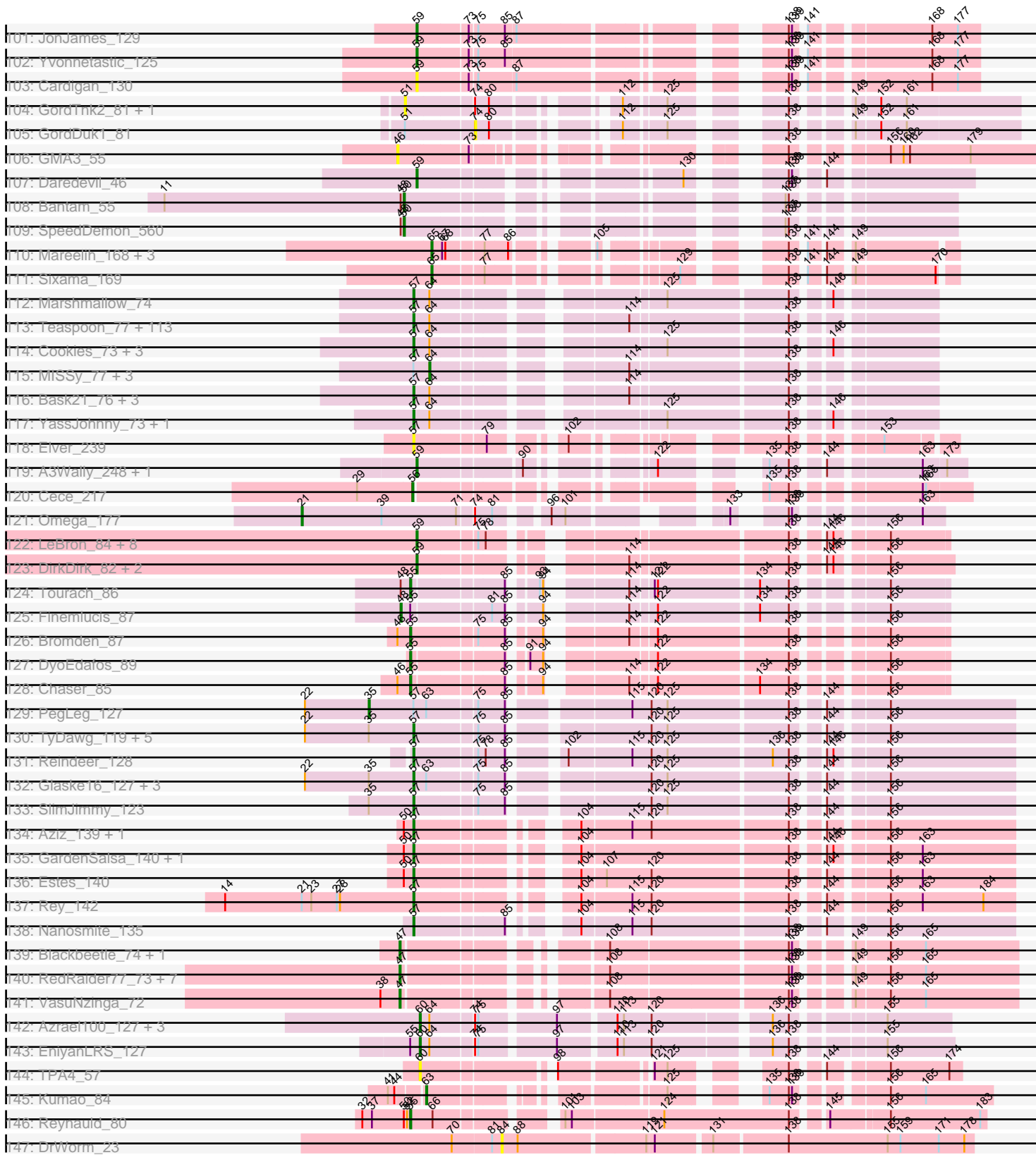
Pham 171093



Pham 171093



Pham 171093



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 171093 Report

This analysis was run 07/09/24 on database version 566.

Pham number 171093 has 573 members, 35 are drafts.

Phages represented in each track:

- Track 1 : Gilberta_64, Timothy_63, Orange_62, Mabel_63, Lucivia_64, Snape_63, Bowtie_64, Flaverint_64
- Track 2 : Ebony_63
- Track 3 : Aneem_64, Salz_62, Joselito_64, Jabith_64, Munch_63, Et2Brutus_62, Bud_62, Fibonacci_63, Mulciber_62
- Track 4 : Hutc2_62, TinyTimmy_61, Insomnia_64
- Track 5 : Bachome_65
- Track 6 : Sham4_63, Petersenfast_61
- Track 7 : MaCh_63
- Track 8 : MyraDee_63
- Track 9 : Kimona_58
- Track 10 : AN9_68, VC3_67, ANI8_68, C3_61
- Track 11 : L5_61
- Track 12 : Kerberos_66, Duplo_66
- Track 13 : DBQu4n_66, Tomathan_66, D29_61, D32_65, Pomar16_65, Naji_66
- Track 14 : TopsytheTRex_62
- Track 15 : Superchunk_64, Caraxes_65
- Track 16 : MissWhite_64
- Track 17 : Ph8s_66
- Track 18 : Adzzy_67
- Track 19 : StarStuff_66
- Track 20 : Serenity_65
- Track 21 : Koduck_65
- Track 22 : Jsquared_66
- Track 23 : Che12_66
- Track 24 : Odin_64
- Track 25 : SwirlSquare_70
- Track 26 : Anthony_67
- Track 27 : Popcicle_63, QuinnKiro_62, Caviar_63, Panamaxus_61, Lambert1_63, Todacoro_63, Texage_61, Hookmount_63, Pocahontas_63, Norbert_60, Noella_63, ResDef_62, Veracruz_61, Margo_63
- Track 28 : JeppNRM_68, PhishRPhriends_65, Phranny_68, ACFishhook_65, Gemma_66, Manu_67, HaveUMetTed_68, OlanP_66, Reba_67, Kalb97_68
- Track 29 : Pawn_67
- Track 30 : Heliosoles_66, Kalnoky_68, Groupthink_68, Marius_68, PurpleHaze_67
- Track 31 : GtownJaz_67, Penny1_67, P28Green_68, MoneyMay_66, Phoxy_67, Vix_65, Spike509_67, LBerry_68, Mainiac_67, Phoebe_68, Grub_67, Cullens_67,

Beauxregard13_66, LugYA_70, Lilith_66, PGHhamlin_69, EpicPhail_68,
 Dieselweasel_68, SoYo_66, BreSam8_67, Marie_65, DaHudson_66, JHC117_65,
 Grum1_66, Daishi_66, Grif_67, Microwolf_65, Sabinator_65, Fernando_67,
 Hercules11_67, Colbster_65, PotatoSplit_68
 • Track 32 : GingkoMaracino_67, Rummer_66, StepMih_66
 • Track 33 : Stagni_66
 • Track 34 : Ollie_67
 • Track 35 : HashRod_68, KADY_66, Misomonster_68
 • Track 36 : Phantastic_65
 • Track 37 : AgronaGT15_66, Wooldri_69, Bxz2_62, Methuselah_62, Soshari_69
 • Track 38 : Malinsilva_69, Sabia_67, Watson_66, MarQuardt_67, Snickers_65,
 Pembroke_67, JenCasNa_68, Taurus_68
 • Track 39 : Jobu08_65
 • Track 40 : MK4_64, JF4_62
 • Track 41 : Fred313_62, HelDan_63
 • Track 42 : Isca_62
 • Track 43 : Louie6_66
 • Track 44 : SoilDragon_67, Aglet_68, MadMarie_67, AugsMagnumOpus_70,
 MuchMore_70
 • Track 45 : Bugatti_64, Giroux_63, Idleandcovert_64, SaturnRing_64, Puppy_64,
 Pistachio_64, TNguyen7_65, BlueBird_66
 • Track 46 : Anubis_70
 • Track 47 : BabyRay_64
 • Track 48 : Heathen_64, Scout_63
 • Track 49 : Farber_67
 • Track 50 : BuzzBuzz_63
 • Track 51 : B1_56, Rockstar_62, JF2_62
 • Track 52 : MA5_64
 • Track 53 : Zetzy_66
 • Track 54 : Tiffany_66
 • Track 55 : LarryKay_67
 • Track 56 : Kingmustik0402_61, PeterPeter_61, Pumbaa_61, Kye_61, KFPoly_60,
 LHTSCC_63, ChampagnePapi_63, Palestino_60, ICleared_60, Arturo_59,
 Kratak_60, Caelakin_60, Funston_60, Phacado_61, Cerulean_62, OKaNui_61,
 Mazhar510_61, JoongJeon_60, Happiness_60, Peaches_59, Shaka_59, Relief_60,
 Eris_60, Maverick_60, AvatarAhPeg_58, Miramae_58, BangNhom_60,
 Cocoaberry_61, SheldonCooper_61, Gadost_61, NotAPhaseMom_60, Annyong_60,
 Tinybot_60, Obama12_62, Stink_58, Phighter1804_61, Iracema64_62,
 DirtyDunning_60, Houdini22_60, Avle17_61, Wander_61, Bruiser_60, Mundrea_59,
 JetBlade_61, Nemo27_60, Shygu2_59
 • Track 57 : LochMonster_62, Sparxx_62, Eros_61, Romney_60, MeeZee_60,
 Eapen_61, Alberto7_62, Connomayer_61, Scamp_61, LittleB_61, Wilbur_61,
 Druantia_60, Ulysses_60, Roosevelt_59, Chaph_61, TygerBlood_61, Holli_60,
 Citius_61, NorthStar_59, Kamy_60, Sabertooth_61, Clarenza_60, Lemur_61,
 LittleGuy_61, TroyPia_62, Millski_60, Taquarus_60, Deano_59, Commander_60,
 Bartimeaus_61, Lorenzo_61, Baby16_61, YoSam321_61, Albee_61, Maxo_62,
 Flux_61, Skipitt_60, Blackmoor_60, TiroTheta9_60, Medusa_61, Melvin_63,
 Burger_59, Broseidon_61, Koreni_60, CentreCat_61, Thanksgivukkah_60,
 Jaykayelowell_58, TinaFeyge_59, Pipcraft_58, Iceman_61, BubbleTrouble_60,
 Spino_60, Camperdownii_59, Nyxis_60, LappelDuVide_58, Ruin_61, Florean_61,
 Bombshell_61, Dhanush_61, Polymorphads_62
 • Track 58 : Cindaradix_56
 • Track 59 : BellusTerra_62

- Track 60 : Eagle_60, Eurydice_62, Ohfah_62, Phelipe_62, Abdiel_61, Nebs_62, LeoAvram_60
- Track 61 : Badger_58, Bumblebee11_58, Xena_58, Datway_59, PetiteSangsue_59, Wile_59, Katalie136_59, Achebe_58, Morpher26_59, Cici_59, AbbysRanger_59, Backyardigan_57, Perplexer_59
- Track 62 : Kremtemulon_57
- Track 63 : Lunsford_62, Phontbonne_61, HamSlice_58, Wizard007_60
- Track 64 : Cintron_60
- Track 65 : Noelle_60
- Track 66 : Stasia_59
- Track 67 : Morrow_62
- Track 68 : DroogsArmy_58
- Track 69 : HINdeR_58
- Track 70 : PP_64
- Track 71 : Sheen_63
- Track 72 : Timshel_60
- Track 73 : NearlyHeadless_74
- Track 74 : Stephig9_73, Groundhog_73, Dixon_73, Smeadley_74, Danforth_74, Astro_74, Expelliarmus_71
- Track 75 : Roary_75
- Track 76 : Saintus_69
- Track 77 : Phrappuccino_141, Settecandela_141
- Track 78 : GoCrazy_87, Hankly_92, KeaneyLin_89
- Track 79 : Circum_92
- Track 80 : EhyElimayoE_114, Kradal_113, Satis_113
- Track 81 : Frankenweenie_123
- Track 82 : JustBecause_112, Kela_113
- Track 83 : Nirvana_124
- Track 84 : BRock_163
- Track 85 : Alone3_172, LuckySocke_170
- Track 86 : GiJojo_160
- Track 87 : Weasels2_55
- Track 88 : Peregrin_54
- Track 89 : Grayson_55
- Track 90 : Grayson_56
- Track 91 : NiceHouse_229
- Track 92 : Trina_43
- Track 93 : Francesca_221, Dorin_221
- Track 94 : Abscondus_118, Dusty_115, Norvs_118, Engineer_119, ClubL_119
- Track 95 : Miskis_117
- Track 96 : PhinkBoden_118, Toniann_118, Cucurbita_119, Culver_119, Aphelion_118, Lozinak_118, Smoothie_119
- Track 97 : WilliamBoone_116
- Track 98 : Bachita_120
- Track 99 : OneUp_103
- Track 100 : Orchid_65, PatrickStar_66, Kampe_66
- Track 101 : JonJames_129
- Track 102 : Yvonnestic_125
- Track 103 : Cardigan_130
- Track 104 : GordTnk2_81, Gmala1_74
- Track 105 : GordDuk1_81
- Track 106 : GMA3_55
- Track 107 : Daredevil_46

- Track 108 : Bantam_55
- Track 109 : SpeedDemon_560
- Track 110 : Mareelih_168, BlueNGold_167, Forza_171, Boopy_170
- Track 111 : Sixama_169
- Track 112 : Marshmallow_74
- Track 113 : Teaspoon_77, Buck_77, Petra64142_80, Highbury_75, NoSleep_77, Glexan_75, Nala_78, TeardropMSU_72, Lilizi_77, Thresher_78, Murica_79, Inca_73, Policronamos_80, 244_77, Flypotenuse_72, Moldemort_79, Nimrod_77, HufflyPuff_79, Gage_78, Emmina_76, Phaja_74, HanKaySha_76, Kanye_73, BilboSwaggins_75, StellaBean_74, AmericanBeauty_83, Myrale_76, Manda_77, Ukulele_71, Rimmer_77, SophKB_73, Miniwave_71, Youngblood_79, IHOP_74, MPhalcon_77, Icee_77, Quallification_77, Dusk_73, Balomoji_76, Saints25_75, JeTaimé_76, Simpliphy_75, BadStone_73, PhatBacter_80, Lilpickle_75, Holt_81, Rakim_77, StolenFromERC_79, MadamMonkfish_76, Gemini_81, Hoonter_79, Mindy_75, Dumbo_76, Mosby_72, Lilac_78, Kimchi_80, Phaux_78, Cactus_79, NelitzaMV_74, FireRed_80, Eureka_74, BigBubba_76, Hopey_76, GooberAzure_79, Goldilocks_79, Terminus_79, Daikon_78, TBrady12_79, CrystalP_75, Phrux_73, Cjw1_76, BaboJay_73, Goku_74, Bench_79, Asriel_75, Henry_74, Bruin_73, Xandras_75, Tuco_77, Contagion_72, Stank_79, GoldenSpark_80, Traaww1_72, Barbarian_75, Filch_77, Easy2Say_77, ShamWow_76, Porky_75, Sassay_71, Pumpkin_79, xkcd_79, RiverMonster_76, Czyszczonek_77, Harella_76, Elph10_76, Toto_74, Murphy_76, Pharsalus_73, Gator_74, Command613_78, Stark_77, Elite2014_75, Misfit_77, Maxxinista_78, ChosenOne_76, Tarkin_75, Argent26_80, Adnama_80, Willez_71, ABCat_73, Wiggin_78, DrDrey_76, Sotrice96_77, Paperbeatsrock_75
- Track 114 : Cookies_73, ChotaBhai_76, SirDuracell_75, DoctorDiddles_75
- Track 115 : MISSy_77, Kostya_76, Palpatine_78, BugsBunny_76
- Track 116 : Bask21_76, Pat3_74, OrionPax_75, Amao_76
- Track 117 : YassJohnny_73, Tomaszewski_71
- Track 118 : Elver_239
- Track 119 : A3Wally_248, PauloDiaboli_248
- Track 120 : Cece_217
- Track 121 : Omega_177
- Track 122 : LeBron_84, Rose5_86, AvadaKedavra_85, Tyson_86, JoeDirt_86, Wyatt2_86, Acquire49_85, UPIE_84, CicholasNage_82
- Track 123 : DirkDirk_82, Appletree2_84, Silverleaf_85
- Track 124 : Tourach_86
- Track 125 : Finemlucis_87
- Track 126 : Bromden_87
- Track 127 : DyoEdafos_89
- Track 128 : Chaser_85
- Track 129 : PegLeg_127
- Track 130 : TyDawg_119, IPhane7_122, Bongo_123, Bricole_126, LilhomieP_124, Auspice_124
- Track 131 : Reindeer_128
- Track 132 : Glaske16_127, Dulcita_125, Skinny_130, Diminimus_125
- Track 133 : SlimJimmy_123
- Track 134 : Aziz_139, GenevaB15_142
- Track 135 : GardenSalsa_140, MrMagoo_142
- Track 136 : Estes_140
- Track 137 : Rey_142
- Track 138 : Nanosmite_135
- Track 139 : Blackbeetle_74, Poise_74

- Track 140 : RedRaider77_73, Gattaca_71, Raela_74, Lilbit_73, LittleLaf_73, Marvin_69, MosMoris_70, Tesla_70
- Track 141 : VasuNzinga_72
- Track 142 : Azrael100_127, Cosmo_135, Wildcat_134, MaryV_120
- Track 143 : EniyanLRS_127
- Track 144 : TPA4_57
- Track 145 : Kumao_84
- Track 146 : Reynauld_80
- Track 147 : DrWorm_23

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

The start number called the most often in the published annotations is 15, it was called in 157 of the 538 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbysRanger_59, Abdiel_61, Achebe_58, Albee_61, Alberto7_62, Annyong_60, Arturo_59, AvatarAhPeg_58, Avle17_61, Baby16_61, Backyardigan_57, Badger_58, BangNhom_60, Bartimeaus_61, BellusTerra_62, Blackmoor_60, BlueBird_66, Bombshell_61, Broseidon_61, Bruiser_60, BubbleTrouble_60, Bugatti_64, Bumblebee11_58, Burger_59, Caelakin_60, Camperdownii_59, Caviar_63, CentreCat_61, Cerulean_62, ChampagnePapi_63, Chaph_61, Cici_59, Cindaradix_56, Citius_61, Clarenza_60, Cocoaberry_61, Commander_60, Connomayer_61, Datway_59, Deano_59, Dhanush_61, DirtyDunning_60, Druantia_60, Eagle_60, Eapen_61, Eris_60, Eros_61, Eurydice_62, Florean_61, Flux_61, Funston_60, Gadost_61, Giroux_63, HamSlice_58, Happiness_60, Heathen_64, Holli_60, Hookmount_63, Houdini22_60, ICleared_60, Iceman_61, Idleandcovert_64, Iracema64_62, JF4_62, Jaykayelowell_58, JetBlade_61, JoongJeon_60, KFPoly_60, Kampy_60, Katalie136_59, Kingmustik0402_61, Koreni_60, Kratak_60, Kye_61, LHTSCC_63, Lambert1_63, LappelDuVide_58, Lemur_61, LeoAvram_60, LittleB_61, LittleGuy_61, LochMonster_62, Lorenzo_61, Lunsford_62, MA5_64, MK4_64, Margo_63, Maverick_60, Maxo_62, Mazhar510_61, Medusa_61, MeeZee_60, Melvin_63, Millski_60, Miramae_58, Morpher26_59, Morrow_62, Mundrea_59, Nebs_62, Nemo27_60, Noella_63, Noelle_60, Norbert_60, NorthStar_59, NotAPhaseMom_60, Nyxis_60, OKaNui_61, Obama12_62, Ohfah_62, Palestino_60, Panamaxus_61, Peaches_59, Perplexer_59, PeterPeter_61, PetiteSangsue_59, Phacado_61, Phelipe_62, Phighter1804_61, Phontbonne_61, Pipcraft_58, Pistachio_64, Pocahontas_63, Polymorphads_62, Popcicle_63, Pumbaa_61, Puppy_64, QuinnKiro_62, Relief_60, ResDef_62, Romney_60, Roosevelt_59, Ruin_61, Sabertooth_61, SaturnRing_64, Scamp_61, Scout_63, Shaka_59, SheldonCooper_61, Shygu2_59, Skipitt_60, Sparxx_62, Spino_60, Stasia_59, Stink_58, TNguyen7_65, Taquarus_60, Texage_61, Thanksgivukkah_60, TinaFeyge_59, Tinybot_60, TiroTheta9_60, Todacoro_63, TroyPia_62, TygerBlood_61, Ulysses_60, Veracruz_61, Wander_61, Wilbur_61, Wile_59, Wizard007_60, Xena_58, YoSam321_61,

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

- B1_56, BabyRay_64, Fred313_62, HelDan_63, Isca_62, JF2_62, Phantastic_65, Rockstar_62,

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

- 244_77, A3Wally_248, ABCat_73, ACFishhook_65, AN9_68, ANI8_68, Abscondus_118, Acquire49_85, Adnama_80, Adzzy_67, Aglet_68, AgronaGT15_66, Alone3_172, Amao_76, AmericanBeauty_83, Aneem_64, Anthony_67, Anubis_70, Aphelion_118, Appletree2_84, Argent26_80, Asriel_75, Astro_74, AugsMagnumOpus_70, Auspice_124, AvadaKedavra_85, Aziz_139, Azrael100_127, BRock_163, BaboJay_73, Bachita_120, Bachome_65, BadStone_73, Balomoji_76, Bantam_55, Barbarian_75, Bask21_76, Beauxregard13_66, Bench_79, BigBubba_76, BilboSwaggins_75, Blackbeetle_74, BlueNGold_167, Bongo_123, Boopy_170, Bowtie_64, BreSam8_67, Bricole_126, Bromden_87, Bruin_73, Buck_77, Bud_62, BugsBunny_76, BuzzBuzz_63, Bxz2_62, C3_61, Cactus_79, Caraxes_65, Cardigan_130, Cece_217, Chaser_85, Che12_66, ChosenOne_76, ChotaBhai_76, CicholasNage_82, Cintron_60, Circum_92, Cjw1_76, ClubL_119, Colbster_65, Command613_78, Contagion_72, Cookies_73, Cosmo_135, CrystalP_75, Cucurbita_119, Cullens_67, Culver_119, Czyszczonek1_77, D29_61, D32_65, DBQu4n_66, DaHudson_66, Daikon_78, Daishi_66, Danforth_74, Daredevil_46, Dieselweasel_68, Diminimus_125, DirkDirk_82, Dixon_73, DoctorDiddles_75, Dorin_221, DrDrey_76, DrWorm_23, DroogsArmy_58, Dulcita_125, Dumbo_76, Duplo_66, Dusk_73, Dusty_115, DyoEdafos_89, Easy2Say_77, Ebony_63, EhyElimayoE_114, Elite2014_75, Elph10_76, Elver_239, Emmina_76, Engineer_119, EniyanLRS_127, EpicPhail_68, Estes_140, Et2Brutus_62, Eureka_74, Expelliarmus_71, Farber_67, Fernando_67, Fibonacci_63, Filch_77, Finemlucis_87, FireRed_80, Flaverint_64, Flypotenuse_72, Forza_171, Francesca_221, Frankenweenie_123, GMA3_55, Gage_78, GardenSalsa_140, Gator_74, Gattaca_71, Gemini_81, Gemma_66, GenevaB15_142, GiJojo_160, Gilberta_64, GingkoMaracino_67, Glaske16_127, Glexan_75, Gmala1_74, GoCrazy_87, Goku_74, GoldenSpark_80, Goldilocks_79, GooberAzure_79, GordDuk1_81, GordTnk2_81, Grayson_55, Grayson_56, Grif_67, Groundhog_73, Groupthink_68, Grub_67, Grum1_66, GtownJaz_67, HINder_58, HanKaySha_76, Hankly_92, Harella_76, HashRod_68, HaveUMetTed_68, Heliosoles_66, Henry_74, Hercules11_67, Highbury_75, Holt_81, Hoonter_79, Hopey_76, HufflyPuff_79, Hutc2_62, IHOP_74, IPhone7_122, Icee_77, Inca_73, Insomnia_64, JHC117_65, Jabith_64, JeTaime_76, JenCasNa_68, JeppNRM_68, Jobu08_65, JoeDirt_86, JonJames_129, Joselito_64, Jsquared_66, JustBecause_112, KADY_66, Kalb97_68, Kalnok_68, Kampe_66, Kanye_73, KeaneyLin_89, Kela_113, Kerberos_66, Kimchi_80, Kimona_58, Koduck_65, Kostya_76, Kradal_113, Kremtemulon_57, Kumao_84, L5_61, LBerry_68, LarryKay_67, LeBron_84, Lilac_78, Lilbit_73, LilhomieP_124, Lilith_66, Lilizi_77, Lilpickle_75, LittleLaf_73, Louie6_66, Lozinak_118, Lucivia_64, LuckySocke_170, LugYA_70, MISSy_77, MPhalcon_77, MaCh_63, Mabel_63, MadMarie_67, MadamMonkfish_76, Mainiac_67, Malinsilva_69, Manda_77, Manu_67, MarQuardt_67, Mareelih_168, Marie_65, Marius_68, Marshmallow_74, Marvin_69, MaryV_120, Maxxinista_78, Methuselah_62, Microwolf_65, Mindy_75, Miniwave_71, Misfit_77, Miskis_117, Misomonster_68, MissWhite_64, Moldemort_79, MoneyMay_66, MosMoris_70, Mosby_72, MrMagoo_142, MuchMore_70, Mulciber_62, Munch_63, Murica_79, Murphy_76, MyraDee_63, Myrale_76, Naji_66, Nala_78, Nanosmite_135, NearlyHeadless_74, NelitzaMV_74, NiceHouse_229, Nimrod_77, Nirvana_124, NoSleep_77, Norvs_118, Odin_64, OlanP_66, Ollie_67, Omega_177, OneUp_103, Orange_62, Orchid_65, OrionPax_75, P28Green_68, PGHhamlin_69, PP_64, Palpatine_78, Paperbeatsrock_75, Pat3_74, PatrickStar_66, PauloDiaboli_248, Pawn_67, PegLeg_127, Pembroke_67, Penny1_67, Peregrin_54, Petersenfast_61, Petra64142_80, Ph8s_66, Phaja_74, Pharsalus_73, PhatBacter_80, Phaux_78, PhinkBoden_118, PhishRPhriends_65, Phoebe_68, Phoxy_67, Phranny_68,

Phrappuccino_141, Phrux_73, Poise_74, Policronamos_80, Pomar16_65, Porky_75, PotatoSplit_68, Pumpkin_79, PurpleHaze_67, Qualification_77, Raela_74, Rakim_77, Reba_67, RedRaider77_73, Reindeer_128, Rey_142, Reynauld_80, Rimmer_77, RiverMonster_76, Roary_75, Rose5_86, Rummer_66, Sabia_67, Sabinator_65, Saints25_75, Saintus_69, Salz_62, Sassay_71, Satis_113, Serenity_65, Settecandela_141, Sham4_63, ShamWow_76, Sheen_63, Silverleaf_85, Simpliphy_75, SirDuracell_75, Sixama_169, Skinny_130, SlimJimmy_123, Smeadley_74, Smoothie_119, Snape_63, Snickers_65, SoYo_66, SoilDragon_67, SophKB_73, Soshari_69, Sotrice96_77, SpeedDemon_560, Spike509_67, Stagni_66, Stank_79, StarStuff_66, Stark_77, StellaBean_74, StepMih_66, Stephig9_73, StolenFromERC_79, Superchunk_64, SwirlSquare_70, TBrady12_79, TPA4_57, Tarkin_75, Taurus_68, TeardropMSU_72, Teaspoon_77, Terminus_79, Tesla_70, Thresher_78, Tiffany_66, Timothy_63, Timshel_60, TinyTimmy_61, TipsytheTRex_62, Tomaszewski_71, Tomathan_66, Toniann_118, Toto_74, Tourach_86, Traaww1_72, Trina_43, Tuco_77, TyDawg_119, Tyson_86, UPIE_84, Ukulele_71, VC3_67, VasuNzinga_72, Vix_65, Watson_66, Weasels2_55, Wiggini_78, Wildcat_134, Willez_71, WilliamBoone_116, Wooldri_69, Wyatt2_86, Xandras_75, YassJohnny_73, Youngblood_79, Yvonnetastic_125, Zetzy_66, xkcd_79,

Summary by start number:

Start 13:

- Found in 44 of 573 (7.7%) of genes in pham
- Manual Annotations of this start: 8 of 538
- Called 18.2% of time when present
- Phage (with cluster) where this start called: B1_56 (A3), BabyRay_64 (A3), Fred313_62 (A3), HelDan_63 (A3), Isca_62 (A3), JF2_62 (A3), Phantastic_65 (A3), Rockstar_62 (A3),

Start 15:

- Found in 170 of 573 (29.7%) of genes in pham
- Manual Annotations of this start: 157 of 538
- Called 95.3% of time when present
- Phage (with cluster) where this start called: AbbysRanger_59 (A4), Abdiel_61 (A4), Achebe_58 (A4), Albee_61 (A4), Alberto7_62 (A4), Annyong_60 (A4), Arturo_59 (A4), AvatarAhPeg_58 (A4), Avle17_61 (A4), Baby16_61 (A4), Backyardigan_57 (A4), Badger_58 (A4), BangNhom_60 (A4), Bartimeaus_61 (A4), BellusTerra_62 (A4), Blackmoor_60 (A4), BlueBird_66 (A3), Bombshell_61 (A4), Broseidon_61 (A4), Bruiser_60 (A4), BubbleTrouble_60 (A4), Bugatti_64 (A3), Bumblebee11_58 (A4), Burger_59 (A4), Caelakin_60 (A4), Camperdownii_59 (A4), Caviar_63 (A3), CentreCat_61 (A4), Cerulean_62 (A4), ChampagnePapi_63 (A4), Chaph_61 (A4), Cici_59 (A4), Cindaradix_56 (A4), Citius_61 (A4), Clarenza_60 (A4), Cocoaberry_61 (A4), Commander_60 (A4), Connomayer_61 (A4), Datway_59 (A4), Deano_59 (A4), Dhanush_61 (A4), DirtyDunning_60 (A4), Druantia_60 (A4), Eagle_60 (A4), Eapen_61 (A4), Eris_60 (A4), Eros_61 (A4), Eurydice_62 (A4), Florean_61 (A4), Flux_61 (A4), Funston_60 (A4), Gadost_61 (A4), Giroux_63 (A3), HamSlice_58 (A4), Happiness_60 (A4), Heathen_64 (A3), Holli_60 (A4), Hookmount_63 (A3), Houdini22_60 (A4), ICleared_60 (A4), Iceman_61 (A4), Idleandcovert_64 (A3), Iracema64_62 (A4), JF4_62 (A3), Jaykayelowell_58 (A4), JetBlade_61 (A4), JoongJeon_60 (A4), KFPoly_60 (A4), Kamy_60 (A4), Katalie136_59 (A4), Kingmustik0402_61 (A4), Koreni_60 (A4), Kratark_60 (A4), Kyee_61 (A4), LHTSCC_63 (A4), Lambert1_63 (A3), LappelDuVide_58 (A4), Lemur_61 (A4),

LeoAvram_60 (A4), LittleB_61 (A4), LittleGuy_61 (A4), LochMonster_62 (A4), Lorenzo_61 (A4), Lunsford_62 (A4), MA5_64 (A3), MK4_64 (A3), Margo_63 (A3), Maverick_60 (A4), Maxo_62 (A4), Mazhar510_61 (A4), Medusa_61 (A4), MeeZee_60 (A4), Melvin_63 (A4), Millski_60 (A4), Miramae_58 (A4), Morpher26_59 (A4), Morrow_62 (A4), Mundrea_59 (A4), Nebs_62 (A4), Nemo27_60 (A4), Noella_63 (A3), Noelle_60 (A4), Norbert_60 (A3), NorthStar_59 (A4), NotAPhaseMom_60 (A4), Nyxis_60 (A4), OKaNui_61 (A4), Obama12_62 (A4), Ohfah_62 (A4), Palestino_60 (A4), Panamaxus_61 (A3), Peaches_59 (A4), Perplexer_59 (A4), PeterPeter_61 (A4), PetiteSangsue_59 (A4), Phacado_61 (A4), Phelipe_62 (A4), Phighter1804_61 (A4), Phontbonne_61 (A4), Pipcraft_58 (A4), Pistachio_64 (A3), Pocahontas_63 (A3), Polymorphads_62 (A4), Popcicle_63 (A3), Pumbaa_61 (A4), Puppy_64 (A3), QuinnKiro_62 (A3), Relief_60 (A4), ResDef_62 (A3), Romney_60 (A4), Roosevelt_59 (A4), Ruin_61 (A4), Sabertooth_61 (A4), SaturnRing_64 (A3), Scamp_61 (A4), Scout_63 (A3), Shaka_59 (A4), SheldonCooper_61 (A4), Shygu2_59 (A4), Skipitt_60 (A4), Sparxx_62 (A4), Spino_60 (A4), Stasia_59 (A4), Stink_58 (A4), TNguyen7_65 (A3), Taquarus_60 (A4), Texage_61 (A3), Thanksgivukkah_60 (A4), TinaFeyge_59 (A4), Tinybot_60 (A4), TiroTheta9_60 (A4), Todacoro_63 (A3), TroyPia_62 (A4), TygerBlood_61 (A4), Ulysses_60 (A4), Veracruz_61 (A3), Wander_61 (A4), Wilbur_61 (A4), Wile_59 (A4), Wizard007_60 (A4), Xena_58 (A4), YoSam321_61 (A4),

Start 21:

- Found in 2 of 573 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Omega_177 (J),

Start 30:

- Found in 2 of 573 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dorin_221 (CG), Francesca_221 (CG),

Start 31:

- Found in 7 of 573 (1.2%) of genes in pham
- Manual Annotations of this start: 6 of 538
- Called 85.7% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_114 (BM), Frankenweenie_123 (BM), JustBecause_112 (BM), Kela_113 (BM), Kradal_113 (BM), Satis_113 (BM),

Start 35:

- Found in 26 of 573 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 3.8% of time when present
- Phage (with cluster) where this start called: PegLeg_127 (M1),

Start 40:

- Found in 1 of 573 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: OneUp_103 (CQ2),

Start 42:

- Found in 10 of 573 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Roary_75 (A8),

Start 45:

- Found in 1 of 573 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MyraDee_63 (A18),

Start 46:

- Found in 7 of 573 (1.2%) of genes in pham
- No Manual Annotations of this start.
- Called 28.6% of time when present
- Phage (with cluster) where this start called: GMA3_55 (DF2), Nirvana_124 (BM),

Start 47:

- Found in 28 of 573 (4.9%) of genes in pham
- Manual Annotations of this start: 10 of 538
- Called 39.3% of time when present
- Phage (with cluster) where this start called: Blackbeetle_74 (S), Gattaca_71 (S), Lilbit_73 (S), LittleLaf_73 (S), Marvin_69 (S), MosMoris_70 (S), Poise_74 (S), Raela_74 (S), RedRaider77_73 (S), Tesla_70 (S), VasuNzinga_72 (S),

Start 48:

- Found in 6 of 573 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 538
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Finemlucis_87 (L2), Phrappuccino_141 (AA), Settecandela_141 (AA),

Start 50:

- Found in 33 of 573 (5.8%) of genes in pham
- Manual Annotations of this start: 7 of 538
- Called 27.3% of time when present
- Phage (with cluster) where this start called: Bachome_65 (A11), Bantam_55 (DL), Ebony_63 (A11), Hutc2_62 (A11), Insomnia_64 (A11), Petersenfast_61 (A11), Sham4_63 (A11), SpeedDemon_560 (DL), TinyTimmy_61 (A11),

Start 51:

- Found in 3 of 573 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Gmala1_74 (DF1), GordTnk2_81 (DF1),

Start 52:

- Found in 86 of 573 (15.0%) of genes in pham
- Manual Annotations of this start: 5 of 538
- Called 5.8% of time when present
- Phage (with cluster) where this start called: Anthony_67 (A20), Anubis_70 (A3), Farber_67 (A3), Jobu08_65 (A3), Tiffany_66 (A3),

Start 53:

- Found in 1 of 573 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trina_43 (CE),

Start 55:

- Found in 7 of 573 (1.2%) of genes in pham
- Manual Annotations of this start: 5 of 538
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Bromden_87 (L4), Chaser_85 (L4), DyoEdafos_89 (L4), Reynauld_80 (singleton), Tourach_86 (L2),

Start 56:

- Found in 4 of 573 (0.7%) of genes in pham
- Manual Annotations of this start: 4 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece_217 (GD3), Kampe_66 (CX), Orchid_65 (CX), PatrickStar_66 (CX),

Start 57:

- Found in 151 of 573 (26.4%) of genes in pham
- Manual Annotations of this start: 139 of 538
- Called 96.7% of time when present
- Phage (with cluster) where this start called: 244_77 (E), ABCat_73 (E), Adnama_80 (E), Amao_76 (E), AmericanBeauty_83 (E), Argent26_80 (E), Asriel_75 (E), Auspice_124 (M1), Aziz_139 (M2), BaboJay_73 (E), BadStone_73 (E), Balomoji_76 (E), Barbarian_75 (E), Bask21_76 (E), Bench_79 (E), BigBubba_76 (E), BilboSwaggins_75 (E), Bongo_123 (M1), Bricole_126 (M1), Bruin_73 (E), Buck_77 (E), Cactus_79 (E), ChosenOne_76 (E), ChotaBhai_76 (E), Cjw1_76 (E), Command613_78 (E), Contagion_72 (E), Cookies_73 (E), CrystalP_75 (E), Czystczon1_77 (E), Daikon_78 (E), Diminimus_125 (M1), DoctorDiddles_75 (E), DrDrey_76 (E), Dulcita_125 (M1), Dumbo_76 (E), Dusk_73 (E), Easy2Say_77 (E), Elite2014_75 (E), Elph10_76 (E), Elver_239 (FK), Emmina_76 (E), Estes_140 (M2), Eureka_74 (E), Filch_77 (E), FireRed_80 (E), Flypotenuse_72 (E), Gage_78 (E), GardenSalsa_140 (M2), Gator_74 (E), Gemini_81 (E), GenevaB15_142 (M2), Glaske16_127 (M1), Glexan_75 (E), Goku_74 (E), GoldenSpark_80 (E), Goldilocks_79 (E), GooberAzure_79 (E), HanKaySha_76 (E), Harella_76 (E), Henry_74 (E), Highbury_75 (E), Holt_81 (E), Hoonter_79 (E), Hopeny_76 (E), HufflyPuff_79 (E), IHOP_74 (E), IPHane7_122 (M1), Icee_77 (E), Inca_73 (E), JeTaimie_76 (E), Kanye_73 (E), Kimchi_80 (E), Lilac_78 (E), LilhomieP_124 (M1), Lilizi_77 (E), Lilpickle_75 (E), MPhalcon_77 (E), MadamMonkfish_76 (E), Manda_77 (E), Marshmallow_74 (E), Maxxinista_78 (E), Mindy_75 (E), Miniwave_71 (E), Misfit_77 (E), Moldemort_79 (E), Mosby_72 (E), MrMagoo_142 (M2), Murica_79 (E), Murphy_76 (E), Myrale_76 (E), Nala_78 (E), Nanosmite_135 (M3), NelitzaMV_74 (E), Nimrod_77 (E), NoSleep_77 (E), OrionPax_75 (E), PP_64 (A7), Paperbeatsrock_75 (E), Pat3_74 (E), Petra64142_80 (E), Phaja_74 (E), Pharsalus_73 (E), PhatBacter_80 (E), Phaux_78 (E), Phrux_73 (E), Policronamos_80 (E), Porky_75 (E), Pumpkin_79 (E), Quallification_77 (E), Rakim_77 (E), Reindeer_128 (M1), Rey_142 (M2), Rimmer_77 (E), RiverMonster_76 (E), Saints25_75 (E), Sassay_71 (E), ShamWow_76 (E), Simpliphy_75 (E), SirDuracell_75 (E), Skinny_130 (M1), SlimJimmy_123 (M1), SophKB_73 (E), Sotrice96_77 (E), Stank_79 (E), Stark_77 (E),

StellaBean_74 (E), StolenFromERC_79 (E), TBrady12_79 (E), Tarkin_75 (E), TeardropMSU_72 (E), Teaspoon_77 (E), Terminus_79 (E), Thresher_78 (E), Tomaszewski_71 (E), Toto_74 (E), Traaww1_72 (E), Tuco_77 (E), TyDawg_119 (M1), Ukulele_71 (E), Wiggin_78 (E), Willez_71 (E), Xandras_75 (E), YassJohnny_73 (E), Youngblood_79 (E), xkcd_79 (E),

Start 58:

- Found in 1 of 573 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NiceHouse_229 (CE),

Start 59:

- Found in 192 of 573 (33.5%) of genes in pham
- Manual Annotations of this start: 156 of 538
- Called 85.4% of time when present
- Phage (with cluster) where this start called: A3Wally_248 (GD1), ACFishhook_65 (A3), AN9_68 (A2), ANI8_68 (A2), Abscondus_118 (CQ), Acquire49_85 (L1), Adzzy_67 (A2), Aglet_68 (A3), AgronaGT15_66 (A3), Alone3_172 (BS), Aneem_64 (A11), Aphelion_118 (CQ1), Appletree2_84 (L1), Astro_74 (A8), AugsMagnumOpus_70 (A3), AvadaKedavra_85 (L1), BRock_163 (BS), Bachita_120 (CQ1), Beauxregard13_66 (A3), Bowtie_64 (A11), BreSam8_67 (A3), Bud_62 (A11), Bxz2_62 (A3), C3_61 (A2), Caraxes_65 (A2), Cardigan_130 (DD), Che12_66 (A2), CicholasNage_82 (L1), Cintron_60 (A4), ClubL_119 (CQ1), Colbster_65 (A3), Cucurbita_119 (CQ1), Cullens_67 (A3), Culver_119 (CQ1), D29_61 (A2), D32_65 (A2), DBQu4n_66 (A2), DaHudson_66 (A3), Daishi_66 (A3), Danforth_74 (A8), Daredevil_46 (DL), Dieselweasel_68 (A3), DirkDirk_82 (L1), Dixon_73 (A8), DroogsArmy_58 (A7), Duplo_66 (A2), Dusty_115 (CQ), Engineer_119 (CQ1), EpicPhail_68 (A3), Et2Brutus_62 (A11), Expelliarmus_71 (A8), Fernando_67 (A3), Fibonacci_63 (A11), Flaverint_64 (A11), Gemma_66 (A3), GiJojo_160 (BS), Gilberta_64 (A11), Grayson_55 (CB), Grayson_56 (CB), Grif_67 (A3), Groundhog_73 (A8), Groupthink_68 (A3), Grub_67 (A3), Grum1_66 (A3), GtownJaz_67 (A3), HINdeR_58 (A7), HashRod_68 (A3), HaveUMetTed_68 (A3), Heliosoles_66 (A3), Hercules11_67 (A3), JHC117_65 (A3), Jabith_64 (A11), JeppNRM_68 (A3), JoeDirt_86 (L1), JonJames_129 (DD), Joselito_64 (A11), Jsquared_66 (A2), KADY_66 (A3), Kalb97_68 (A3), Kainoky_68 (A3), Kerberos_66 (A2), Kimona_58 (A19), Koduck_65 (A2), L5_61 (A2), LBerry_68 (A3), LarryKay_67 (A3), LeBron_84 (L1), Lilith_66 (A3), Louie6_66 (A3), Lozinak_118 (CQ1), Lucivia_64 (A11), LuckySocke_170 (BS), LugYA_70 (A3), MaCh_63 (A11), Mabel_63 (A11), MadMarie_67 (A3), Mainiac_67 (A3), Manu_67 (A3), Marie_65 (A3), Marius_68 (A3), Methuselah_62 (A3), Microwolf_65 (A3), Miskis_117 (CQ), Misomonster_68 (A3), MissWhite_64 (A2), MoneyMay_66 (A3), MuchMore_70 (A3), Mulciber_62 (A11), Munch_63 (A11), Naji_66 (A2), NearlyHeadless_74 (A8), Norvs_118 (CQ), OlanP_66 (A3), Ollie_67 (A3), Orange_62 (A11), P28Green_68 (A3), PGHhamlin_69 (A3), PauloDiaboli_248 (GD1), Pawn_67 (A3), Penny1_67 (A3), Peregrin_54 (CB), Ph8s_66 (A2), PhinkBoden_118 (CQ1), PhishRPhriends_65 (A3), Phoebe_68 (A3), Phoxy_67 (A3), Phranny_68 (A3), Pomar16_65 (A2), PotatoSplit_68 (A3), PurpleHaze_67 (A3), Reba_67 (A3), Rose5_86 (L1), Sabinator_65 (A3), Saintus_69 (A8), Salz_62 (A11), Serenity_65 (A2), Sheen_63 (A7), Silverleaf_85 (L1), Smeadley_74 (A8), Smoothie_119 (CQ1), Snape_63 (A11), SoYo_66 (A3), SoilDragon_67 (A3), Soshari_69 (A3), Spike509_67 (A3), StarStuff_66 (A2), Stephig9_73 (A8), Superchunk_64 (A2), SwirlSquare_70 (A2), Timothy_63 (A11), Timshel_60 (A7), TipsytheTRex_62 (A2), Tomathan_66 (A2), Toniann_118 (CQ1),

Tyson_86 (L1), UPIE_84 (L1), VC3_67 (A2), Vix_65 (A3), Weasels2_55 (CB), WilliamBoone_116 (CQ1), Wooldri_69 (A3), Wyatt2_86 (L1), Yvonnetastic_125 (DD), Zetzy_66 (A3),

Start 60:

- Found in 10 of 573 (1.7%) of genes in pham
- Manual Annotations of this start: 9 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100_127 (V), Circum_92 (AM), Cosmo_135 (V), EniyanLRS_127 (V), GoCrazy_87 (AM), Hankly_92 (AM), KeaneyLin_89 (AM), MaryV_120 (V), TPA4_57 (singleton), Wildcat_134 (V),

Start 63:

- Found in 104 of 573 (18.2%) of genes in pham
- Manual Annotations of this start: 14 of 538
- Called 15.4% of time when present
- Phage (with cluster) where this start called: BuzzBuzz_63 (A3), GingkoMaracino_67 (A3), JenCasNa_68 (A3), Kremtemulon_57 (A4), Kumao_84 (singleton), Malinsilva_69 (A3), MarQuardt_67 (A3), Odin_64 (A2), Pembroke_67 (A3), Rummer_66 (A3), Sabia_67 (A3), Snickers_65 (A3), Stagni_66 (A3), StepMih_66 (A3), Taurus_68 (A3), Watson_66 (A3),

Start 64:

- Found in 139 of 573 (24.3%) of genes in pham
- Manual Annotations of this start: 2 of 538
- Called 2.9% of time when present
- Phage (with cluster) where this start called: BugsBunny_76 (E), Kostya_76 (E), MISSy_77 (E), Palpatine_78 (E),

Start 65:

- Found in 5 of 573 (0.9%) of genes in pham
- Manual Annotations of this start: 5 of 538
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BlueNGold_167 (DS), Boopy_170 (DS), Forza_171 (DS), Mareelih_168 (DS), Sixama_169 (DS),

Start 74:

- Found in 16 of 573 (2.8%) of genes in pham
- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: GordDuk1_81 (DF1),

Start 84:

- Found in 4 of 573 (0.7%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: DrWorm_23 (singleton),

Summary by clusters:

There are 39 clusters represented in this pham: GD1, DL, GD3, BM, DD, L1, singleton, M1, M3, BS, FK, DS, A11, DF1, A18, DF2, A3, A2, A4, A7, CB, A8, CQ1, AA, E, CG, J, AM, CE, L4, CX, L2, V, CQ, A20, CQ2, A19, S, M2,

Info for manual annotations of cluster A11:

- Start number 50 was manually annotated 5 times for cluster A11.
- Start number 59 was manually annotated 18 times for cluster A11.

Info for manual annotations of cluster A18:

- Start number 45 was manually annotated 1 time for cluster A18.

Info for manual annotations of cluster A19:

- Start number 59 was manually annotated 1 time for cluster A19.

Info for manual annotations of cluster A2:

- Start number 59 was manually annotated 22 times for cluster A2.
- Start number 63 was manually annotated 1 time for cluster A2.

Info for manual annotations of cluster A20:

- Start number 52 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A3:

- Start number 13 was manually annotated 8 times for cluster A3.
- Start number 15 was manually annotated 23 times for cluster A3.
- Start number 52 was manually annotated 4 times for cluster A3.
- Start number 59 was manually annotated 64 times for cluster A3.
- Start number 63 was manually annotated 12 times for cluster A3.

Info for manual annotations of cluster A4:

- Start number 15 was manually annotated 134 times for cluster A4.
- Start number 59 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster A7:

- Start number 57 was manually annotated 1 time for cluster A7.
- Start number 59 was manually annotated 4 times for cluster A7.

Info for manual annotations of cluster A8:

- Start number 42 was manually annotated 1 time for cluster A8.
- Start number 59 was manually annotated 9 times for cluster A8.

Info for manual annotations of cluster AA:

- Start number 48 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster AM:

- Start number 60 was manually annotated 4 times for cluster AM.

Info for manual annotations of cluster BM:

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

Info for manual annotations of cluster BS:

- Start number 59 was manually annotated 4 times for cluster BS.

Info for manual annotations of cluster CB:

- Start number 59 was manually annotated 4 times for cluster CB.

Info for manual annotations of cluster CE:

- Start number 53 was manually annotated 1 time for cluster CE.
- Start number 58 was manually annotated 1 time for cluster CE.

Info for manual annotations of cluster CG:

- Start number 30 was manually annotated 1 time for cluster CG.

Info for manual annotations of cluster CQ:

- Start number 59 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 59 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 40 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster CX:

- Start number 56 was manually annotated 3 times for cluster CX.

Info for manual annotations of cluster DD:

- Start number 59 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster DL:

- Start number 50 was manually annotated 2 times for cluster DL.
- Start number 59 was manually annotated 1 time for cluster DL.

Info for manual annotations of cluster DS:

- Start number 65 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster E:

- Start number 57 was manually annotated 119 times for cluster E.
- Start number 64 was manually annotated 2 times for cluster E.

Info for manual annotations of cluster GD1:

- Start number 59 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD3:

- Start number 56 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster J:

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

Info for manual annotations of cluster L1:

- Start number 59 was manually annotated 12 times for cluster L1.

Info for manual annotations of cluster L2:

- Start number 48 was manually annotated 1 time for cluster L2.
- Start number 55 was manually annotated 1 time for cluster L2.

Info for manual annotations of cluster L4:

- Start number 55 was manually annotated 3 times for cluster L4.

Info for manual annotations of cluster M1:

- Start number 35 was manually annotated 1 time for cluster M1.
- Start number 57 was manually annotated 12 times for cluster M1.

Info for manual annotations of cluster M2:

- Start number 57 was manually annotated 6 times for cluster M2.

Info for manual annotations of cluster M3:

- Start number 57 was manually annotated 1 time for cluster M3.

Info for manual annotations of cluster S:

- Start number 47 was manually annotated 10 times for cluster S.

Info for manual annotations of cluster V:

- Start number 60 was manually annotated 5 times for cluster V.

Gene Information:

Gene: 244_77 Start: 48199, Stop: 48612, Start Num: 57

Candidate Starts for 244_77:

(Start: 57 @48199 has 139 MA's), (Start: 64 @48214 has 2 MA's), (114, 48361), (138, 48499),

Gene: A3Wally_248 Start: 138625, Stop: 139011, Start Num: 59

Candidate Starts for A3Wally_248:

(Start: 59 @138625 has 156 MA's), (90, 138712), (122, 138796), (135, 138856), (138, 138874), (144, 138895), (163, 138973), (173, 138994),

Gene: ABCat_73 Start: 48552, Stop: 48965, Start Num: 57

Candidate Starts for ABCat_73:

(Start: 57 @48552 has 139 MA's), (Start: 64 @48567 has 2 MA's), (114, 48714), (138, 48852),

Gene: ACFishhook_65 Start: 40901, Stop: 40482, Start Num: 59

Candidate Starts for ACFishhook_65:

(8, 41156), (Start: 52 @40910 has 5 MA's), (Start: 59 @40901 has 156 MA's), (Start: 63 @40892 has 14 MA's), (101, 40799), (138, 40646), (156, 40577),

Gene: AN9_68 Start: 40889, Stop: 40512, Start Num: 59

Candidate Starts for AN9_68:

(18, 41003), (Start: 59 @40889 has 156 MA's), (Start: 63 @40880 has 14 MA's), (69, 40859), (74, 40841), (81, 40826), (138, 40637), (146, 40610), (151, 40586), (156, 40568),

Gene: ANI8_68 Start: 40889, Stop: 40512, Start Num: 59

Candidate Starts for ANI8_68:

(18, 41003), (Start: 59 @40889 has 156 MA's), (Start: 63 @40880 has 14 MA's), (69, 40859), (74, 40841), (81, 40826), (138, 40637), (146, 40610), (151, 40586), (156, 40568),

Gene: AbbysRanger_59 Start: 40097, Stop: 39711, Start Num: 15

Candidate Starts for AbbysRanger_59:

(Start: 15 @40097 has 157 MA's), (117, 39938), (121, 39929), (138, 39845), (156, 39776),

Gene: Abdiel_61 Start: 40247, Stop: 39867, Start Num: 15

Candidate Starts for Abdiel_61:

(Start: 13 @40256 has 8 MA's), (Start: 15 @40247 has 157 MA's), (117, 40088), (118, 40085), (121, 40079), (138, 39995), (156, 39926),

Gene: Abscondus_118 Start: 67747, Stop: 68124, Start Num: 59

Candidate Starts for Abscondus_118:

(Start: 35 @67702 has 1 MA's), (Start: 59 @67747 has 156 MA's), (80, 67807), (138, 68005), (141, 68014), (142, 68017), (144, 68026), (156, 68074),

Gene: Achebe_58 Start: 40080, Stop: 39694, Start Num: 15

Candidate Starts for Achebe_58:

(Start: 15 @40080 has 157 MA's), (117, 39921), (121, 39912), (138, 39828), (156, 39759),

Gene: Acquire49_85 Start: 54457, Stop: 54870, Start Num: 59

Candidate Starts for Acquire49_85:

(Start: 59 @54457 has 156 MA's), (75, 54508), (78, 54514), (138, 54748), (144, 54769), (146, 54775), (156, 54817),

Gene: Adnama_80 Start: 48578, Stop: 48991, Start Num: 57

Candidate Starts for Adnama_80:

(Start: 57 @48578 has 139 MA's), (Start: 64 @48593 has 2 MA's), (114, 48740), (138, 48878),

Gene: Adzzy_67 Start: 39457, Stop: 39080, Start Num: 59

Candidate Starts for Adzzy_67:

(Start: 47 @39472 has 10 MA's), (Start: 59 @39457 has 156 MA's), (Start: 63 @39448 has 14 MA's), (69, 39427), (99, 39361), (117, 39298), (138, 39205), (156, 39136),

Gene: Aglet_68 Start: 40944, Stop: 40525, Start Num: 59

Candidate Starts for Aglet_68:

(1, 41292), (2, 41289), (4, 41250), (Start: 52 @40953 has 5 MA's), (Start: 59 @40944 has 156 MA's), (Start: 63 @40935 has 14 MA's), (101, 40842), (138, 40689), (156, 40620),

Gene: AgronaGT15_66 Start: 40792, Stop: 40373, Start Num: 59

Candidate Starts for AgronaGT15_66:

(1, 41140), (2, 41137), (4, 41098), (Start: 52 @40801 has 5 MA's), (Start: 59 @40792 has 156 MA's), (Start: 63 @40783 has 14 MA's), (101, 40690), (138, 40537), (156, 40468), (180, 40390),

Gene: Albee_61 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Albee_61:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Alberto7_62 Start: 40580, Stop: 40200, Start Num: 15

Candidate Starts for Alberto7_62:

(Start: 15 @40580 has 157 MA's), (117, 40421), (121, 40412), (138, 40328), (156, 40259), (157, 40253),

Gene: Alone3_172 Start: 89660, Stop: 90058, Start Num: 59

Candidate Starts for Alone3_172:

(Start: 59 @89660 has 156 MA's), (Start: 64 @89672 has 2 MA's), (89, 89756), (92, 89762), (99, 89786), (138, 89927), (145, 89951), (154, 89996), (158, 90008), (169, 90041),

Gene: Amao_76 Start: 47972, Stop: 48385, Start Num: 57
Candidate Starts for Amao_76:
(Start: 57 @47972 has 139 MA's), (Start: 64 @47987 has 2 MA's), (114, 48134), (138, 48272),

Gene: AmericanBeauty_83 Start: 48721, Stop: 49134, Start Num: 57
Candidate Starts for AmericanBeauty_83:
(Start: 57 @48721 has 139 MA's), (Start: 64 @48736 has 2 MA's), (114, 48883), (138, 49021),

Gene: Aneem_64 Start: 39830, Stop: 39456, Start Num: 59
Candidate Starts for Aneem_64:
(1, 40166), (5, 40118), (10, 40061), (20, 39938), (23, 39911), (Start: 50 @39842 has 7 MA's), (Start: 59 @39830 has 156 MA's), (99, 39734), (117, 39671), (121, 39662), (125, 39650), (135, 39596), (138, 39578), (156, 39509),

Gene: Annyong_60 Start: 40288, Stop: 39908, Start Num: 15
Candidate Starts for Annyong_60:
(Start: 15 @40288 has 157 MA's), (117, 40129), (121, 40120), (138, 40036), (156, 39967),

Gene: Anthony_67 Start: 41229, Stop: 40837, Start Num: 52
Candidate Starts for Anthony_67:
(36, 41259), (Start: 52 @41229 has 5 MA's), (75, 41169), (138, 40971), (156, 40902),

Gene: Anubis_70 Start: 40839, Stop: 40411, Start Num: 52
Candidate Starts for Anubis_70:
(1, 41178), (2, 41175), (4, 41136), (6, 41127), (Start: 52 @40839 has 5 MA's), (Start: 59 @40830 has 156 MA's), (Start: 63 @40821 has 14 MA's), (101, 40728), (138, 40575), (156, 40506),

Gene: Aphelion_118 Start: 68628, Stop: 69005, Start Num: 59
Candidate Starts for Aphelion_118:
(Start: 35 @68583 has 1 MA's), (Start: 59 @68628 has 156 MA's), (80, 68688), (138, 68886), (141, 68895), (142, 68898), (144, 68907), (156, 68955), (163, 68985),

Gene: Appletree2_84 Start: 54041, Stop: 54460, Start Num: 59
Candidate Starts for Appletree2_84:
(Start: 59 @54041 has 156 MA's), (114, 54194), (138, 54332), (144, 54353), (146, 54359), (156, 54401),

Gene: Argent26_80 Start: 48359, Stop: 48772, Start Num: 57
Candidate Starts for Argent26_80:
(Start: 57 @48359 has 139 MA's), (Start: 64 @48374 has 2 MA's), (114, 48521), (138, 48659),

Gene: Arturo_59 Start: 40358, Stop: 39978, Start Num: 15
Candidate Starts for Arturo_59:
(Start: 15 @40358 has 157 MA's), (117, 40199), (121, 40190), (138, 40106), (156, 40037),

Gene: Asriel_75 Start: 46915, Stop: 47328, Start Num: 57
Candidate Starts for Asriel_75:
(Start: 57 @46915 has 139 MA's), (Start: 64 @46930 has 2 MA's), (114, 47077), (138, 47215),

Gene: Astro_74 Start: 41340, Stop: 40969, Start Num: 59
Candidate Starts for Astro_74:
(Start: 42 @41361 has 1 MA's), (Start: 59 @41340 has 156 MA's), (117, 41181), (129, 41148), (137, 41091), (138, 41088), (149, 41049), (156, 41019),

Gene: AugsMagnumOpus_70 Start: 40935, Stop: 40516, Start Num: 59

Candidate Starts for AugsMagnumOpus_70:

(1, 41283), (2, 41280), (4, 41241), (Start: 52 @40944 has 5 MA's), (Start: 59 @40935 has 156 MA's), (Start: 63 @40926 has 14 MA's), (101, 40833), (138, 40680), (156, 40611),

Gene: Auspice_124 Start: 65416, Stop: 65913, Start Num: 57

Candidate Starts for Auspice_124:

(22, 65314), (Start: 35 @65374 has 1 MA's), (Start: 57 @65416 has 139 MA's), (75, 65470), (85, 65494), (120, 65605), (125, 65620), (138, 65728), (144, 65749), (156, 65797),

Gene: AvadaKedavra_85 Start: 54536, Stop: 54949, Start Num: 59

Candidate Starts for AvadaKedavra_85:

(Start: 59 @54536 has 156 MA's), (75, 54587), (78, 54593), (138, 54827), (144, 54848), (146, 54854), (156, 54896),

Gene: AvatarAhPeg_58 Start: 39870, Stop: 39484, Start Num: 15

Candidate Starts for AvatarAhPeg_58:

(Start: 15 @39870 has 157 MA's), (117, 39711), (121, 39702), (138, 39618), (156, 39549),

Gene: Avle17_61 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Avle17_61:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919),

Gene: Aziz_139 Start: 66655, Stop: 67140, Start Num: 57

Candidate Starts for Aziz_139:

(Start: 50 @66646 has 7 MA's), (Start: 57 @66655 has 139 MA's), (104, 66769), (115, 66814), (120, 66832), (138, 66955), (144, 66976), (156, 67024),

Gene: Azrael100_127 Start: 63905, Stop: 64339, Start Num: 60

Candidate Starts for Azrael100_127:

(Start: 60 @63905 has 9 MA's), (Start: 64 @63914 has 2 MA's), (74, 63950), (75, 63953), (97, 64016), (110, 64064), (113, 64070), (120, 64094), (136, 64193), (138, 64208), (155, 64280),

Gene: B1_56 Start: 38826, Stop: 38434, Start Num: 13

Candidate Starts for B1_56:

(Start: 13 @38826 has 8 MA's), (Start: 15 @38817 has 157 MA's), (117, 38661), (135, 38586), (138, 38568), (156, 38499), (163, 38469), (172, 38451),

Gene: BRock_163 Start: 85073, Stop: 85462, Start Num: 59

Candidate Starts for BRock_163:

(26, 84986), (44, 85052), (Start: 59 @85073 has 156 MA's), (Start: 63 @85082 has 14 MA's), (89, 85169), (138, 85331), (154, 85400), (158, 85412), (169, 85445),

Gene: BaboJay_73 Start: 47752, Stop: 48165, Start Num: 57

Candidate Starts for BaboJay_73:

(Start: 57 @47752 has 139 MA's), (Start: 64 @47767 has 2 MA's), (114, 47914), (138, 48052),

Gene: Baby16_61 Start: 40254, Stop: 39874, Start Num: 15

Candidate Starts for Baby16_61:

(Start: 15 @40254 has 157 MA's), (117, 40095), (121, 40086), (138, 40002), (156, 39933), (157, 39927),

Gene: BabyRay_64 Start: 40631, Stop: 40239, Start Num: 13

Candidate Starts for BabyRay_64:

(3, 40772), (Start: 13 @40631 has 8 MA's), (Start: 15 @40622 has 157 MA's), (81, 40559), (117, 40466), (138, 40373), (163, 40274), (176, 40244),

Gene: Bachita_120 Start: 68407, Stop: 68784, Start Num: 59

Candidate Starts for Bachita_120:

(Start: 35 @68362 has 1 MA's), (Start: 59 @68407 has 156 MA's), (80, 68467), (138, 68665), (141, 68674), (142, 68677), (156, 68734), (163, 68764),

Gene: Bachome_65 Start: 39822, Stop: 39436, Start Num: 50

Candidate Starts for Bachome_65:

(1, 40146), (5, 40098), (10, 40041), (20, 39918), (Start: 50 @39822 has 7 MA's), (Start: 59 @39810 has 156 MA's), (99, 39714), (117, 39651), (121, 39642), (125, 39630), (135, 39576), (138, 39558), (156, 39489),

Gene: Backyardigan_57 Start: 40113, Stop: 39727, Start Num: 15

Candidate Starts for Backyardigan_57:

(Start: 15 @40113 has 157 MA's), (117, 39954), (121, 39945), (138, 39861), (156, 39792),

Gene: BadStone_73 Start: 48121, Stop: 48534, Start Num: 57

Candidate Starts for BadStone_73:

(Start: 57 @48121 has 139 MA's), (Start: 64 @48136 has 2 MA's), (114, 48283), (138, 48421),

Gene: Badger_58 Start: 40081, Stop: 39695, Start Num: 15

Candidate Starts for Badger_58:

(Start: 15 @40081 has 157 MA's), (117, 39922), (121, 39913), (138, 39829), (156, 39760),

Gene: Balomoji_76 Start: 48682, Stop: 49095, Start Num: 57

Candidate Starts for Balomoji_76:

(Start: 57 @48682 has 139 MA's), (Start: 64 @48697 has 2 MA's), (114, 48844), (138, 48982),

Gene: BangNhom_60 Start: 40646, Stop: 40266, Start Num: 15

Candidate Starts for BangNhom_60:

(Start: 15 @40646 has 157 MA's), (117, 40487), (121, 40478), (138, 40394), (156, 40325),

Gene: Bantam_55 Start: 44365, Stop: 44757, Start Num: 50

Candidate Starts for Bantam_55:

(11, 44140), (Start: 48 @44362 has 3 MA's), (Start: 50 @44365 has 7 MA's), (137, 44623), (138, 44626),

Gene: Barbarian_75 Start: 46915, Stop: 47328, Start Num: 57

Candidate Starts for Barbarian_75:

(Start: 57 @46915 has 139 MA's), (Start: 64 @46930 has 2 MA's), (114, 47077), (138, 47215),

Gene: Bartimeaus_61 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Bartimeaus_61:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Bask21_76 Start: 47535, Stop: 47948, Start Num: 57

Candidate Starts for Bask21_76:

(Start: 57 @47535 has 139 MA's), (Start: 64 @47550 has 2 MA's), (114, 47697), (138, 47835),

Gene: Beauxregard13_66 Start: 40947, Stop: 40528, Start Num: 59

Candidate Starts for Beauxregard13_66:

(1, 41295), (2, 41292), (Start: 52 @40956 has 5 MA's), (Start: 59 @40947 has 156 MA's), (Start: 63 @40938 has 14 MA's), (101, 40845), (138, 40692), (156, 40623),

Gene: BellusTerra_62 Start: 40247, Stop: 39867, Start Num: 15

Candidate Starts for BellusTerra_62:

(Start: 13 @40256 has 8 MA's), (Start: 15 @40247 has 157 MA's), (117, 40088), (121, 40079), (138, 39995), (156, 39926), (157, 39920),

Gene: Bench_79 Start: 48219, Stop: 48632, Start Num: 57

Candidate Starts for Bench_79:

(Start: 57 @48219 has 139 MA's), (Start: 64 @48234 has 2 MA's), (114, 48381), (138, 48519),

Gene: BigBubba_76 Start: 47931, Stop: 48344, Start Num: 57

Candidate Starts for BigBubba_76:

(Start: 57 @47931 has 139 MA's), (Start: 64 @47946 has 2 MA's), (114, 48093), (138, 48231),

Gene: BilboSwaggins_75 Start: 48560, Stop: 48973, Start Num: 57

Candidate Starts for BilboSwaggins_75:

(Start: 57 @48560 has 139 MA's), (Start: 64 @48575 has 2 MA's), (114, 48722), (138, 48860),

Gene: Blackbeetle_74 Start: 40595, Stop: 41086, Start Num: 47

Candidate Starts for Blackbeetle_74:

(Start: 47 @40595 has 10 MA's), (108, 40742), (138, 40898), (139, 40901), (149, 40937), (156, 40967), (165, 41000),

Gene: Blackmoor_60 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Blackmoor_60:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: BlueBird_66 Start: 40669, Stop: 40286, Start Num: 15

Candidate Starts for BlueBird_66:

(3, 40819), (Start: 13 @40678 has 8 MA's), (Start: 15 @40669 has 157 MA's), (117, 40513), (127, 40486), (135, 40438), (138, 40420), (163, 40321), (176, 40291),

Gene: BlueNGold_167 Start: 97256, Stop: 96897, Start Num: 65

Candidate Starts for BlueNGold_167:

(Start: 65 @97256 has 5 MA's), (67, 97247), (68, 97244), (77, 97214), (86, 97193), (105, 97139), (138, 97022), (141, 97013), (144, 97001), (149, 96983),

Gene: Bombshell_61 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Bombshell_61:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919), (157, 39913),

Gene: Bongo_123 Start: 65032, Stop: 65529, Start Num: 57

Candidate Starts for Bongo_123:

(22, 64930), (Start: 35 @64990 has 1 MA's), (Start: 57 @65032 has 139 MA's), (75, 65086), (85, 65110), (120, 65221), (125, 65236), (138, 65344), (144, 65365), (156, 65413),

Gene: Boopy_170 Start: 97267, Stop: 96908, Start Num: 65

Candidate Starts for Boopy_170:

(Start: 65 @97267 has 5 MA's), (67, 97258), (68, 97255), (77, 97225), (86, 97204), (105, 97150), (138, 97033), (141, 97024), (144, 97012), (149, 96994),

Gene: Bowtie_64 Start: 39837, Stop: 39463, Start Num: 59

Candidate Starts for Bowtie_64:

(1, 40173), (5, 40125), (10, 40068), (20, 39945), (Start: 50 @39849 has 7 MA's), (Start: 59 @39837 has 156 MA's), (117, 39678), (121, 39669), (135, 39603), (138, 39585), (156, 39516),

Gene: BreSam8_67 Start: 40937, Stop: 40518, Start Num: 59

Candidate Starts for BreSam8_67:

(1, 41285), (2, 41282), (Start: 52 @40946 has 5 MA's), (Start: 59 @40937 has 156 MA's), (Start: 63 @40928 has 14 MA's), (101, 40835), (138, 40682), (156, 40613),

Gene: Bricole_126 Start: 65180, Stop: 65677, Start Num: 57

Candidate Starts for Bricole_126:

(22, 65078), (Start: 35 @65138 has 1 MA's), (Start: 57 @65180 has 139 MA's), (75, 65234), (85, 65258), (120, 65369), (125, 65384), (138, 65492), (144, 65513), (156, 65561),

Gene: Bromden_87 Start: 56046, Stop: 56465, Start Num: 55

Candidate Starts for Bromden_87:

(46, 56034), (Start: 55 @56046 has 5 MA's), (75, 56103), (85, 56127), (94, 56148), (114, 56205), (122, 56226), (138, 56343), (156, 56412),

Gene: Broseidon_61 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Broseidon_61:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Bruin_73 Start: 47095, Stop: 47508, Start Num: 57

Candidate Starts for Bruin_73:

(Start: 57 @47095 has 139 MA's), (Start: 64 @47110 has 2 MA's), (114, 47257), (138, 47395),

Gene: Bruiser_60 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Bruiser_60:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922),

Gene: BubbleTrouble_60 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for BubbleTrouble_60:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Buck_77 Start: 48800, Stop: 49213, Start Num: 57

Candidate Starts for Buck_77:

(Start: 57 @48800 has 139 MA's), (Start: 64 @48815 has 2 MA's), (114, 48962), (138, 49100),

Gene: Bud_62 Start: 39384, Stop: 39010, Start Num: 59

Candidate Starts for Bud_62:

(1, 39720), (5, 39672), (10, 39615), (20, 39492), (23, 39465), (Start: 50 @39396 has 7 MA's), (Start: 59 @39384 has 156 MA's), (99, 39288), (117, 39225), (121, 39216), (125, 39204), (135, 39150), (138, 39132), (156, 39063),

Gene: Bugatti_64 Start: 40669, Stop: 40286, Start Num: 15

Candidate Starts for Bugatti_64:

(3, 40819), (Start: 13 @40678 has 8 MA's), (Start: 15 @40669 has 157 MA's), (117, 40513), (127, 40486), (135, 40438), (138, 40420), (163, 40321), (176, 40291),

Gene: BugsBunny_76 Start: 48642, Stop: 49040, Start Num: 64

Candidate Starts for BugsBunny_76:

(Start: 57 @48627 has 139 MA's), (Start: 64 @48642 has 2 MA's), (114, 48789), (138, 48927),

Gene: Bumblebee11_58 Start: 40083, Stop: 39697, Start Num: 15

Candidate Starts for Bumblebee11_58:

(Start: 15 @40083 has 157 MA's), (117, 39924), (121, 39915), (138, 39831), (156, 39762),

Gene: Burger_59 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Burger_59:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: BuzzBuzz_63 Start: 40962, Stop: 40552, Start Num: 63

Candidate Starts for BuzzBuzz_63:

(1, 41319), (2, 41316), (4, 41277), (Start: 52 @40980 has 5 MA's), (Start: 59 @40971 has 156 MA's), (Start: 63 @40962 has 14 MA's), (101, 40869), (138, 40716), (156, 40647), (163, 40617),

Gene: Bxz2_62 Start: 40978, Stop: 40559, Start Num: 59

Candidate Starts for Bxz2_62:

(1, 41326), (2, 41323), (4, 41284), (Start: 52 @40987 has 5 MA's), (Start: 59 @40978 has 156 MA's), (Start: 63 @40969 has 14 MA's), (101, 40876), (138, 40723), (156, 40654), (180, 40576),

Gene: C3_61 Start: 40889, Stop: 40512, Start Num: 59

Candidate Starts for C3_61:

(18, 41003), (Start: 59 @40889 has 156 MA's), (Start: 63 @40880 has 14 MA's), (69, 40859), (74, 40841), (81, 40826), (138, 40637), (146, 40610), (151, 40586), (156, 40568),

Gene: Cactus_79 Start: 47576, Stop: 47989, Start Num: 57

Candidate Starts for Cactus_79:

(Start: 57 @47576 has 139 MA's), (Start: 64 @47591 has 2 MA's), (114, 47738), (138, 47876),

Gene: Caelakin_60 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Caelakin_60:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922),

Gene: Camperdownii_59 Start: 39917, Stop: 39537, Start Num: 15

Candidate Starts for Camperdownii_59:

(Start: 15 @39917 has 157 MA's), (117, 39758), (121, 39749), (138, 39665), (156, 39596), (157, 39590),

Gene: Caraxes_65 Start: 39205, Stop: 38822, Start Num: 59

Candidate Starts for Caraxes_65:

(18, 39319), (Start: 47 @39220 has 10 MA's), (Start: 59 @39205 has 156 MA's), (74, 39157), (102, 39103), (117, 39040), (138, 38947), (144, 38926), (156, 38878),

Gene: Cardigan_130 Start: 73527, Stop: 73958, Start Num: 59

Candidate Starts for Cardigan_130:

(Start: 59 @73527 has 156 MA's), (73, 73572), (75, 73578), (87, 73611), (138, 73806), (139, 73809), (141, 73815), (168, 73914), (177, 73938),

Gene: Caviar_63 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for Caviar_63:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: Cece_217 Start: 133054, Stop: 133446, Start Num: 56

Candidate Starts for Cece_217:

(29, 133003), (Start: 56 @133054 has 4 MA's), (135, 133285), (138, 133303), (163, 133402), (165, 133405),

Gene: CentreCat_61 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for CentreCat_61:

(Start: 15 @40246 has 157 MA's), (117, 40087), (121, 40078), (138, 39994), (156, 39925), (157, 39919),

Gene: Cerulean_62 Start: 40647, Stop: 40267, Start Num: 15

Candidate Starts for Cerulean_62:

(Start: 15 @40647 has 157 MA's), (117, 40488), (121, 40479), (138, 40395), (156, 40326),

Gene: ChampagnePapi_63 Start: 40646, Stop: 40266, Start Num: 15

Candidate Starts for ChampagnePapi_63:

(Start: 15 @40646 has 157 MA's), (117, 40487), (121, 40478), (138, 40394), (156, 40325),

Gene: Chaph_61 Start: 40254, Stop: 39874, Start Num: 15

Candidate Starts for Chaph_61:

(Start: 15 @40254 has 157 MA's), (117, 40095), (121, 40086), (138, 40002), (156, 39933), (157, 39927),

Gene: Chaser_85 Start: 54673, Stop: 55089, Start Num: 55

Candidate Starts for Chaser_85:

(46, 54661), (Start: 55 @54673 has 5 MA's), (85, 54751), (94, 54772), (114, 54829), (122, 54850), (134, 54940), (138, 54967), (156, 55036),

Gene: Che12_66 Start: 39418, Stop: 39041, Start Num: 59

Candidate Starts for Che12_66:

(Start: 47 @39433 has 10 MA's), (Start: 59 @39418 has 156 MA's), (Start: 63 @39409 has 14 MA's), (69, 39388), (99, 39322), (117, 39259), (138, 39166), (151, 39115), (156, 39097), (163, 39067),

Gene: ChosenOne_76 Start: 47576, Stop: 47989, Start Num: 57

Candidate Starts for ChosenOne_76:

(Start: 57 @47576 has 139 MA's), (Start: 64 @47591 has 2 MA's), (114, 47738), (138, 47876),

Gene: ChotaBhai_76 Start: 47900, Stop: 48313, Start Num: 57

Candidate Starts for ChotaBhai_76:

(Start: 57 @47900 has 139 MA's), (Start: 64 @47915 has 2 MA's), (125, 48092), (138, 48200), (146, 48227),

Gene: CicholasNage_82 Start: 54121, Stop: 54534, Start Num: 59

Candidate Starts for CicholasNage_82:

(Start: 59 @54121 has 156 MA's), (75, 54172), (78, 54178), (138, 54412), (144, 54433), (146, 54439), (156, 54481),

Gene: Cici_59 Start: 40098, Stop: 39712, Start Num: 15

Candidate Starts for Cici_59:

(Start: 15 @40098 has 157 MA's), (117, 39939), (121, 39930), (138, 39846), (156, 39777),

Gene: Cindaradix_56 Start: 39716, Stop: 39336, Start Num: 15

Candidate Starts for Cindaradix_56:

(Start: 15 @39716 has 157 MA's), (71, 39680), (117, 39557), (118, 39554), (121, 39548), (138, 39464), (156, 39395),

Gene: Cintron_60 Start: 40223, Stop: 39843, Start Num: 59

Candidate Starts for Cintron_60:

(Start: 59 @40223 has 156 MA's), (Start: 63 @40214 has 14 MA's), (117, 40064), (121, 40055), (138, 39971), (156, 39902),

Gene: Circum_92 Start: 52997, Stop: 53359, Start Num: 60

Candidate Starts for Circum_92:

(Start: 60 @52997 has 9 MA's), (76, 53042), (83, 53057), (138, 53231), (173, 53348),

Gene: Citius_61 Start: 40264, Stop: 39884, Start Num: 15

Candidate Starts for Citius_61:

(Start: 15 @40264 has 157 MA's), (117, 40105), (121, 40096), (138, 40012), (156, 39943), (157, 39937),

Gene: Cjw1_76 Start: 49273, Stop: 49686, Start Num: 57

Candidate Starts for Cjw1_76:

(Start: 57 @49273 has 139 MA's), (Start: 64 @49288 has 2 MA's), (114, 49435), (138, 49573),

Gene: Clarenza_60 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Clarenza_60:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919), (157, 39913),

Gene: ClubL_119 Start: 67337, Stop: 67714, Start Num: 59

Candidate Starts for ClubL_119:

(Start: 35 @67292 has 1 MA's), (Start: 59 @67337 has 156 MA's), (80, 67397), (138, 67595), (141, 67604), (142, 67607), (144, 67616), (156, 67664),

Gene: Cocoaberry_61 Start: 40247, Stop: 39867, Start Num: 15

Candidate Starts for Cocoaberry_61:

(Start: 15 @40247 has 157 MA's), (117, 40088), (121, 40079), (138, 39995), (156, 39926),

Gene: Colbster_65 Start: 40947, Stop: 40528, Start Num: 59

Candidate Starts for Colbster_65:

(1, 41295), (2, 41292), (Start: 52 @40956 has 5 MA's), (Start: 59 @40947 has 156 MA's), (Start: 63 @40938 has 14 MA's), (101, 40845), (138, 40692), (156, 40623),

Gene: Command613_78 Start: 48615, Stop: 49028, Start Num: 57

Candidate Starts for Command613_78:

(Start: 57 @48615 has 139 MA's), (Start: 64 @48630 has 2 MA's), (114, 48777), (138, 48915),

Gene: Commander_60 Start: 40242, Stop: 39862, Start Num: 15
Candidate Starts for Commander_60:
(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921), (157, 39915),

Gene: Connomayer_61 Start: 40243, Stop: 39863, Start Num: 15
Candidate Starts for Connomayer_61:
(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Contagion_72 Start: 47376, Stop: 47789, Start Num: 57
Candidate Starts for Contagion_72:
(Start: 57 @47376 has 139 MA's), (Start: 64 @47391 has 2 MA's), (114, 47538), (138, 47676),

Gene: Cookies_73 Start: 47757, Stop: 48170, Start Num: 57
Candidate Starts for Cookies_73:
(Start: 57 @47757 has 139 MA's), (Start: 64 @47772 has 2 MA's), (125, 47949), (138, 48057), (146, 48084),

Gene: Cosmo_135 Start: 64335, Stop: 64769, Start Num: 60
Candidate Starts for Cosmo_135:
(Start: 60 @64335 has 9 MA's), (Start: 64 @64344 has 2 MA's), (74, 64380), (75, 64383), (97, 64446), (110, 64494), (113, 64500), (120, 64524), (136, 64623), (138, 64638), (155, 64710),

Gene: CrystalP_75 Start: 48560, Stop: 48973, Start Num: 57
Candidate Starts for CrystalP_75:
(Start: 57 @48560 has 139 MA's), (Start: 64 @48575 has 2 MA's), (114, 48722), (138, 48860),

Gene: Cucurbita_119 Start: 68902, Stop: 69279, Start Num: 59
Candidate Starts for Cucurbita_119:
(Start: 35 @68857 has 1 MA's), (Start: 59 @68902 has 156 MA's), (80, 68962), (138, 69160), (141, 69169), (142, 69172), (144, 69181), (156, 69229), (163, 69259),

Gene: Cullens_67 Start: 40943, Stop: 40524, Start Num: 59
Candidate Starts for Cullens_67:
(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: Culver_119 Start: 67097, Stop: 67474, Start Num: 59
Candidate Starts for Culver_119:
(Start: 35 @67052 has 1 MA's), (Start: 59 @67097 has 156 MA's), (80, 67157), (138, 67355), (141, 67364), (142, 67367), (144, 67376), (156, 67424), (163, 67454),

Gene: Czyszczonek1_77 Start: 48082, Stop: 48495, Start Num: 57
Candidate Starts for Czyszczonek1_77:
(Start: 57 @48082 has 139 MA's), (Start: 64 @48097 has 2 MA's), (114, 48244), (138, 48382),

Gene: D29_61 Start: 40913, Stop: 40536, Start Num: 59
Candidate Starts for D29_61:
(18, 41027), (Start: 47 @40928 has 10 MA's), (Start: 59 @40913 has 156 MA's), (75, 40862), (101, 40814), (102, 40811), (117, 40754), (138, 40661), (139, 40658), (156, 40592),

Gene: D32_65 Start: 40913, Stop: 40536, Start Num: 59

Candidate Starts for D32_65:

(18, 41027), (Start: 47 @40928 has 10 MA's), (Start: 59 @40913 has 156 MA's), (75, 40862), (101, 40814), (102, 40811), (117, 40754), (138, 40661), (139, 40658), (156, 40592),

Gene: DBQu4n_66 Start: 40894, Stop: 40517, Start Num: 59

Candidate Starts for DBQu4n_66:

(18, 41008), (Start: 47 @40909 has 10 MA's), (Start: 59 @40894 has 156 MA's), (75, 40843), (101, 40795), (102, 40792), (117, 40735), (138, 40642), (139, 40639), (156, 40573),

Gene: DaHudson_66 Start: 40936, Stop: 40517, Start Num: 59

Candidate Starts for DaHudson_66:

(1, 41284), (2, 41281), (Start: 52 @40945 has 5 MA's), (Start: 59 @40936 has 156 MA's), (Start: 63 @40927 has 14 MA's), (101, 40834), (138, 40681), (156, 40612),

Gene: Daikon_78 Start: 48703, Stop: 49116, Start Num: 57

Candidate Starts for Daikon_78:

(Start: 57 @48703 has 139 MA's), (Start: 64 @48718 has 2 MA's), (114, 48865), (138, 49003),

Gene: Daishi_66 Start: 39812, Stop: 39393, Start Num: 59

Candidate Starts for Daishi_66:

(1, 40160), (2, 40157), (Start: 52 @39821 has 5 MA's), (Start: 59 @39812 has 156 MA's), (Start: 63 @39803 has 14 MA's), (101, 39710), (138, 39557), (156, 39488),

Gene: Danforth_74 Start: 41388, Stop: 41017, Start Num: 59

Candidate Starts for Danforth_74:

(Start: 42 @41409 has 1 MA's), (Start: 59 @41388 has 156 MA's), (117, 41229), (129, 41196), (137, 41139), (138, 41136), (149, 41097), (156, 41067),

Gene: Daredevil_46 Start: 39668, Stop: 40063, Start Num: 59

Candidate Starts for Daredevil_46:

(Start: 59 @39668 has 156 MA's), (130, 39860), (138, 39917), (139, 39920), (144, 39938),

Gene: Datway_59 Start: 40069, Stop: 39683, Start Num: 15

Candidate Starts for Datway_59:

(Start: 15 @40069 has 157 MA's), (117, 39910), (121, 39901), (138, 39817), (156, 39748),

Gene: Deano_59 Start: 40251, Stop: 39871, Start Num: 15

Candidate Starts for Deano_59:

(Start: 15 @40251 has 157 MA's), (117, 40092), (121, 40083), (138, 39999), (156, 39930), (157, 39924),

Gene: Dhanush_61 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for Dhanush_61:

(Start: 15 @40246 has 157 MA's), (117, 40087), (121, 40078), (138, 39994), (156, 39925), (157, 39919),

Gene: Dieselweasel_68 Start: 40946, Stop: 40527, Start Num: 59

Candidate Starts for Dieselweasel_68:

(1, 41294), (2, 41291), (Start: 52 @40955 has 5 MA's), (Start: 59 @40946 has 156 MA's), (Start: 63 @40937 has 14 MA's), (101, 40844), (138, 40691), (156, 40622),

Gene: Diminimus_125 Start: 65027, Stop: 65524, Start Num: 57

Candidate Starts for Diminimus_125:

(22, 64925), (Start: 35 @64985 has 1 MA's), (Start: 57 @65027 has 139 MA's), (Start: 63 @65039 has 14 MA's), (75, 65081), (85, 65105), (120, 65216), (125, 65231), (138, 65339), (144, 65360), (156, 65408),

Gene: DirkDirk_82 Start: 53621, Stop: 54040, Start Num: 59

Candidate Starts for DirkDirk_82:

(Start: 59 @53621 has 156 MA's), (114, 53774), (138, 53912), (144, 53933), (146, 53939), (156, 53981),

Gene: DirtyDunning_60 Start: 40258, Stop: 39878, Start Num: 15

Candidate Starts for DirtyDunning_60:

(Start: 15 @40258 has 157 MA's), (117, 40099), (121, 40090), (138, 40006), (156, 39937),

Gene: Dixon_73 Start: 40908, Stop: 40537, Start Num: 59

Candidate Starts for Dixon_73:

(Start: 42 @40929 has 1 MA's), (Start: 59 @40908 has 156 MA's), (117, 40749), (129, 40716), (137, 40659), (138, 40656), (149, 40617), (156, 40587),

Gene: DoctorDiddles_75 Start: 47944, Stop: 48357, Start Num: 57

Candidate Starts for DoctorDiddles_75:

(Start: 57 @47944 has 139 MA's), (Start: 64 @47959 has 2 MA's), (125, 48136), (138, 48244), (146, 48271),

Gene: Dorin_221 Start: 115745, Stop: 116227, Start Num: 30

Candidate Starts for Dorin_221:

(Start: 30 @115745 has 1 MA's), (33, 115751), (43, 115775), (61, 115802), (99, 115913), (106, 115949), (120, 115994), (138, 116099), (140, 116108), (145, 116132),

Gene: DrDrey_76 Start: 49001, Stop: 49414, Start Num: 57

Candidate Starts for DrDrey_76:

(Start: 57 @49001 has 139 MA's), (Start: 64 @49016 has 2 MA's), (114, 49163), (138, 49301),

Gene: DrWorm_23 Start: 15744, Stop: 16166, Start Num: 84

Candidate Starts for DrWorm_23:

(70, 15699), (81, 15735), (84, 15744), (88, 15759), (119, 15873), (121, 15879), (131, 15927), (138, 15993), (155, 16086), (159, 16098), (171, 16134), (178, 16158),

Gene: DroogsArmy_58 Start: 42717, Stop: 42268, Start Num: 59

Candidate Starts for DroogsArmy_58:

(Start: 59 @42717 has 156 MA's), (66, 42702), (81, 42654), (117, 42558), (125, 42537), (126, 42534), (138, 42465), (139, 42462), (149, 42426), (156, 42396), (175, 42339), (186, 42285),

Gene: Druantia_60 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for Druantia_60:

(Start: 15 @40246 has 157 MA's), (117, 40087), (121, 40078), (138, 39994), (156, 39925), (157, 39919),

Gene: Dulcita_125 Start: 65028, Stop: 65525, Start Num: 57

Candidate Starts for Dulcita_125:

(22, 64926), (Start: 35 @64986 has 1 MA's), (Start: 57 @65028 has 139 MA's), (Start: 63 @65040 has 14 MA's), (75, 65082), (85, 65106), (120, 65217), (125, 65232), (138, 65340), (144, 65361), (156, 65409),

Gene: Dumbo_76 Start: 47481, Stop: 47894, Start Num: 57

Candidate Starts for Dumbo_76:

(Start: 57 @47481 has 139 MA's), (Start: 64 @47496 has 2 MA's), (114, 47643), (138, 47781),

Gene: Duplo_66 Start: 40950, Stop: 40573, Start Num: 59

Candidate Starts for Duplo_66:

(18, 41064), (Start: 59 @40950 has 156 MA's), (75, 40899), (101, 40851), (102, 40848), (117, 40791), (138, 40698), (139, 40695), (156, 40629),

Gene: Dusk_73 Start: 47781, Stop: 48194, Start Num: 57

Candidate Starts for Dusk_73:

(Start: 57 @47781 has 139 MA's), (Start: 64 @47796 has 2 MA's), (114, 47943), (138, 48081),

Gene: Dusty_115 Start: 67309, Stop: 67686, Start Num: 59

Candidate Starts for Dusty_115:

(Start: 35 @67264 has 1 MA's), (Start: 59 @67309 has 156 MA's), (80, 67369), (138, 67567), (141, 67576), (142, 67579), (144, 67588), (156, 67636),

Gene: DyoEdafos_89 Start: 55386, Stop: 55802, Start Num: 55

Candidate Starts for DyoEdafos_89:

(Start: 55 @55386 has 5 MA's), (85, 55464), (91, 55473), (94, 55485), (122, 55563), (138, 55680), (156, 55749),

Gene: Eagle_60 Start: 40268, Stop: 39888, Start Num: 15

Candidate Starts for Eagle_60:

(Start: 13 @40277 has 8 MA's), (Start: 15 @40268 has 157 MA's), (117, 40109), (118, 40106), (121, 40100), (138, 40016), (156, 39947),

Gene: Eapen_61 Start: 40238, Stop: 39858, Start Num: 15

Candidate Starts for Eapen_61:

(Start: 15 @40238 has 157 MA's), (117, 40079), (121, 40070), (138, 39986), (156, 39917), (157, 39911),

Gene: Easy2Say_77 Start: 49025, Stop: 49438, Start Num: 57

Candidate Starts for Easy2Say_77:

(Start: 57 @49025 has 139 MA's), (Start: 64 @49040 has 2 MA's), (114, 49187), (138, 49325),

Gene: Ebony_63 Start: 39413, Stop: 39027, Start Num: 50

Candidate Starts for Ebony_63:

(1, 39737), (5, 39689), (10, 39632), (17, 39527), (20, 39509), (23, 39482), (Start: 50 @39413 has 7 MA's), (Start: 59 @39401 has 156 MA's), (99, 39305), (117, 39242), (120, 39236), (121, 39233), (125, 39221), (135, 39167), (138, 39149), (156, 39080),

Gene: EhyElimayoE_114 Start: 75438, Stop: 74971, Start Num: 31

Candidate Starts for EhyElimayoE_114:

(25, 75474), (Start: 31 @75438 has 6 MA's), (43, 75411), (66, 75372), (75, 75336), (102, 75288), (137, 75144), (138, 75141), (163, 75033), (182, 74982),

Gene: Elite2014_75 Start: 47575, Stop: 47988, Start Num: 57

Candidate Starts for Elite2014_75:

(Start: 57 @47575 has 139 MA's), (Start: 64 @47590 has 2 MA's), (114, 47737), (138, 47875),

Gene: Elph10_76 Start: 47580, Stop: 47993, Start Num: 57

Candidate Starts for Elph10_76:

(Start: 57 @47580 has 139 MA's), (Start: 64 @47595 has 2 MA's), (114, 47742), (138, 47880),

Gene: Elver_239 Start: 108033, Stop: 108416, Start Num: 57

Candidate Starts for Elver_239:

(Start: 57 @108033 has 139 MA's), (79, 108093), (102, 108141), (138, 108294), (153, 108357),

Gene: Emmina_76 Start: 47482, Stop: 47895, Start Num: 57

Candidate Starts for Emmina_76:

(Start: 57 @47482 has 139 MA's), (Start: 64 @47497 has 2 MA's), (114, 47644), (138, 47782),

Gene: Engineer_119 Start: 68380, Stop: 68757, Start Num: 59

Candidate Starts for Engineer_119:

(Start: 35 @68335 has 1 MA's), (Start: 59 @68380 has 156 MA's), (80, 68440), (138, 68638), (141, 68647), (142, 68650), (144, 68659), (156, 68707),

Gene: EniyanLRS_127 Start: 63903, Stop: 64340, Start Num: 60

Candidate Starts for EniyanLRS_127:

(Start: 55 @63894 has 5 MA's), (Start: 60 @63903 has 9 MA's), (Start: 64 @63912 has 2 MA's), (74, 63948), (75, 63951), (97, 64014), (110, 64062), (113, 64068), (120, 64092), (136, 64191), (138, 64206), (155, 64278),

Gene: EpicPhail_68 Start: 40947, Stop: 40528, Start Num: 59

Candidate Starts for EpicPhail_68:

(1, 41295), (2, 41292), (Start: 52 @40956 has 5 MA's), (Start: 59 @40947 has 156 MA's), (Start: 63 @40938 has 14 MA's), (101, 40845), (138, 40692), (156, 40623),

Gene: Eris_60 Start: 40258, Stop: 39878, Start Num: 15

Candidate Starts for Eris_60:

(Start: 15 @40258 has 157 MA's), (117, 40099), (121, 40090), (138, 40006), (156, 39937),

Gene: Eros_61 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Eros_61:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Estes_140 Start: 66866, Stop: 67351, Start Num: 57

Candidate Starts for Estes_140:

(Start: 50 @66857 has 7 MA's), (Start: 57 @66866 has 139 MA's), (104, 66980), (107, 67001), (120, 67043), (138, 67166), (144, 67187), (156, 67235), (163, 67265),

Gene: Et2Brutus_62 Start: 39364, Stop: 38990, Start Num: 59

Candidate Starts for Et2Brutus_62:

(1, 39700), (5, 39652), (10, 39595), (20, 39472), (23, 39445), (Start: 50 @39376 has 7 MA's), (Start: 59 @39364 has 156 MA's), (99, 39268), (117, 39205), (121, 39196), (125, 39184), (135, 39130), (138, 39112), (156, 39043),

Gene: Eureka_74 Start: 48046, Stop: 48459, Start Num: 57

Candidate Starts for Eureka_74:

(Start: 57 @48046 has 139 MA's), (Start: 64 @48061 has 2 MA's), (114, 48208), (138, 48346),

Gene: Eurydice_62 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Eurydice_62:

(Start: 13 @40252 has 8 MA's), (Start: 15 @40243 has 157 MA's), (117, 40084), (118, 40081), (121, 40075), (138, 39991), (156, 39922),

Gene: Expelliarmus_71 Start: 41112, Stop: 40741, Start Num: 59

Candidate Starts for Expelliarmus_71:

(Start: 42 @41133 has 1 MA's), (Start: 59 @41112 has 156 MA's), (117, 40953), (129, 40920), (137, 40863), (138, 40860), (149, 40821), (156, 40791),

Gene: Farber_67 Start: 40942, Stop: 40514, Start Num: 52

Candidate Starts for Farber_67:

(1, 41281), (2, 41278), (4, 41239), (Start: 52 @40942 has 5 MA's), (Start: 59 @40933 has 156 MA's), (Start: 63 @40924 has 14 MA's), (101, 40831), (138, 40678), (156, 40609), (180, 40531),

Gene: Fernando_67 Start: 40943, Stop: 40524, Start Num: 59

Candidate Starts for Fernando_67:

(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: Fibonacci_63 Start: 39370, Stop: 38996, Start Num: 59

Candidate Starts for Fibonacci_63:

(1, 39706), (5, 39658), (10, 39601), (20, 39478), (23, 39451), (Start: 50 @39382 has 7 MA's), (Start: 59 @39370 has 156 MA's), (99, 39274), (117, 39211), (121, 39202), (125, 39190), (135, 39136), (138, 39118), (156, 39049),

Gene: Filch_77 Start: 47507, Stop: 47920, Start Num: 57

Candidate Starts for Filch_77:

(Start: 57 @47507 has 139 MA's), (Start: 64 @47522 has 2 MA's), (114, 47669), (138, 47807),

Gene: Finemlucis_87 Start: 56813, Stop: 57238, Start Num: 48

Candidate Starts for Finemlucis_87:

(Start: 48 @56813 has 3 MA's), (Start: 55 @56822 has 5 MA's), (81, 56888), (85, 56900), (94, 56921), (114, 56978), (122, 56999), (134, 57089), (138, 57116), (156, 57185),

Gene: FireRed_80 Start: 49069, Stop: 49482, Start Num: 57

Candidate Starts for FireRed_80:

(Start: 57 @49069 has 139 MA's), (Start: 64 @49084 has 2 MA's), (114, 49231), (138, 49369),

Gene: Flaverint_64 Start: 39828, Stop: 39454, Start Num: 59

Candidate Starts for Flaverint_64:

(1, 40164), (5, 40116), (10, 40059), (20, 39936), (Start: 50 @39840 has 7 MA's), (Start: 59 @39828 has 156 MA's), (117, 39669), (121, 39660), (135, 39594), (138, 39576), (156, 39507),

Gene: Florean_61 Start: 40242, Stop: 39862, Start Num: 15

Candidate Starts for Florean_61:

(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921), (157, 39915),

Gene: Flux_61 Start: 40242, Stop: 39862, Start Num: 15

Candidate Starts for Flux_61:

(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921), (157, 39915),

Gene: Flypotenuse_72 Start: 47566, Stop: 47979, Start Num: 57

Candidate Starts for Flypotenuse_72:

(Start: 57 @47566 has 139 MA's), (Start: 64 @47581 has 2 MA's), (114, 47728), (138, 47866),

Gene: Forza_171 Start: 97184, Stop: 96825, Start Num: 65

Candidate Starts for Forza_171:

(Start: 65 @97184 has 5 MA's), (67, 97175), (68, 97172), (77, 97142), (86, 97121), (105, 97067), (138, 96950), (141, 96941), (144, 96929), (149, 96911),

Gene: Francesca_221 Start: 116394, Stop: 116876, Start Num: 30

Candidate Starts for Francesca_221:

(Start: 30 @116394 has 1 MA's), (33, 116400), (43, 116424), (61, 116451), (99, 116562), (106, 116598), (120, 116643), (138, 116748), (140, 116757), (145, 116781),

Gene: Frankenweenie_123 Start: 80415, Stop: 79951, Start Num: 31

Candidate Starts for Frankenweenie_123:

(Start: 31 @80415 has 6 MA's), (46, 80382), (66, 80352), (84, 80295), (102, 80268), (138, 80121), (143, 80106), (146, 80094), (163, 80013), (182, 79962),

Gene: Fred313_62 Start: 40274, Stop: 39882, Start Num: 13

Candidate Starts for Fred313_62:

(3, 40415), (Start: 13 @40274 has 8 MA's), (Start: 15 @40265 has 157 MA's), (117, 40109), (135, 40034), (138, 40016), (163, 39917),

Gene: Funston_60 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Funston_60:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922),

Gene: GMA3_55 Start: 48480, Stop: 48010, Start Num: 46

Candidate Starts for GMA3_55:

(46, 48480), (73, 48420), (138, 48225), (156, 48156), (160, 48144), (162, 48138), (179, 48081),

Gene: Gadost_61 Start: 40247, Stop: 39867, Start Num: 15

Candidate Starts for Gadost_61:

(Start: 15 @40247 has 157 MA's), (117, 40088), (121, 40079), (138, 39995), (156, 39926),

Gene: Gage_78 Start: 48359, Stop: 48772, Start Num: 57

Candidate Starts for Gage_78:

(Start: 57 @48359 has 139 MA's), (Start: 64 @48374 has 2 MA's), (114, 48521), (138, 48659),

Gene: GardenSalsa_140 Start: 66997, Stop: 67482, Start Num: 57

Candidate Starts for GardenSalsa_140:

(Start: 50 @66988 has 7 MA's), (Start: 57 @66997 has 139 MA's), (104, 67111), (138, 67297), (144, 67318), (146, 67324), (156, 67366), (163, 67396),

Gene: Gator_74 Start: 48412, Stop: 48825, Start Num: 57

Candidate Starts for Gator_74:

(Start: 57 @48412 has 139 MA's), (Start: 64 @48427 has 2 MA's), (114, 48574), (138, 48712),

Gene: Gattaca_71 Start: 40699, Stop: 41190, Start Num: 47

Candidate Starts for Gattaca_71:

(Start: 47 @40699 has 10 MA's), (108, 40846), (138, 41002), (139, 41005), (149, 41041), (156, 41071), (165, 41104),

Gene: Gemini_81 Start: 48876, Stop: 49289, Start Num: 57

Candidate Starts for Gemini_81:

(Start: 57 @48876 has 139 MA's), (Start: 64 @48891 has 2 MA's), (114, 49038), (138, 49176),

Gene: Gemma_66 Start: 40825, Stop: 40406, Start Num: 59

Candidate Starts for Gemma_66:

(8, 41080), (Start: 52 @40834 has 5 MA's), (Start: 59 @40825 has 156 MA's), (Start: 63 @40816 has 14 MA's), (101, 40723), (138, 40570), (156, 40501),

Gene: GenevaB15_142 Start: 66655, Stop: 67140, Start Num: 57

Candidate Starts for GenevaB15_142:

(Start: 50 @66646 has 7 MA's), (Start: 57 @66655 has 139 MA's), (104, 66769), (115, 66814), (120, 66832), (138, 66955), (144, 66976), (156, 67024),

Gene: GiJojo_160 Start: 88793, Stop: 89200, Start Num: 59

Candidate Starts for GiJojo_160:

(Start: 59 @88793 has 156 MA's), (72, 88832), (89, 88889), (136, 89054), (138, 89069), (145, 89093), (147, 89108), (154, 89138), (158, 89150), (164, 89174), (167, 89180),

Gene: Gilberta_64 Start: 39821, Stop: 39447, Start Num: 59

Candidate Starts for Gilberta_64:

(1, 40157), (5, 40109), (10, 40052), (20, 39929), (Start: 50 @39833 has 7 MA's), (Start: 59 @39821 has 156 MA's), (117, 39662), (121, 39653), (135, 39587), (138, 39569), (156, 39500),

Gene: GingkoMaracino_67 Start: 40820, Stop: 40410, Start Num: 63

Candidate Starts for GingkoMaracino_67:

(1, 41177), (2, 41174), (4, 41135), (6, 41126), (Start: 52 @40838 has 5 MA's), (Start: 59 @40829 has 156 MA's), (Start: 63 @40820 has 14 MA's), (101, 40727), (138, 40574), (156, 40505),

Gene: Giroux_63 Start: 40668, Stop: 40285, Start Num: 15

Candidate Starts for Giroux_63:

(3, 40818), (Start: 13 @40677 has 8 MA's), (Start: 15 @40668 has 157 MA's), (117, 40512), (127, 40485), (135, 40437), (138, 40419), (163, 40320), (176, 40290),

Gene: Glaske16_127 Start: 66146, Stop: 66643, Start Num: 57

Candidate Starts for Glaske16_127:

(22, 66044), (Start: 35 @66104 has 1 MA's), (Start: 57 @66146 has 139 MA's), (Start: 63 @66158 has 14 MA's), (75, 66200), (85, 66224), (120, 66335), (125, 66350), (138, 66458), (144, 66479), (156, 66527),

Gene: Glexan_75 Start: 48696, Stop: 49109, Start Num: 57

Candidate Starts for Glexan_75:

(Start: 57 @48696 has 139 MA's), (Start: 64 @48711 has 2 MA's), (114, 48858), (138, 48996),

Gene: Gmala1_74 Start: 58542, Stop: 58096, Start Num: 51

Candidate Starts for Gmala1_74:

(51, 58542), (74, 58485), (80, 58473), (112, 58389), (125, 58356), (138, 58284), (149, 58245), (152, 58224), (161, 58200),

Gene: GoCrazy_87 Start: 51181, Stop: 51546, Start Num: 60

Candidate Starts for GoCrazy_87:

(Start: 60 @51181 has 9 MA's), (138, 51418), (144, 51439), (173, 51535),

Gene: Goku_74 Start: 47775, Stop: 48188, Start Num: 57

Candidate Starts for Goku_74:

(Start: 57 @47775 has 139 MA's), (Start: 64 @47790 has 2 MA's), (114, 47937), (138, 48075),

Gene: GoldenSpark_80 Start: 48359, Stop: 48772, Start Num: 57

Candidate Starts for GoldenSpark_80:

(Start: 57 @48359 has 139 MA's), (Start: 64 @48374 has 2 MA's), (114, 48521), (138, 48659),

Gene: Goldilocks_79 Start: 47857, Stop: 48270, Start Num: 57

Candidate Starts for Goldilocks_79:

(Start: 57 @47857 has 139 MA's), (Start: 64 @47872 has 2 MA's), (114, 48019), (138, 48157),

Gene: GooberAzure_79 Start: 48359, Stop: 48772, Start Num: 57

Candidate Starts for GooberAzure_79:

(Start: 57 @48359 has 139 MA's), (Start: 64 @48374 has 2 MA's), (114, 48521), (138, 48659),

Gene: GordDuk1_81 Start: 59275, Stop: 58886, Start Num: 74

Candidate Starts for GordDuk1_81:

(51, 59332), (74, 59275), (80, 59263), (112, 59179), (125, 59146), (138, 59074), (149, 59035), (152, 59014), (161, 58990),

Gene: GordTnk2_81 Start: 59262, Stop: 58816, Start Num: 51

Candidate Starts for GordTnk2_81:

(51, 59262), (74, 59205), (80, 59193), (112, 59109), (125, 59076), (138, 59004), (149, 58965), (152, 58944), (161, 58920),

Gene: Grayson_55 Start: 20751, Stop: 20332, Start Num: 59

Candidate Starts for Grayson_55:

(Start: 59 @20751 has 156 MA's), (85, 20676), (116, 20586), (138, 20481), (157, 20406),

Gene: Grayson_56 Start: 21137, Stop: 20748, Start Num: 59

Candidate Starts for Grayson_56:

(Start: 52 @21146 has 5 MA's), (Start: 59 @21137 has 156 MA's), (111, 20984), (138, 20867), (144, 20846),

Gene: Grif_67 Start: 41018, Stop: 40599, Start Num: 59

Candidate Starts for Grif_67:

(1, 41366), (2, 41363), (Start: 52 @41027 has 5 MA's), (Start: 59 @41018 has 156 MA's), (Start: 63 @41009 has 14 MA's), (101, 40916), (138, 40763), (156, 40694),

Gene: Groundhog_73 Start: 41318, Stop: 40947, Start Num: 59

Candidate Starts for Groundhog_73:

(Start: 42 @41339 has 1 MA's), (Start: 59 @41318 has 156 MA's), (117, 41159), (129, 41126), (137, 41069), (138, 41066), (149, 41027), (156, 40997),

Gene: Groupthink_68 Start: 40829, Stop: 40410, Start Num: 59

Candidate Starts for Groupthink_68:

(Start: 52 @40838 has 5 MA's), (Start: 59 @40829 has 156 MA's), (Start: 63 @40820 has 14 MA's), (101, 40727), (138, 40574), (156, 40505),

Gene: Grub_67 Start: 40935, Stop: 40516, Start Num: 59

Candidate Starts for Grub_67:

(1, 41283), (2, 41280), (Start: 52 @40944 has 5 MA's), (Start: 59 @40935 has 156 MA's), (Start: 63 @40926 has 14 MA's), (101, 40833), (138, 40680), (156, 40611),

Gene: Grum1_66 Start: 40943, Stop: 40524, Start Num: 59

Candidate Starts for Grum1_66:

(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: GtownJaz_67 Start: 40945, Stop: 40526, Start Num: 59

Candidate Starts for GtownJaz_67:

(1, 41293), (2, 41290), (Start: 52 @40954 has 5 MA's), (Start: 59 @40945 has 156 MA's), (Start: 63 @40936 has 14 MA's), (101, 40843), (138, 40690), (156, 40621),

Gene: HINdeR_58 Start: 42418, Stop: 41969, Start Num: 59

Candidate Starts for HINdeR_58:

(Start: 59 @42418 has 156 MA's), (81, 42355), (117, 42259), (121, 42250), (138, 42166), (156, 42097), (186, 41986),

Gene: HamSlice_58 Start: 40241, Stop: 39861, Start Num: 15

Candidate Starts for HamSlice_58:

(Start: 15 @40241 has 157 MA's), (117, 40082), (118, 40079), (121, 40073), (138, 39989), (156, 39920),

Gene: HanKaySha_76 Start: 47660, Stop: 48073, Start Num: 57

Candidate Starts for HanKaySha_76:

(Start: 57 @47660 has 139 MA's), (Start: 64 @47675 has 2 MA's), (114, 47822), (138, 47960),

Gene: Hankly_92 Start: 52366, Stop: 52731, Start Num: 60

Candidate Starts for Hankly_92:

(Start: 60 @52366 has 9 MA's), (138, 52603), (144, 52624), (173, 52720),

Gene: Happiness_60 Start: 40229, Stop: 39849, Start Num: 15

Candidate Starts for Happiness_60:

(Start: 15 @40229 has 157 MA's), (117, 40070), (121, 40061), (138, 39977), (156, 39908),

Gene: Harella_76 Start: 49212, Stop: 49625, Start Num: 57

Candidate Starts for Harella_76:

(Start: 57 @49212 has 139 MA's), (Start: 64 @49227 has 2 MA's), (114, 49374), (138, 49512),

Gene: HashRod_68 Start: 40971, Stop: 40552, Start Num: 59

Candidate Starts for HashRod_68:

(1, 41319), (2, 41316), (4, 41277), (Start: 52 @40980 has 5 MA's), (Start: 59 @40971 has 156 MA's), (Start: 63 @40962 has 14 MA's), (101, 40869), (138, 40716), (156, 40647), (163, 40617),

Gene: HaveUMetTed_68 Start: 40814, Stop: 40395, Start Num: 59

Candidate Starts for HaveUMetTed_68:

(8, 41069), (Start: 52 @40823 has 5 MA's), (Start: 59 @40814 has 156 MA's), (Start: 63 @40805 has 14 MA's), (101, 40712), (138, 40559), (156, 40490),

Gene: Heathen_64 Start: 40360, Stop: 39977, Start Num: 15

Candidate Starts for Heathen_64:

(3, 40510), (Start: 13 @40369 has 8 MA's), (Start: 15 @40360 has 157 MA's), (117, 40204), (135, 40129), (138, 40111), (163, 40012),

Gene: HelDan_63 Start: 40585, Stop: 40193, Start Num: 13

Candidate Starts for HelDan_63:

(3, 40726), (Start: 13 @40585 has 8 MA's), (Start: 15 @40576 has 157 MA's), (117, 40420), (135, 40345), (138, 40327), (163, 40228),

Gene: Heliosoles_66 Start: 40832, Stop: 40413, Start Num: 59

Candidate Starts for Heliosoles_66:

(Start: 52 @40841 has 5 MA's), (Start: 59 @40832 has 156 MA's), (Start: 63 @40823 has 14 MA's), (101, 40730), (138, 40577), (156, 40508),

Gene: Henry_74 Start: 48000, Stop: 48413, Start Num: 57

Candidate Starts for Henry_74:

(Start: 57 @48000 has 139 MA's), (Start: 64 @48015 has 2 MA's), (114, 48162), (138, 48300),

Gene: Hercules11_67 Start: 40952, Stop: 40533, Start Num: 59

Candidate Starts for Hercules11_67:

(1, 41300), (2, 41297), (Start: 52 @40961 has 5 MA's), (Start: 59 @40952 has 156 MA's), (Start: 63 @40943 has 14 MA's), (101, 40850), (138, 40697), (156, 40628),

Gene: Highbury_75 Start: 47648, Stop: 48061, Start Num: 57

Candidate Starts for Highbury_75:

(Start: 57 @47648 has 139 MA's), (Start: 64 @47663 has 2 MA's), (114, 47810), (138, 47948),

Gene: Holli_60 Start: 40033, Stop: 39653, Start Num: 15

Candidate Starts for Holli_60:

(Start: 15 @40033 has 157 MA's), (117, 39874), (121, 39865), (138, 39781), (156, 39712), (157, 39706),

Gene: Holt_81 Start: 48773, Stop: 49186, Start Num: 57

Candidate Starts for Holt_81:

(Start: 57 @48773 has 139 MA's), (Start: 64 @48788 has 2 MA's), (114, 48935), (138, 49073),

Gene: Hookmount_63 Start: 40647, Stop: 40264, Start Num: 15

Candidate Starts for Hookmount_63:

(Start: 13 @40656 has 8 MA's), (Start: 15 @40647 has 157 MA's), (101, 40551), (117, 40491), (138, 40398), (163, 40299), (165, 40296), (176, 40269),

Gene: Hoonter_79 Start: 48359, Stop: 48772, Start Num: 57

Candidate Starts for Hoonter_79:

(Start: 57 @48359 has 139 MA's), (Start: 64 @48374 has 2 MA's), (114, 48521), (138, 48659),

Gene: Hokey_76 Start: 48192, Stop: 48605, Start Num: 57

Candidate Starts for Hokey_76:

(Start: 57 @48192 has 139 MA's), (Start: 64 @48207 has 2 MA's), (114, 48354), (138, 48492),

Gene: Houdini22_60 Start: 40247, Stop: 39867, Start Num: 15

Candidate Starts for Houdini22_60:

(Start: 15 @40247 has 157 MA's), (117, 40088), (121, 40079), (138, 39995), (156, 39926),

Gene: HufflyPuff_79 Start: 49025, Stop: 49438, Start Num: 57

Candidate Starts for HufflyPuff_79:

(Start: 57 @49025 has 139 MA's), (Start: 64 @49040 has 2 MA's), (114, 49187), (138, 49325),

Gene: Hutc2_62 Start: 39382, Stop: 38996, Start Num: 50

Candidate Starts for Hutc2_62:

(1, 39706), (5, 39658), (10, 39601), (20, 39478), (23, 39451), (Start: 50 @39382 has 7 MA's), (Start: 59 @39370 has 156 MA's), (99, 39274), (117, 39211), (121, 39202), (125, 39190), (135, 39136), (138, 39118), (156, 39049),

Gene: ICleared_60 Start: 40275, Stop: 39895, Start Num: 15

Candidate Starts for ICleared_60:

(Start: 15 @40275 has 157 MA's), (117, 40116), (121, 40107), (138, 40023), (156, 39954),

Gene: IHOP_74 Start: 48124, Stop: 48537, Start Num: 57

Candidate Starts for IHOP_74:

(Start: 57 @48124 has 139 MA's), (Start: 64 @48139 has 2 MA's), (114, 48286), (138, 48424),

Gene: IPhane7_122 Start: 65032, Stop: 65529, Start Num: 57

Candidate Starts for IPhane7_122:

(22, 64930), (Start: 35 @64990 has 1 MA's), (Start: 57 @65032 has 139 MA's), (75, 65086), (85, 65110), (120, 65221), (125, 65236), (138, 65344), (144, 65365), (156, 65413),

Gene: Icee_77 Start: 48023, Stop: 48436, Start Num: 57

Candidate Starts for Icee_77:

(Start: 57 @48023 has 139 MA's), (Start: 64 @48038 has 2 MA's), (114, 48185), (138, 48323),

Gene: Iceman_61 Start: 40532, Stop: 40152, Start Num: 15

Candidate Starts for Iceman_61:

(Start: 15 @40532 has 157 MA's), (117, 40373), (121, 40364), (138, 40280), (156, 40211), (157, 40205),

Gene: Idleandcovert_64 Start: 40669, Stop: 40286, Start Num: 15

Candidate Starts for Idleandcovert_64:

(3, 40819), (Start: 13 @40678 has 8 MA's), (Start: 15 @40669 has 157 MA's), (117, 40513), (127, 40486), (135, 40438), (138, 40420), (163, 40321), (176, 40291),

Gene: Inca_73 Start: 46649, Stop: 47062, Start Num: 57

Candidate Starts for Inca_73:

(Start: 57 @46649 has 139 MA's), (Start: 64 @46664 has 2 MA's), (114, 46811), (138, 46949),

Gene: Insomnia_64 Start: 39893, Stop: 39507, Start Num: 50

Candidate Starts for Insomnia_64:

(1, 40217), (5, 40169), (10, 40112), (20, 39989), (23, 39962), (Start: 50 @39893 has 7 MA's), (Start: 59 @39881 has 156 MA's), (99, 39785), (117, 39722), (121, 39713), (125, 39701), (135, 39647), (138, 39629), (156, 39560),

Gene: Iracema64_62 Start: 40510, Stop: 40130, Start Num: 15

Candidate Starts for Iracema64_62:

(Start: 15 @40510 has 157 MA's), (117, 40351), (121, 40342), (138, 40258), (156, 40189),

Gene: Isca_62 Start: 40131, Stop: 39739, Start Num: 13

Candidate Starts for Isca_62:

(Start: 13 @40131 has 8 MA's), (Start: 15 @40122 has 157 MA's), (117, 39966), (135, 39891), (138, 39873), (163, 39774),

Gene: JF2_62 Start: 38826, Stop: 38434, Start Num: 13

Candidate Starts for JF2_62:

(Start: 13 @38826 has 8 MA's), (Start: 15 @38817 has 157 MA's), (117, 38661), (135, 38586), (138, 38568), (156, 38499), (163, 38469), (172, 38451),

Gene: JF4_62 Start: 38817, Stop: 38434, Start Num: 15

Candidate Starts for JF4_62:

(Start: 13 @38826 has 8 MA's), (Start: 15 @38817 has 157 MA's), (117, 38661), (135, 38586), (138, 38568), (156, 38499), (163, 38469), (172, 38451),

Gene: JHC117_65 Start: 40942, Stop: 40523, Start Num: 59

Candidate Starts for JHC117_65:

(1, 41290), (2, 41287), (Start: 52 @40951 has 5 MA's), (Start: 59 @40942 has 156 MA's), (Start: 63 @40933 has 14 MA's), (101, 40840), (138, 40687), (156, 40618),

Gene: Jabith_64 Start: 39882, Stop: 39508, Start Num: 59

Candidate Starts for Jabith_64:

(1, 40218), (5, 40170), (10, 40113), (20, 39990), (23, 39963), (Start: 50 @39894 has 7 MA's), (Start: 59 @39882 has 156 MA's), (99, 39786), (117, 39723), (121, 39714), (125, 39702), (135, 39648), (138, 39630), (156, 39561),

Gene: Jaykayelowell_58 Start: 40236, Stop: 39856, Start Num: 15

Candidate Starts for Jaykayelowell_58:

(Start: 15 @40236 has 157 MA's), (117, 40077), (121, 40068), (138, 39984), (156, 39915), (157, 39909),

Gene: JeTaime_76 Start: 48841, Stop: 49254, Start Num: 57

Candidate Starts for JeTaime_76:

(Start: 57 @48841 has 139 MA's), (Start: 64 @48856 has 2 MA's), (114, 49003), (138, 49141),

Gene: JenCasNa_68 Start: 40934, Stop: 40524, Start Num: 63

Candidate Starts for JenCasNa_68:

(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: JeppNRM_68 Start: 40830, Stop: 40411, Start Num: 59

Candidate Starts for JeppNRM_68:

(8, 41085), (Start: 52 @40839 has 5 MA's), (Start: 59 @40830 has 156 MA's), (Start: 63 @40821 has 14 MA's), (101, 40728), (138, 40575), (156, 40506),

Gene: JetBlade_61 Start: 40237, Stop: 39857, Start Num: 15

Candidate Starts for JetBlade_61:

(Start: 15 @40237 has 157 MA's), (117, 40078), (121, 40069), (138, 39985), (156, 39916),

Gene: Jobu08_65 Start: 40784, Stop: 40356, Start Num: 52

Candidate Starts for Jobu08_65:

(1, 41123), (2, 41120), (4, 41081), (Start: 52 @40784 has 5 MA's), (Start: 59 @40775 has 156 MA's), (Start: 63 @40766 has 14 MA's), (101, 40673), (138, 40520), (156, 40451),

Gene: JoeDirt_86 Start: 55023, Stop: 55436, Start Num: 59

Candidate Starts for JoeDirt_86:

(Start: 59 @55023 has 156 MA's), (75, 55074), (78, 55080), (138, 55314), (144, 55335), (146, 55341), (156, 55383),

Gene: JonJames_129 Start: 74477, Stop: 74908, Start Num: 59

Candidate Starts for JonJames_129:

(Start: 59 @74477 has 156 MA's), (73, 74522), (75, 74528), (85, 74552), (87, 74561), (138, 74756), (139, 74759), (141, 74765), (168, 74864), (177, 74888),

Gene: JoongJeon_60 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for JoongJeon_60:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919),

Gene: Joselito_64 Start: 39830, Stop: 39456, Start Num: 59

Candidate Starts for Joselito_64:

(1, 40166), (5, 40118), (10, 40061), (20, 39938), (23, 39911), (Start: 50 @39842 has 7 MA's), (Start: 59 @39830 has 156 MA's), (99, 39734), (117, 39671), (121, 39662), (125, 39650), (135, 39596), (138, 39578), (156, 39509),

Gene: Jsquared_66 Start: 39964, Stop: 39587, Start Num: 59

Candidate Starts for Jsquared_66:

(Start: 47 @39979 has 10 MA's), (Start: 59 @39964 has 156 MA's), (Start: 64 @39952 has 2 MA's), (69, 39934), (81, 39901), (117, 39805), (138, 39712), (150, 39667), (156, 39643),

Gene: JustBecause_112 Start: 74626, Stop: 74162, Start Num: 31

Candidate Starts for JustBecause_112:

(Start: 31 @74626 has 6 MA's), (46, 74593), (62, 74572), (66, 74563), (78, 74521), (84, 74506), (102, 74479), (138, 74332), (143, 74317), (146, 74305), (163, 74224), (182, 74173),

Gene: KADY_66 Start: 40971, Stop: 40552, Start Num: 59

Candidate Starts for KADY_66:

(1, 41319), (2, 41316), (4, 41277), (Start: 52 @40980 has 5 MA's), (Start: 59 @40971 has 156 MA's), (Start: 63 @40962 has 14 MA's), (101, 40869), (138, 40716), (156, 40647), (163, 40617),

Gene: KFPoly_60 Start: 40237, Stop: 39857, Start Num: 15

Candidate Starts for KFPoly_60:

(Start: 15 @40237 has 157 MA's), (117, 40078), (121, 40069), (138, 39985), (156, 39916),

Gene: Kalb97_68 Start: 40828, Stop: 40409, Start Num: 59

Candidate Starts for Kalb97_68:

(8, 41083), (Start: 52 @40837 has 5 MA's), (Start: 59 @40828 has 156 MA's), (Start: 63 @40819 has 14 MA's), (101, 40726), (138, 40573), (156, 40504),

Gene: Kalnoky_68 Start: 40826, Stop: 40407, Start Num: 59

Candidate Starts for Kalnoky_68:

(Start: 52 @40835 has 5 MA's), (Start: 59 @40826 has 156 MA's), (Start: 63 @40817 has 14 MA's), (101, 40724), (138, 40571), (156, 40502),

Gene: Kampe_66 Start: 55077, Stop: 54682, Start Num: 56

Candidate Starts for Kampe_66:

(Start: 56 @55077 has 4 MA's), (66, 55062), (135, 54852), (138, 54834), (141, 54825), (156, 54765), (181, 54699), (185, 54690),

Gene: Kampy_60 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Kampy_60:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Kanye_73 Start: 47705, Stop: 48118, Start Num: 57

Candidate Starts for Kanye_73:

(Start: 57 @47705 has 139 MA's), (Start: 64 @47720 has 2 MA's), (114, 47867), (138, 48005),

Gene: Katalie136_59 Start: 40083, Stop: 39697, Start Num: 15

Candidate Starts for Katalie136_59:

(Start: 15 @40083 has 157 MA's), (117, 39924), (121, 39915), (138, 39831), (156, 39762),

Gene: KeaneyLin_89 Start: 52219, Stop: 52584, Start Num: 60

Candidate Starts for KeaneyLin_89:

(Start: 60 @52219 has 9 MA's), (138, 52456), (144, 52477), (173, 52573),

Gene: Kela_113 Start: 74506, Stop: 74042, Start Num: 31

Candidate Starts for Kela_113:

(Start: 31 @74506 has 6 MA's), (46, 74473), (62, 74452), (66, 74443), (78, 74401), (84, 74386), (102, 74359), (138, 74212), (143, 74197), (146, 74185), (163, 74104), (182, 74053),

Gene: Kerberos_66 Start: 40912, Stop: 40535, Start Num: 59

Candidate Starts for Kerberos_66:

(18, 41026), (Start: 59 @40912 has 156 MA's), (75, 40861), (101, 40813), (102, 40810), (117, 40753), (138, 40660), (139, 40657), (156, 40591),

Gene: Kimchi_80 Start: 48362, Stop: 48775, Start Num: 57

Candidate Starts for Kimchi_80:

(Start: 57 @48362 has 139 MA's), (Start: 64 @48377 has 2 MA's), (114, 48524), (138, 48662),

Gene: Kimona_58 Start: 38659, Stop: 38276, Start Num: 59

Candidate Starts for Kimona_58:

(19, 38791), (Start: 59 @38659 has 156 MA's), (81, 38596), (102, 38557), (117, 38500), (121, 38491), (135, 38425), (138, 38407), (144, 38386), (156, 38338),

Gene: Kingmustik0402_61 Start: 40232, Stop: 39852, Start Num: 15

Candidate Starts for Kingmustik0402_61:

(Start: 15 @40232 has 157 MA's), (117, 40073), (121, 40064), (138, 39980), (156, 39911),

Gene: Koduck_65 Start: 39809, Stop: 39432, Start Num: 59

Candidate Starts for Koduck_65:

(Start: 47 @39824 has 10 MA's), (Start: 59 @39809 has 156 MA's), (Start: 63 @39800 has 14 MA's), (Start: 64 @39797 has 2 MA's), (81, 39746), (117, 39650), (125, 39629), (138, 39557), (146, 39530), (156, 39488),

Gene: Koreni_60 Start: 39924, Stop: 39544, Start Num: 15

Candidate Starts for Koreni_60:

(Start: 15 @39924 has 157 MA's), (117, 39765), (121, 39756), (138, 39672), (156, 39603), (157, 39597),

Gene: Kostya_76 Start: 48238, Stop: 48636, Start Num: 64

Candidate Starts for Kostya_76:

(Start: 57 @48223 has 139 MA's), (Start: 64 @48238 has 2 MA's), (114, 48385), (138, 48523),

Gene: Kradal_113 Start: 75438, Stop: 74971, Start Num: 31
Candidate Starts for Kradal_113:
(25, 75474), (Start: 31 @75438 has 6 MA's), (43, 75411), (66, 75372), (75, 75336), (102, 75288), (137, 75144), (138, 75141), (163, 75033), (182, 74982),

Gene: Kratark_60 Start: 40241, Stop: 39861, Start Num: 15
Candidate Starts for Kratark_60:
(Start: 15 @40241 has 157 MA's), (117, 40082), (121, 40073), (138, 39989), (156, 39920),

Gene: Kremtemulon_57 Start: 40182, Stop: 39811, Start Num: 63
Candidate Starts for Kremtemulon_57:
(9, 40425), (16, 40326), (Start: 59 @40191 has 156 MA's), (Start: 63 @40182 has 14 MA's), (117, 40032), (121, 40023), (138, 39939), (156, 39870),

Gene: Kumao_84 Start: 54374, Stop: 54781, Start Num: 63
Candidate Starts for Kumao_84:
(41, 54347), (44, 54353), (Start: 63 @54374 has 14 MA's), (125, 54545), (135, 54599), (138, 54617), (139, 54620), (156, 54686), (165, 54719),

Gene: Kyee_61 Start: 40241, Stop: 39861, Start Num: 15
Candidate Starts for Kyee_61:
(Start: 15 @40241 has 157 MA's), (117, 40082), (121, 40073), (138, 39989), (156, 39920),

Gene: L5_61 Start: 39896, Stop: 39519, Start Num: 59
Candidate Starts for L5_61:
(18, 40010), (Start: 47 @39911 has 10 MA's), (Start: 59 @39896 has 156 MA's), (81, 39833), (117, 39737), (125, 39716), (138, 39644), (156, 39575),

Gene: LBerry_68 Start: 40947, Stop: 40528, Start Num: 59
Candidate Starts for LBerry_68:
(1, 41295), (2, 41292), (Start: 52 @40956 has 5 MA's), (Start: 59 @40947 has 156 MA's), (Start: 63 @40938 has 14 MA's), (101, 40845), (138, 40692), (156, 40623),

Gene: LHTSCC_63 Start: 40646, Stop: 40266, Start Num: 15
Candidate Starts for LHTSCC_63:
(Start: 15 @40646 has 157 MA's), (117, 40487), (121, 40478), (138, 40394), (156, 40325),

Gene: Lambert1_63 Start: 40646, Stop: 40263, Start Num: 15
Candidate Starts for Lambert1_63:
(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: LappelDuVide_58 Start: 40242, Stop: 39862, Start Num: 15
Candidate Starts for LappelDuVide_58:
(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921), (157, 39915),

Gene: LarryKay_67 Start: 40973, Stop: 40554, Start Num: 59
Candidate Starts for LarryKay_67:
(1, 41321), (2, 41318), (Start: 52 @40982 has 5 MA's), (Start: 59 @40973 has 156 MA's), (Start: 63 @40964 has 14 MA's), (101, 40871), (138, 40718), (156, 40649), (180, 40571),

Gene: LeBron_84 Start: 53694, Stop: 54107, Start Num: 59

Candidate Starts for LeBron_84:

(Start: 59 @53694 has 156 MA's), (75, 53745), (78, 53751), (138, 53985), (144, 54006), (146, 54012), (156, 54054),

Gene: Lemur_61 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Lemur_61:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919), (157, 39913),

Gene: LeoAvram_60 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for LeoAvram_60:

(Start: 13 @40255 has 8 MA's), (Start: 15 @40246 has 157 MA's), (117, 40087), (118, 40084), (121, 40078), (138, 39994), (156, 39925),

Gene: Lilac_78 Start: 47977, Stop: 48390, Start Num: 57

Candidate Starts for Lilac_78:

(Start: 57 @47977 has 139 MA's), (Start: 64 @47992 has 2 MA's), (114, 48139), (138, 48277),

Gene: Lilbit_73 Start: 41279, Stop: 41770, Start Num: 47

Candidate Starts for Lilbit_73:

(Start: 47 @41279 has 10 MA's), (108, 41426), (138, 41582), (139, 41585), (149, 41621), (156, 41651), (165, 41684),

Gene: LilhomieP_124 Start: 66310, Stop: 66807, Start Num: 57

Candidate Starts for LilhomieP_124:

(22, 66208), (Start: 35 @66268 has 1 MA's), (Start: 57 @66310 has 139 MA's), (75, 66364), (85, 66388), (120, 66499), (125, 66514), (138, 66622), (144, 66643), (156, 66691),

Gene: Lilith_66 Start: 40936, Stop: 40517, Start Num: 59

Candidate Starts for Lilith_66:

(1, 41284), (2, 41281), (Start: 52 @40945 has 5 MA's), (Start: 59 @40936 has 156 MA's), (Start: 63 @40927 has 14 MA's), (101, 40834), (138, 40681), (156, 40612),

Gene: Lilizi_77 Start: 47690, Stop: 48103, Start Num: 57

Candidate Starts for Lilizi_77:

(Start: 57 @47690 has 139 MA's), (Start: 64 @47705 has 2 MA's), (114, 47852), (138, 47990),

Gene: Lilpickle_75 Start: 47575, Stop: 47988, Start Num: 57

Candidate Starts for Lilpickle_75:

(Start: 57 @47575 has 139 MA's), (Start: 64 @47590 has 2 MA's), (114, 47737), (138, 47875),

Gene: LittleB_61 Start: 40244, Stop: 39864, Start Num: 15

Candidate Starts for LittleB_61:

(Start: 15 @40244 has 157 MA's), (117, 40085), (121, 40076), (138, 39992), (156, 39923), (157, 39917),

Gene: LittleGuy_61 Start: 40139, Stop: 39759, Start Num: 15

Candidate Starts for LittleGuy_61:

(Start: 15 @40139 has 157 MA's), (117, 39980), (121, 39971), (138, 39887), (156, 39818), (157, 39812),

Gene: LittleLaf_73 Start: 41008, Stop: 41499, Start Num: 47

Candidate Starts for LittleLaf_73:

(Start: 47 @41008 has 10 MA's), (108, 41155), (138, 41311), (139, 41314), (149, 41350), (156, 41380), (165, 41413),

Gene: LochMonster_62 Start: 40482, Stop: 40102, Start Num: 15

Candidate Starts for LochMonster_62:

(Start: 15 @40482 has 157 MA's), (117, 40323), (121, 40314), (138, 40230), (156, 40161), (157, 40155),

Gene: Lorenzo_61 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Lorenzo_61:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Louie6_66 Start: 40972, Stop: 40553, Start Num: 59

Candidate Starts for Louie6_66:

(Start: 52 @40981 has 5 MA's), (Start: 59 @40972 has 156 MA's), (Start: 63 @40963 has 14 MA's), (101, 40870), (138, 40717), (156, 40648), (163, 40618),

Gene: Lozinak_118 Start: 68218, Stop: 68595, Start Num: 59

Candidate Starts for Lozinak_118:

(Start: 35 @68173 has 1 MA's), (Start: 59 @68218 has 156 MA's), (80, 68278), (138, 68476), (141, 68485), (142, 68488), (144, 68497), (156, 68545), (163, 68575),

Gene: Lucivia_64 Start: 39879, Stop: 39505, Start Num: 59

Candidate Starts for Lucivia_64:

(1, 40215), (5, 40167), (10, 40110), (20, 39987), (Start: 50 @39891 has 7 MA's), (Start: 59 @39879 has 156 MA's), (117, 39720), (121, 39711), (135, 39645), (138, 39627), (156, 39558),

Gene: LuckySocke_170 Start: 88165, Stop: 88563, Start Num: 59

Candidate Starts for LuckySocke_170:

(Start: 59 @88165 has 156 MA's), (Start: 64 @88177 has 2 MA's), (89, 88261), (92, 88267), (99, 88291), (138, 88432), (145, 88456), (154, 88501), (158, 88513), (169, 88546),

Gene: LugYA_70 Start: 40944, Stop: 40525, Start Num: 59

Candidate Starts for LugYA_70:

(1, 41292), (2, 41289), (Start: 52 @40953 has 5 MA's), (Start: 59 @40944 has 156 MA's), (Start: 63 @40935 has 14 MA's), (101, 40842), (138, 40689), (156, 40620),

Gene: Lunsford_62 Start: 40237, Stop: 39857, Start Num: 15

Candidate Starts for Lunsford_62:

(Start: 15 @40237 has 157 MA's), (117, 40078), (118, 40075), (121, 40069), (138, 39985), (156, 39916),

Gene: MA5_64 Start: 40026, Stop: 39643, Start Num: 15

Candidate Starts for MA5_64:

(Start: 13 @40035 has 8 MA's), (Start: 15 @40026 has 157 MA's), (117, 39870), (135, 39795), (138, 39777), (163, 39678),

Gene: MISSy_77 Start: 48096, Stop: 48494, Start Num: 64

Candidate Starts for MISSy_77:

(Start: 57 @48081 has 139 MA's), (Start: 64 @48096 has 2 MA's), (114, 48243), (138, 48381),

Gene: MK4_64 Start: 40101, Stop: 39718, Start Num: 15

Candidate Starts for MK4_64:

(Start: 13 @40110 has 8 MA's), (Start: 15 @40101 has 157 MA's), (117, 39945), (135, 39870), (138, 39852), (156, 39783), (163, 39753), (172, 39735),

Gene: MPhalcon_77 Start: 48074, Stop: 48487, Start Num: 57

Candidate Starts for MPhalcon_77:

(Start: 57 @48074 has 139 MA's), (Start: 64 @48089 has 2 MA's), (114, 48236), (138, 48374),

Gene: MaCh_63 Start: 39809, Stop: 39435, Start Num: 59

Candidate Starts for MaCh_63:

(1, 40145), (5, 40097), (10, 40040), (20, 39917), (Start: 50 @39821 has 7 MA's), (Start: 59 @39809 has 156 MA's), (99, 39713), (117, 39650), (121, 39641), (125, 39629), (135, 39575), (138, 39557), (156, 39488),

Gene: Mabel_63 Start: 39826, Stop: 39452, Start Num: 59

Candidate Starts for Mabel_63:

(1, 40162), (5, 40114), (10, 40057), (20, 39934), (Start: 50 @39838 has 7 MA's), (Start: 59 @39826 has 156 MA's), (117, 39667), (121, 39658), (135, 39592), (138, 39574), (156, 39505),

Gene: MadMarie_67 Start: 40945, Stop: 40526, Start Num: 59

Candidate Starts for MadMarie_67:

(1, 41293), (2, 41290), (4, 41251), (Start: 52 @40954 has 5 MA's), (Start: 59 @40945 has 156 MA's), (Start: 63 @40936 has 14 MA's), (101, 40843), (138, 40690), (156, 40621),

Gene: MadamMonkfish_76 Start: 47299, Stop: 47712, Start Num: 57

Candidate Starts for MadamMonkfish_76:

(Start: 57 @47299 has 139 MA's), (Start: 64 @47314 has 2 MA's), (114, 47461), (138, 47599),

Gene: Mainiac_67 Start: 40937, Stop: 40518, Start Num: 59

Candidate Starts for Mainiac_67:

(1, 41285), (2, 41282), (Start: 52 @40946 has 5 MA's), (Start: 59 @40937 has 156 MA's), (Start: 63 @40928 has 14 MA's), (101, 40835), (138, 40682), (156, 40613),

Gene: Malinsilva_69 Start: 40926, Stop: 40516, Start Num: 63

Candidate Starts for Malinsilva_69:

(1, 41283), (2, 41280), (Start: 52 @40944 has 5 MA's), (Start: 59 @40935 has 156 MA's), (Start: 63 @40926 has 14 MA's), (101, 40833), (138, 40680), (156, 40611),

Gene: Manda_77 Start: 49161, Stop: 49574, Start Num: 57

Candidate Starts for Manda_77:

(Start: 57 @49161 has 139 MA's), (Start: 64 @49176 has 2 MA's), (114, 49323), (138, 49461),

Gene: Manu_67 Start: 40829, Stop: 40410, Start Num: 59

Candidate Starts for Manu_67:

(8, 41084), (Start: 52 @40838 has 5 MA's), (Start: 59 @40829 has 156 MA's), (Start: 63 @40820 has 14 MA's), (101, 40727), (138, 40574), (156, 40505),

Gene: MarQuardt_67 Start: 40936, Stop: 40526, Start Num: 63

Candidate Starts for MarQuardt_67:

(1, 41293), (2, 41290), (Start: 52 @40954 has 5 MA's), (Start: 59 @40945 has 156 MA's), (Start: 63 @40936 has 14 MA's), (101, 40843), (138, 40690), (156, 40621),

Gene: Mareelih_168 Start: 96702, Stop: 96343, Start Num: 65

Candidate Starts for Mareelih_168:

(Start: 65 @96702 has 5 MA's), (67, 96693), (68, 96690), (77, 96660), (86, 96639), (105, 96585), (138, 96468), (141, 96459), (144, 96447), (149, 96429),

Gene: Margo_63 Start: 40672, Stop: 40289, Start Num: 15

Candidate Starts for Margo_63:

(Start: 13 @40681 has 8 MA's), (Start: 15 @40672 has 157 MA's), (101, 40576), (117, 40516), (138, 40423), (163, 40324), (165, 40321), (176, 40294),

Gene: Marie_65 Start: 40943, Stop: 40524, Start Num: 59

Candidate Starts for Marie_65:

(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: Marius_68 Start: 40826, Stop: 40407, Start Num: 59

Candidate Starts for Marius_68:

(Start: 52 @40835 has 5 MA's), (Start: 59 @40826 has 156 MA's), (Start: 63 @40817 has 14 MA's), (101, 40724), (138, 40571), (156, 40502),

Gene: Marshmallow_74 Start: 48854, Stop: 49267, Start Num: 57

Candidate Starts for Marshmallow_74:

(Start: 57 @48854 has 139 MA's), (Start: 64 @48869 has 2 MA's), (125, 49046), (138, 49154), (146, 49181),

Gene: Marvin_69 Start: 40817, Stop: 41308, Start Num: 47

Candidate Starts for Marvin_69:

(Start: 47 @40817 has 10 MA's), (108, 40964), (138, 41120), (139, 41123), (149, 41159), (156, 41189), (165, 41222),

Gene: MaryV_120 Start: 62395, Stop: 62829, Start Num: 60

Candidate Starts for MaryV_120:

(Start: 60 @62395 has 9 MA's), (Start: 64 @62404 has 2 MA's), (74, 62440), (75, 62443), (97, 62506), (110, 62554), (113, 62560), (120, 62584), (136, 62683), (138, 62698), (155, 62770),

Gene: Maverick_60 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Maverick_60:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922),

Gene: Maxo_62 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Maxo_62:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Maxxinista_78 Start: 47950, Stop: 48363, Start Num: 57

Candidate Starts for Maxxinista_78:

(Start: 57 @47950 has 139 MA's), (Start: 64 @47965 has 2 MA's), (114, 48112), (138, 48250),

Gene: Mazhar510_61 Start: 40244, Stop: 39864, Start Num: 15

Candidate Starts for Mazhar510_61:

(Start: 15 @40244 has 157 MA's), (117, 40085), (121, 40076), (138, 39992), (156, 39923),

Gene: Medusa_61 Start: 40257, Stop: 39877, Start Num: 15

Candidate Starts for Medusa_61:

(Start: 15 @40257 has 157 MA's), (117, 40098), (121, 40089), (138, 40005), (156, 39936), (157, 39930),

Gene: MeeZee_60 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for MeeZee_60:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919), (157, 39913),

Gene: Melvin_63 Start: 40238, Stop: 39858, Start Num: 15

Candidate Starts for Melvin_63:

(Start: 15 @40238 has 157 MA's), (117, 40079), (121, 40070), (138, 39986), (156, 39917), (157, 39911),

Gene: Methuselah_62 Start: 40967, Stop: 40548, Start Num: 59

Candidate Starts for Methuselah_62:

(1, 41315), (2, 41312), (4, 41273), (Start: 52 @40976 has 5 MA's), (Start: 59 @40967 has 156 MA's), (Start: 63 @40958 has 14 MA's), (101, 40865), (138, 40712), (156, 40643), (180, 40565),

Gene: Microwolf_65 Start: 40959, Stop: 40540, Start Num: 59

Candidate Starts for Microwolf_65:

(1, 41307), (2, 41304), (Start: 52 @40968 has 5 MA's), (Start: 59 @40959 has 156 MA's), (Start: 63 @40950 has 14 MA's), (101, 40857), (138, 40704), (156, 40635),

Gene: Millski_60 Start: 40244, Stop: 39864, Start Num: 15

Candidate Starts for Millski_60:

(Start: 15 @40244 has 157 MA's), (117, 40085), (121, 40076), (138, 39992), (156, 39923), (157, 39917),

Gene: Mindy_75 Start: 47166, Stop: 47579, Start Num: 57

Candidate Starts for Mindy_75:

(Start: 57 @47166 has 139 MA's), (Start: 64 @47181 has 2 MA's), (114, 47328), (138, 47466),

Gene: Miniwave_71 Start: 47619, Stop: 48032, Start Num: 57

Candidate Starts for Miniwave_71:

(Start: 57 @47619 has 139 MA's), (Start: 64 @47634 has 2 MA's), (114, 47781), (138, 47919),

Gene: Miramae_58 Start: 39532, Stop: 39146, Start Num: 15

Candidate Starts for Miramae_58:

(Start: 15 @39532 has 157 MA's), (117, 39373), (121, 39364), (138, 39280), (156, 39211),

Gene: Misfit_77 Start: 49093, Stop: 49506, Start Num: 57

Candidate Starts for Misfit_77:

(Start: 57 @49093 has 139 MA's), (Start: 64 @49108 has 2 MA's), (114, 49255), (138, 49393),

Gene: Miskis_117 Start: 67235, Stop: 67612, Start Num: 59

Candidate Starts for Miskis_117:

(Start: 35 @67190 has 1 MA's), (Start: 59 @67235 has 156 MA's), (80, 67295), (138, 67493), (141, 67502), (142, 67505), (144, 67514), (156, 67562), (163, 67592),

Gene: Misomonster_68 Start: 40970, Stop: 40551, Start Num: 59

Candidate Starts for Misomonster_68:

(1, 41318), (2, 41315), (4, 41276), (Start: 52 @40979 has 5 MA's), (Start: 59 @40970 has 156 MA's), (Start: 63 @40961 has 14 MA's), (101, 40868), (138, 40715), (156, 40646), (163, 40616),

Gene: MissWhite_64 Start: 39952, Stop: 39575, Start Num: 59

Candidate Starts for MissWhite_64:

(18, 40063), (49, 39964), (Start: 59 @39952 has 156 MA's), (Start: 63 @39943 has 14 MA's), (Start: 64 @39940 has 2 MA's), (69, 39922), (81, 39889), (117, 39793), (138, 39700), (146, 39673), (156, 39631),

Gene: Moldemort_79 Start: 48178, Stop: 48591, Start Num: 57

Candidate Starts for Moldemort_79:

(Start: 57 @48178 has 139 MA's), (Start: 64 @48193 has 2 MA's), (114, 48340), (138, 48478),

Gene: MoneyMay_66 Start: 40943, Stop: 40524, Start Num: 59

Candidate Starts for MoneyMay_66:

(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: Morpher26_59 Start: 40104, Stop: 39718, Start Num: 15

Candidate Starts for Morpher26_59:

(Start: 15 @40104 has 157 MA's), (117, 39945), (121, 39936), (138, 39852), (156, 39783),

Gene: Morrow_62 Start: 40249, Stop: 39869, Start Num: 15

Candidate Starts for Morrow_62:

(Start: 13 @40258 has 8 MA's), (Start: 15 @40249 has 157 MA's), (117, 40090), (118, 40087), (121, 40081), (138, 39997), (156, 39928), (157, 39922),

Gene: MosMoris_70 Start: 40699, Stop: 41190, Start Num: 47

Candidate Starts for MosMoris_70:

(Start: 47 @40699 has 10 MA's), (108, 40846), (138, 41002), (139, 41005), (149, 41041), (156, 41071), (165, 41104),

Gene: Mosby_72 Start: 47376, Stop: 47789, Start Num: 57

Candidate Starts for Mosby_72:

(Start: 57 @47376 has 139 MA's), (Start: 64 @47391 has 2 MA's), (114, 47538), (138, 47676),

Gene: MrMagoo_142 Start: 66998, Stop: 67483, Start Num: 57

Candidate Starts for MrMagoo_142:

(Start: 50 @66989 has 7 MA's), (Start: 57 @66998 has 139 MA's), (104, 67112), (138, 67298), (144, 67319), (146, 67325), (156, 67367), (163, 67397),

Gene: MuchMore_70 Start: 40935, Stop: 40516, Start Num: 59

Candidate Starts for MuchMore_70:

(1, 41283), (2, 41280), (4, 41241), (Start: 52 @40944 has 5 MA's), (Start: 59 @40935 has 156 MA's), (Start: 63 @40926 has 14 MA's), (101, 40833), (138, 40680), (156, 40611),

Gene: Mulciber_62 Start: 39367, Stop: 38993, Start Num: 59

Candidate Starts for Mulciber_62:

(1, 39703), (5, 39655), (10, 39598), (20, 39475), (23, 39448), (Start: 50 @39379 has 7 MA's), (Start: 59 @39367 has 156 MA's), (99, 39271), (117, 39208), (121, 39199), (125, 39187), (135, 39133), (138, 39115), (156, 39046),

Gene: Munch_63 Start: 39830, Stop: 39456, Start Num: 59

Candidate Starts for Munch_63:

(1, 40166), (5, 40118), (10, 40061), (20, 39938), (23, 39911), (Start: 50 @39842 has 7 MA's), (Start: 59 @39830 has 156 MA's), (99, 39734), (117, 39671), (121, 39662), (125, 39650), (135, 39596), (138, 39578), (156, 39509),

Gene: Mundrea_59 Start: 40096, Stop: 39716, Start Num: 15

Candidate Starts for Mundrea_59:

(Start: 15 @40096 has 157 MA's), (117, 39937), (121, 39928), (138, 39844), (156, 39775),

Gene: Murica_79 Start: 49025, Stop: 49438, Start Num: 57

Candidate Starts for Murica_79:

(Start: 57 @49025 has 139 MA's), (Start: 64 @49040 has 2 MA's), (114, 49187), (138, 49325),

Gene: Murphy_76 Start: 48462, Stop: 48875, Start Num: 57

Candidate Starts for Murphy_76:

(Start: 57 @48462 has 139 MA's), (Start: 64 @48477 has 2 MA's), (114, 48624), (138, 48762),

Gene: MyraDee_63 Start: 37799, Stop: 37377, Start Num: 45

Candidate Starts for MyraDee_63:

(Start: 45 @37799 has 1 MA's), (71, 37754), (117, 37634), (125, 37613), (135, 37559), (138, 37541), (156, 37472), (160, 37460), (180, 37394),

Gene: Myrale_76 Start: 48719, Stop: 49132, Start Num: 57

Candidate Starts for Myrale_76:

(Start: 57 @48719 has 139 MA's), (Start: 64 @48734 has 2 MA's), (114, 48881), (138, 49019),

Gene: Naji_66 Start: 40913, Stop: 40536, Start Num: 59

Candidate Starts for Naji_66:

(18, 41027), (Start: 47 @40928 has 10 MA's), (Start: 59 @40913 has 156 MA's), (75, 40862), (101, 40814), (102, 40811), (117, 40754), (138, 40661), (139, 40658), (156, 40592),

Gene: Nala_78 Start: 48583, Stop: 48996, Start Num: 57

Candidate Starts for Nala_78:

(Start: 57 @48583 has 139 MA's), (Start: 64 @48598 has 2 MA's), (114, 48745), (138, 48883),

Gene: Nanosmite_135 Start: 66876, Stop: 67361, Start Num: 57

Candidate Starts for Nanosmite_135:

(Start: 57 @66876 has 139 MA's), (85, 66954), (104, 66990), (115, 67035), (120, 67053), (138, 67176), (144, 67197), (156, 67245),

Gene: NearlyHeadless_74 Start: 41154, Stop: 40783, Start Num: 59

Candidate Starts for NearlyHeadless_74:

(Start: 42 @41175 has 1 MA's), (Start: 59 @41154 has 156 MA's), (117, 40995), (129, 40962), (138, 40902), (149, 40863), (156, 40833),

Gene: Nebs_62 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for Nebs_62:

(Start: 13 @40255 has 8 MA's), (Start: 15 @40246 has 157 MA's), (117, 40087), (118, 40084), (121, 40078), (138, 39994), (156, 39925),

Gene: NelitzaMV_74 Start: 47665, Stop: 48078, Start Num: 57

Candidate Starts for NelitzaMV_74:

(Start: 57 @47665 has 139 MA's), (Start: 64 @47680 has 2 MA's), (114, 47827), (138, 47965),

Gene: Nemo27_60 Start: 40242, Stop: 39862, Start Num: 15

Candidate Starts for Nemo27_60:

(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921),

Gene: NiceHouse_229 Start: 121776, Stop: 122174, Start Num: 58

Candidate Starts for NiceHouse_229:

(34, 121731), (54, 121770), (Start: 58 @121776 has 1 MA's), (95, 121881), (105, 121911), (120, 121953), (135, 122022), (138, 122040),

Gene: Nimrod_77 Start: 49286, Stop: 49699, Start Num: 57

Candidate Starts for Nimrod_77:

(Start: 57 @49286 has 139 MA's), (Start: 64 @49301 has 2 MA's), (114, 49448), (138, 49586),

Gene: Nirvana_124 Start: 78772, Stop: 78338, Start Num: 46

Candidate Starts for Nirvana_124:

(Start: 31 @78805 has 6 MA's), (46, 78772), (102, 78655), (138, 78508), (146, 78481), (182, 78349),

Gene: NoSleep_77 Start: 47920, Stop: 48333, Start Num: 57

Candidate Starts for NoSleep_77:

(Start: 57 @47920 has 139 MA's), (Start: 64 @47935 has 2 MA's), (114, 48082), (138, 48220),

Gene: Noella_63 Start: 40647, Stop: 40264, Start Num: 15

Candidate Starts for Noella_63:

(Start: 13 @40656 has 8 MA's), (Start: 15 @40647 has 157 MA's), (101, 40551), (117, 40491), (138, 40398), (163, 40299), (165, 40296), (176, 40269),

Gene: Noelle_60 Start: 40405, Stop: 40019, Start Num: 15

Candidate Starts for Noelle_60:

(Start: 15 @40405 has 157 MA's), (117, 40246), (121, 40237), (138, 40153), (139, 40150), (156, 40084),

Gene: Norbert_60 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for Norbert_60:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: NorthStar_59 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for NorthStar_59:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Norvs_118 Start: 67819, Stop: 68196, Start Num: 59

Candidate Starts for Norvs_118:

(Start: 35 @67774 has 1 MA's), (Start: 59 @67819 has 156 MA's), (80, 67879), (138, 68077), (141, 68086), (142, 68089), (144, 68098), (156, 68146),

Gene: NotAPhaseMom_60 Start: 40247, Stop: 39867, Start Num: 15

Candidate Starts for NotAPhaseMom_60:

(Start: 15 @40247 has 157 MA's), (117, 40088), (121, 40079), (138, 39995), (156, 39926),

Gene: Nyxis_60 Start: 40133, Stop: 39753, Start Num: 15

Candidate Starts for Nyxis_60:

(Start: 15 @40133 has 157 MA's), (117, 39974), (121, 39965), (138, 39881), (156, 39812), (157, 39806),

Gene: OKaNui_61 Start: 40293, Stop: 39913, Start Num: 15

Candidate Starts for OKaNui_61:

(Start: 15 @40293 has 157 MA's), (117, 40134), (121, 40125), (138, 40041), (156, 39972),

Gene: Obama12_62 Start: 40630, Stop: 40250, Start Num: 15

Candidate Starts for Obama12_62:

(Start: 15 @40630 has 157 MA's), (117, 40471), (121, 40462), (138, 40378), (156, 40309),

Gene: Odin_64 Start: 39580, Stop: 39206, Start Num: 63

Candidate Starts for Odin_64:

(18, 39706), (Start: 47 @39604 has 10 MA's), (Start: 59 @39589 has 156 MA's), (Start: 63 @39580 has 14 MA's), (74, 39541), (85, 39514), (117, 39424), (138, 39331), (144, 39310), (150, 39286), (156, 39262),

Gene: Ohfah_62 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for Ohfah_62:

(Start: 13 @40255 has 8 MA's), (Start: 15 @40246 has 157 MA's), (117, 40087), (118, 40084), (121, 40078), (138, 39994), (156, 39925),

Gene: OlanP_66 Start: 41002, Stop: 40583, Start Num: 59

Candidate Starts for OlanP_66:

(8, 41257), (Start: 52 @41011 has 5 MA's), (Start: 59 @41002 has 156 MA's), (Start: 63 @40993 has 14 MA's), (101, 40900), (138, 40747), (156, 40678),

Gene: Ollie_67 Start: 40814, Stop: 40395, Start Num: 59

Candidate Starts for Ollie_67:

(1, 41162), (2, 41159), (4, 41120), (6, 41111), (Start: 52 @40823 has 5 MA's), (Start: 59 @40814 has 156 MA's), (Start: 63 @40805 has 14 MA's), (101, 40712), (138, 40559), (156, 40490),

Gene: Omega_177 Start: 91771, Stop: 92247, Start Num: 21

Candidate Starts for Omega_177:

(Start: 21 @91771 has 1 MA's), (39, 91846), (71, 91915), (74, 91927), (81, 91942), (96, 91978), (101, 91990), (133, 92098), (138, 92128), (139, 92131), (163, 92227),

Gene: OneUp_103 Start: 65646, Stop: 66053, Start Num: 40

Candidate Starts for OneUp_103:

(24, 65583), (Start: 40 @65646 has 1 MA's), (Start: 59 @65676 has 156 MA's), (75, 65727), (82, 65742), (112, 65832), (130, 65877), (138, 65934), (141, 65943), (142, 65946), (168, 66042),

Gene: Orange_62 Start: 39379, Stop: 39005, Start Num: 59

Candidate Starts for Orange_62:

(1, 39715), (5, 39667), (10, 39610), (20, 39487), (Start: 50 @39391 has 7 MA's), (Start: 59 @39379 has 156 MA's), (117, 39220), (121, 39211), (135, 39145), (138, 39127), (156, 39058),

Gene: Orchid_65 Start: 55078, Stop: 54683, Start Num: 56

Candidate Starts for Orchid_65:

(Start: 56 @55078 has 4 MA's), (66, 55063), (135, 54853), (138, 54835), (141, 54826), (156, 54766), (181, 54700), (185, 54691),

Gene: OrionPax_75 Start: 47671, Stop: 48084, Start Num: 57

Candidate Starts for OrionPax_75:

(Start: 57 @47671 has 139 MA's), (Start: 64 @47686 has 2 MA's), (114, 47833), (138, 47971),

Gene: P28Green_68 Start: 40946, Stop: 40527, Start Num: 59

Candidate Starts for P28Green_68:

(1, 41294), (2, 41291), (Start: 52 @40955 has 5 MA's), (Start: 59 @40946 has 156 MA's), (Start: 63 @40937 has 14 MA's), (101, 40844), (138, 40691), (156, 40622),

Gene: PGHhamlin_69 Start: 40935, Stop: 40516, Start Num: 59

Candidate Starts for PGHhamlin_69:

(1, 41283), (2, 41280), (Start: 52 @40944 has 5 MA's), (Start: 59 @40935 has 156 MA's), (Start: 63 @40926 has 14 MA's), (101, 40833), (138, 40680), (156, 40611),

Gene: PP_64 Start: 44619, Stop: 44173, Start Num: 57

Candidate Starts for PP_64:

(41, 44637), (Start: 57 @44619 has 139 MA's), (90, 44538), (138, 44370), (156, 44301), (160, 44289), (179, 44226),

Gene: Palestino_60 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Palestino_60:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922),

Gene: Palpatine_78 Start: 49067, Stop: 49465, Start Num: 64

Candidate Starts for Palpatine_78:

(Start: 57 @49052 has 139 MA's), (Start: 64 @49067 has 2 MA's), (114, 49214), (138, 49352),

Gene: Panamaxus_61 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for Panamaxus_61:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: Paperbeatsrock_75 Start: 48297, Stop: 48710, Start Num: 57

Candidate Starts for Paperbeatsrock_75:

(Start: 57 @48297 has 139 MA's), (Start: 64 @48312 has 2 MA's), (114, 48459), (138, 48597),

Gene: Pat3_74 Start: 46829, Stop: 47242, Start Num: 57

Candidate Starts for Pat3_74:

(Start: 57 @46829 has 139 MA's), (Start: 64 @46844 has 2 MA's), (114, 46991), (138, 47129),

Gene: PatrickStar_66 Start: 55077, Stop: 54682, Start Num: 56

Candidate Starts for PatrickStar_66:

(Start: 56 @55077 has 4 MA's), (66, 55062), (135, 54852), (138, 54834), (141, 54825), (156, 54765), (181, 54699), (185, 54690),

Gene: PauloDiaboli_248 Start: 135825, Stop: 136211, Start Num: 59

Candidate Starts for PauloDiaboli_248:

(Start: 59 @135825 has 156 MA's), (90, 135912), (122, 135996), (135, 136056), (138, 136074), (144, 136095), (163, 136173), (173, 136194),

Gene: Pawn_67 Start: 40833, Stop: 40414, Start Num: 59

Candidate Starts for Pawn_67:

(8, 41088), (16, 40983), (Start: 52 @40842 has 5 MA's), (Start: 59 @40833 has 156 MA's), (Start: 63 @40824 has 14 MA's), (101, 40731), (138, 40578), (156, 40509),

Gene: Peaches_59 Start: 40242, Stop: 39862, Start Num: 15

Candidate Starts for Peaches_59:

(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921),

Gene: PegLeg_127 Start: 66152, Stop: 66691, Start Num: 35

Candidate Starts for PegLeg_127:

(22, 66092), (Start: 35 @66152 has 1 MA's), (Start: 57 @66194 has 139 MA's), (Start: 63 @66206 has 14 MA's), (75, 66248), (85, 66272), (115, 66365), (120, 66383), (125, 66398), (138, 66506), (144, 66527), (156, 66575),

Gene: Pembroke_67 Start: 40935, Stop: 40525, Start Num: 63

Candidate Starts for Pembroke_67:

(1, 41292), (2, 41289), (Start: 52 @40953 has 5 MA's), (Start: 59 @40944 has 156 MA's), (Start: 63 @40935 has 14 MA's), (101, 40842), (138, 40689), (156, 40620),

Gene: Penny1_67 Start: 40947, Stop: 40528, Start Num: 59

Candidate Starts for Penny1_67:

(1, 41295), (2, 41292), (Start: 52 @40956 has 5 MA's), (Start: 59 @40947 has 156 MA's), (Start: 63 @40938 has 14 MA's), (101, 40845), (138, 40692), (156, 40623),

Gene: Peregrin_54 Start: 20303, Stop: 19884, Start Num: 59

Candidate Starts for Peregrin_54:

(Start: 52 @20312 has 5 MA's), (Start: 59 @20303 has 156 MA's), (85, 20228), (109, 20153), (138, 20033), (157, 19958),

Gene: Perplexer_59 Start: 40080, Stop: 39694, Start Num: 15

Candidate Starts for Perplexer_59:

(Start: 15 @40080 has 157 MA's), (117, 39921), (121, 39912), (138, 39828), (156, 39759),

Gene: PeterPeter_61 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for PeterPeter_61:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919),

Gene: Petersenfast_61 Start: 39390, Stop: 39004, Start Num: 50

Candidate Starts for Petersenfast_61:

(1, 39714), (5, 39666), (10, 39609), (20, 39486), (Start: 50 @39390 has 7 MA's), (Start: 59 @39378 has 156 MA's), (117, 39219), (121, 39210), (135, 39144), (138, 39126), (156, 39057),

Gene: PetiteSangsue_59 Start: 40083, Stop: 39697, Start Num: 15

Candidate Starts for PetiteSangsue_59:

(Start: 15 @40083 has 157 MA's), (117, 39924), (121, 39915), (138, 39831), (156, 39762),

Gene: Petra64142_80 Start: 49516, Stop: 49929, Start Num: 57

Candidate Starts for Petra64142_80:

(Start: 57 @49516 has 139 MA's), (Start: 64 @49531 has 2 MA's), (114, 49678), (138, 49816),

Gene: Ph8s_66 Start: 39754, Stop: 39380, Start Num: 59

Candidate Starts for Ph8s_66:

(18, 39868), (Start: 47 @39769 has 10 MA's), (Start: 59 @39754 has 156 MA's), (Start: 63 @39745 has 14 MA's), (81, 39691), (99, 39658), (117, 39595), (125, 39577), (138, 39505), (151, 39454), (156, 39436),

Gene: Phacado_61 Start: 40242, Stop: 39862, Start Num: 15

Candidate Starts for Phacado_61:

(Start: 15 @40242 has 157 MA's), (117, 40083), (121, 40074), (138, 39990), (156, 39921),

Gene: Phaja_74 Start: 48123, Stop: 48536, Start Num: 57

Candidate Starts for Phaja_74:

(Start: 57 @48123 has 139 MA's), (Start: 64 @48138 has 2 MA's), (114, 48285), (138, 48423),

Gene: Phantastic_65 Start: 40293, Stop: 39901, Start Num: 13

Candidate Starts for Phantastic_65:

(3, 40434), (Start: 13 @40293 has 8 MA's), (Start: 15 @40284 has 157 MA's), (117, 40128), (135, 40053), (138, 40035), (163, 39936),

Gene: Pharsalus_73 Start: 48097, Stop: 48510, Start Num: 57

Candidate Starts for Pharsalus_73:

(Start: 57 @48097 has 139 MA's), (Start: 64 @48112 has 2 MA's), (114, 48259), (138, 48397),

Gene: PhatBacter_80 Start: 49069, Stop: 49482, Start Num: 57

Candidate Starts for PhatBacter_80:

(Start: 57 @49069 has 139 MA's), (Start: 64 @49084 has 2 MA's), (114, 49231), (138, 49369),

Gene: Phaux_78 Start: 49064, Stop: 49477, Start Num: 57

Candidate Starts for Phaux_78:

(Start: 57 @49064 has 139 MA's), (Start: 64 @49079 has 2 MA's), (114, 49226), (138, 49364),

Gene: Phelipe_62 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for Phelipe_62:

(Start: 13 @40255 has 8 MA's), (Start: 15 @40246 has 157 MA's), (117, 40087), (118, 40084), (121, 40078), (138, 39994), (156, 39925),

Gene: Phighter1804_61 Start: 40307, Stop: 39927, Start Num: 15

Candidate Starts for Phighter1804_61:

(Start: 15 @40307 has 157 MA's), (117, 40148), (121, 40139), (138, 40055), (156, 39986),

Gene: PhinkBoden_118 Start: 68507, Stop: 68884, Start Num: 59

Candidate Starts for PhinkBoden_118:

(Start: 35 @68462 has 1 MA's), (Start: 59 @68507 has 156 MA's), (80, 68567), (138, 68765), (141, 68774), (142, 68777), (144, 68786), (156, 68834), (163, 68864),

Gene: PhishRPhriends_65 Start: 40010, Stop: 39591, Start Num: 59

Candidate Starts for PhishRPhriends_65:

(8, 40265), (Start: 52 @40019 has 5 MA's), (Start: 59 @40010 has 156 MA's), (Start: 63 @40001 has 14 MA's), (101, 39908), (138, 39755), (156, 39686),

Gene: Phoebe_68 Start: 40936, Stop: 40517, Start Num: 59

Candidate Starts for Phoebe_68:

(1, 41284), (2, 41281), (Start: 52 @40945 has 5 MA's), (Start: 59 @40936 has 156 MA's), (Start: 63 @40927 has 14 MA's), (101, 40834), (138, 40681), (156, 40612),

Gene: Phontbonne_61 Start: 40149, Stop: 39769, Start Num: 15

Candidate Starts for Phontbonne_61:

(Start: 15 @40149 has 157 MA's), (117, 39990), (118, 39987), (121, 39981), (138, 39897), (156, 39828),

Gene: Phoxy_67 Start: 40968, Stop: 40549, Start Num: 59

Candidate Starts for Phoxy_67:

(1, 41316), (2, 41313), (Start: 52 @40977 has 5 MA's), (Start: 59 @40968 has 156 MA's), (Start: 63 @40959 has 14 MA's), (101, 40866), (138, 40713), (156, 40644),

Gene: Phranny_68 Start: 40815, Stop: 40396, Start Num: 59

Candidate Starts for Phranny_68:

(8, 41070), (Start: 52 @40824 has 5 MA's), (Start: 59 @40815 has 156 MA's), (Start: 63 @40806 has 14 MA's), (101, 40713), (138, 40560), (156, 40491),

Gene: Phrappuccino_141 Start: 99435, Stop: 99845, Start Num: 48

Candidate Starts for Phrappuccino_141:

(7, 99213), (Start: 48 @99435 has 3 MA's), (Start: 63 @99456 has 14 MA's), (101, 99555), (117, 99615), (120, 99621), (128, 99639), (138, 99702), (144, 99723), (156, 99780),

Gene: Phrux_73 Start: 47660, Stop: 48073, Start Num: 57

Candidate Starts for Phrux_73:

(Start: 57 @47660 has 139 MA's), (Start: 64 @47675 has 2 MA's), (114, 47822), (138, 47960),

Gene: Pipcraft_58 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for Pipcraft_58:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Pistachio_64 Start: 40216, Stop: 39833, Start Num: 15

Candidate Starts for Pistachio_64:

(3, 40366), (Start: 13 @40225 has 8 MA's), (Start: 15 @40216 has 157 MA's), (117, 40060), (127, 40033), (135, 39985), (138, 39967), (163, 39868), (176, 39838),

Gene: Pocahontas_63 Start: 40643, Stop: 40260, Start Num: 15

Candidate Starts for Pocahontas_63:

(Start: 13 @40652 has 8 MA's), (Start: 15 @40643 has 157 MA's), (101, 40547), (117, 40487), (138, 40394), (163, 40295), (165, 40292), (176, 40265),

Gene: Poise_74 Start: 40595, Stop: 41086, Start Num: 47

Candidate Starts for Poise_74:

(Start: 47 @40595 has 10 MA's), (108, 40742), (138, 40898), (139, 40901), (149, 40937), (156, 40967), (165, 41000),

Gene: Policronamos_80 Start: 49064, Stop: 49477, Start Num: 57

Candidate Starts for Policronamos_80:

(Start: 57 @49064 has 139 MA's), (Start: 64 @49079 has 2 MA's), (114, 49226), (138, 49364),

Gene: Polymorphads_62 Start: 40236, Stop: 39856, Start Num: 15

Candidate Starts for Polymorphads_62:

(Start: 15 @40236 has 157 MA's), (117, 40077), (121, 40068), (138, 39984), (156, 39915), (157, 39909),

Gene: Pomar16_65 Start: 40953, Stop: 40576, Start Num: 59

Candidate Starts for Pomar16_65:

(18, 41067), (Start: 47 @40968 has 10 MA's), (Start: 59 @40953 has 156 MA's), (75, 40902), (101, 40854), (102, 40851), (117, 40794), (138, 40701), (139, 40698), (156, 40632),

Gene: Popcicle_63 Start: 40643, Stop: 40260, Start Num: 15

Candidate Starts for Popcicle_63:

(Start: 13 @40652 has 8 MA's), (Start: 15 @40643 has 157 MA's), (101, 40547), (117, 40487), (138, 40394), (163, 40295), (165, 40292), (176, 40265),

Gene: Porky_75 Start: 47490, Stop: 47903, Start Num: 57

Candidate Starts for Porky_75:

(Start: 57 @47490 has 139 MA's), (Start: 64 @47505 has 2 MA's), (114, 47652), (138, 47790),

Gene: PotatoSplit_68 Start: 40947, Stop: 40528, Start Num: 59

Candidate Starts for PotatoSplit_68:

(1, 41295), (2, 41292), (Start: 52 @40956 has 5 MA's), (Start: 59 @40947 has 156 MA's), (Start: 63 @40938 has 14 MA's), (101, 40845), (138, 40692), (156, 40623),

Gene: Pumbaa_61 Start: 40188, Stop: 39808, Start Num: 15

Candidate Starts for Pumbaa_61:

(Start: 15 @40188 has 157 MA's), (117, 40029), (121, 40020), (138, 39936), (156, 39867),

Gene: Pumpkin_79 Start: 48718, Stop: 49131, Start Num: 57

Candidate Starts for Pumpkin_79:

(Start: 57 @48718 has 139 MA's), (Start: 64 @48733 has 2 MA's), (114, 48880), (138, 49018),

Gene: Puppy_64 Start: 40288, Stop: 39905, Start Num: 15

Candidate Starts for Puppy_64:

(3, 40438), (Start: 13 @40297 has 8 MA's), (Start: 15 @40288 has 157 MA's), (117, 40132), (127, 40105), (135, 40057), (138, 40039), (163, 39940), (176, 39910),

Gene: PurpleHaze_67 Start: 40828, Stop: 40409, Start Num: 59

Candidate Starts for PurpleHaze_67:

(Start: 52 @40837 has 5 MA's), (Start: 59 @40828 has 156 MA's), (Start: 63 @40819 has 14 MA's), (101, 40726), (138, 40573), (156, 40504),

Gene: Quallification_77 Start: 48705, Stop: 49118, Start Num: 57

Candidate Starts for Quallification_77:

(Start: 57 @48705 has 139 MA's), (Start: 64 @48720 has 2 MA's), (114, 48867), (138, 49005),

Gene: QuinnKiro_62 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for QuinnKiro_62:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: Raela_74 Start: 41152, Stop: 41643, Start Num: 47

Candidate Starts for Raela_74:

(Start: 47 @41152 has 10 MA's), (108, 41299), (138, 41455), (139, 41458), (149, 41494), (156, 41524), (165, 41557),

Gene: Rakim_77 Start: 48174, Stop: 48587, Start Num: 57

Candidate Starts for Rakim_77:

(Start: 57 @48174 has 139 MA's), (Start: 64 @48189 has 2 MA's), (114, 48336), (138, 48474),

Gene: Reba_67 Start: 40488, Stop: 40069, Start Num: 59

Candidate Starts for Reba_67:

(8, 40743), (Start: 52 @40497 has 5 MA's), (Start: 59 @40488 has 156 MA's), (Start: 63 @40479 has 14 MA's), (101, 40386), (138, 40233), (156, 40164),

Gene: RedRaider77_73 Start: 40540, Stop: 41031, Start Num: 47

Candidate Starts for RedRaider77_73:

(Start: 47 @40540 has 10 MA's), (108, 40687), (138, 40843), (139, 40846), (149, 40882), (156, 40912), (165, 40945),

Gene: Reindeer_128 Start: 67626, Stop: 68123, Start Num: 57

Candidate Starts for Reindeer_128:

(Start: 57 @67626 has 139 MA's), (75, 67680), (78, 67686), (85, 67704), (102, 67740), (115, 67797), (120, 67815), (125, 67830), (136, 67923), (138, 67938), (144, 67959), (146, 67965), (156, 68007),

Gene: Relief_60 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Relief_60:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919),

Gene: ResDef_62 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for ResDef_62:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: Rey_142 Start: 66571, Stop: 67056, Start Num: 57

Candidate Starts for Rey_142:

(14, 66394), (Start: 21 @66466 has 1 MA's), (23, 66475), (27, 66499), (28, 66502), (Start: 57 @66571 has 139 MA's), (104, 66685), (115, 66730), (120, 66748), (138, 66871), (144, 66892), (156, 66940), (163, 66970), (184, 67027),

Gene: Reynauld_80 Start: 64338, Stop: 63856, Start Num: 55

Candidate Starts for Reynauld_80:

(32, 64383), (37, 64374), (Start: 50 @64344 has 7 MA's), (Start: 52 @64341 has 5 MA's), (Start: 55 @64338 has 5 MA's), (66, 64317), (101, 64224), (103, 64218), (124, 64137), (138, 64020), (145, 63996), (156, 63945), (183, 63861),

Gene: Rimmer_77 Start: 48410, Stop: 48823, Start Num: 57

Candidate Starts for Rimmer_77:

(Start: 57 @48410 has 139 MA's), (Start: 64 @48425 has 2 MA's), (114, 48572), (138, 48710),

Gene: RiverMonster_76 Start: 48238, Stop: 48651, Start Num: 57

Candidate Starts for RiverMonster_76:

(Start: 57 @48238 has 139 MA's), (Start: 64 @48253 has 2 MA's), (114, 48400), (138, 48538),

Gene: Roary_75 Start: 41394, Stop: 41002, Start Num: 42

Candidate Starts for Roary_75:

(Start: 42 @41394 has 1 MA's), (Start: 59 @41373 has 156 MA's), (117, 41214), (129, 41181), (138, 41121), (149, 41082), (156, 41052),

Gene: Rockstar_62 Start: 40119, Stop: 39727, Start Num: 13

Candidate Starts for Rockstar_62:

(Start: 13 @40119 has 8 MA's), (Start: 15 @40110 has 157 MA's), (117, 39954), (135, 39879), (138, 39861), (156, 39792), (163, 39762), (172, 39744),

Gene: Romney_60 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Romney_60:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919), (157, 39913),

Gene: Roosevelt_59 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Roosevelt_59:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Rose5_86 Start: 54868, Stop: 55281, Start Num: 59

Candidate Starts for Rose5_86:

(Start: 59 @54868 has 156 MA's), (75, 54919), (78, 54925), (138, 55159), (144, 55180), (146, 55186), (156, 55228),

Gene: Ruin_61 Start: 40236, Stop: 39856, Start Num: 15

Candidate Starts for Ruin_61:

(Start: 15 @40236 has 157 MA's), (117, 40077), (121, 40068), (138, 39984), (156, 39915), (157, 39909),

Gene: Rummer_66 Start: 40962, Stop: 40552, Start Num: 63

Candidate Starts for Rummer_66:

(1, 41319), (2, 41316), (4, 41277), (6, 41268), (Start: 52 @40980 has 5 MA's), (Start: 59 @40971 has 156 MA's), (Start: 63 @40962 has 14 MA's), (101, 40869), (138, 40716), (156, 40647),

Gene: Sabertooth_61 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Sabertooth_61:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Sabia_67 Start: 40943, Stop: 40533, Start Num: 63

Candidate Starts for Sabia_67:

(1, 41300), (2, 41297), (Start: 52 @40961 has 5 MA's), (Start: 59 @40952 has 156 MA's), (Start: 63 @40943 has 14 MA's), (101, 40850), (138, 40697), (156, 40628),

Gene: Sabinator_65 Start: 40942, Stop: 40523, Start Num: 59

Candidate Starts for Sabinator_65:

(1, 41290), (2, 41287), (Start: 52 @40951 has 5 MA's), (Start: 59 @40942 has 156 MA's), (Start: 63 @40933 has 14 MA's), (101, 40840), (138, 40687), (156, 40618),

Gene: Saints25_75 Start: 47648, Stop: 48061, Start Num: 57

Candidate Starts for Saints25_75:

(Start: 57 @47648 has 139 MA's), (Start: 64 @47663 has 2 MA's), (114, 47810), (138, 47948),

Gene: Saintus_69 Start: 38038, Stop: 37667, Start Num: 59

Candidate Starts for Saintus_69:

(Start: 42 @38059 has 1 MA's), (Start: 59 @38038 has 156 MA's), (117, 37879), (129, 37846), (137, 37789), (138, 37786), (156, 37717),

Gene: Salz_62 Start: 39349, Stop: 38975, Start Num: 59

Candidate Starts for Salz_62:

(1, 39685), (5, 39637), (10, 39580), (20, 39457), (23, 39430), (Start: 50 @39361 has 7 MA's), (Start: 59 @39349 has 156 MA's), (99, 39253), (117, 39190), (121, 39181), (125, 39169), (135, 39115), (138, 39097), (156, 39028),

Gene: Sassay_71 Start: 46338, Stop: 46751, Start Num: 57

Candidate Starts for Sassay_71:

(Start: 57 @46338 has 139 MA's), (Start: 64 @46353 has 2 MA's), (114, 46500), (138, 46638),

Gene: Satis_113 Start: 75434, Stop: 74967, Start Num: 31

Candidate Starts for Satis_113:

(25, 75470), (Start: 31 @75434 has 6 MA's), (43, 75407), (66, 75368), (75, 75332), (102, 75284), (137, 75140), (138, 75137), (163, 75029), (182, 74978),

Gene: SaturnRing_64 Start: 40669, Stop: 40286, Start Num: 15

Candidate Starts for SaturnRing_64:

(3, 40819), (Start: 13 @40678 has 8 MA's), (Start: 15 @40669 has 157 MA's), (117, 40513), (127, 40486), (135, 40438), (138, 40420), (163, 40321), (176, 40291),

Gene: Scamp_61 Start: 40245, Stop: 39865, Start Num: 15

Candidate Starts for Scamp_61:

(Start: 15 @40245 has 157 MA's), (117, 40086), (121, 40077), (138, 39993), (156, 39924), (157, 39918),

Gene: Scout_63 Start: 39823, Stop: 39440, Start Num: 15

Candidate Starts for Scout_63:

(3, 39973), (Start: 13 @39832 has 8 MA's), (Start: 15 @39823 has 157 MA's), (117, 39667), (135, 39592), (138, 39574), (163, 39475),

Gene: Serenity_65 Start: 39936, Stop: 39559, Start Num: 59

Candidate Starts for Serenity_65:

(Start: 47 @39951 has 10 MA's), (Start: 59 @39936 has 156 MA's), (117, 39777), (138, 39684), (146, 39657), (150, 39639), (156, 39615),

Gene: Settecandela_141 Start: 99435, Stop: 99845, Start Num: 48

Candidate Starts for Settecandela_141:

(7, 99213), (Start: 48 @99435 has 3 MA's), (Start: 63 @99456 has 14 MA's), (101, 99555), (117, 99615), (120, 99621), (128, 99639), (138, 99702), (144, 99723), (156, 99780),

Gene: Shaka_59 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Shaka_59:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919),

Gene: Sham4_63 Start: 39389, Stop: 39003, Start Num: 50

Candidate Starts for Sham4_63:

(1, 39713), (5, 39665), (10, 39608), (20, 39485), (Start: 50 @39389 has 7 MA's), (Start: 59 @39377 has 156 MA's), (117, 39218), (121, 39209), (135, 39143), (138, 39125), (156, 39056),

Gene: ShamWow_76 Start: 48560, Stop: 48973, Start Num: 57

Candidate Starts for ShamWow_76:

(Start: 57 @48560 has 139 MA's), (Start: 64 @48575 has 2 MA's), (114, 48722), (138, 48860),

Gene: Sheen_63 Start: 43521, Stop: 43072, Start Num: 59

Candidate Starts for Sheen_63:

(12, 43725), (Start: 59 @43521 has 156 MA's), (81, 43458), (117, 43362), (121, 43353), (138, 43269), (149, 43230), (156, 43200), (186, 43089),

Gene: SheldonCooper_61 Start: 40647, Stop: 40267, Start Num: 15
Candidate Starts for SheldonCooper_61:
(Start: 15 @40647 has 157 MA's), (117, 40488), (121, 40479), (138, 40395), (156, 40326),

Gene: Shygu2_59 Start: 40134, Stop: 39754, Start Num: 15
Candidate Starts for Shygu2_59:
(Start: 15 @40134 has 157 MA's), (117, 39975), (121, 39966), (138, 39882), (156, 39813),

Gene: Silverleaf_85 Start: 54367, Stop: 54780, Start Num: 59
Candidate Starts for Silverleaf_85:
(Start: 59 @54367 has 156 MA's), (114, 54520), (138, 54658), (144, 54679), (146, 54685), (156, 54727),

Gene: Simpliphy_75 Start: 47638, Stop: 48051, Start Num: 57
Candidate Starts for Simpliphy_75:
(Start: 57 @47638 has 139 MA's), (Start: 64 @47653 has 2 MA's), (114, 47800), (138, 47938),

Gene: SirDuracell_75 Start: 46924, Stop: 47337, Start Num: 57
Candidate Starts for SirDuracell_75:
(Start: 57 @46924 has 139 MA's), (Start: 64 @46939 has 2 MA's), (125, 47116), (138, 47224), (146, 47251),

Gene: Sixama_169 Start: 96671, Stop: 96312, Start Num: 65
Candidate Starts for Sixama_169:
(Start: 65 @96671 has 5 MA's), (77, 96629), (129, 96497), (138, 96437), (141, 96428), (144, 96416), (149, 96398), (170, 96326),

Gene: Skinny_130 Start: 67311, Stop: 67808, Start Num: 57
Candidate Starts for Skinny_130:
(22, 67209), (Start: 35 @67269 has 1 MA's), (Start: 57 @67311 has 139 MA's), (Start: 63 @67323 has 14 MA's), (75, 67365), (85, 67389), (120, 67500), (125, 67515), (138, 67623), (144, 67644), (156, 67692),

Gene: Skipitt_60 Start: 40237, Stop: 39857, Start Num: 15
Candidate Starts for Skipitt_60:
(Start: 15 @40237 has 157 MA's), (117, 40078), (121, 40069), (138, 39985), (156, 39916), (157, 39910),

Gene: SlimJimmy_123 Start: 66020, Stop: 66517, Start Num: 57
Candidate Starts for SlimJimmy_123:
(Start: 35 @65978 has 1 MA's), (Start: 57 @66020 has 139 MA's), (75, 66074), (85, 66098), (120, 66209), (125, 66224), (138, 66332), (144, 66353), (156, 66401),

Gene: Smeadley_74 Start: 41234, Stop: 40863, Start Num: 59
Candidate Starts for Smeadley_74:
(Start: 42 @41255 has 1 MA's), (Start: 59 @41234 has 156 MA's), (117, 41075), (129, 41042), (137, 40985), (138, 40982), (149, 40943), (156, 40913),

Gene: Smoothie_119 Start: 68218, Stop: 68595, Start Num: 59
Candidate Starts for Smoothie_119:
(Start: 35 @68173 has 1 MA's), (Start: 59 @68218 has 156 MA's), (80, 68278), (138, 68476), (141, 68485), (142, 68488), (144, 68497), (156, 68545), (163, 68575),

Gene: Snape_63 Start: 39369, Stop: 38995, Start Num: 59
Candidate Starts for Snape_63:
(1, 39705), (5, 39657), (10, 39600), (20, 39477), (Start: 50 @39381 has 7 MA's), (Start: 59 @39369 has 156 MA's), (117, 39210), (121, 39201), (135, 39135), (138, 39117), (156, 39048),

Gene: Snickers_65 Start: 40908, Stop: 40498, Start Num: 63
Candidate Starts for Snickers_65:
(1, 41265), (2, 41262), (Start: 52 @40926 has 5 MA's), (Start: 59 @40917 has 156 MA's), (Start: 63 @40908 has 14 MA's), (101, 40815), (138, 40662), (156, 40593),

Gene: SoYo_66 Start: 40855, Stop: 40436, Start Num: 59
Candidate Starts for SoYo_66:
(1, 41203), (2, 41200), (Start: 52 @40864 has 5 MA's), (Start: 59 @40855 has 156 MA's), (Start: 63 @40846 has 14 MA's), (101, 40753), (138, 40600), (156, 40531),

Gene: SoilDragon_67 Start: 40391, Stop: 39972, Start Num: 59
Candidate Starts for SoilDragon_67:
(1, 40739), (2, 40736), (4, 40697), (Start: 52 @40400 has 5 MA's), (Start: 59 @40391 has 156 MA's), (Start: 63 @40382 has 14 MA's), (101, 40289), (138, 40136), (156, 40067),

Gene: SophKB_73 Start: 47316, Stop: 47729, Start Num: 57
Candidate Starts for SophKB_73:
(Start: 57 @47316 has 139 MA's), (Start: 64 @47331 has 2 MA's), (114, 47478), (138, 47616),

Gene: Soshari_69 Start: 40967, Stop: 40548, Start Num: 59
Candidate Starts for Soshari_69:
(1, 41315), (2, 41312), (4, 41273), (Start: 52 @40976 has 5 MA's), (Start: 59 @40967 has 156 MA's), (Start: 63 @40958 has 14 MA's), (101, 40865), (138, 40712), (156, 40643), (180, 40565),

Gene: Sotrice96_77 Start: 48319, Stop: 48732, Start Num: 57
Candidate Starts for Sotrice96_77:
(Start: 57 @48319 has 139 MA's), (Start: 64 @48334 has 2 MA's), (114, 48481), (138, 48619),

Gene: Sparxx_62 Start: 40238, Stop: 39858, Start Num: 15
Candidate Starts for Sparxx_62:
(Start: 15 @40238 has 157 MA's), (117, 40079), (121, 40070), (138, 39986), (156, 39917), (157, 39911),

Gene: SpeedDemon_560 Start: 46149, Stop: 46541, Start Num: 50
Candidate Starts for SpeedDemon_560:
(Start: 48 @46146 has 3 MA's), (Start: 50 @46149 has 7 MA's), (137, 46407), (138, 46410),

Gene: Spike509_67 Start: 40968, Stop: 40549, Start Num: 59
Candidate Starts for Spike509_67:
(1, 41316), (2, 41313), (Start: 52 @40977 has 5 MA's), (Start: 59 @40968 has 156 MA's), (Start: 63 @40959 has 14 MA's), (101, 40866), (138, 40713), (156, 40644),

Gene: Spino_60 Start: 40246, Stop: 39866, Start Num: 15
Candidate Starts for Spino_60:
(Start: 15 @40246 has 157 MA's), (117, 40087), (121, 40078), (138, 39994), (156, 39925), (157, 39919),

Gene: Stagni_66 Start: 40937, Stop: 40527, Start Num: 63

Candidate Starts for Stagni_66:

(1, 41294), (2, 41291), (4, 41252), (Start: 52 @40955 has 5 MA's), (Start: 59 @40946 has 156 MA's), (Start: 63 @40937 has 14 MA's), (101, 40844), (138, 40691), (156, 40622),

Gene: Stank_79 Start: 48577, Stop: 48990, Start Num: 57

Candidate Starts for Stank_79:

(Start: 57 @48577 has 139 MA's), (Start: 64 @48592 has 2 MA's), (114, 48739), (138, 48877),

Gene: StarStuff_66 Start: 40915, Stop: 40538, Start Num: 59

Candidate Starts for StarStuff_66:

(18, 41029), (Start: 59 @40915 has 156 MA's), (75, 40864), (81, 40852), (101, 40816), (102, 40813), (117, 40756), (138, 40663), (139, 40660), (156, 40594),

Gene: Stark_77 Start: 48121, Stop: 48534, Start Num: 57

Candidate Starts for Stark_77:

(Start: 57 @48121 has 139 MA's), (Start: 64 @48136 has 2 MA's), (114, 48283), (138, 48421),

Gene: Stasia_59 Start: 40011, Stop: 39631, Start Num: 15

Candidate Starts for Stasia_59:

(Start: 15 @40011 has 157 MA's), (85, 39936), (117, 39852), (121, 39843), (138, 39759), (156, 39690), (157, 39684),

Gene: StellaBean_74 Start: 47884, Stop: 48297, Start Num: 57

Candidate Starts for StellaBean_74:

(Start: 57 @47884 has 139 MA's), (Start: 64 @47899 has 2 MA's), (114, 48046), (138, 48184),

Gene: StepMih_66 Start: 40928, Stop: 40518, Start Num: 63

Candidate Starts for StepMih_66:

(1, 41285), (2, 41282), (4, 41243), (6, 41234), (Start: 52 @40946 has 5 MA's), (Start: 59 @40937 has 156 MA's), (Start: 63 @40928 has 14 MA's), (101, 40835), (138, 40682), (156, 40613),

Gene: Stephig9_73 Start: 41171, Stop: 40800, Start Num: 59

Candidate Starts for Stephig9_73:

(Start: 42 @41192 has 1 MA's), (Start: 59 @41171 has 156 MA's), (117, 41012), (129, 40979), (137, 40922), (138, 40919), (149, 40880), (156, 40850),

Gene: Stink_58 Start: 39812, Stop: 39426, Start Num: 15

Candidate Starts for Stink_58:

(Start: 15 @39812 has 157 MA's), (117, 39653), (121, 39644), (138, 39560), (156, 39491),

Gene: StolenFromERC_79 Start: 48359, Stop: 48772, Start Num: 57

Candidate Starts for StolenFromERC_79:

(Start: 57 @48359 has 139 MA's), (Start: 64 @48374 has 2 MA's), (114, 48521), (138, 48659),

Gene: Superchunk_64 Start: 39205, Stop: 38822, Start Num: 59

Candidate Starts for Superchunk_64:

(18, 39319), (Start: 47 @39220 has 10 MA's), (Start: 59 @39205 has 156 MA's), (74, 39157), (102, 39103), (117, 39040), (138, 38947), (144, 38926), (156, 38878),

Gene: SwirlSquare_70 Start: 40121, Stop: 39744, Start Num: 59

Candidate Starts for SwirlSquare_70:

(18, 40235), (Start: 59 @40121 has 156 MA's), (Start: 63 @40112 has 14 MA's), (99, 40025), (117, 39962), (123, 39947), (129, 39929), (138, 39869), (151, 39818), (156, 39800),

Gene: TBrady12_79 Start: 48058, Stop: 48471, Start Num: 57

Candidate Starts for TBrady12_79:

(Start: 57 @48058 has 139 MA's), (Start: 64 @48073 has 2 MA's), (114, 48220), (138, 48358),

Gene: TNguyen7_65 Start: 40635, Stop: 40252, Start Num: 15

Candidate Starts for TNguyen7_65:

(3, 40785), (Start: 13 @40644 has 8 MA's), (Start: 15 @40635 has 157 MA's), (117, 40479), (127, 40452), (135, 40404), (138, 40386), (163, 40287), (176, 40257),

Gene: TPA4_57 Start: 41159, Stop: 41554, Start Num: 60

Candidate Starts for TPA4_57:

(Start: 60 @41159 has 9 MA's), (98, 41264), (121, 41336), (125, 41348), (138, 41420), (144, 41441), (156, 41489), (174, 41543),

Gene: Taquarus_60 Start: 40246, Stop: 39866, Start Num: 15

Candidate Starts for Taquarus_60:

(Start: 15 @40246 has 157 MA's), (117, 40087), (121, 40078), (138, 39994), (156, 39925), (157, 39919),

Gene: Tarkin_75 Start: 48306, Stop: 48719, Start Num: 57

Candidate Starts for Tarkin_75:

(Start: 57 @48306 has 139 MA's), (Start: 64 @48321 has 2 MA's), (114, 48468), (138, 48606),

Gene: Taurus_68 Start: 40934, Stop: 40524, Start Num: 63

Candidate Starts for Taurus_68:

(1, 41291), (2, 41288), (Start: 52 @40952 has 5 MA's), (Start: 59 @40943 has 156 MA's), (Start: 63 @40934 has 14 MA's), (101, 40841), (138, 40688), (156, 40619),

Gene: TeardropMSU_72 Start: 47306, Stop: 47719, Start Num: 57

Candidate Starts for TeardropMSU_72:

(Start: 57 @47306 has 139 MA's), (Start: 64 @47321 has 2 MA's), (114, 47468), (138, 47606),

Gene: Teaspoon_77 Start: 48200, Stop: 48613, Start Num: 57

Candidate Starts for Teaspoon_77:

(Start: 57 @48200 has 139 MA's), (Start: 64 @48215 has 2 MA's), (114, 48362), (138, 48500),

Gene: Terminus_79 Start: 49093, Stop: 49506, Start Num: 57

Candidate Starts for Terminus_79:

(Start: 57 @49093 has 139 MA's), (Start: 64 @49108 has 2 MA's), (114, 49255), (138, 49393),

Gene: Tesla_70 Start: 40389, Stop: 40880, Start Num: 47

Candidate Starts for Tesla_70:

(Start: 47 @40389 has 10 MA's), (108, 40536), (138, 40692), (139, 40695), (149, 40731), (156, 40761), (165, 40794),

Gene: Texage_61 Start: 40647, Stop: 40264, Start Num: 15

Candidate Starts for Texage_61:

(Start: 13 @40656 has 8 MA's), (Start: 15 @40647 has 157 MA's), (101, 40551), (117, 40491), (138, 40398), (163, 40299), (165, 40296), (176, 40269),

Gene: Thanksgivukkah_60 Start: 40241, Stop: 39861, Start Num: 15

Candidate Starts for Thanksgivukkah_60:

(Start: 15 @40241 has 157 MA's), (117, 40082), (121, 40073), (138, 39989), (156, 39920), (157, 39914),

Gene: Thresher_78 Start: 49180, Stop: 49593, Start Num: 57

Candidate Starts for Thresher_78:

(Start: 57 @49180 has 139 MA's), (Start: 64 @49195 has 2 MA's), (114, 49342), (138, 49480),

Gene: Tiffany_66 Start: 40838, Stop: 40410, Start Num: 52

Candidate Starts for Tiffany_66:

(1, 41177), (2, 41174), (Start: 52 @40838 has 5 MA's), (Start: 59 @40829 has 156 MA's), (Start: 63 @40820 has 14 MA's), (101, 40727), (138, 40574), (156, 40505),

Gene: Timothy_63 Start: 39346, Stop: 38972, Start Num: 59

Candidate Starts for Timothy_63:

(1, 39682), (5, 39634), (10, 39577), (20, 39454), (Start: 50 @39358 has 7 MA's), (Start: 59 @39346 has 156 MA's), (117, 39187), (121, 39178), (135, 39112), (138, 39094), (156, 39025),

Gene: Timshel_60 Start: 42789, Stop: 42340, Start Num: 59

Candidate Starts for Timshel_60:

(Start: 59 @42789 has 156 MA's), (66, 42774), (81, 42726), (117, 42630), (125, 42609), (126, 42606), (138, 42537), (149, 42498), (156, 42468), (175, 42411), (186, 42357),

Gene: TinaFeyge_59 Start: 40238, Stop: 39858, Start Num: 15

Candidate Starts for TinaFeyge_59:

(Start: 15 @40238 has 157 MA's), (117, 40079), (121, 40070), (138, 39986), (156, 39917), (157, 39911),

Gene: TinyTimmy_61 Start: 39407, Stop: 39021, Start Num: 50

Candidate Starts for TinyTimmy_61:

(1, 39731), (5, 39683), (10, 39626), (20, 39503), (23, 39476), (Start: 50 @39407 has 7 MA's), (Start: 59 @39395 has 156 MA's), (99, 39299), (117, 39236), (121, 39227), (125, 39215), (135, 39161), (138, 39143), (156, 39074),

Gene: Tinybot_60 Start: 40273, Stop: 39893, Start Num: 15

Candidate Starts for Tinybot_60:

(Start: 15 @40273 has 157 MA's), (117, 40114), (121, 40105), (138, 40021), (156, 39952),

Gene: TopsytheTRex_62 Start: 40006, Stop: 39629, Start Num: 59

Candidate Starts for TopsytheTRex_62:

(Start: 47 @40021 has 10 MA's), (Start: 59 @40006 has 156 MA's), (102, 39904), (117, 39847), (138, 39754), (150, 39709), (156, 39685),

Gene: TiroTheta9_60 Start: 40237, Stop: 39857, Start Num: 15

Candidate Starts for TiroTheta9_60:

(Start: 15 @40237 has 157 MA's), (117, 40078), (121, 40069), (138, 39985), (156, 39916), (157, 39910),

Gene: Todacoro_63 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for Todacoro_63:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: Tomaszewski_71 Start: 47469, Stop: 47882, Start Num: 57

Candidate Starts for Tomaszewski_71:

(Start: 57 @47469 has 139 MA's), (Start: 64 @47484 has 2 MA's), (125, 47661), (138, 47769), (146, 47796),

Gene: Tomathan_66 Start: 40962, Stop: 40585, Start Num: 59

Candidate Starts for Tomathan_66:

(18, 41076), (Start: 47 @40977 has 10 MA's), (Start: 59 @40962 has 156 MA's), (75, 40911), (101, 40863), (102, 40860), (117, 40803), (138, 40710), (139, 40707), (156, 40641),

Gene: Toniann_118 Start: 67752, Stop: 68129, Start Num: 59

Candidate Starts for Toniann_118:

(Start: 35 @67707 has 1 MA's), (Start: 59 @67752 has 156 MA's), (80, 67812), (138, 68010), (141, 68019), (142, 68022), (144, 68031), (156, 68079), (163, 68109),

Gene: Toto_74 Start: 48560, Stop: 48973, Start Num: 57

Candidate Starts for Toto_74:

(Start: 57 @48560 has 139 MA's), (Start: 64 @48575 has 2 MA's), (114, 48722), (138, 48860),

Gene: Tourach_86 Start: 56255, Stop: 56671, Start Num: 55

Candidate Starts for Tourach_86:

(Start: 48 @56246 has 3 MA's), (Start: 55 @56255 has 5 MA's), (85, 56333), (93, 56351), (94, 56354), (114, 56411), (121, 56429), (122, 56432), (134, 56522), (138, 56549), (156, 56618),

Gene: Traaww1_72 Start: 47744, Stop: 48157, Start Num: 57

Candidate Starts for Traaww1_72:

(Start: 57 @47744 has 139 MA's), (Start: 64 @47759 has 2 MA's), (114, 47906), (138, 48044),

Gene: Trina_43 Start: 16818, Stop: 16444, Start Num: 53

Candidate Starts for Trina_43:

(Start: 53 @16818 has 1 MA's), (75, 16761), (89, 16734), (100, 16713), (112, 16677), (125, 16644), (138, 16572), (156, 16503), (157, 16497),

Gene: TroyPia_62 Start: 40241, Stop: 39861, Start Num: 15

Candidate Starts for TroyPia_62:

(Start: 15 @40241 has 157 MA's), (117, 40082), (121, 40073), (138, 39989), (156, 39920), (157, 39914),

Gene: Tuco_77 Start: 49068, Stop: 49481, Start Num: 57

Candidate Starts for Tuco_77:

(Start: 57 @49068 has 139 MA's), (Start: 64 @49083 has 2 MA's), (114, 49230), (138, 49368),

Gene: TyDawg_119 Start: 65035, Stop: 65532, Start Num: 57

Candidate Starts for TyDawg_119:

(22, 64933), (Start: 35 @64993 has 1 MA's), (Start: 57 @65035 has 139 MA's), (75, 65089), (85, 65113), (120, 65224), (125, 65239), (138, 65347), (144, 65368), (156, 65416),

Gene: TygerBlood_61 Start: 40243, Stop: 39863, Start Num: 15

Candidate Starts for TygerBlood_61:

(Start: 15 @40243 has 157 MA's), (117, 40084), (121, 40075), (138, 39991), (156, 39922), (157, 39916),

Gene: Tyson_86 Start: 54794, Stop: 55207, Start Num: 59

Candidate Starts for Tyson_86:

(Start: 59 @54794 has 156 MA's), (75, 54845), (78, 54851), (138, 55085), (144, 55106), (146, 55112), (156, 55154),

Gene: UPIE_84 Start: 54390, Stop: 54803, Start Num: 59

Candidate Starts for UPIE_84:

(Start: 59 @54390 has 156 MA's), (75, 54441), (78, 54447), (138, 54681), (144, 54702), (146, 54708), (156, 54750),

Gene: Ukulele_71 Start: 47451, Stop: 47864, Start Num: 57

Candidate Starts for Ukulele_71:

(Start: 57 @47451 has 139 MA's), (Start: 64 @47466 has 2 MA's), (114, 47613), (138, 47751),

Gene: Ulysses_60 Start: 39923, Stop: 39543, Start Num: 15

Candidate Starts for Ulysses_60:

(Start: 15 @39923 has 157 MA's), (117, 39764), (121, 39755), (138, 39671), (156, 39602), (157, 39596),

Gene: VC3_67 Start: 40889, Stop: 40512, Start Num: 59

Candidate Starts for VC3_67:

(18, 41003), (Start: 59 @40889 has 156 MA's), (Start: 63 @40880 has 14 MA's), (69, 40859), (74, 40841), (81, 40826), (138, 40637), (146, 40610), (151, 40586), (156, 40568),

Gene: VasuNzinga_72 Start: 40491, Stop: 40982, Start Num: 47

Candidate Starts for VasuNzinga_72:

(38, 40473), (Start: 47 @40491 has 10 MA's), (108, 40638), (138, 40794), (139, 40797), (149, 40833), (156, 40863), (165, 40896),

Gene: Veracruz_61 Start: 40646, Stop: 40263, Start Num: 15

Candidate Starts for Veracruz_61:

(Start: 13 @40655 has 8 MA's), (Start: 15 @40646 has 157 MA's), (101, 40550), (117, 40490), (138, 40397), (163, 40298), (165, 40295), (176, 40268),

Gene: Vix_65 Start: 41026, Stop: 40607, Start Num: 59

Candidate Starts for Vix_65:

(1, 41374), (2, 41371), (Start: 52 @41035 has 5 MA's), (Start: 59 @41026 has 156 MA's), (Start: 63 @41017 has 14 MA's), (101, 40924), (138, 40771), (156, 40702),

Gene: Wander_61 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Wander_61:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919),

Gene: Watson_66 Start: 40926, Stop: 40516, Start Num: 63

Candidate Starts for Watson_66:

(1, 41283), (2, 41280), (Start: 52 @40944 has 5 MA's), (Start: 59 @40935 has 156 MA's), (Start: 63 @40926 has 14 MA's), (101, 40833), (138, 40680), (156, 40611),

Gene: Weasels2_55 Start: 20844, Stop: 20455, Start Num: 59

Candidate Starts for Weasels2_55:

(Start: 59 @20844 has 156 MA's), (85, 20769), (138, 20574), (157, 20499), (166, 20469),

Gene: Wiggin_78 Start: 48145, Stop: 48558, Start Num: 57

Candidate Starts for Wiggin_78:

(Start: 57 @48145 has 139 MA's), (Start: 64 @48160 has 2 MA's), (114, 48307), (138, 48445),

Gene: Wilbur_61 Start: 40240, Stop: 39860, Start Num: 15

Candidate Starts for Wilbur_61:

(Start: 15 @40240 has 157 MA's), (117, 40081), (121, 40072), (138, 39988), (156, 39919), (157, 39913),

Gene: Wildcat_134 Start: 64288, Stop: 64722, Start Num: 60

Candidate Starts for Wildcat_134:

(Start: 60 @64288 has 9 MA's), (Start: 64 @64297 has 2 MA's), (74, 64333), (75, 64336), (97, 64399), (110, 64447), (113, 64453), (120, 64477), (136, 64576), (138, 64591), (155, 64663),

Gene: Wile_59 Start: 40114, Stop: 39728, Start Num: 15

Candidate Starts for Wile_59:

(Start: 15 @40114 has 157 MA's), (117, 39955), (121, 39946), (138, 39862), (156, 39793),

Gene: Willez_71 Start: 46338, Stop: 46751, Start Num: 57

Candidate Starts for Willez_71:

(Start: 57 @46338 has 139 MA's), (Start: 64 @46353 has 2 MA's), (114, 46500), (138, 46638),

Gene: WilliamBoone_116 Start: 65070, Stop: 65447, Start Num: 59

Candidate Starts for WilliamBoone_116:

(Start: 59 @65070 has 156 MA's), (130, 65271), (132, 65289), (138, 65328), (139, 65331), (141, 65337), (142, 65340), (148, 65364),

Gene: Wizard007_60 Start: 40248, Stop: 39868, Start Num: 15

Candidate Starts for Wizard007_60:

(Start: 15 @40248 has 157 MA's), (117, 40089), (118, 40086), (121, 40080), (138, 39996), (156, 39927),

Gene: Wooldri_69 Start: 40855, Stop: 40436, Start Num: 59

Candidate Starts for Wooldri_69:

(1, 41203), (2, 41200), (4, 41161), (Start: 52 @40864 has 5 MA's), (Start: 59 @40855 has 156 MA's), (Start: 63 @40846 has 14 MA's), (101, 40753), (138, 40600), (156, 40531), (180, 40453),

Gene: Wyatt2_86 Start: 54792, Stop: 55205, Start Num: 59

Candidate Starts for Wyatt2_86:

(Start: 59 @54792 has 156 MA's), (75, 54843), (78, 54849), (138, 55083), (144, 55104), (146, 55110), (156, 55152),

Gene: Xandras_75 Start: 47553, Stop: 47966, Start Num: 57

Candidate Starts for Xandras_75:

(Start: 57 @47553 has 139 MA's), (Start: 64 @47568 has 2 MA's), (114, 47715), (138, 47853),

Gene: Xena_58 Start: 40080, Stop: 39694, Start Num: 15

Candidate Starts for Xena_58:

(Start: 15 @40080 has 157 MA's), (117, 39921), (121, 39912), (138, 39828), (156, 39759),

Gene: YassJohnny_73 Start: 47508, Stop: 47921, Start Num: 57

Candidate Starts for YassJohnny_73:

(Start: 57 @47508 has 139 MA's), (Start: 64 @47523 has 2 MA's), (125, 47700), (138, 47808), (146, 47835),

Gene: YoSam321_61 Start: 40237, Stop: 39857, Start Num: 15

Candidate Starts for YoSam321_61:

(Start: 15 @40237 has 157 MA's), (117, 40078), (121, 40069), (138, 39985), (156, 39916), (157, 39910),

Gene: Youngblood_79 Start: 49020, Stop: 49433, Start Num: 57

Candidate Starts for Youngblood_79:

(Start: 57 @49020 has 139 MA's), (Start: 64 @49035 has 2 MA's), (114, 49182), (138, 49320),

Gene: Yvonnetastic_125 Start: 70757, Stop: 71188, Start Num: 59

Candidate Starts for Yvonnetastic_125:

(Start: 59 @70757 has 156 MA's), (73, 70802), (75, 70808), (85, 70832), (138, 71036), (139, 71039), (141, 71045), (168, 71144), (177, 71168),

Gene: Zetzy_66 Start: 40506, Stop: 40087, Start Num: 59

Candidate Starts for Zetzy_66:

(1, 40854), (2, 40851), (4, 40812), (Start: 52 @40515 has 5 MA's), (Start: 59 @40506 has 156 MA's), (Start: 63 @40497 has 14 MA's), (71, 40470), (101, 40404), (138, 40251), (156, 40182),

Gene: xkcd_79 Start: 49210, Stop: 49623, Start Num: 57

Candidate Starts for xkcd_79:

(Start: 57 @49210 has 139 MA's), (Start: 64 @49225 has 2 MA's), (114, 49372), (138, 49510),