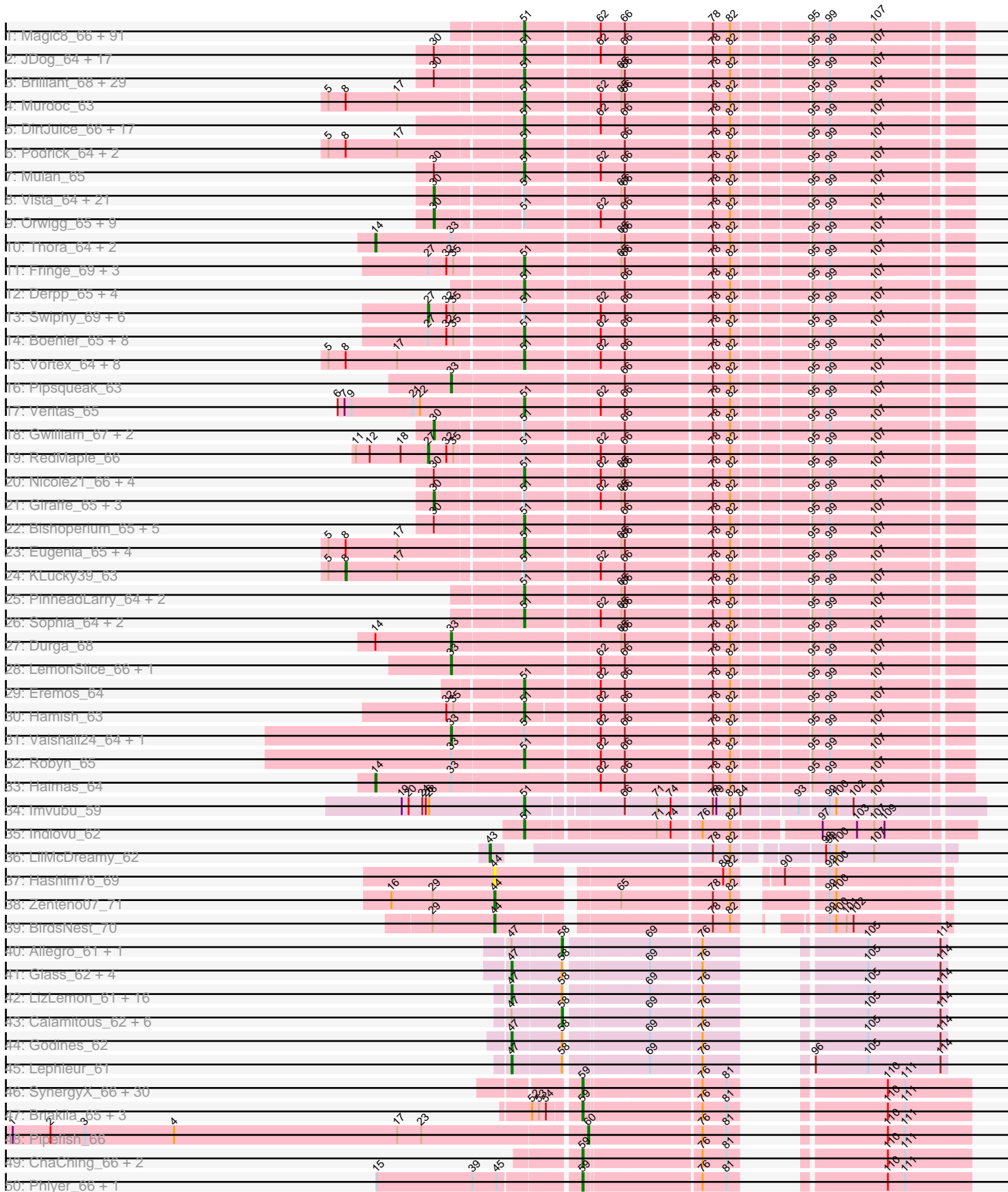
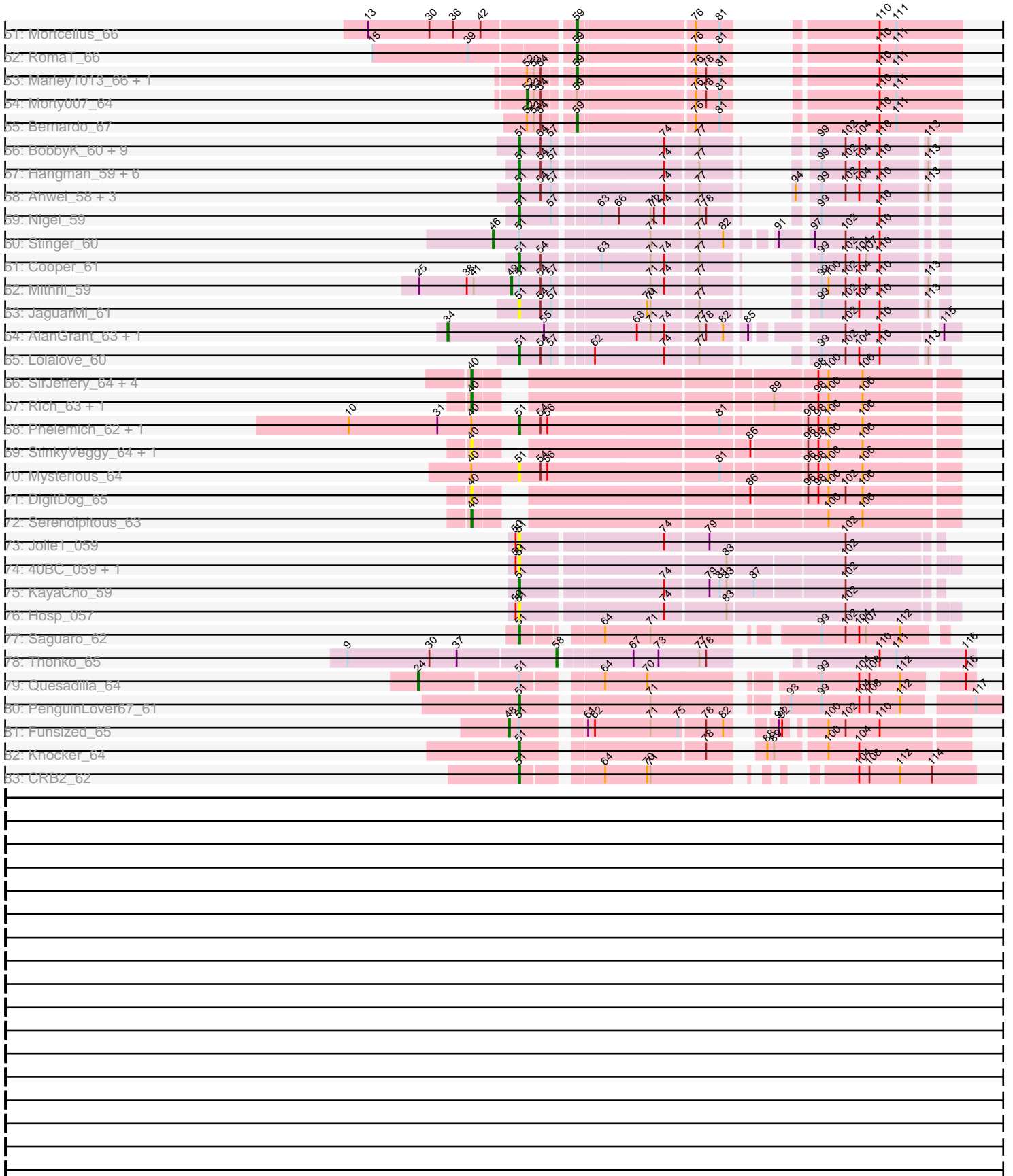


Pham 171118



Pham 171118



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 171118 Report

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

Pham number 171118 has 415 members, 43 are drafts.

Phages represented in each track:

- Track 1 : Magic8_66, Weher20_63, FriarPreacher_64, Pherdinand_66, Soto_63, Basato_65, Zonia_66, Melc17_63, Aelin_65, OSmaximus_66, Mana_64, Vivaldi_66, Jiminy_66, MichaelPhcott_64, Iridoclysis_65, JakeO_66, Manad_64, MitKao_65, Maru_65, Pinkman_65, BlackStallion_66, FluffyNinja_66, Schadenfreude_65, ImtiyazSitla_66, Yoshand_66, Ashraf_66, Inchworm_67, Phergie_66, Cobra_66, Frankicide_63, Mosaic_63, Dingo_63, LeeLot_65, KlimbOn_65, Inverness_64, Doddsville_64, Lopsy_63, Etaye_65, Chorkpop_65, Dati_63, Duggie_65, Kailash_64, Schueller_66, GeneCoco_66, Daffy_64, Antonia_64, MiniBoss_63, Cornobble_64, Cher_65, LostAndPhound_65, AbsoluteMadLad_65, Emiris_67, PhrankReynolds_65, MelsMeow_65, Legolas_67, Wallhey_66, Phareon_64, Swish_66, Morgushi_64, PhrodoBaggins_66, CheetO_65, LasagnaCat_67, KingTut_57, Katniss_66, Phenghiskhan_66, Roliet_63, SassyCat97_64, AltPhacts_64, Held_64, Potter_63, Hartsy_64, Fozzie_65, BlueHusk_67, Mag7_64, CampRoach_66, Tooj_63, HSavage_63, TallGrassMM_64, HighStump_67, Apizium_64, Phleuron_64, Kwksand96_66, MRabcd_65, Mikota_63, Puhltonio_64, Sheila_62, Craff_68, Kloppinator_66, Maskar_66, KingVeVeVe_64, Struggle_66, BatteryCK_64
- Track 2 : JDog_64, Zelda_66, Banjo_64, Thunderbird_66, Childish_64, Longacauda_66, Slatt_66, DaddyDaniels_67, Riggan_66, Squiggle_65, Vaticameos_62, HenryJackson_65, Kahve_65, LeiMonet_68, Jiraiya_69, Cannibal_65, Kimbrough_66, Daka_68
- Track 3 : Brilliant_68, LuckyMarjie_63, Tomlarah_66, Plmatters_64, Gareth_65, Simielle_65, DelRivs_63, Waterdiva_65, Rimu_68, Grand2040_64, Altwerkus_63, Skippy_66, Hocus_64, Badfish_65, Soile_66, Kwadwo_64, Mecca_65, Scrick_65, Quisquilliae_66, Bluephacebaby_65, Beaglebox_64, Jillium_65, Timmi_64, Omniscient_66, Anderson_66, Gophee_66, Toni_65, Burr_65, Zaider_66, MrPhizzler_65
- Track 4 : Murdoc_63
- Track 5 : DirtJuice_66, EmpTee_64, Prickles_67, SDcharge11_65, Pops_63, Olive_65, ProfessorX_64, Virapocalypse_66, Olak_66, Spartan300_65, Sigman_65, JacAttac_66, Phunky_63, FugateOSU_66, ShiVal_63, JangoPhett_65, Dione_63, Valjean_65
- Track 6 : Podrick_64, Buckeye_65, Matalotodo_65
- Track 7 : Mulan_65
- Track 8 : Vista_64, PG1_65, Megamind20_66, Chah_66, Pacifista_68, Serpentine_0065, Orion_66, Numberten_64, Selr12_67, ThreeOh3D2_66, Mcshane_64, Serendipity_64, Roy17_63, ABU_65, Lulumae_62, Scoot17C_65, Hertubise_64, Ricotta_64, PhatCats2014_65, Piglet_0065, Orfeu_65, Oosterbaan_64

- Track 9 : Orwigg_65, UncleHowie_63, Mutante_65, DoesntMatter_62, Lego3393_63, Megatron_65, Xavier_64, Phamished_67, Morty_66, DuchessDung_65
- Track 10 : Thora_64, Oline_65, Trypo_67
- Track 11 : Fringe_69, Freya_62, Lulwa_63, Lasso_65
- Track 12 : Derpp_65, TyrionL_66, CharlieGBrown_64, Placalicious_66, Labeouficaum_66
- Track 13 : Swiphy_69, Kikipoo_66, Chute_66, Chaelin_66, Virgeve_64, Colbert_63, IsaacEli_66
- Track 14 : Boehler_65, Windsor_65, Coletti_68, Crownjwl_64, Horchata_63, Keitherie_67, Roscoe_66, PhatLouie_67, Adriana_67
- Track 15 : Vortex_64, Nacho_0067, Chunky_64, OliverWalter_63, Surely_65, Newman_63, Squid_64, Usavi_65, TomBombadil_65
- Track 16 : Pipsqueak_63
- Track 17 : Veritas_65
- Track 18 : Gwilliam_67, UAch1_65, Hetaeria_64
- Track 19 : RedMaple_66
- Track 20 : Nicole21_66, Haleema_64, Dice_66, Nyala_64, Cosmolli16_66
- Track 21 : Giraffe_65, Andre_67, Charles1_66, Telesworld_63
- Track 22 : Bishoperium_65, QueenBeane_65, True_64, CamL_65, Samaymay_65, Lumine_66
- Track 23 : Eugenia_65, Gyarad_0064, Suffolk_63, Fang_66, Phipps_65
- Track 24 : KLucky39_63
- Track 25 : PinheadLarry_64, Harvey_63, Mesh1_66
- Track 26 : Sophia_64, Solosis_64, DonSanchon_62
- Track 27 : Durga_68
- Track 28 : LemonSlice_66, YouGoGlencoco_66
- Track 29 : Eremos_64
- Track 30 : Hamish_63
- Track 31 : Vaishali24_64, Carthage_64
- Track 32 : Robyn_65
- Track 33 : Haimas_64
- Track 34 : Imvubu_59
- Track 35 : Indlovu_62
- Track 36 : LilMcDreamy_62
- Track 37 : Hashim76_69
- Track 38 : Zenteno07_71
- Track 39 : BirdsNest_70
- Track 40 : Allegro_61, Kaleb_61
- Track 41 : Glass_62, ItsyBitsy1_61, Kheth_61, Eaglehorse_61, FrenchFry_62
- Track 42 : LizLemon_61, Brownie5_61, Phantasmagoria_61, West99_61, Laurie_61, Rosebush_60, Opia_62, Rhinoforte_61, Qyrzula_56, Boyle_61, Arbiter_60, Hedgerow_61, Ares_61, Blocker23_61, Bananafish_62, Sabella_61, Tinciduntolum_62
- Track 43 : Calamitous_62, Lars_62, Faze9_60, Coffee_61, TA17A_61, Tres_61, MasterPo_62
- Track 44 : Godines_62
- Track 45 : Lephleur_61
- Track 46 : SynergyX_66, Jackstina_62, MmasiCarm_67, Yinz_66, Kamiyu_66, Athena_68, Ben11_66, Tydolla_63, GlenHope_67, Phaedrus_61, RagingRooster_65, HarveySr_65, Audrey_66, Akoma_66, Daisy_65, Rita1961_67, Philly_65, Kronus_66, Nozo_66, Corofin_66, Gervas_67, Devonte_65, Heathcliff_66, Chandler_66, Abinghost_66, Deenasa_66, Casbah_66, Halfpint_65, OrangeOswald_66, Baloo_65,

LestyG_64

- Track 47 : Briakila_65, Phayeta_68, Neos5_65, SlippinJimmy_68
- Track 48 : Pipefish_66
- Track 49 : ChaChing_66, Yahalom_64, Gadget_67
- Track 50 : Phlyer_66, Compostia_65
- Track 51 : Mortcellus_66
- Track 52 : RomaT_66
- Track 53 : Marley1013_66, Obutu_67
- Track 54 : Morty007_64
- Track 55 : Bernardo_67
- Track 56 : BobbyK_60, Austelle_60, BrownCNA_61, Prince_60, ChrisnMich_59, Hydro_59, Heath_58, Apex_60, Waleliano_59, VioletZ_61
- Track 57 : Hangman_59, Magpie_58, RawrgerThat_60, Mudslide_59, Frederick_59, Zemanar_60, Fortunato_60
- Track 58 : Ahwei_58, Nanao_58, Poster_58, JAMaL_59
- Track 59 : Nigel_59
- Track 60 : Stinger_60
- Track 61 : Cooper_61
- Track 62 : Mithril_59
- Track 63 : JaguarMi_61
- Track 64 : AlanGrant_63, Vincenzo_62
- Track 65 : Lolalove_60
- Track 66 : SirJeffery_64, Acadian_65, Donny_66, Suigeneris_66, EastView9101_66
- Track 67 : Rich_63, Bae_65
- Track 68 : Phelemich_62, Reprobate_63
- Track 69 : StinkyVeggy_64, Nangang_64
- Track 70 : Mysterious_64
- Track 71 : DigitDog_65
- Track 72 : Serendipitous_63
- Track 73 : Jolie1_059
- Track 74 : 40BC_059, 39HC_059
- Track 75 : KayaCho_59
- Track 76 : Hosp_057
- Track 77 : Saguaro_62
- Track 78 : Thonko_65
- Track 79 : Quesadilla_64
- Track 80 : PenguinLover67_61
- Track 81 : Funsized_65
- Track 82 : Knocker_64
- Track 83 : CRB2_62

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

The start number called the most often in the published annotations is 51, it was called in 233 of the 372 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 39HC_059, 40BC_059, AbsoluteMadLad_65, Adriana_67, Aelin_65, Ahwei_58, AltPhacts_64, Altwerkus_63, Anderson_66, Antonia_64, Apex_60, Apizium_64, Ashraf_66, Austelle_60, Badfish_65, Banjo_64, Basato_65, BatteryCK_64,

Beaglebox_64, Bishoperium_65, BlackStallion_66, BlueHusk_67, Bluephacebaby_65, BobbyK_60, Boehler_65, Brilliant_68, BrownCNA_61, Buckeye_65, Burr_65, CRB2_62, CamL_65, CampRoach_66, Cannibal_65, CharlieGBrown_64, CheetO_65, Cher_65, Childish_64, Chorkpop_65, ChrisnMich_59, Chunky_64, Cobra_66, Coletti_68, Cooper_61, Cornobble_64, Cosmolli16_66, Craff_68, Crownjwl_64, DaddyDaniels_67, Daffy_64, Daka_68, Dati_63, DelRivs_63, Derpp_65, Dice_66, Dingo_63, Dione_63, DirtJuice_66, Doddsville_64, DonSanchon_62, Duggie_65, Emiris_67, EmpTee_64, Eremos_64, Etaye_65, Eugenia_65, Fang_66, FluffyNinja_66, Fortunato_60, Fozzie_65, Frankicide_63, Frederick_59, Freya_62, FriarPreacher_64, Fringe_69, FugateOSU_66, Gareth_65, GeneCoco_66, Gophee_66, Grand2040_64, Gyarad_0064, HSavage_63, Haleema_64, Hamish_63, Hangman_59, Hartsy_64, Harvey_63, Heath_58, Held_64, HenryJackson_65, HighStump_67, Hocus_64, Horchata_63, Hosp_057, Hydro_59, ImtiyazSitla_66, Imvubu_59, Inchworm_67, Indlovu_62, Inverness_64, Iridoclysis_65, JAMaL_59, JDog_64, JacAttac_66, JaguarMi_61, JakeO_66, JangoPhett_65, Jillium_65, Jiminy_66, Jiraiya_69, Jolie1_059, Kahve_65, Kailash_64, Katniss_66, KayaCho_59, Keitherie_67, Kimbrough_66, KingTut_57, KingVeVeVe_64, KlimbOn_65, Kloppinator_66, Knocker_64, Kwadwo_64, Kwksand96_66, Labeouficaum_66, LasagnaCat_67, Lasso_65, LeeLot_65, Legolas_67, LeiMonet_68, Lolalove_60, Longacauda_66, Lopsy_63, LostAndPhound_65, LuckyMarjie_63, Lulwa_63, Lumine_66, MRabcd_65, Mag7_64, Magic8_66, Magpie_58, Mana_64, Manad_64, Maru_65, Maskar_66, Matalotodo_65, Mecca_65, Melc17_63, MelsMeow_65, Mesh1_66, MichaelPhcott_64, Mikota_63, MiniBoss_63, MitKao_65, Morgushi_64, Mosaic_63, MrPhizzler_65, Mudslide_59, Mulan_65, Murdoc_63, Mysterious_64, Nacho_0067, Nanao_58, Newman_63, Nicole21_66, Nigel_59, Nyala_64, OSmaximus_66, Olak_66, Olive_65, OliverWalter_63, Omniscient_66, PenguinLover67_61, Phareon_64, PhatLouie_67, Phelemich_62, PhenghisKhan_66, Pherdinand_66, Phergie_66, Phipps_65, Phleuron_64, PhrankReynolds_65, PhrodoBaggins_66, Phunky_63, PinheadLarry_64, Pinkman_65, Placalicious_66, Plmatters_64, Podrick_64, Pops_63, Poster_58, Potter_63, Prickles_67, Prince_60, ProfessorX_64, Puhltonio_64, QueenBeane_65, Quisquillae_66, RawrgerThat_60, Reprobate_63, Riggan_66, Rimu_68, Robyn_65, Roliet_63, Roscoe_66, SDcharge11_65, Saguario_62, Samaymay_65, SassyCat97_64, Schadenfreude_65, Schueller_66, Scrick_65, Sheila_62, ShiVal_63, Sigman_65, Simielle_65, Skippy_66, Slatt_66, Soile_66, Solosis_64, Sophia_64, Soto_63, Spartan300_65, Squid_64, Squiggle_65, Struggle_66, Suffolk_63, Surely_65, Swish_66, TallGrassMM_64, Thunderbird_66, Timmi_64, TomBombadil_65, Tomlarah_66, Toni_65, Tooj_63, True_64, TyrionL_66, Usavi_65, Valjean_65, Vaticameos_62, Veritas_65, VioletZ_61, Virapocalypse_66, Vivaldi_66, Vortex_64, Waleliano_59, Wallhey_66, Waterdiva_65, Weher20_63, Windsor_65, Yoshand_66, Zaider_66, Zelda_66, Zemanar_60, Zonia_66,

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

- ABU_65, Andre_67, Carthage_64, Chaelin_66, Chah_66, Charles1_66, Chute_66, Colbert_63, DoesntMatter_62, DuchessDung_65, Funsized_65, Giraffe_65, Gwilliam_67, Hertubise_64, Hetaeria_64, IsaacEli_66, KLucky39_63, Kikipoo_66, Lego3393_63, Lulumae_62, Mcshane_64, Megamind20_66, Megatron_65, Mithril_59, Morty_66, Mutante_65, Numberten_64, Oosterbaan_64, Orfeu_65, Orion_66, Orwigg_65, PG1_65, Pacifista_68, Phamished_67, PhatCats2014_65, Piglet_0065, Quesadilla_64, RedMaple_66, Ricotta_64, Roy17_63, Scoot17C_65, Selr12_67, Serendipity_64, Serpentine_0065, Stinger_60, Swiphy_69, Telesworld_63, ThreeOh3D2_66, UAch1_65, UncleHowie_63, Vaishali24_64, Virgeve_64, Vista_64, Xavier_64,

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

- Abinghost_66, Acadian_65, Akoma_66, AlanGrant_63, Allegro_61, Arbiter_60, Ares_61, Athena_68, Audrey_66, Bae_65, Baloo_65, Bananafish_62, Ben11_66, Bernardo_67, BirdsNest_70, Blocker23_61, Boyle_61, Briakila_65, Brownie5_61, Calamitous_62, Casbah_66, ChaChing_66, Chandler_66, Coffee_61, Compostia_65, Corofin_66, Daisy_65, Deenasa_66, Devonte_65, DigitDog_65, Donny_66, Durga_68, Eaglehorse_61, EastView9101_66, Faze9_60, FrenchFry_62, Gadget_67, Gervas_67, Glass_62, GlenHope_67, Godines_62, Haimas_64, Halfpint_65, HarveySr_65, Hashim76_69, Heathcliff_66, Hedgerow_61, ItsyBitsy1_61, Jackstina_62, Kaleb_61, Kamiyu_66, Kheth_61, Kronus_66, Lars_62, Laurie_61, LemonSlice_66, Lephleur_61, LestyG_64, LilMcDreamy_62, LizLemon_61, Marley1013_66, MasterPo_62, MmasiCarm_67, Mortcellus_66, Morty007_64, Nangang_64, Neos5_65, Nozo_66, Obutu_67, Oline_65, Opia_62, OrangeOswald_66, Phaedrus_61, Phantasmagoria_61, Phayeta_68, Philly_65, Phlyer_66, Pipefish_66, Pipsqueak_63, Qyrzula_56, RagingRooster_65, Rhinoforte_61, Rich_63, Rita1961_67, RomaT_66, Rosebush_60, Sabella_61, Serendipitous_63, SirJeffery_64, SlippinJimmy_68, StinkyVeggy_64, Suigeneris_66, SynergyX_66, TA17A_61, Thonko_65, Thora_64, Tinciduntolum_62, Tres_61, Trypo_67, Tydolla_63, Vincenzo_62, West99_61, Yahalom_64, Yinz_66, YouGoGlencoco_66, Zenteno07_71,

Summary by start number:

Start 8:

- Found in 19 of 415 (4.6%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 5.3% of time when present
- Phage (with cluster) where this start called: KLucky39_63 (B1),

Start 14:

- Found in 5 of 415 (1.2%) of genes in pham
- Manual Annotations of this start: 4 of 372
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Haimas_64 (B1), Oline_65 (B1), Thora_64 (B1), Trypo_67 (B1),

Start 24:

- Found in 2 of 415 (0.5%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Quesadilla_64 (B9),

Start 27:

- Found in 21 of 415 (5.1%) of genes in pham
- Manual Annotations of this start: 6 of 372
- Called 38.1% of time when present
- Phage (with cluster) where this start called: Chaelin_66 (B1), Chute_66 (B1), Colbert_63 (B1), IsaacEli_66 (B1), Kikipoo_66 (B1), RedMaple_66 (B1), Swiphy_69 (B1), Virgeve_64 (B1),

Start 30:

- Found in 101 of 415 (24.3%) of genes in pham

- Manual Annotations of this start: 31 of 372
- Called 38.6% of time when present
- Phage (with cluster) where this start called: ABU_65 (B1), Andre_67 (B1), Chah_66 (B1), Charles1_66 (B1), DoesntMatter_62 (B1), DuchessDung_65 (B1), Giraffe_65 (B1), Gwilliam_67 (B1), Hertubise_64 (B1), Hetaeria_64 (B1), Lego3393_63 (B1), Lulumae_62 (B1), Mcshane_64 (B1), Megamind20_66 (B1), Megatron_65 (B1), Morty_66 (B1), Mutante_65 (B1), Numberten_64 (B1), Oosterbaan_64 (B1), Orfeu_65 (B1), Orion_66 (B1), Orwigg_65 (B1), PG1_65 (B1), Pacifista_68 (B1), Phamished_67 (B1), PhatCats2014_65 (B1), Piglet_0065 (B1), Ricotta_64 (B1), Roy17_63 (B1), Scoot17C_65 (B1), Selr12_67 (B1), Serendipity_64 (B1), Serpentine_0065 (B1), Telesworld_63 (B1), ThreeOh3D2_66 (B1), UAch1_65 (B1), UncleHowie_63 (B1), Vista_64 (B1), Xavier_64 (B1),

Start 33:

- Found in 11 of 415 (2.7%) of genes in pham
- Manual Annotations of this start: 6 of 372
- Called 54.5% of time when present
- Phage (with cluster) where this start called: Carthage_64 (B1), Durga_68 (B1), LemonSlice_66 (B1), Pipsqueak_63 (B1), Vaishali24_64 (B1), YouGoGlencoco_66 (B1),

Start 34:

- Found in 2 of 415 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_63 (B4), Vincenzo_62 (B4),

Start 40:

- Found in 14 of 415 (3.4%) of genes in pham
- Manual Annotations of this start: 6 of 372
- Called 78.6% of time when present
- Phage (with cluster) where this start called: Acadian_65 (B5), Bae_65 (B5), DigitDog_65 (B5), Donny_66 (B5), EastView9101_66 (B5), Nangang_64 (B5), Rich_63 (B5), Serendipitous_63 (B5), SirJeffery_64 (B5), StinkyVeggy_64 (B5), Suigeneris_66 (B5),

Start 43:

- Found in 1 of 415 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilMcDreamy_62 (B12),

Start 44:

- Found in 3 of 415 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdsNest_70 (B13), Hashim76_69 (B13), Zenteno07_71 (B13),

Start 46:

- Found in 1 of 415 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Stinger_60 (B4),

Start 47:

- Found in 33 of 415 (8.0%) of genes in pham
- Manual Annotations of this start: 24 of 372
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Arbiter_60 (B2), Ares_61 (B2), Bananafish_62 (B2), Blocker23_61 (B2), Boyle_61 (B2), Brownie5_61 (B2), Eaglehorse_61 (B2), FrenchFry_62 (B2), Glass_62 (B2), Godines_62 (B2), Hedgerow_61 (B2), ItsyBitsy1_61 (B2), Kheth_61 (B2), Laurie_61 (B2), Lephleur_61 (B2), LizLemon_61 (B2), Opia_62 (B2), Phantasmagoria_61 (B2), Qyrzula_56 (B2), Rhinoforte_61 (B2), Rosebush_60 (B2), Sabella_61 (B2), Tinciduntolum_62 (B2), West99_61 (B2),

Start 48:

- Found in 1 of 415 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Funsized_65 (B9),

Start 49:

- Found in 1 of 415 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mithril_59 (B4),

Start 51:

- Found in 309 of 415 (74.5%) of genes in pham
- Manual Annotations of this start: 233 of 372
- Called 82.5% of time when present
- Phage (with cluster) where this start called: 39HC_059 (B6), 40BC_059 (B6), AbsoluteMadLad_65 (B1), Adriana_67 (B1), Aelin_65 (B1), Ahwei_58 (B4), AltPhacts_64 (B1), Altwerkus_63 (B1), Anderson_66 (B1), Antonia_64 (B1), Apex_60 (B4), Apizium_64 (B1), Ashraf_66 (B1), Austelle_60 (B4), Badfish_65 (B1), Banjo_64 (B1), Basato_65 (B1), BatteryCK_64 (B1), Beaglebox_64 (B1), Bishoperium_65 (B1), BlackStallion_66 (B1), BlueHusk_67 (B1), Bluephacebaby_65 (B1), BobbyK_60 (B4), Boehler_65 (B1), Brilliant_68 (B1), BrownCNA_61 (B4), Buckeye_65 (B1), Burr_65 (B1), CRB2_62 (B9), CamL_65 (B1), CampRoach_66 (B1), Cannibal_65 (B1), CharlieGBrown_64 (B1), CheetO_65 (B1), Cher_65 (B1), Childish_64 (B1), Chorkpop_65 (B1), ChrisnMich_59 (B4), Chunky_64 (B1), Cobra_66 (B1), Coletti_68 (B1), Cooper_61 (B4), Cornobble_64 (B1), Cosmolli16_66 (B1), Craff_68 (B1), Crownjwl_64 (B1), DaddyDaniels_67 (B1), Daffy_64 (B1), Daka_68 (B1), Dati_63 (B1), DelRivs_63 (B1), Derpp_65 (B1), Dice_66 (B1), Dingo_63 (B1), Dione_63 (B1), DirtJuice_66 (B1), Doddsville_64 (B1), DonSanchon_62 (B1), Duggie_65 (B1), Emiris_67 (B1), EmpTee_64 (B1), Eremos_64 (B1), Etaye_65 (B1), Eugenia_65 (B1), Fang_66 (B1), FluffyNinja_66 (B1), Fortunato_60 (B4), Fozzie_65 (B1), Frankicide_63 (B1), Frederick_59 (B4), Freya_62 (B1), FriarPreacher_64 (B1), Fringe_69 (B1), FugateOSU_66 (B1), Gareth_65 (B1), GeneCoco_66 (B1), Gophee_66 (B1), Grand2040_64 (B1), Gyarad_0064 (B1), HSavage_63 (B1), Haleema_64 (B1), Hamish_63 (B1), Hangman_59 (B4), Hartsy_64 (B1), Harvey_63 (B1), Heath_58 (B4), Held_64 (B1), HenryJackson_65 (B1), HighStump_67 (B1), Hocus_64 (B1), Horchata_63 (B1), Hosp_057 (B6), Hydro_59 (B4), ImtiyazSitla_66 (B1), Imvubu_59 (B10), Inchworm_67 (B1), Indlovu_62 (B11), Inverness_64 (B1),

Iridoclysis_65 (B1), JAMaL_59 (B4), JDog_64 (B1), JacAttac_66 (B1), JaguarMi_61 (B4), JakeO_66 (B1), JangoPhett_65 (B1), Jillium_65 (B1), Jiminy_66 (B1), Jiraiya_69 (B1), Jolie1_059 (B6), Kahve_65 (B1), Kailash_64 (B1), Katniss_66 (B1), KayaCho_59 (B6), Keitherie_67 (B1), Kimbrough_66 (B1), KingTut_57 (B1), KingVeVeVe_64 (B1), KlimbOn_65 (B1), Kloppinator_66 (B1), Knocker_64 (B9), Kwadwo_64 (B1), Kwksand96_66 (B1), Labeouficaum_66 (B1), LasagnaCat_67 (B1), Lasso_65 (B1), LeeLot_65 (B1), Legolas_67 (B1), LeiMonet_68 (B1), Lolalove_60 (B4), Longacauda_66 (B1), Lopsy_63 (B1), LostAndPhound_65 (B1), LuckyMarjie_63 (B1), Lulwa_63 (B1), Lumine_66 (B1), MRabcd_65 (B1), Mag7_64 (B1), Magic8_66 (B1), Magpie_58 (B4), Mana_64 (B1), Manad_64 (B1), Maru_65 (B1), Maskar_66 (B1), Matalotodo_65 (B1), Mecca_65 (B1), Melc17_63 (B1), MelsMeow_65 (B1), Mesh1_66 (B1), MichaelPhcott_64 (B1), Mikota_63 (B1), MiniBoss_63 (B1), MitKao_65 (B1), Morgushi_64 (B1), Mosaic_63 (B1), MrPhizzler_65 (B1), Mudslide_59 (B4), Mulan_65 (B1), Murdoc_63 (B1), Mysterious_64 (B5), Nacho_0067 (B1), Nanao_58 (B4), Newman_63 (B1), Nicole21_66 (B1), Nigel_59 (B4), Nyala_64 (B1), OSmaximus_66 (B1), Olak_66 (B1), Olive_65 (B1), OliverWalter_63 (B1), Omniscient_66 (B1), PenguinLover67_61 (B9), Phareon_64 (B1), PhatLouie_67 (B1), Phelemich_62 (B5), PhenghisKhan_66 (B1), Pherdinand_66 (B1), Phergie_66 (B1), Phipps_65 (B1), Phleuron_64 (B1), PhrankReynolds_65 (B1), PhrodoBaggins_66 (B1), Phunky_63 (B1), PinheadLarry_64 (B1), Pinkman_65 (B1), Placalicious_66 (B1), Plmatters_64 (B1), Podrick_64 (B1), Pops_63 (B1), Poster_58 (B4), Potter_63 (B1), Prickles_67 (B1), Prince_60 (B4), ProfessorX_64 (B1), Puhltonio_64 (B1), QueenBeane_65 (B1), Quisquiliae_66 (B1), RawrgerThat_60 (B4), Reprobate_63 (B5), Riggan_66 (B1), Rimu_68 (B1), Robyn_65 (B1), Roliet_63 (B1), Roscoe_66 (B1), SDcharge11_65 (B1), Saguaro_62 (B7), Samaymay_65 (B1), SassyCat97_64 (B1), Schadenfreude_65 (B1), Schueller_66 (B1), Scrick_65 (B1), Sheila_62 (B1), ShiVal_63 (B1), Sigman_65 (B1), Simielle_65 (B1), Skippy_66 (B1), Slatt_66 (B1), Soile_66 (B1), Solosis_64 (B1), Sophia_64 (B1), Soto_63 (B1), Spartan300_65 (B1), Squid_64 (B1), Squiggle_65 (B1), Struggle_66 (B1), Suffolk_63 (B1), Surely_65 (B1), Swish_66 (B1), TallGrassMM_64 (B1), Thunderbird_66 (B1), Timmi_64 (B1), TomBombadil_65 (B1), Tomlarah_66 (B1), Toni_65 (B1), Tooj_63 (B1), True_64 (B1), TyrionL_66 (B1), Usavi_65 (B1), Valjean_65 (B1), Vaticameos_62 (B1), Veritas_65 (B1), VioletZ_61 (B4), Virapocalypse_66 (B1), Vivaldi_66 (B1), Vortex_64 (B1), Waleliano_59 (B4), Wallhey_66 (B1), Waterdiva_65 (B1), Weher20_63 (B1), Windsor_65 (B1), Yoshand_66 (B1), Zaider_66 (B1), Zelda_66 (B1), Zemanar_60 (B4), Zonia_66 (B1),

Start 52:

- Found in 8 of 415 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Morty007_64 (B3),

Start 58:

- Found in 34 of 415 (8.2%) of genes in pham
- Manual Annotations of this start: 8 of 372
- Called 29.4% of time when present
- Phage (with cluster) where this start called: Allegro_61 (B2), Calamitous_62 (B2), Coffee_61 (B2), Faze9_60 (B2), Kaleb_61 (B2), Lars_62 (B2), MasterPo_62 (B2), TA17A_61 (B2), Thonko_65 (B8), Tres_61 (B2),

Start 59:

- Found in 46 of 415 (11.1%) of genes in pham
- Manual Annotations of this start: 42 of 372
- Called 97.8% of time when present
- Phage (with cluster) where this start called: Abinghost_66 (B3), Akoma_66 (B3), Athena_68 (B3), Audrey_66 (B3), Baloo_65 (B3), Ben11_66 (B3), Bernardo_67 (B3), Briakila_65 (B3), Casbah_66 (B3), ChaChing_66 (B3), Chandler_66 (B3), Compostia_65 (B3), Corofin_66 (B3), Daisy_65 (B3), Deenasa_66 (B3), Devonte_65 (B3), Gadget_67 (B3), Gervas_67 (B3), GlenHope_67 (B3), Halfpint_65 (B3), HarveySr_65 (B3), Heathcliff_66 (B3), Jackstina_62 (B3), Kamiyu_66 (B3), Kronus_66 (B3), LestyG_64 (B3), Marley1013_66 (B3), MmasiCarm_67 (B3), Mortcellus_66 (B3), Neos5_65 (B3), Nozo_66 (B3), Obutu_67 (B3), OrangeOswald_66 (B3), Phaedrus_61 (B3), Phayeta_68 (B3), Philly_65 (B3), Phlyer_66 (B3), RagingRooster_65 (B3), Rita1961_67 (B3), RomaT_66 (B3), SlippinJimmy_68 (B3), SynergyX_66 (B3), Tydolla_63 (B3), Yahalom_64 (B3), Yinz_66 (B3),

Start 60:

- Found in 1 of 415 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 372
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pipefish_66 (B3),

Summary by clusters:

There are 13 clusters represented in this pham: B10, B11, B4, B5, B6, B7, B12, B1, B2, B3, B8, B9, B13,

Info for manual annotations of cluster B1:

- Start number 8 was manually annotated 1 time for cluster B1.
- Start number 14 was manually annotated 4 times for cluster B1.
- Start number 27 was manually annotated 6 times for cluster B1.
- Start number 30 was manually annotated 31 times for cluster B1.
- Start number 33 was manually annotated 6 times for cluster B1.
- Start number 51 was manually annotated 205 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 51 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 51 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 43 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 44 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 47 was manually annotated 24 times for cluster B2.
- Start number 58 was manually annotated 7 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 52 was manually annotated 1 time for cluster B3.

- Start number 59 was manually annotated 42 times for cluster B3.
- Start number 60 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B4:

- Start number 34 was manually annotated 2 times for cluster B4.
- Start number 46 was manually annotated 1 time for cluster B4.
- Start number 49 was manually annotated 1 time for cluster B4.
- Start number 51 was manually annotated 19 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 40 was manually annotated 6 times for cluster B5.
- Start number 51 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 51 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 51 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 58 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 24 was manually annotated 1 time for cluster B9.
- Start number 48 was manually annotated 1 time for cluster B9.
- Start number 51 was manually annotated 3 times for cluster B9.

Gene Information:

Gene: 39HC_059 Start: 55136, Stop: 54783, Start Num: 51

Candidate Starts for 39HC_059:

(50, 55139), (Start: 51 @55136 has 233 MA's), (83, 54968), (102, 54872),

Gene: 40BC_059 Start: 55136, Stop: 54783, Start Num: 51

Candidate Starts for 40BC_059:

(50, 55139), (Start: 51 @55136 has 233 MA's), (83, 54968), (102, 54872),

Gene: ABU_65 Start: 56126, Stop: 55701, Start Num: 30

Candidate Starts for ABU_65:

(Start: 30 @56126 has 31 MA's), (Start: 51 @56060 has 233 MA's), (65, 55982), (66, 55979), (78, 55907), (82, 55892), (95, 55832), (99, 55817), (107, 55778),

Gene: Abinghost_66 Start: 56041, Stop: 55772, Start Num: 59

Candidate Starts for Abinghost_66:

(Start: 59 @56041 has 42 MA's), (76, 55945), (81, 55924), (110, 55843), (111, 55828),

Gene: AbsoluteMadLad_65 Start: 56014, Stop: 55655, Start Num: 51

Candidate Starts for AbsoluteMadLad_65:

(Start: 51 @56014 has 233 MA's), (62, 55954), (66, 55933), (78, 55861), (82, 55846), (95, 55786), (99, 55771), (107, 55732),

Gene: Acadian_65 Start: 57138, Stop: 56755, Start Num: 40
Candidate Starts for Acadian_65:
(Start: 40 @57138 has 6 MA's), (98, 56874), (100, 56865), (106, 56835),

Gene: Adriana_67 Start: 56641, Stop: 56282, Start Num: 51
Candidate Starts for Adriana_67:
(Start: 27 @56713 has 6 MA's), (32, 56698), (35, 56692), (Start: 51 @56641 has 233 MA's), (62, 56581), (66, 56560), (78, 56488), (82, 56473), (95, 56413), (99, 56398), (107, 56359),

Gene: Aelin_65 Start: 55578, Stop: 55219, Start Num: 51
Candidate Starts for Aelin_65:
(Start: 51 @55578 has 233 MA's), (62, 55518), (66, 55497), (78, 55425), (82, 55410), (95, 55350), (99, 55335), (107, 55296),

Gene: Ahwei_58 Start: 55731, Stop: 55444, Start Num: 51
Candidate Starts for Ahwei_58:
(Start: 51 @55731 has 233 MA's), (54, 55713), (57, 55704), (74, 55617), (77, 55590), (94, 55557), (99, 55542), (102, 55521), (104, 55509), (110, 55491), (113, 55455),

Gene: Akoma_66 Start: 56089, Stop: 55820, Start Num: 59
Candidate Starts for Akoma_66:
(Start: 59 @56089 has 42 MA's), (76, 55993), (81, 55972), (110, 55891), (111, 55876),

Gene: AlanGrant_63 Start: 57986, Stop: 57591, Start Num: 34
Candidate Starts for AlanGrant_63:
(Start: 34 @57986 has 2 MA's), (55, 57902), (68, 57833), (71, 57821), (74, 57809), (77, 57782), (78, 57776), (82, 57761), (85, 57746), (102, 57680), (110, 57650), (115, 57605),

Gene: Allegro_61 Start: 54331, Stop: 54071, Start Num: 58
Candidate Starts for Allegro_61:
(Start: 47 @54373 has 24 MA's), (Start: 58 @54331 has 8 MA's), (69, 54265), (76, 54223), (105, 54139), (114, 54076),

Gene: AltPhacts_64 Start: 55127, Stop: 54768, Start Num: 51
Candidate Starts for AltPhacts_64:
(Start: 51 @55127 has 233 MA's), (62, 55067), (66, 55046), (78, 54974), (82, 54959), (95, 54899), (99, 54884), (107, 54845),

Gene: Altwerkus_63 Start: 55224, Stop: 54865, Start Num: 51
Candidate Starts for Altwerkus_63:
(Start: 30 @55290 has 31 MA's), (Start: 51 @55224 has 233 MA's), (65, 55146), (66, 55143), (78, 55071), (82, 55056), (95, 54996), (99, 54981), (107, 54942),

Gene: Anderson_66 Start: 55796, Stop: 55437, Start Num: 51
Candidate Starts for Anderson_66:
(Start: 30 @55862 has 31 MA's), (Start: 51 @55796 has 233 MA's), (65, 55718), (66, 55715), (78, 55643), (82, 55628), (95, 55568), (99, 55553), (107, 55514),

Gene: Andre_67 Start: 56038, Stop: 55613, Start Num: 30
Candidate Starts for Andre_67:
(Start: 30 @56038 has 31 MA's), (Start: 51 @55972 has 233 MA's), (62, 55912), (65, 55894), (66, 55891), (78, 55819), (82, 55804), (95, 55744), (99, 55729), (107, 55690),

Gene: Antonia_64 Start: 55578, Stop: 55219, Start Num: 51
Candidate Starts for Antonia_64:
(Start: 51 @55578 has 233 MA's), (62, 55518), (66, 55497), (78, 55425), (82, 55410), (95, 55350), (99, 55335), (107, 55296),

Gene: Apex_60 Start: 56952, Stop: 56665, Start Num: 51
Candidate Starts for Apex_60:
(Start: 51 @56952 has 233 MA's), (54, 56934), (57, 56925), (74, 56838), (77, 56811), (99, 56763), (102, 56742), (104, 56730), (110, 56712), (113, 56676),

Gene: Apizium_64 Start: 55240, Stop: 54887, Start Num: 51
Candidate Starts for Apizium_64:
(Start: 51 @55240 has 233 MA's), (62, 55180), (66, 55159), (78, 55087), (82, 55072), (95, 55018), (99, 55003), (107, 54964),

Gene: Arbiter_60 Start: 54484, Stop: 54182, Start Num: 47
Candidate Starts for Arbiter_60:
(Start: 47 @54484 has 24 MA's), (Start: 58 @54442 has 8 MA's), (69, 54376), (76, 54334), (105, 54250), (114, 54187),

Gene: Ares_61 Start: 54453, Stop: 54151, Start Num: 47
Candidate Starts for Ares_61:
(Start: 47 @54453 has 24 MA's), (Start: 58 @54411 has 8 MA's), (69, 54345), (76, 54303), (105, 54219), (114, 54156),

Gene: Ashraf_66 Start: 55792, Stop: 55433, Start Num: 51
Candidate Starts for Ashraf_66:
(Start: 51 @55792 has 233 MA's), (62, 55732), (66, 55711), (78, 55639), (82, 55624), (95, 55564), (99, 55549), (107, 55510),

Gene: Athena_68 Start: 56824, Stop: 56555, Start Num: 59
Candidate Starts for Athena_68:
(Start: 59 @56824 has 42 MA's), (76, 56728), (81, 56707), (110, 56626), (111, 56611),

Gene: Audrey_66 Start: 56080, Stop: 55811, Start Num: 59
Candidate Starts for Audrey_66:
(Start: 59 @56080 has 42 MA's), (76, 55984), (81, 55963), (110, 55882), (111, 55867),

Gene: Austelle_60 Start: 57408, Stop: 57121, Start Num: 51
Candidate Starts for Austelle_60:
(Start: 51 @57408 has 233 MA's), (54, 57390), (57, 57381), (74, 57294), (77, 57267), (99, 57219), (102, 57198), (104, 57186), (110, 57168), (113, 57132),

Gene: Badfish_65 Start: 56082, Stop: 55723, Start Num: 51
Candidate Starts for Badfish_65:
(Start: 30 @56148 has 31 MA's), (Start: 51 @56082 has 233 MA's), (65, 56004), (66, 56001), (78, 55929), (82, 55914), (95, 55854), (99, 55839), (107, 55800),

Gene: Bae_65 Start: 58112, Stop: 57729, Start Num: 40
Candidate Starts for Bae_65:
(Start: 40 @58112 has 6 MA's), (89, 57884), (98, 57848), (100, 57839), (106, 57809),

Gene: Baloo_65 Start: 55913, Stop: 55644, Start Num: 59

Candidate Starts for Baloo_65:

(Start: 59 @55913 has 42 MA's), (76, 55817), (81, 55796), (110, 55715), (111, 55700),

Gene: Bananafish_62 Start: 54384, Stop: 54082, Start Num: 47

Candidate Starts for Bananafish_62:

(Start: 47 @54384 has 24 MA's), (Start: 58 @54342 has 8 MA's), (69, 54276), (76, 54234), (105, 54150), (114, 54087),

Gene: Banjo_64 Start: 55571, Stop: 55212, Start Num: 51

Candidate Starts for Banjo_64:

(Start: 30 @55637 has 31 MA's), (Start: 51 @55571 has 233 MA's), (62, 55511), (66, 55490), (78, 55418), (82, 55403), (95, 55343), (99, 55328), (107, 55289),

Gene: Basato_65 Start: 55845, Stop: 55486, Start Num: 51

Candidate Starts for Basato_65:

(Start: 51 @55845 has 233 MA's), (62, 55785), (66, 55764), (78, 55692), (82, 55677), (95, 55617), (99, 55602), (107, 55563),

Gene: BatteryCK_64 Start: 55539, Stop: 55180, Start Num: 51

Candidate Starts for BatteryCK_64:

(Start: 51 @55539 has 233 MA's), (62, 55479), (66, 55458), (78, 55386), (82, 55371), (95, 55311), (99, 55296), (107, 55257),

Gene: Beaglebox_64 Start: 55635, Stop: 55276, Start Num: 51

Candidate Starts for Beaglebox_64:

(Start: 30 @55701 has 31 MA's), (Start: 51 @55635 has 233 MA's), (65, 55557), (66, 55554), (78, 55482), (82, 55467), (95, 55407), (99, 55392), (107, 55353),

Gene: Ben11_66 Start: 56298, Stop: 56029, Start Num: 59

Candidate Starts for Ben11_66:

(Start: 59 @56298 has 42 MA's), (76, 56202), (81, 56181), (110, 56100), (111, 56085),

Gene: Bernardo_67 Start: 56285, Stop: 56016, Start Num: 59

Candidate Starts for Bernardo_67:

(Start: 52 @56321 has 1 MA's), (53, 56315), (54, 56309), (Start: 59 @56285 has 42 MA's), (76, 56189), (81, 56168), (110, 56087), (111, 56072),

Gene: BirdsNest_70 Start: 57348, Stop: 57022, Start Num: 44

Candidate Starts for BirdsNest_70:

(29, 57402), (Start: 44 @57348 has 2 MA's), (78, 57180), (82, 57165), (99, 57123), (100, 57117), (101, 57108), (102, 57102),

Gene: Bishoperium_65 Start: 56110, Stop: 55751, Start Num: 51

Candidate Starts for Bishoperium_65:

(Start: 30 @56176 has 31 MA's), (Start: 51 @56110 has 233 MA's), (66, 56029), (78, 55957), (82, 55942), (95, 55882), (99, 55867), (107, 55828),

Gene: BlackStallion_66 Start: 55839, Stop: 55480, Start Num: 51

Candidate Starts for BlackStallion_66:

(Start: 51 @55839 has 233 MA's), (62, 55779), (66, 55758), (78, 55686), (82, 55671), (95, 55611), (99, 55596), (107, 55557),

Gene: Blocker23_61 Start: 54450, Stop: 54148, Start Num: 47

Candidate Starts for Blocker23_61:

(Start: 47 @54450 has 24 MA's), (Start: 58 @54408 has 8 MA's), (69, 54342), (76, 54300), (105, 54216), (114, 54153),

Gene: BlueHusk_67 Start: 55594, Stop: 55235, Start Num: 51

Candidate Starts for BlueHusk_67:

(Start: 51 @55594 has 233 MA's), (62, 55534), (66, 55513), (78, 55441), (82, 55426), (95, 55366), (99, 55351), (107, 55312),

Gene: Bluephacebaby_65 Start: 56113, Stop: 55754, Start Num: 51

Candidate Starts for Bluephacebaby_65:

(Start: 30 @56179 has 31 MA's), (Start: 51 @56113 has 233 MA's), (65, 56035), (66, 56032), (78, 55960), (82, 55945), (95, 55885), (99, 55870), (107, 55831),

Gene: BobbyK_60 Start: 56718, Stop: 56431, Start Num: 51

Candidate Starts for BobbyK_60:

(Start: 51 @56718 has 233 MA's), (54, 56700), (57, 56691), (74, 56604), (77, 56577), (99, 56529), (102, 56508), (104, 56496), (110, 56478), (113, 56442),

Gene: Boehler_65 Start: 55757, Stop: 55398, Start Num: 51

Candidate Starts for Boehler_65:

(Start: 27 @55829 has 6 MA's), (32, 55814), (35, 55808), (Start: 51 @55757 has 233 MA's), (62, 55697), (66, 55676), (78, 55604), (82, 55589), (95, 55529), (99, 55514), (107, 55475),

Gene: Boyle_61 Start: 54493, Stop: 54191, Start Num: 47

Candidate Starts for Boyle_61:

(Start: 47 @54493 has 24 MA's), (Start: 58 @54451 has 8 MA's), (69, 54385), (76, 54343), (105, 54259), (114, 54196),

Gene: Briakila_65 Start: 56055, Stop: 55786, Start Num: 59

Candidate Starts for Briakila_65:

(Start: 52 @56091 has 1 MA's), (53, 56085), (54, 56079), (Start: 59 @56055 has 42 MA's), (76, 55959), (81, 55938), (110, 55857), (111, 55842),

Gene: Brilliant_68 Start: 56079, Stop: 55720, Start Num: 51

Candidate Starts for Brilliant_68:

(Start: 30 @56145 has 31 MA's), (Start: 51 @56079 has 233 MA's), (65, 56001), (66, 55998), (78, 55926), (82, 55911), (95, 55851), (99, 55836), (107, 55797),

Gene: BrownCNA_61 Start: 57075, Stop: 56788, Start Num: 51

Candidate Starts for BrownCNA_61:

(Start: 51 @57075 has 233 MA's), (54, 57057), (57, 57048), (74, 56961), (77, 56934), (99, 56886), (102, 56865), (104, 56853), (110, 56835), (113, 56799),

Gene: Brownie5_61 Start: 54495, Stop: 54193, Start Num: 47

Candidate Starts for Brownie5_61:

(Start: 47 @54495 has 24 MA's), (Start: 58 @54453 has 8 MA's), (69, 54387), (76, 54345), (105, 54261), (114, 54198),

Gene: Buckeye_65 Start: 56371, Stop: 56012, Start Num: 51

Candidate Starts for Buckeye_65:

(5, 56530), (Start: 8 @56515 has 1 MA's), (17, 56470), (Start: 51 @56371 has 233 MA's), (66, 56290), (78, 56218), (82, 56203), (95, 56143), (99, 56128), (107, 56089),

Gene: Burr_65 Start: 55546, Stop: 55187, Start Num: 51

Candidate Starts for Burr_65:

(Start: 30 @55612 has 31 MA's), (Start: 51 @55546 has 233 MA's), (65, 55468), (66, 55465), (78, 55393), (82, 55378), (95, 55318), (99, 55303), (107, 55264),

Gene: CRB2_62 Start: 57788, Stop: 57468, Start Num: 51

Candidate Starts for CRB2_62:

(Start: 51 @57788 has 233 MA's), (64, 57731), (70, 57695), (71, 57692), (104, 57569), (108, 57560), (112, 57533), (114, 57506),

Gene: Calamitous_62 Start: 54341, Stop: 54081, Start Num: 58

Candidate Starts for Calamitous_62:

(Start: 47 @54383 has 24 MA's), (Start: 58 @54341 has 8 MA's), (69, 54275), (76, 54233), (105, 54149), (114, 54086),

Gene: CamL_65 Start: 55878, Stop: 55519, Start Num: 51

Candidate Starts for CamL_65:

(Start: 30 @55944 has 31 MA's), (Start: 51 @55878 has 233 MA's), (66, 55797), (78, 55725), (82, 55710), (95, 55650), (99, 55635), (107, 55596),

Gene: CampRoach_66 Start: 55983, Stop: 55624, Start Num: 51

Candidate Starts for CampRoach_66:

(Start: 51 @55983 has 233 MA's), (62, 55923), (66, 55902), (78, 55830), (82, 55815), (95, 55755), (99, 55740), (107, 55701),

Gene: Cannibal_65 Start: 55820, Stop: 55461, Start Num: 51

Candidate Starts for Cannibal_65:

(Start: 30 @55886 has 31 MA's), (Start: 51 @55820 has 233 MA's), (62, 55760), (66, 55739), (78, 55667), (82, 55652), (95, 55592), (99, 55577), (107, 55538),

Gene: Carthage_64 Start: 55118, Stop: 54699, Start Num: 33

Candidate Starts for Carthage_64:

(Start: 33 @55118 has 6 MA's), (Start: 51 @55058 has 233 MA's), (62, 54998), (66, 54977), (78, 54905), (82, 54890), (95, 54830), (99, 54815), (107, 54776),

Gene: Casbah_66 Start: 56400, Stop: 56131, Start Num: 59

Candidate Starts for Casbah_66:

(Start: 59 @56400 has 42 MA's), (76, 56304), (81, 56283), (110, 56202), (111, 56187),

Gene: ChaChing_66 Start: 56100, Stop: 55831, Start Num: 59

Candidate Starts for ChaChing_66:

(Start: 59 @56100 has 42 MA's), (76, 56004), (81, 55983), (110, 55902), (111, 55887),

Gene: Chaelin_66 Start: 56180, Stop: 55749, Start Num: 27

Candidate Starts for Chaelin_66:

(Start: 27 @56180 has 6 MA's), (32, 56165), (35, 56159), (Start: 51 @56108 has 233 MA's), (62, 56048), (66, 56027), (78, 55955), (82, 55940), (95, 55880), (99, 55865), (107, 55826),

Gene: Chah_66 Start: 55589, Stop: 55164, Start Num: 30

Candidate Starts for Chah_66:

(Start: 30 @55589 has 31 MA's), (Start: 51 @55523 has 233 MA's), (65, 55445), (66, 55442), (78, 55370), (82, 55355), (95, 55295), (99, 55280), (107, 55241),

Gene: Chandler_66 Start: 56868, Stop: 56599, Start Num: 59

Candidate Starts for Chandler_66:

(Start: 59 @56868 has 42 MA's), (76, 56772), (81, 56751), (110, 56670), (111, 56655),

Gene: Charles1_66 Start: 55899, Stop: 55474, Start Num: 30

Candidate Starts for Charles1_66:

(Start: 30 @55899 has 31 MA's), (Start: 51 @55833 has 233 MA's), (62, 55773), (65, 55755), (66, 55752), (78, 55680), (82, 55665), (95, 55605), (99, 55590), (107, 55551),

Gene: CharlieGBrown_64 Start: 55484, Stop: 55125, Start Num: 51

Candidate Starts for CharlieGBrown_64:

(Start: 51 @55484 has 233 MA's), (66, 55403), (78, 55331), (82, 55316), (95, 55256), (99, 55241), (107, 55202),

Gene: CheetO_65 Start: 55794, Stop: 55435, Start Num: 51

Candidate Starts for CheetO_65:

(Start: 51 @55794 has 233 MA's), (62, 55734), (66, 55713), (78, 55641), (82, 55626), (95, 55566), (99, 55551), (107, 55512),

Gene: Cher_65 Start: 56088, Stop: 55729, Start Num: 51

Candidate Starts for Cher_65:

(Start: 51 @56088 has 233 MA's), (62, 56028), (66, 56007), (78, 55935), (82, 55920), (95, 55860), (99, 55845), (107, 55806),

Gene: Childish_64 Start: 56099, Stop: 55740, Start Num: 51

Candidate Starts for Childish_64:

(Start: 30 @56165 has 31 MA's), (Start: 51 @56099 has 233 MA's), (62, 56039), (66, 56018), (78, 55946), (82, 55931), (95, 55871), (99, 55856), (107, 55817),

Gene: Chorkpop_65 Start: 55575, Stop: 55216, Start Num: 51

Candidate Starts for Chorkpop_65:

(Start: 51 @55575 has 233 MA's), (62, 55515), (66, 55494), (78, 55422), (82, 55407), (95, 55347), (99, 55332), (107, 55293),

Gene: ChrisnMich_59 Start: 55743, Stop: 55456, Start Num: 51

Candidate Starts for ChrisnMich_59:

(Start: 51 @55743 has 233 MA's), (54, 55725), (57, 55716), (74, 55629), (77, 55602), (99, 55554), (102, 55533), (104, 55521), (110, 55503), (113, 55467),

Gene: Chunky_64 Start: 55124, Stop: 54765, Start Num: 51

Candidate Starts for Chunky_64:

(5, 55283), (Start: 8 @55268 has 1 MA's), (17, 55223), (Start: 51 @55124 has 233 MA's), (62, 55064), (66, 55043), (78, 54971), (82, 54956), (95, 54896), (99, 54881), (107, 54842),

Gene: Chute_66 Start: 56208, Stop: 55777, Start Num: 27

Candidate Starts for Chute_66:

(Start: 27 @56208 has 6 MA's), (32, 56193), (35, 56187), (Start: 51 @56136 has 233 MA's), (62, 56076), (66, 56055), (78, 55983), (82, 55968), (95, 55908), (99, 55893), (107, 55854),

Gene: Cobra_66 Start: 56120, Stop: 55761, Start Num: 51

Candidate Starts for Cobra_66:

(Start: 51 @56120 has 233 MA's), (62, 56060), (66, 56039), (78, 55967), (82, 55952), (95, 55892), (99, 55877), (107, 55838),

Gene: Coffee_61 Start: 54445, Stop: 54185, Start Num: 58

Candidate Starts for Coffee_61:

(Start: 47 @54487 has 24 MA's), (Start: 58 @54445 has 8 MA's), (69, 54379), (76, 54337), (105, 54253), (114, 54190),

Gene: Colbert_63 Start: 55206, Stop: 54775, Start Num: 27

Candidate Starts for Colbert_63:

(Start: 27 @55206 has 6 MA's), (32, 55191), (35, 55185), (Start: 51 @55134 has 233 MA's), (62, 55074), (66, 55053), (78, 54981), (82, 54966), (95, 54906), (99, 54891), (107, 54852),

Gene: Coletti_68 Start: 56636, Stop: 56277, Start Num: 51

Candidate Starts for Coletti_68:

(Start: 27 @56708 has 6 MA's), (32, 56693), (35, 56687), (Start: 51 @56636 has 233 MA's), (62, 56576), (66, 56555), (78, 56483), (82, 56468), (95, 56408), (99, 56393), (107, 56354),

Gene: Compostia_65 Start: 56487, Stop: 56218, Start Num: 59

Candidate Starts for Compostia_65:

(15, 56655), (39, 56571), (45, 56550), (Start: 59 @56487 has 42 MA's), (76, 56391), (81, 56370), (110, 56289), (111, 56274),

Gene: Cooper_61 Start: 56209, Stop: 55922, Start Num: 51

Candidate Starts for Cooper_61:

(Start: 51 @56209 has 233 MA's), (54, 56191), (63, 56149), (71, 56107), (74, 56095), (77, 56068), (99, 56020), (102, 55999), (104, 55987), (107, 55981), (110, 55969),

Gene: Cornobble_64 Start: 55568, Stop: 55209, Start Num: 51

Candidate Starts for Cornobble_64:

(Start: 51 @55568 has 233 MA's), (62, 55508), (66, 55487), (78, 55415), (82, 55400), (95, 55340), (99, 55325), (107, 55286),

Gene: Corofin_66 Start: 56111, Stop: 55842, Start Num: 59

Candidate Starts for Corofin_66:

(Start: 59 @56111 has 42 MA's), (76, 56015), (81, 55994), (110, 55913), (111, 55898),

Gene: Cosmolli16_66 Start: 56278, Stop: 55919, Start Num: 51

Candidate Starts for Cosmolli16_66:

(Start: 30 @56344 has 31 MA's), (Start: 51 @56278 has 233 MA's), (62, 56218), (65, 56200), (66, 56197), (78, 56125), (82, 56110), (95, 56050), (99, 56035), (107, 55996),

Gene: Craff_68 Start: 56523, Stop: 56164, Start Num: 51

Candidate Starts for Craff_68:

(Start: 51 @56523 has 233 MA's), (62, 56463), (66, 56442), (78, 56370), (82, 56355), (95, 56295), (99, 56280), (107, 56241),

Gene: Crownjwl_64 Start: 55597, Stop: 55238, Start Num: 51

Candidate Starts for Crownjwl_64:

(Start: 27 @55669 has 6 MA's), (32, 55654), (35, 55648), (Start: 51 @55597 has 233 MA's), (62, 55537), (66, 55516), (78, 55444), (82, 55429), (95, 55369), (99, 55354), (107, 55315),

Gene: DaddyDaniels_67 Start: 56056, Stop: 55697, Start Num: 51

Candidate Starts for DaddyDaniels_67:

(Start: 30 @56122 has 31 MA's), (Start: 51 @56056 has 233 MA's), (62, 55996), (66, 55975), (78, 55903), (82, 55888), (95, 55828), (99, 55813), (107, 55774),

Gene: Daffy_64 Start: 55561, Stop: 55202, Start Num: 51

Candidate Starts for Daffy_64:

(Start: 51 @55561 has 233 MA's), (62, 55501), (66, 55480), (78, 55408), (82, 55393), (95, 55333), (99, 55318), (107, 55279),

Gene: Daisy_65 Start: 55644, Stop: 55375, Start Num: 59

Candidate Starts for Daisy_65:

(Start: 59 @55644 has 42 MA's), (76, 55548), (81, 55527), (110, 55446), (111, 55431),

Gene: Daka_68 Start: 56077, Stop: 55718, Start Num: 51

Candidate Starts for Daka_68:

(Start: 30 @56143 has 31 MA's), (Start: 51 @56077 has 233 MA's), (62, 56017), (66, 55996), (78, 55924), (82, 55909), (95, 55849), (99, 55834), (107, 55795),

Gene: Dati_63 Start: 55904, Stop: 55545, Start Num: 51

Candidate Starts for Dati_63:

(Start: 51 @55904 has 233 MA's), (62, 55844), (66, 55823), (78, 55751), (82, 55736), (95, 55676), (99, 55661), (107, 55622),

Gene: Deenasa_66 Start: 56949, Stop: 56680, Start Num: 59

Candidate Starts for Deenasa_66:

(Start: 59 @56949 has 42 MA's), (76, 56853), (81, 56832), (110, 56751), (111, 56736),

Gene: DelRivs_63 Start: 55546, Stop: 55187, Start Num: 51

Candidate Starts for DelRivs_63:

(Start: 30 @55612 has 31 MA's), (Start: 51 @55546 has 233 MA's), (65, 55468), (66, 55465), (78, 55393), (82, 55378), (95, 55318), (99, 55303), (107, 55264),

Gene: Derpp_65 Start: 55660, Stop: 55301, Start Num: 51

Candidate Starts for Derpp_65:

(Start: 51 @55660 has 233 MA's), (66, 55579), (78, 55507), (82, 55492), (95, 55432), (99, 55417), (107, 55378),

Gene: Devonte_65 Start: 55723, Stop: 55454, Start Num: 59

Candidate Starts for Devonte_65:

(Start: 59 @55723 has 42 MA's), (76, 55627), (81, 55606), (110, 55525), (111, 55510),

Gene: Dice_66 Start: 55544, Stop: 55185, Start Num: 51

Candidate Starts for Dice_66:

(Start: 30 @55610 has 31 MA's), (Start: 51 @55544 has 233 MA's), (62, 55484), (65, 55466), (66, 55463), (78, 55391), (82, 55376), (95, 55316), (99, 55301), (107, 55262),

Gene: DigitDog_65 Start: 57197, Stop: 56814, Start Num: 40

Candidate Starts for DigitDog_65:

(Start: 40 @57197 has 6 MA's), (86, 56987), (96, 56942), (98, 56933), (100, 56924), (102, 56909), (106, 56894),

Gene: Dingo_63 Start: 55103, Stop: 54744, Start Num: 51

Candidate Starts for Dingo_63:

(Start: 51 @55103 has 233 MA's), (62, 55043), (66, 55022), (78, 54950), (82, 54935), (95, 54875), (99, 54860), (107, 54821),

Gene: Dione_63 Start: 55275, Stop: 54916, Start Num: 51

Candidate Starts for Dione_63:

(Start: 51 @55275 has 233 MA's), (62, 55215), (66, 55194), (78, 55122), (82, 55107), (95, 55047), (99, 55032), (107, 54993),

Gene: DirtJuice_66 Start: 55865, Stop: 55506, Start Num: 51

Candidate Starts for DirtJuice_66:

(Start: 51 @55865 has 233 MA's), (62, 55805), (66, 55784), (78, 55712), (82, 55697), (95, 55637), (99, 55622), (107, 55583),

Gene: Doddsville_64 Start: 55623, Stop: 55264, Start Num: 51

Candidate Starts for Doddsville_64:

(Start: 51 @55623 has 233 MA's), (62, 55563), (66, 55542), (78, 55470), (82, 55455), (95, 55395), (99, 55380), (107, 55341),

Gene: DoesntMatter_62 Start: 55634, Stop: 55209, Start Num: 30

Candidate Starts for DoesntMatter_62:

(Start: 30 @55634 has 31 MA's), (Start: 51 @55568 has 233 MA's), (62, 55508), (66, 55487), (78, 55415), (82, 55400), (95, 55340), (99, 55325), (107, 55286),

Gene: DonSanchon_62 Start: 55258, Stop: 54899, Start Num: 51

Candidate Starts for DonSanchon_62:

(Start: 51 @55258 has 233 MA's), (62, 55198), (65, 55180), (66, 55177), (78, 55105), (82, 55090), (95, 55030), (99, 55015), (107, 54976),

Gene: Donny_66 Start: 57184, Stop: 56801, Start Num: 40

Candidate Starts for Donny_66:

(Start: 40 @57184 has 6 MA's), (98, 56920), (100, 56911), (106, 56881),

Gene: DuchessDung_65 Start: 55207, Stop: 54782, Start Num: 30

Candidate Starts for DuchessDung_65:

(Start: 30 @55207 has 31 MA's), (Start: 51 @55141 has 233 MA's), (62, 55081), (66, 55060), (78, 54988), (82, 54973), (95, 54913), (99, 54898), (107, 54859),

Gene: Duggie_65 Start: 55819, Stop: 55460, Start Num: 51

Candidate Starts for Duggie_65:

(Start: 51 @55819 has 233 MA's), (62, 55759), (66, 55738), (78, 55666), (82, 55651), (95, 55591), (99, 55576), (107, 55537),

Gene: Durga_68 Start: 56368, Stop: 55949, Start Num: 33

Candidate Starts for Durga_68:

(Start: 14 @56434 has 4 MA's), (Start: 33 @56368 has 6 MA's), (65, 56230), (66, 56227), (78, 56155), (82, 56140), (95, 56080), (99, 56065), (107, 56026),

Gene: Eaglehorse_61 Start: 54371, Stop: 54069, Start Num: 47

Candidate Starts for Eaglehorse_61:

(Start: 47 @54371 has 24 MA's), (Start: 58 @54329 has 8 MA's), (69, 54263), (76, 54221), (105, 54137), (114, 54074),

Gene: EastView9101_66 Start: 56882, Stop: 56499, Start Num: 40

Candidate Starts for EastView9101_66:

(Start: 40 @56882 has 6 MA's), (98, 56618), (100, 56609), (106, 56579),

Gene: Emiris_67 Start: 56275, Stop: 55916, Start Num: 51

Candidate Starts for Emiris_67:

(Start: 51 @56275 has 233 MA's), (62, 56215), (66, 56194), (78, 56122), (82, 56107), (95, 56047), (99, 56032), (107, 55993),

Gene: EmpTee_64 Start: 55784, Stop: 55425, Start Num: 51

Candidate Starts for EmpTee_64:

(Start: 51 @55784 has 233 MA's), (62, 55724), (66, 55703), (78, 55631), (82, 55616), (95, 55556), (99, 55541), (107, 55502),

Gene: Eremos_64 Start: 55774, Stop: 55415, Start Num: 51

Candidate Starts for Eremos_64:

(Start: 51 @55774 has 233 MA's), (62, 55714), (66, 55693), (78, 55621), (82, 55606), (95, 55546), (99, 55531), (107, 55492),

Gene: Etaye_65 Start: 56417, Stop: 56058, Start Num: 51

Candidate Starts for Etaye_65:

(Start: 51 @56417 has 233 MA's), (62, 56357), (66, 56336), (78, 56264), (82, 56249), (95, 56189), (99, 56174), (107, 56135),

Gene: Eugenia_65 Start: 55927, Stop: 55568, Start Num: 51

Candidate Starts for Eugenia_65:

(5, 56086), (Start: 8 @56071 has 1 MA's), (17, 56026), (Start: 51 @55927 has 233 MA's), (65, 55849), (66, 55846), (78, 55774), (82, 55759), (95, 55699), (99, 55684), (107, 55645),

Gene: Fang_66 Start: 55820, Stop: 55461, Start Num: 51

Candidate Starts for Fang_66:

(5, 55979), (Start: 8 @55964 has 1 MA's), (17, 55919), (Start: 51 @55820 has 233 MA's), (65, 55742), (66, 55739), (78, 55667), (82, 55652), (95, 55592), (99, 55577), (107, 55538),

Gene: Faze9_60 Start: 54468, Stop: 54208, Start Num: 58

Candidate Starts for Faze9_60:

(Start: 47 @54510 has 24 MA's), (Start: 58 @54468 has 8 MA's), (69, 54402), (76, 54360), (105, 54276), (114, 54213),

Gene: FluffyNinja_66 Start: 55840, Stop: 55481, Start Num: 51

Candidate Starts for FluffyNinja_66:

(Start: 51 @55840 has 233 MA's), (62, 55780), (66, 55759), (78, 55687), (82, 55672), (95, 55612), (99, 55597), (107, 55558),

Gene: Fortunato_60 Start: 56770, Stop: 56483, Start Num: 51

Candidate Starts for Fortunato_60:

(Start: 51 @56770 has 233 MA's), (54, 56752), (57, 56743), (74, 56656), (77, 56629), (99, 56581), (102, 56560), (104, 56548), (110, 56530), (113, 56494),

Gene: Fozzie_65 Start: 56066, Stop: 55707, Start Num: 51

Candidate Starts for Fozzie_65:

(Start: 51 @56066 has 233 MA's), (62, 56006), (66, 55985), (78, 55913), (82, 55898), (95, 55838), (99, 55823), (107, 55784),

Gene: Frankicide_63 Start: 55606, Stop: 55247, Start Num: 51

Candidate Starts for Frankicide_63:

(Start: 51 @55606 has 233 MA's), (62, 55546), (66, 55525), (78, 55453), (82, 55438), (95, 55378), (99, 55363), (107, 55324),

Gene: Frederick_59 Start: 56661, Stop: 56374, Start Num: 51

Candidate Starts for Frederick_59:

(Start: 51 @56661 has 233 MA's), (54, 56643), (57, 56634), (74, 56547), (77, 56520), (99, 56472), (102, 56451), (104, 56439), (110, 56421), (113, 56385),

Gene: FrenchFry_62 Start: 54494, Stop: 54192, Start Num: 47

Candidate Starts for FrenchFry_62:

(Start: 47 @54494 has 24 MA's), (Start: 58 @54452 has 8 MA's), (69, 54386), (76, 54344), (105, 54260), (114, 54197),

Gene: Freya_62 Start: 55266, Stop: 54907, Start Num: 51

Candidate Starts for Freya_62:

(Start: 27 @55338 has 6 MA's), (32, 55323), (35, 55317), (Start: 51 @55266 has 233 MA's), (65, 55188), (66, 55185), (78, 55113), (82, 55098), (95, 55038), (99, 55023), (107, 54984),

Gene: FriarPreacher_64 Start: 55659, Stop: 55300, Start Num: 51

Candidate Starts for FriarPreacher_64:

(Start: 51 @55659 has 233 MA's), (62, 55599), (66, 55578), (78, 55506), (82, 55491), (95, 55431), (99, 55416), (107, 55377),

Gene: Fringe_69 Start: 56442, Stop: 56083, Start Num: 51

Candidate Starts for Fringe_69:

(Start: 27 @56514 has 6 MA's), (32, 56499), (35, 56493), (Start: 51 @56442 has 233 MA's), (65, 56364), (66, 56361), (78, 56289), (82, 56274), (95, 56214), (99, 56199), (107, 56160),

Gene: FugateOSU_66 Start: 56611, Stop: 56252, Start Num: 51

Candidate Starts for FugateOSU_66:

(Start: 51 @56611 has 233 MA's), (62, 56551), (66, 56530), (78, 56458), (82, 56443), (95, 56383), (99, 56368), (107, 56329),

Gene: Funsized_65 Start: 58974, Stop: 58633, Start Num: 48

Candidate Starts for Funsized_65:

(Start: 48 @58974 has 1 MA's), (Start: 51 @58965 has 233 MA's), (61, 58920), (62, 58914), (71, 58866), (75, 58842), (78, 58821), (82, 58806), (91, 58782), (92, 58779), (100, 58752), (102, 58737), (110, 58707),

Gene: Gadget_67 Start: 56421, Stop: 56152, Start Num: 59

Candidate Starts for Gadget_67:

(Start: 59 @56421 has 42 MA's), (76, 56325), (81, 56304), (110, 56223), (111, 56208),

Gene: Gareth_65 Start: 56064, Stop: 55705, Start Num: 51

Candidate Starts for Gareth_65:

(Start: 30 @56130 has 31 MA's), (Start: 51 @56064 has 233 MA's), (65, 55986), (66, 55983), (78, 55911), (82, 55896), (95, 55836), (99, 55821), (107, 55782),

Gene: GeneCoco_66 Start: 56108, Stop: 55749, Start Num: 51

Candidate Starts for GeneCoco_66:

(Start: 51 @56108 has 233 MA's), (62, 56048), (66, 56027), (78, 55955), (82, 55940), (95, 55880), (99, 55865), (107, 55826),

Gene: Gervas_67 Start: 56505, Stop: 56236, Start Num: 59

Candidate Starts for Gervas_67:

(Start: 59 @56505 has 42 MA's), (76, 56409), (81, 56388), (110, 56307), (111, 56292),

Gene: Giraffe_65 Start: 56125, Stop: 55700, Start Num: 30

Candidate Starts for Giraffe_65:

(Start: 30 @56125 has 31 MA's), (Start: 51 @56059 has 233 MA's), (62, 55999), (65, 55981), (66, 55978), (78, 55906), (82, 55891), (95, 55831), (99, 55816), (107, 55777),

Gene: Glass_62 Start: 54496, Stop: 54194, Start Num: 47

Candidate Starts for Glass_62:

(Start: 47 @54496 has 24 MA's), (Start: 58 @54454 has 8 MA's), (69, 54388), (76, 54346), (105, 54262), (114, 54199),

Gene: GlenHope_67 Start: 56079, Stop: 55810, Start Num: 59

Candidate Starts for GlenHope_67:

(Start: 59 @56079 has 42 MA's), (76, 55983), (81, 55962), (110, 55881), (111, 55866),

Gene: Godines_62 Start: 54753, Stop: 54451, Start Num: 47

Candidate Starts for Godines_62:

(Start: 47 @54753 has 24 MA's), (Start: 58 @54711 has 8 MA's), (69, 54645), (76, 54603), (105, 54519), (114, 54456),

Gene: Gophee_66 Start: 56050, Stop: 55691, Start Num: 51

Candidate Starts for Gophee_66:

(Start: 30 @56116 has 31 MA's), (Start: 51 @56050 has 233 MA's), (65, 55972), (66, 55969), (78, 55897), (82, 55882), (95, 55822), (99, 55807), (107, 55768),

Gene: Grand2040_64 Start: 56053, Stop: 55694, Start Num: 51

Candidate Starts for Grand2040_64:

(Start: 30 @56119 has 31 MA's), (Start: 51 @56053 has 233 MA's), (65, 55975), (66, 55972), (78, 55900), (82, 55885), (95, 55825), (99, 55810), (107, 55771),

Gene: Gwilliam_67 Start: 56524, Stop: 56099, Start Num: 30

Candidate Starts for Gwilliam_67:

(Start: 30 @56524 has 31 MA's), (Start: 51 @56458 has 233 MA's), (66, 56377), (78, 56305), (82, 56290), (95, 56230), (99, 56215), (107, 56176),

Gene: Gyarad_0064 Start: 55140, Stop: 54781, Start Num: 51

Candidate Starts for Gyarad_0064:

(5, 55299), (Start: 8 @55284 has 1 MA's), (17, 55239), (Start: 51 @55140 has 233 MA's), (65, 55062), (66, 55059), (78, 54987), (82, 54972), (95, 54912), (99, 54897), (107, 54858),

Gene: HSavage_63 Start: 55584, Stop: 55225, Start Num: 51

Candidate Starts for HSavage_63:

(Start: 51 @55584 has 233 MA's), (62, 55524), (66, 55503), (78, 55431), (82, 55416), (95, 55356), (99, 55341), (107, 55302),

Gene: Haimas_64 Start: 55627, Stop: 55142, Start Num: 14

Candidate Starts for Haimas_64:

(Start: 14 @55627 has 4 MA's), (Start: 33 @55561 has 6 MA's), (62, 55441), (66, 55420), (78, 55348), (82, 55333), (95, 55273), (99, 55258), (107, 55219),

Gene: Haleema_64 Start: 55605, Stop: 55246, Start Num: 51

Candidate Starts for Haleema_64:

(Start: 30 @55671 has 31 MA's), (Start: 51 @55605 has 233 MA's), (62, 55545), (65, 55527), (66, 55524), (78, 55452), (82, 55437), (95, 55377), (99, 55362), (107, 55323),

Gene: Halfpint_65 Start: 55824, Stop: 55555, Start Num: 59

Candidate Starts for Halfpint_65:

(Start: 59 @55824 has 42 MA's), (76, 55728), (81, 55707), (110, 55626), (111, 55611),

Gene: Hamish_63 Start: 55492, Stop: 55136, Start Num: 51

Candidate Starts for Hamish_63:

(32, 55549), (35, 55543), (Start: 51 @55492 has 233 MA's), (62, 55435), (66, 55414), (78, 55342), (82, 55327), (95, 55267), (99, 55252), (107, 55213),

Gene: Hangman_59 Start: 56818, Stop: 56531, Start Num: 51

Candidate Starts for Hangman_59:

(Start: 51 @56818 has 233 MA's), (54, 56800), (57, 56791), (74, 56704), (77, 56677), (99, 56629), (102, 56608), (104, 56596), (110, 56578), (113, 56542),

Gene: Hartsy_64 Start: 55745, Stop: 55386, Start Num: 51

Candidate Starts for Hartsy_64:

(Start: 51 @55745 has 233 MA's), (62, 55685), (66, 55664), (78, 55592), (82, 55577), (95, 55517), (99, 55502), (107, 55463),

Gene: Harvey_63 Start: 55588, Stop: 55229, Start Num: 51

Candidate Starts for Harvey_63:

(Start: 51 @55588 has 233 MA's), (65, 55510), (66, 55507), (78, 55435), (82, 55420), (95, 55360), (99, 55345), (107, 55306),

Gene: HarveySr_65 Start: 55669, Stop: 55400, Start Num: 59

Candidate Starts for HarveySr_65:

(Start: 59 @55669 has 42 MA's), (76, 55573), (81, 55552), (110, 55471), (111, 55456),

Gene: Hashim76_69 Start: 57352, Stop: 57008, Start Num: 44

Candidate Starts for Hashim76_69:

(Start: 44 @57352 has 2 MA's), (80, 57172), (82, 57166), (90, 57142), (99, 57109), (100, 57103),

Gene: Heath_58 Start: 56444, Stop: 56157, Start Num: 51

Candidate Starts for Heath_58:

(Start: 51 @56444 has 233 MA's), (54, 56426), (57, 56417), (74, 56330), (77, 56303), (99, 56255), (102, 56234), (104, 56222), (110, 56204), (113, 56168),

Gene: Heathcliff_66 Start: 56046, Stop: 55777, Start Num: 59

Candidate Starts for Heathcliff_66:

(Start: 59 @56046 has 42 MA's), (76, 55950), (81, 55929), (110, 55848), (111, 55833),

Gene: Hedgerow_61 Start: 54470, Stop: 54168, Start Num: 47

Candidate Starts for Hedgerow_61:

(Start: 47 @54470 has 24 MA's), (Start: 58 @54428 has 8 MA's), (69, 54362), (76, 54320), (105, 54236), (114, 54173),

Gene: Held_64 Start: 55562, Stop: 55203, Start Num: 51

Candidate Starts for Held_64:

(Start: 51 @55562 has 233 MA's), (62, 55502), (66, 55481), (78, 55409), (82, 55394), (95, 55334), (99, 55319), (107, 55280),

Gene: HenryJackson_65 Start: 56088, Stop: 55729, Start Num: 51

Candidate Starts for HenryJackson_65:

(Start: 30 @56154 has 31 MA's), (Start: 51 @56088 has 233 MA's), (62, 56028), (66, 56007), (78, 55935), (82, 55920), (95, 55860), (99, 55845), (107, 55806),

Gene: Hertubise_64 Start: 55920, Stop: 55495, Start Num: 30

Candidate Starts for Hertubise_64:

(Start: 30 @55920 has 31 MA's), (Start: 51 @55854 has 233 MA's), (65, 55776), (66, 55773), (78, 55701), (82, 55686), (95, 55626), (99, 55611), (107, 55572),

Gene: Hetaeria_64 Start: 55860, Stop: 55435, Start Num: 30

Candidate Starts for Hetaeria_64:

(Start: 30 @55860 has 31 MA's), (Start: 51 @55794 has 233 MA's), (66, 55713), (78, 55641), (82, 55626), (95, 55566), (99, 55551), (107, 55512),

Gene: HighStump_67 Start: 56065, Stop: 55706, Start Num: 51

Candidate Starts for HighStump_67:

(Start: 51 @56065 has 233 MA's), (62, 56005), (66, 55984), (78, 55912), (82, 55897), (95, 55837), (99, 55822), (107, 55783),

Gene: Hocus_64 Start: 55549, Stop: 55190, Start Num: 51

Candidate Starts for Hocus_64:

(Start: 30 @55615 has 31 MA's), (Start: 51 @55549 has 233 MA's), (65, 55471), (66, 55468), (78, 55396), (82, 55381), (95, 55321), (99, 55306), (107, 55267),

Gene: Horchata_63 Start: 55584, Stop: 55225, Start Num: 51

Candidate Starts for Horchata_63:

(Start: 27 @55656 has 6 MA's), (32, 55641), (35, 55635), (Start: 51 @55584 has 233 MA's), (62, 55524), (66, 55503), (78, 55431), (82, 55416), (95, 55356), (99, 55341), (107, 55302),

Gene: Hosp_057 Start: 53377, Stop: 53018, Start Num: 51

Candidate Starts for Hosp_057:

(50, 53380), (Start: 51 @53377 has 233 MA's), (74, 53260), (83, 53209), (102, 53107),

Gene: Hydro_59 Start: 56795, Stop: 56508, Start Num: 51

Candidate Starts for Hydro_59:

(Start: 51 @56795 has 233 MA's), (54, 56777), (57, 56768), (74, 56681), (77, 56654), (99, 56606), (102, 56585), (104, 56573), (110, 56555), (113, 56519),

Gene: ImtiyazSitla_66 Start: 55792, Stop: 55433, Start Num: 51

Candidate Starts for ImtiyazSitla_66:

(Start: 51 @55792 has 233 MA's), (62, 55732), (66, 55711), (78, 55639), (82, 55624), (95, 55564), (99, 55549), (107, 55510),

Gene: Imvubu_59 Start: 55213, Stop: 54848, Start Num: 51

Candidate Starts for Imvubu_59:

(19, 55315), (20, 55309), (Start: 24 @55297 has 1 MA's), (26, 55294), (28, 55291), (Start: 51 @55213 has 233 MA's), (66, 55138), (71, 55111), (74, 55099), (78, 55066), (79, 55063), (82, 55051), (84, 55042), (93, 54997), (99, 54973), (100, 54967), (102, 54952), (107, 54934),

Gene: Inchworm_67 Start: 55943, Stop: 55584, Start Num: 51

Candidate Starts for Inchworm_67:

(Start: 51 @55943 has 233 MA's), (62, 55883), (66, 55862), (78, 55790), (82, 55775), (95, 55715), (99, 55700), (107, 55661),

Gene: Indlovu_62 Start: 57138, Stop: 56779, Start Num: 51

Candidate Starts for Indlovu_62:

(Start: 51 @57138 has 233 MA's), (71, 57033), (74, 57021), (76, 56997), (82, 56973), (97, 56904), (103, 56874), (107, 56859), (109, 56850),

Gene: Inverness_64 Start: 55592, Stop: 55233, Start Num: 51

Candidate Starts for Inverness_64:

(Start: 51 @55592 has 233 MA's), (62, 55532), (66, 55511), (78, 55439), (82, 55424), (95, 55364), (99, 55349), (107, 55310),

Gene: Iridoclysis_65 Start: 55876, Stop: 55517, Start Num: 51

Candidate Starts for Iridoclysis_65:

(Start: 51 @55876 has 233 MA's), (62, 55816), (66, 55795), (78, 55723), (82, 55708), (95, 55648), (99, 55633), (107, 55594),

Gene: IsaacEli_66 Start: 56148, Stop: 55717, Start Num: 27

Candidate Starts for IsaacEli_66:

(Start: 27 @56148 has 6 MA's), (32, 56133), (35, 56127), (Start: 51 @56076 has 233 MA's), (62, 56016), (66, 55995), (78, 55923), (82, 55908), (95, 55848), (99, 55833), (107, 55794),

Gene: ItsyBitsy1_61 Start: 54584, Stop: 54282, Start Num: 47

Candidate Starts for ItsyBitsy1_61:

(Start: 47 @54584 has 24 MA's), (Start: 58 @54542 has 8 MA's), (69, 54476), (76, 54434), (105, 54350), (114, 54287),

Gene: JAMaL_59 Start: 56836, Stop: 56549, Start Num: 51

Candidate Starts for JAMaL_59:

(Start: 51 @56836 has 233 MA's), (54, 56818), (57, 56809), (74, 56722), (77, 56695), (94, 56662), (99, 56647), (102, 56626), (104, 56614), (110, 56596), (113, 56560),

Gene: JDog_64 Start: 56098, Stop: 55739, Start Num: 51

Candidate Starts for JDog_64:

(Start: 30 @56164 has 31 MA's), (Start: 51 @56098 has 233 MA's), (62, 56038), (66, 56017), (78, 55945), (82, 55930), (95, 55870), (99, 55855), (107, 55816),

Gene: JacAttac_66 Start: 55538, Stop: 55179, Start Num: 51

Candidate Starts for JacAttac_66:

(Start: 51 @55538 has 233 MA's), (62, 55478), (66, 55457), (78, 55385), (82, 55370), (95, 55310), (99, 55295), (107, 55256),

Gene: Jackstina_62 Start: 55971, Stop: 55702, Start Num: 59

Candidate Starts for Jackstina_62:

(Start: 59 @55971 has 42 MA's), (76, 55875), (81, 55854), (110, 55773), (111, 55758),

Gene: JaguarMi_61 Start: 57862, Stop: 57575, Start Num: 51

Candidate Starts for JaguarMi_61:

(Start: 51 @57862 has 233 MA's), (54, 57844), (57, 57835), (70, 57763), (71, 57760), (77, 57721), (99, 57673), (102, 57652), (104, 57640), (110, 57622), (113, 57586),

Gene: JakeO_66 Start: 55821, Stop: 55462, Start Num: 51

Candidate Starts for JakeO_66:

(Start: 51 @55821 has 233 MA's), (62, 55761), (66, 55740), (78, 55668), (82, 55653), (95, 55593), (99, 55578), (107, 55539),

Gene: JangoPhett_65 Start: 55879, Stop: 55520, Start Num: 51

Candidate Starts for JangoPhett_65:

(Start: 51 @55879 has 233 MA's), (62, 55819), (66, 55798), (78, 55726), (82, 55711), (95, 55651), (99, 55636), (107, 55597),

Gene: Jillium_65 Start: 56083, Stop: 55724, Start Num: 51

Candidate Starts for Jillium_65:

(Start: 30 @56149 has 31 MA's), (Start: 51 @56083 has 233 MA's), (65, 56005), (66, 56002), (78, 55930), (82, 55915), (95, 55855), (99, 55840), (107, 55801),

Gene: Jiminy_66 Start: 55657, Stop: 55298, Start Num: 51

Candidate Starts for Jiminy_66:

(Start: 51 @55657 has 233 MA's), (62, 55597), (66, 55576), (78, 55504), (82, 55489), (95, 55429), (99, 55414), (107, 55375),

Gene: Jiraiya_69 Start: 55855, Stop: 55496, Start Num: 51

Candidate Starts for Jiraiya_69:

(Start: 30 @55921 has 31 MA's), (Start: 51 @55855 has 233 MA's), (62, 55795), (66, 55774), (78, 55702), (82, 55687), (95, 55627), (99, 55612), (107, 55573),

Gene: Jolie1_059 Start: 55277, Stop: 54930, Start Num: 51

Candidate Starts for Jolie1_059:

(50, 55280), (Start: 51 @55277 has 233 MA's), (74, 55160), (79, 55124), (102, 55007),

Gene: KLucky39_63 Start: 55283, Stop: 54780, Start Num: 8

Candidate Starts for KLucky39_63:

(5, 55298), (Start: 8 @55283 has 1 MA's), (17, 55238), (Start: 51 @55139 has 233 MA's), (62, 55079), (66, 55058), (78, 54986), (82, 54971), (95, 54911), (99, 54896), (107, 54857),

Gene: Kahve_65 Start: 56085, Stop: 55726, Start Num: 51

Candidate Starts for Kahve_65:

(Start: 30 @56151 has 31 MA's), (Start: 51 @56085 has 233 MA's), (62, 56025), (66, 56004), (78, 55932), (82, 55917), (95, 55857), (99, 55842), (107, 55803),

Gene: Kailash_64 Start: 55983, Stop: 55624, Start Num: 51

Candidate Starts for Kailash_64:

(Start: 51 @55983 has 233 MA's), (62, 55923), (66, 55902), (78, 55830), (82, 55815), (95, 55755), (99, 55740), (107, 55701),

Gene: Kaleb_61 Start: 54461, Stop: 54201, Start Num: 58

Candidate Starts for Kaleb_61:

(Start: 47 @54503 has 24 MA's), (Start: 58 @54461 has 8 MA's), (69, 54395), (76, 54353), (105, 54269), (114, 54206),

Gene: Kamiyu_66 Start: 56048, Stop: 55779, Start Num: 59

Candidate Starts for Kamiyu_66:

(Start: 59 @56048 has 42 MA's), (76, 55952), (81, 55931), (110, 55850), (111, 55835),

Gene: Katniss_66 Start: 55523, Stop: 55164, Start Num: 51

Candidate Starts for Katniss_66:

(Start: 51 @55523 has 233 MA's), (62, 55463), (66, 55442), (78, 55370), (82, 55355), (95, 55295), (99, 55280), (107, 55241),

Gene: KayaCho_59 Start: 55392, Stop: 55051, Start Num: 51

Candidate Starts for KayaCho_59:

(Start: 51 @55392 has 233 MA's), (74, 55275), (79, 55239), (81, 55230), (83, 55224), (87, 55203), (102, 55128),

Gene: Keitherie_67 Start: 56146, Stop: 55787, Start Num: 51

Candidate Starts for Keitherie_67:

(Start: 27 @56218 has 6 MA's), (32, 56203), (35, 56197), (Start: 51 @56146 has 233 MA's), (62, 56086), (66, 56065), (78, 55993), (82, 55978), (95, 55918), (99, 55903), (107, 55864),

Gene: Kheth_61 Start: 54415, Stop: 54113, Start Num: 47

Candidate Starts for Kheth_61:

(Start: 47 @54415 has 24 MA's), (Start: 58 @54373 has 8 MA's), (69, 54307), (76, 54265), (105, 54181), (114, 54118),

Gene: Kikipoo_66 Start: 56148, Stop: 55717, Start Num: 27

Candidate Starts for Kikipoo_66:

(Start: 27 @56148 has 6 MA's), (32, 56133), (35, 56127), (Start: 51 @56076 has 233 MA's), (62, 56016), (66, 55995), (78, 55923), (82, 55908), (95, 55848), (99, 55833), (107, 55794),

Gene: Kimbrough_66 Start: 56126, Stop: 55767, Start Num: 51

Candidate Starts for Kimbrough_66:

(Start: 30 @56192 has 31 MA's), (Start: 51 @56126 has 233 MA's), (62, 56066), (66, 56045), (78, 55973), (82, 55958), (95, 55898), (99, 55883), (107, 55844),

Gene: KingTut_57 Start: 52290, Stop: 51931, Start Num: 51

Candidate Starts for KingTut_57:

(Start: 51 @52290 has 233 MA's), (62, 52230), (66, 52209), (78, 52137), (82, 52122), (95, 52062), (99, 52047), (107, 52008),

Gene: KingVeVeVe_64 Start: 55093, Stop: 54734, Start Num: 51

Candidate Starts for KingVeVeVe_64:

(Start: 51 @55093 has 233 MA's), (62, 55033), (66, 55012), (78, 54940), (82, 54925), (95, 54865), (99, 54850), (107, 54811),

Gene: KlimbOn_65 Start: 55584, Stop: 55225, Start Num: 51

Candidate Starts for KlimbOn_65:

(Start: 51 @55584 has 233 MA's), (62, 55524), (66, 55503), (78, 55431), (82, 55416), (95, 55356), (99, 55341), (107, 55302),

Gene: Kloppinator_66 Start: 55735, Stop: 55376, Start Num: 51

Candidate Starts for Kloppinator_66:

(Start: 51 @55735 has 233 MA's), (62, 55675), (66, 55654), (78, 55582), (82, 55567), (95, 55507), (99, 55492), (107, 55453),

Gene: Knocker_64 Start: 58158, Stop: 57814, Start Num: 51

Candidate Starts for Knocker_64:

(Start: 51 @58158 has 233 MA's), (78, 58014), (88, 57981), (89, 57975), (100, 57933), (104, 57906),

Gene: Kronus_66 Start: 57136, Stop: 56867, Start Num: 59

Candidate Starts for Kronus_66:

(Start: 59 @57136 has 42 MA's), (76, 57040), (81, 57019), (110, 56938), (111, 56923),

Gene: Kwadwo_64 Start: 55536, Stop: 55177, Start Num: 51

Candidate Starts for Kwadwo_64:

(Start: 30 @55602 has 31 MA's), (Start: 51 @55536 has 233 MA's), (65, 55458), (66, 55455), (78, 55383), (82, 55368), (95, 55308), (99, 55293), (107, 55254),

Gene: Kwksand96_66 Start: 55672, Stop: 55313, Start Num: 51

Candidate Starts for Kwksand96_66:

(Start: 51 @55672 has 233 MA's), (62, 55612), (66, 55591), (78, 55519), (82, 55504), (95, 55444), (99, 55429), (107, 55390),

Gene: Labeouficaum_66 Start: 55660, Stop: 55301, Start Num: 51

Candidate Starts for Labeouficaum_66:

(Start: 51 @55660 has 233 MA's), (66, 55579), (78, 55507), (82, 55492), (95, 55432), (99, 55417), (107, 55378),

Gene: Lars_62 Start: 54438, Stop: 54178, Start Num: 58

Candidate Starts for Lars_62:

(Start: 47 @54480 has 24 MA's), (Start: 58 @54438 has 8 MA's), (69, 54372), (76, 54330), (105, 54246), (114, 54183),

Gene: LasagnaCat_67 Start: 55955, Stop: 55596, Start Num: 51

Candidate Starts for LasagnaCat_67:

(Start: 51 @55955 has 233 MA's), (62, 55895), (66, 55874), (78, 55802), (82, 55787), (95, 55727), (99, 55712), (107, 55673),

Gene: Lasso_65 Start: 55811, Stop: 55452, Start Num: 51

Candidate Starts for Lasso_65:

(Start: 27 @55883 has 6 MA's), (32, 55868), (35, 55862), (Start: 51 @55811 has 233 MA's), (65, 55733), (66, 55730), (78, 55658), (82, 55643), (95, 55583), (99, 55568), (107, 55529),

Gene: Laurie_61 Start: 54177, Stop: 53875, Start Num: 47

Candidate Starts for Laurie_61:

(Start: 47 @54177 has 24 MA's), (Start: 58 @54135 has 8 MA's), (69, 54069), (76, 54027), (105, 53943), (114, 53880),

Gene: LeeLot_65 Start: 56166, Stop: 55807, Start Num: 51

Candidate Starts for LeeLot_65:

(Start: 51 @56166 has 233 MA's), (62, 56106), (66, 56085), (78, 56013), (82, 55998), (95, 55938), (99, 55923), (107, 55884),

Gene: Lego3393_63 Start: 56186, Stop: 55758, Start Num: 30

Candidate Starts for Lego3393_63:

(Start: 30 @56186 has 31 MA's), (Start: 51 @56117 has 233 MA's), (62, 56057), (66, 56036), (78, 55964), (82, 55949), (95, 55889), (99, 55874), (107, 55835),

Gene: Legolas_67 Start: 55905, Stop: 55546, Start Num: 51

Candidate Starts for Legolas_67:

(Start: 51 @55905 has 233 MA's), (62, 55845), (66, 55824), (78, 55752), (82, 55737), (95, 55677), (99, 55662), (107, 55623),

Gene: LeiMonet_68 Start: 56029, Stop: 55670, Start Num: 51

Candidate Starts for LeiMonet_68:

(Start: 30 @56095 has 31 MA's), (Start: 51 @56029 has 233 MA's), (62, 55969), (66, 55948), (78, 55876), (82, 55861), (95, 55801), (99, 55786), (107, 55747),

Gene: LemonSlice_66 Start: 55556, Stop: 55137, Start Num: 33

Candidate Starts for LemonSlice_66:

(Start: 33 @55556 has 6 MA's), (62, 55436), (66, 55415), (78, 55343), (82, 55328), (95, 55268), (99, 55253), (107, 55214),

Gene: Lephleur_61 Start: 54344, Stop: 54042, Start Num: 47

Candidate Starts for Lephleur_61:

(Start: 47 @54344 has 24 MA's), (Start: 58 @54302 has 8 MA's), (69, 54236), (76, 54194), (96, 54155), (105, 54110), (114, 54047),

Gene: LestyG_64 Start: 55566, Stop: 55297, Start Num: 59

Candidate Starts for LestyG_64:

(Start: 59 @55566 has 42 MA's), (76, 55470), (81, 55449), (110, 55368), (111, 55353),

Gene: LilMcDreamy_62 Start: 56755, Stop: 56402, Start Num: 43

Candidate Starts for LilMcDreamy_62:

(Start: 43 @56755 has 1 MA's), (78, 56593), (82, 56578), (98, 56509), (99, 56506), (100, 56500), (107, 56467),

Gene: LizLemon_61 Start: 54505, Stop: 54203, Start Num: 47

Candidate Starts for LizLemon_61:

(Start: 47 @54505 has 24 MA's), (Start: 58 @54463 has 8 MA's), (69, 54397), (76, 54355), (105, 54271), (114, 54208),

Gene: Lolalove_60 Start: 56775, Stop: 56488, Start Num: 51

Candidate Starts for Lolalove_60:

(Start: 51 @56775 has 233 MA's), (54, 56757), (57, 56748), (62, 56721), (74, 56661), (77, 56634), (99, 56586), (102, 56565), (104, 56553), (110, 56535), (113, 56499),

Gene: Longacauda_66 Start: 55932, Stop: 55573, Start Num: 51

Candidate Starts for Longacauda_66:

(Start: 30 @55998 has 31 MA's), (Start: 51 @55932 has 233 MA's), (62, 55872), (66, 55851), (78, 55779), (82, 55764), (95, 55704), (99, 55689), (107, 55650),

Gene: Lopsy_63 Start: 55224, Stop: 54865, Start Num: 51

Candidate Starts for Lopsy_63:

(Start: 51 @55224 has 233 MA's), (62, 55164), (66, 55143), (78, 55071), (82, 55056), (95, 54996), (99, 54981), (107, 54942),

Gene: LostAndPhound_65 Start: 56110, Stop: 55751, Start Num: 51

Candidate Starts for LostAndPhound_65:

(Start: 51 @56110 has 233 MA's), (62, 56050), (66, 56029), (78, 55957), (82, 55942), (95, 55882), (99, 55867), (107, 55828),

Gene: LuckyMarjie_63 Start: 55286, Stop: 54927, Start Num: 51

Candidate Starts for LuckyMarjie_63:

(Start: 30 @55352 has 31 MA's), (Start: 51 @55286 has 233 MA's), (65, 55208), (66, 55205), (78, 55133), (82, 55118), (95, 55058), (99, 55043), (107, 55004),

Gene: Lulumae_62 Start: 55337, Stop: 54912, Start Num: 30

Candidate Starts for Lulumae_62:

(Start: 30 @55337 has 31 MA's), (Start: 51 @55271 has 233 MA's), (65, 55193), (66, 55190), (78, 55118), (82, 55103), (95, 55043), (99, 55028), (107, 54989),

Gene: Lulwa_63 Start: 54868, Stop: 54509, Start Num: 51

Candidate Starts for Lulwa_63:

(Start: 27 @54940 has 6 MA's), (32, 54925), (35, 54919), (Start: 51 @54868 has 233 MA's), (65, 54790), (66, 54787), (78, 54715), (82, 54700), (95, 54640), (99, 54625), (107, 54586),

Gene: Lumine_66 Start: 55755, Stop: 55396, Start Num: 51

Candidate Starts for Lumine_66:

(Start: 30 @55821 has 31 MA's), (Start: 51 @55755 has 233 MA's), (66, 55674), (78, 55602), (82, 55587), (95, 55527), (99, 55512), (107, 55473),

Gene: MRabcd_65 Start: 55879, Stop: 55520, Start Num: 51

Candidate Starts for MRabcd_65:

(Start: 51 @55879 has 233 MA's), (62, 55819), (66, 55798), (78, 55726), (82, 55711), (95, 55651), (99, 55636), (107, 55597),

Gene: Mag7_64 Start: 55527, Stop: 55168, Start Num: 51

Candidate Starts for Mag7_64:

(Start: 51 @55527 has 233 MA's), (62, 55467), (66, 55446), (78, 55374), (82, 55359), (95, 55299), (99, 55284), (107, 55245),

Gene: Magic8_66 Start: 55874, Stop: 55515, Start Num: 51

Candidate Starts for Magic8_66:

(Start: 51 @55874 has 233 MA's), (62, 55814), (66, 55793), (78, 55721), (82, 55706), (95, 55646), (99, 55631), (107, 55592),

Gene: Magpie_58 Start: 56700, Stop: 56413, Start Num: 51

Candidate Starts for Magpie_58:

(Start: 51 @56700 has 233 MA's), (54, 56682), (57, 56673), (74, 56586), (77, 56559), (99, 56511), (102, 56490), (104, 56478), (110, 56460), (113, 56424),

Gene: Mana_64 Start: 55551, Stop: 55192, Start Num: 51

Candidate Starts for Mana_64:

(Start: 51 @55551 has 233 MA's), (62, 55491), (66, 55470), (78, 55398), (82, 55383), (95, 55323), (99, 55308), (107, 55269),

Gene: Manad_64 Start: 55836, Stop: 55477, Start Num: 51

Candidate Starts for Manad_64:

(Start: 51 @55836 has 233 MA's), (62, 55776), (66, 55755), (78, 55683), (82, 55668), (95, 55608), (99, 55593), (107, 55554),

Gene: Marley1013_66 Start: 56764, Stop: 56495, Start Num: 59

Candidate Starts for Marley1013_66:

(Start: 52 @56800 has 1 MA's), (53, 56794), (54, 56788), (Start: 59 @56764 has 42 MA's), (76, 56668), (78, 56659), (81, 56647), (110, 56566), (111, 56551),

Gene: Maru_65 Start: 55991, Stop: 55632, Start Num: 51

Candidate Starts for Maru_65:

(Start: 51 @55991 has 233 MA's), (62, 55931), (66, 55910), (78, 55838), (82, 55823), (95, 55763), (99, 55748), (107, 55709),

Gene: Maskar_66 Start: 55792, Stop: 55433, Start Num: 51

Candidate Starts for Maskar_66:

(Start: 51 @55792 has 233 MA's), (62, 55732), (66, 55711), (78, 55639), (82, 55624), (95, 55564), (99, 55549), (107, 55510),

Gene: MasterPo_62 Start: 54329, Stop: 54069, Start Num: 58

Candidate Starts for MasterPo_62:

(Start: 47 @54371 has 24 MA's), (Start: 58 @54329 has 8 MA's), (69, 54263), (76, 54221), (105, 54137), (114, 54074),

Gene: Matalotodo_65 Start: 56103, Stop: 55744, Start Num: 51

Candidate Starts for Matalotodo_65:

(5, 56262), (Start: 8 @56247 has 1 MA's), (17, 56202), (Start: 51 @56103 has 233 MA's), (66, 56022), (78, 55950), (82, 55935), (95, 55875), (99, 55860), (107, 55821),

Gene: Mcshane_64 Start: 55615, Stop: 55190, Start Num: 30

Candidate Starts for Mcshane_64:

(Start: 30 @55615 has 31 MA's), (Start: 51 @55549 has 233 MA's), (65, 55471), (66, 55468), (78, 55396), (82, 55381), (95, 55321), (99, 55306), (107, 55267),

Gene: Mecca_65 Start: 56114, Stop: 55755, Start Num: 51

Candidate Starts for Mecca_65:

(Start: 30 @56180 has 31 MA's), (Start: 51 @56114 has 233 MA's), (65, 56036), (66, 56033), (78, 55961), (82, 55946), (95, 55886), (99, 55871), (107, 55832),

Gene: Megamind20_66 Start: 55603, Stop: 55178, Start Num: 30

Candidate Starts for Megamind20_66:

(Start: 30 @55603 has 31 MA's), (Start: 51 @55537 has 233 MA's), (65, 55459), (66, 55456), (78, 55384), (82, 55369), (95, 55309), (99, 55294), (107, 55255),

Gene: Megatron_65 Start: 56130, Stop: 55705, Start Num: 30

Candidate Starts for Megatron_65:

(Start: 30 @56130 has 31 MA's), (Start: 51 @56064 has 233 MA's), (62, 56004), (66, 55983), (78, 55911), (82, 55896), (95, 55836), (99, 55821), (107, 55782),

Gene: Melc17_63 Start: 56192, Stop: 55833, Start Num: 51

Candidate Starts for Melc17_63:

(Start: 51 @56192 has 233 MA's), (62, 56132), (66, 56111), (78, 56039), (82, 56024), (95, 55964), (99, 55949), (107, 55910),

Gene: MelsMeow_65 Start: 55845, Stop: 55486, Start Num: 51

Candidate Starts for MelsMeow_65:

(Start: 51 @55845 has 233 MA's), (62, 55785), (66, 55764), (78, 55692), (82, 55677), (95, 55617), (99, 55602), (107, 55563),

Gene: Mesh1_66 Start: 56127, Stop: 55768, Start Num: 51

Candidate Starts for Mesh1_66:

(Start: 51 @56127 has 233 MA's), (65, 56049), (66, 56046), (78, 55974), (82, 55959), (95, 55899), (99, 55884), (107, 55845),

Gene: MichaelPhcott_64 Start: 55524, Stop: 55165, Start Num: 51

Candidate Starts for MichaelPhcott_64:

(Start: 51 @55524 has 233 MA's), (62, 55464), (66, 55443), (78, 55371), (82, 55356), (95, 55296), (99, 55281), (107, 55242),

Gene: Mikota_63 Start: 55090, Stop: 54731, Start Num: 51

Candidate Starts for Mikota_63:

(Start: 51 @55090 has 233 MA's), (62, 55030), (66, 55009), (78, 54937), (82, 54922), (95, 54862), (99, 54847), (107, 54808),

Gene: MiniBoss_63 Start: 54896, Stop: 54537, Start Num: 51

Candidate Starts for MiniBoss_63:

(Start: 51 @54896 has 233 MA's), (62, 54836), (66, 54815), (78, 54743), (82, 54728), (95, 54668), (99, 54653), (107, 54614),

Gene: MitKao_65 Start: 55561, Stop: 55202, Start Num: 51

Candidate Starts for MitKao_65:

(Start: 51 @55561 has 233 MA's), (62, 55501), (66, 55480), (78, 55408), (82, 55393), (95, 55333), (99, 55318), (107, 55279),

Gene: Mithril_59 Start: 56913, Stop: 56620, Start Num: 49

Candidate Starts for Mithril_59:

(25, 56994), (38, 56952), (41, 56946), (Start: 49 @56913 has 1 MA's), (Start: 51 @56907 has 233 MA's), (54, 56889), (57, 56880), (71, 56805), (74, 56793), (77, 56766), (99, 56718), (100, 56712), (102, 56697), (104, 56685), (110, 56667), (113, 56631),

Gene: MmasiCarm_67 Start: 56493, Stop: 56224, Start Num: 59

Candidate Starts for MmasiCarm_67:

(Start: 59 @56493 has 42 MA's), (76, 56397), (81, 56376), (110, 56295), (111, 56280),

Gene: Morgushi_64 Start: 55550, Stop: 55191, Start Num: 51

Candidate Starts for Morgushi_64:

(Start: 51 @55550 has 233 MA's), (62, 55490), (66, 55469), (78, 55397), (82, 55382), (95, 55322), (99, 55307), (107, 55268),

Gene: Mortcellus_66 Start: 57151, Stop: 56882, Start Num: 59

Candidate Starts for Mortcellus_66:

(13, 57325), (Start: 30 @57271 has 31 MA's), (36, 57250), (42, 57226), (Start: 59 @57151 has 42 MA's), (76, 57055), (81, 57034), (110, 56953), (111, 56938),

Gene: Morty_66 Start: 56144, Stop: 55719, Start Num: 30

Candidate Starts for Morty_66:

(Start: 30 @56144 has 31 MA's), (Start: 51 @56078 has 233 MA's), (62, 56018), (66, 55997), (78, 55925), (82, 55910), (95, 55850), (99, 55835), (107, 55796),

Gene: Morty007_64 Start: 56800, Stop: 56495, Start Num: 52

Candidate Starts for Morty007_64:

(Start: 52 @56800 has 1 MA's), (53, 56794), (54, 56788), (Start: 59 @56764 has 42 MA's), (76, 56668), (78, 56659), (81, 56647), (110, 56566), (111, 56551),

Gene: Mosaic_63 Start: 55555, Stop: 55196, Start Num: 51

Candidate Starts for Mosaic_63:

(Start: 51 @55555 has 233 MA's), (62, 55495), (66, 55474), (78, 55402), (82, 55387), (95, 55327), (99, 55312), (107, 55273),

Gene: MrPhizzler_65 Start: 56018, Stop: 55659, Start Num: 51

Candidate Starts for MrPhizzler_65:

(Start: 30 @56084 has 31 MA's), (Start: 51 @56018 has 233 MA's), (65, 55940), (66, 55937), (78, 55865), (82, 55850), (95, 55790), (99, 55775), (107, 55736),

Gene: Mudslide_59 Start: 57040, Stop: 56753, Start Num: 51

Candidate Starts for Mudslide_59:

(Start: 51 @57040 has 233 MA's), (54, 57022), (57, 57013), (74, 56926), (77, 56899), (99, 56851), (102, 56830), (104, 56818), (110, 56800), (113, 56764),

Gene: Mulan_65 Start: 55789, Stop: 55430, Start Num: 51

Candidate Starts for Mulan_65:

(Start: 30 @55858 has 31 MA's), (Start: 51 @55789 has 233 MA's), (62, 55729), (66, 55708), (78, 55636), (82, 55621), (95, 55561), (99, 55546), (107, 55507),

Gene: Murdoc_63 Start: 55551, Stop: 55192, Start Num: 51

Candidate Starts for Murdoc_63:

(5, 55710), (Start: 8 @55695 has 1 MA's), (17, 55650), (Start: 51 @55551 has 233 MA's), (62, 55491), (65, 55473), (66, 55470), (78, 55398), (82, 55383), (95, 55323), (99, 55308), (107, 55269),

Gene: Mutante_65 Start: 55627, Stop: 55202, Start Num: 30

Candidate Starts for Mutante_65:

(Start: 30 @55627 has 31 MA's), (Start: 51 @55561 has 233 MA's), (62, 55501), (66, 55480), (78, 55408), (82, 55393), (95, 55333), (99, 55318), (107, 55279),

Gene: Mysterious_64 Start: 57019, Stop: 56651, Start Num: 51

Candidate Starts for Mysterious_64:

(Start: 40 @57061 has 6 MA's), (Start: 51 @57019 has 233 MA's), (54, 57001), (56, 56995), (81, 56848), (96, 56779), (98, 56770), (100, 56761), (106, 56731),

Gene: Nacho_0067 Start: 56309, Stop: 55950, Start Num: 51

Candidate Starts for Nacho_0067:

(5, 56468), (Start: 8 @56453 has 1 MA's), (17, 56408), (Start: 51 @56309 has 233 MA's), (62, 56249), (66, 56228), (78, 56156), (82, 56141), (95, 56081), (99, 56066), (107, 56027),

Gene: Nanao_58 Start: 55734, Stop: 55447, Start Num: 51

Candidate Starts for Nanao_58:

(Start: 51 @55734 has 233 MA's), (54, 55716), (57, 55707), (74, 55620), (77, 55593), (94, 55560), (99, 55545), (102, 55524), (104, 55512), (110, 55494), (113, 55458),

Gene: Nangang_64 Start: 57223, Stop: 56840, Start Num: 40

Candidate Starts for Nangang_64:

(Start: 40 @57223 has 6 MA's), (86, 57013), (96, 56968), (98, 56959), (100, 56950), (106, 56920),

Gene: Neos5_65 Start: 56226, Stop: 55957, Start Num: 59

Candidate Starts for Neos5_65:

(Start: 52 @56262 has 1 MA's), (53, 56256), (54, 56250), (Start: 59 @56226 has 42 MA's), (76, 56130), (81, 56109), (110, 56028), (111, 56013),

Gene: Newman_63 Start: 55587, Stop: 55228, Start Num: 51

Candidate Starts for Newman_63:

(5, 55746), (Start: 8 @55731 has 1 MA's), (17, 55686), (Start: 51 @55587 has 233 MA's), (62, 55527), (66, 55506), (78, 55434), (82, 55419), (95, 55359), (99, 55344), (107, 55305),

Gene: Nicole21_66 Start: 55840, Stop: 55481, Start Num: 51

Candidate Starts for Nicole21_66:

(Start: 30 @55906 has 31 MA's), (Start: 51 @55840 has 233 MA's), (62, 55780), (65, 55762), (66, 55759), (78, 55687), (82, 55672), (95, 55612), (99, 55597), (107, 55558),

Gene: Nigel_59 Start: 55848, Stop: 55561, Start Num: 51

Candidate Starts for Nigel_59:

(Start: 51 @55848 has 233 MA's), (57, 55821), (63, 55788), (66, 55773), (71, 55746), (72, 55743), (74, 55734), (77, 55707), (78, 55701), (99, 55659), (110, 55608),

Gene: Nozo_66 Start: 56847, Stop: 56578, Start Num: 59

Candidate Starts for Nozo_66:

(Start: 59 @56847 has 42 MA's), (76, 56751), (81, 56730), (110, 56649), (111, 56634),

Gene: Numberten_64 Start: 55850, Stop: 55425, Start Num: 30

Candidate Starts for Numberten_64:

(Start: 30 @55850 has 31 MA's), (Start: 51 @55784 has 233 MA's), (65, 55706), (66, 55703), (78, 55631), (82, 55616), (95, 55556), (99, 55541), (107, 55502),

Gene: Nyala_64 Start: 55559, Stop: 55200, Start Num: 51

Candidate Starts for Nyala_64:

(Start: 30 @55625 has 31 MA's), (Start: 51 @55559 has 233 MA's), (62, 55499), (65, 55481), (66, 55478), (78, 55406), (82, 55391), (95, 55331), (99, 55316), (107, 55277),

Gene: OSmaximus_66 Start: 56305, Stop: 55946, Start Num: 51

Candidate Starts for OSmaximus_66:

(Start: 51 @56305 has 233 MA's), (62, 56245), (66, 56224), (78, 56152), (82, 56137), (95, 56077), (99, 56062), (107, 56023),

Gene: Obutu_67 Start: 56446, Stop: 56177, Start Num: 59

Candidate Starts for Obutu_67:

(Start: 52 @56482 has 1 MA's), (53, 56476), (54, 56470), (Start: 59 @56446 has 42 MA's), (76, 56350), (78, 56341), (81, 56329), (110, 56248), (111, 56233),

Gene: Olak_66 Start: 55562, Stop: 55203, Start Num: 51

Candidate Starts for Olak_66:

(Start: 51 @55562 has 233 MA's), (62, 55502), (66, 55481), (78, 55409), (82, 55394), (95, 55334), (99, 55319), (107, 55280),

Gene: Oline_65 Start: 55790, Stop: 55305, Start Num: 14

Candidate Starts for Oline_65:

(Start: 14 @55790 has 4 MA's), (Start: 33 @55724 has 6 MA's), (65, 55586), (66, 55583), (78, 55511), (82, 55496), (95, 55436), (99, 55421), (107, 55382),

Gene: Olive_65 Start: 55775, Stop: 55416, Start Num: 51

Candidate Starts for Olive_65:

(Start: 51 @55775 has 233 MA's), (62, 55715), (66, 55694), (78, 55622), (82, 55607), (95, 55547), (99, 55532), (107, 55493),

Gene: OliverWalter_63 Start: 55594, Stop: 55235, Start Num: 51

Candidate Starts for OliverWalter_63:

(5, 55753), (Start: 8 @55738 has 1 MA's), (17, 55693), (Start: 51 @55594 has 233 MA's), (62, 55534), (66, 55513), (78, 55441), (82, 55426), (95, 55366), (99, 55351), (107, 55312),

Gene: Omniscient_66 Start: 56422, Stop: 56063, Start Num: 51

Candidate Starts for Omniscient_66:

(Start: 30 @56488 has 31 MA's), (Start: 51 @56422 has 233 MA's), (65, 56344), (66, 56341), (78, 56269), (82, 56254), (95, 56194), (99, 56179), (107, 56140),

Gene: Oosterbaan_64 Start: 55907, Stop: 55482, Start Num: 30

Candidate Starts for Oosterbaan_64:

(Start: 30 @55907 has 31 MA's), (Start: 51 @55841 has 233 MA's), (65, 55763), (66, 55760), (78, 55688), (82, 55673), (95, 55613), (99, 55598), (107, 55559),

Gene: Opia_62 Start: 54395, Stop: 54093, Start Num: 47

Candidate Starts for Opia_62:

(Start: 47 @54395 has 24 MA's), (Start: 58 @54353 has 8 MA's), (69, 54287), (76, 54245), (105, 54161), (114, 54098),

Gene: OrangeOswald_66 Start: 56088, Stop: 55819, Start Num: 59

Candidate Starts for OrangeOswald_66:

(Start: 59 @56088 has 42 MA's), (76, 55992), (81, 55971), (110, 55890), (111, 55875),

Gene: Orfeu_65 Start: 56164, Stop: 55739, Start Num: 30

Candidate Starts for Orfeu_65:

(Start: 30 @56164 has 31 MA's), (Start: 51 @56098 has 233 MA's), (65, 56020), (66, 56017), (78, 55945), (82, 55930), (95, 55870), (99, 55855), (107, 55816),

Gene: Orion_66 Start: 55569, Stop: 55144, Start Num: 30

Candidate Starts for Orion_66:

(Start: 30 @55569 has 31 MA's), (Start: 51 @55503 has 233 MA's), (65, 55425), (66, 55422), (78, 55350), (82, 55335), (95, 55275), (99, 55260), (107, 55221),

Gene: Orwigg_65 Start: 55549, Stop: 55124, Start Num: 30

Candidate Starts for Orwigg_65:

(Start: 30 @55549 has 31 MA's), (Start: 51 @55483 has 233 MA's), (62, 55423), (66, 55402), (78, 55330), (82, 55315), (95, 55255), (99, 55240), (107, 55201),

Gene: PG1_65 Start: 56140, Stop: 55715, Start Num: 30

Candidate Starts for PG1_65:

(Start: 30 @56140 has 31 MA's), (Start: 51 @56074 has 233 MA's), (65, 55996), (66, 55993), (78, 55921), (82, 55906), (95, 55846), (99, 55831), (107, 55792),

Gene: Pacifista_68 Start: 55624, Stop: 55199, Start Num: 30

Candidate Starts for Pacifista_68:

(Start: 30 @55624 has 31 MA's), (Start: 51 @55558 has 233 MA's), (65, 55480), (66, 55477), (78, 55405), (82, 55390), (95, 55330), (99, 55315), (107, 55276),

Gene: PenguinLover67_61 Start: 56708, Stop: 56340, Start Num: 51

Candidate Starts for PenguinLover67_61:

(Start: 51 @56708 has 233 MA's), (71, 56609), (93, 56513), (99, 56486), (104, 56453), (108, 56444), (112, 56417), (117, 56363),

Gene: Phaedrus_61 Start: 55521, Stop: 55252, Start Num: 59

Candidate Starts for Phaedrus_61:

(Start: 59 @55521 has 42 MA's), (76, 55425), (81, 55404), (110, 55323), (111, 55308),

Gene: Phamished_67 Start: 55840, Stop: 55412, Start Num: 30

Candidate Starts for Phamished_67:

(Start: 30 @55840 has 31 MA's), (Start: 51 @55771 has 233 MA's), (62, 55711), (66, 55690), (78, 55618), (82, 55603), (95, 55543), (99, 55528), (107, 55489),

Gene: Phantasmagoria_61 Start: 54385, Stop: 54083, Start Num: 47

Candidate Starts for Phantasmagoria_61:

(Start: 47 @54385 has 24 MA's), (Start: 58 @54343 has 8 MA's), (69, 54277), (76, 54235), (105, 54151), (114, 54088),

Gene: Phareon_64 Start: 55280, Stop: 54921, Start Num: 51

Candidate Starts for Phareon_64:

(Start: 51 @55280 has 233 MA's), (62, 55220), (66, 55199), (78, 55127), (82, 55112), (95, 55052), (99, 55037), (107, 54998),

Gene: PhatCats2014_65 Start: 56145, Stop: 55720, Start Num: 30

Candidate Starts for PhatCats2014_65:

(Start: 30 @56145 has 31 MA's), (Start: 51 @56079 has 233 MA's), (65, 56001), (66, 55998), (78, 55926), (82, 55911), (95, 55851), (99, 55836), (107, 55797),

Gene: PhatLouie_67 Start: 56097, Stop: 55738, Start Num: 51

Candidate Starts for PhatLouie_67:

(Start: 27 @56169 has 6 MA's), (32, 56154), (35, 56148), (Start: 51 @56097 has 233 MA's), (62, 56037), (66, 56016), (78, 55944), (82, 55929), (95, 55869), (99, 55854), (107, 55815),

Gene: Phayeta_68 Start: 56350, Stop: 56081, Start Num: 59

Candidate Starts for Phayeta_68:

(Start: 52 @56386 has 1 MA's), (53, 56380), (54, 56374), (Start: 59 @56350 has 42 MA's), (76, 56254), (81, 56233), (110, 56152), (111, 56137),

Gene: Phelemich_62 Start: 57018, Stop: 56650, Start Num: 51

Candidate Starts for Phelemich_62:

(10, 57168), (31, 57090), (Start: 40 @57060 has 6 MA's), (Start: 51 @57018 has 233 MA's), (54, 57000), (56, 56994), (81, 56847), (96, 56778), (98, 56769), (100, 56760), (106, 56730),

Gene: PhenghisKhan_66 Start: 55729, Stop: 55370, Start Num: 51

Candidate Starts for PhenghisKhan_66:

(Start: 51 @55729 has 233 MA's), (62, 55669), (66, 55648), (78, 55576), (82, 55561), (95, 55501), (99, 55486), (107, 55447),

Gene: Pherdinand_66 Start: 55842, Stop: 55483, Start Num: 51

Candidate Starts for Pherdinand_66:

(Start: 51 @55842 has 233 MA's), (62, 55782), (66, 55761), (78, 55689), (82, 55674), (95, 55614), (99, 55599), (107, 55560),

Gene: Phergie_66 Start: 55721, Stop: 55362, Start Num: 51

Candidate Starts for Phergie_66:

(Start: 51 @55721 has 233 MA's), (62, 55661), (66, 55640), (78, 55568), (82, 55553), (95, 55493), (99, 55478), (107, 55439),

Gene: Philly_65 Start: 55908, Stop: 55639, Start Num: 59

Candidate Starts for Philly_65:

(Start: 59 @55908 has 42 MA's), (76, 55812), (81, 55791), (110, 55710), (111, 55695),

Gene: Phipps_65 Start: 55351, Stop: 54992, Start Num: 51

Candidate Starts for Phipps_65:

(5, 55510), (Start: 8 @55495 has 1 MA's), (17, 55450), (Start: 51 @55351 has 233 MA's), (65, 55273), (66, 55270), (78, 55198), (82, 55183), (95, 55123), (99, 55108), (107, 55069),

Gene: Phleuron_64 Start: 55527, Stop: 55168, Start Num: 51

Candidate Starts for Phleuron_64:

(Start: 51 @55527 has 233 MA's), (62, 55467), (66, 55446), (78, 55374), (82, 55359), (95, 55299), (99, 55284), (107, 55245),

Gene: Phlyer_66 Start: 56802, Stop: 56533, Start Num: 59

Candidate Starts for Phlyer_66:

(15, 56970), (39, 56886), (45, 56865), (Start: 59 @56802 has 42 MA's), (76, 56706), (81, 56685), (110, 56604), (111, 56589),

Gene: PhrankReynolds_65 Start: 55726, Stop: 55367, Start Num: 51

Candidate Starts for PhrankReynolds_65:

(Start: 51 @55726 has 233 MA's), (62, 55666), (66, 55645), (78, 55573), (82, 55558), (95, 55498), (99, 55483), (107, 55444),

Gene: PhrodoBaggins_66 Start: 55946, Stop: 55587, Start Num: 51

Candidate Starts for PhrodoBaggins_66:

(Start: 51 @55946 has 233 MA's), (62, 55886), (66, 55865), (78, 55793), (82, 55778), (95, 55718), (99, 55703), (107, 55664),

Gene: Phunky_63 Start: 55578, Stop: 55219, Start Num: 51

Candidate Starts for Phunky_63:

(Start: 51 @55578 has 233 MA's), (62, 55518), (66, 55497), (78, 55425), (82, 55410), (95, 55350), (99, 55335), (107, 55296),

Gene: Piglet_0065 Start: 56117, Stop: 55692, Start Num: 30

Candidate Starts for Piglet_0065:

(Start: 30 @56117 has 31 MA's), (Start: 51 @56051 has 233 MA's), (65, 55973), (66, 55970), (78, 55898), (82, 55883), (95, 55823), (99, 55808), (107, 55769),

Gene: PinheadLarry_64 Start: 55888, Stop: 55529, Start Num: 51

Candidate Starts for PinheadLarry_64:

(Start: 51 @55888 has 233 MA's), (65, 55810), (66, 55807), (78, 55735), (82, 55720), (95, 55660), (99, 55645), (107, 55606),

Gene: Pinkman_65 Start: 55664, Stop: 55305, Start Num: 51

Candidate Starts for Pinkman_65:

(Start: 51 @55664 has 233 MA's), (62, 55604), (66, 55583), (78, 55511), (82, 55496), (95, 55436), (99, 55421), (107, 55382),

Gene: Pipefish_66 Start: 56527, Stop: 56261, Start Num: 60

Candidate Starts for Pipefish_66:

(1, 57022), (2, 56989), (3, 56959), (4, 56881), (17, 56686), (23, 56665), (Start: 60 @56527 has 1 MA's), (76, 56434), (81, 56413), (110, 56332), (111, 56317),

Gene: Pipsqueak_63 Start: 55567, Stop: 55148, Start Num: 33

Candidate Starts for Pipsqueak_63:

(Start: 33 @55567 has 6 MA's), (66, 55426), (78, 55354), (82, 55339), (95, 55279), (99, 55264), (107, 55225),

Gene: Placalicious_66 Start: 56608, Stop: 56249, Start Num: 51

Candidate Starts for Placalicious_66:

(Start: 51 @56608 has 233 MA's), (66, 56527), (78, 56455), (82, 56440), (95, 56380), (99, 56365), (107, 56326),

Gene: Plmatters_64 Start: 55581, Stop: 55222, Start Num: 51

Candidate Starts for Plmatters_64:

(Start: 30 @55647 has 31 MA's), (Start: 51 @55581 has 233 MA's), (65, 55503), (66, 55500), (78, 55428), (82, 55413), (95, 55353), (99, 55338), (107, 55299),

Gene: Podrick_64 Start: 55360, Stop: 55001, Start Num: 51

Candidate Starts for Podrick_64:

(5, 55519), (Start: 8 @55504 has 1 MA's), (17, 55459), (Start: 51 @55360 has 233 MA's), (66, 55279), (78, 55207), (82, 55192), (95, 55132), (99, 55117), (107, 55078),

Gene: Pops_63 Start: 55578, Stop: 55219, Start Num: 51

Candidate Starts for Pops_63:

(Start: 51 @55578 has 233 MA's), (62, 55518), (66, 55497), (78, 55425), (82, 55410), (95, 55350), (99, 55335), (107, 55296),

Gene: Poster_58 Start: 55735, Stop: 55448, Start Num: 51

Candidate Starts for Poster_58:

(Start: 51 @55735 has 233 MA's), (54, 55717), (57, 55708), (74, 55621), (77, 55594), (94, 55561), (99, 55546), (102, 55525), (104, 55513), (110, 55495), (113, 55459),

Gene: Potter_63 Start: 55572, Stop: 55213, Start Num: 51

Candidate Starts for Potter_63:

(Start: 51 @55572 has 233 MA's), (62, 55512), (66, 55491), (78, 55419), (82, 55404), (95, 55344), (99, 55329), (107, 55290),

Gene: Prickles_67 Start: 56073, Stop: 55714, Start Num: 51

Candidate Starts for Prickles_67:

(Start: 51 @56073 has 233 MA's), (62, 56013), (66, 55992), (78, 55920), (82, 55905), (95, 55845), (99, 55830), (107, 55791),

Gene: Prince_60 Start: 56953, Stop: 56666, Start Num: 51

Candidate Starts for Prince_60:

(Start: 51 @56953 has 233 MA's), (54, 56935), (57, 56926), (74, 56839), (77, 56812), (99, 56764), (102, 56743), (104, 56731), (110, 56713), (113, 56677),

Gene: ProfessorX_64 Start: 55571, Stop: 55212, Start Num: 51

Candidate Starts for ProfessorX_64:

(Start: 51 @55571 has 233 MA's), (62, 55511), (66, 55490), (78, 55418), (82, 55403), (95, 55343), (99, 55328), (107, 55289),

Gene: Puhltonio_64 Start: 55846, Stop: 55487, Start Num: 51

Candidate Starts for Puhltonio_64:

(Start: 51 @55846 has 233 MA's), (62, 55786), (66, 55765), (78, 55693), (82, 55678), (95, 55618), (99, 55603), (107, 55564),

Gene: QueenBeane_65 Start: 55878, Stop: 55519, Start Num: 51

Candidate Starts for QueenBeane_65:

(Start: 30 @55944 has 31 MA's), (Start: 51 @55878 has 233 MA's), (66, 55797), (78, 55725), (82, 55710), (95, 55650), (99, 55635), (107, 55596),

Gene: Quesadilla_64 Start: 57240, Stop: 56815, Start Num: 24

Candidate Starts for Quesadilla_64:

(Start: 24 @57240 has 1 MA's), (Start: 51 @57156 has 233 MA's), (64, 57099), (70, 57063), (99, 56934), (104, 56901), (108, 56892), (112, 56865), (116, 56823),

Gene: Quisquilliae_66 Start: 55839, Stop: 55480, Start Num: 51

Candidate Starts for Quisquilliae_66:

(Start: 30 @55905 has 31 MA's), (Start: 51 @55839 has 233 MA's), (65, 55761), (66, 55758), (78, 55686), (82, 55671), (95, 55611), (99, 55596), (107, 55557),

Gene: Qyrzula_56 Start: 54506, Stop: 54204, Start Num: 47

Candidate Starts for Qyrzula_56:

(Start: 47 @54506 has 24 MA's), (Start: 58 @54464 has 8 MA's), (69, 54398), (76, 54356), (105, 54272), (114, 54209),

Gene: RagingRooster_65 Start: 55736, Stop: 55467, Start Num: 59

Candidate Starts for RagingRooster_65:

(Start: 59 @55736 has 42 MA's), (76, 55640), (81, 55619), (110, 55538), (111, 55523),

Gene: RawrgerThat_60 Start: 56793, Stop: 56506, Start Num: 51

Candidate Starts for RawrgerThat_60:

(Start: 51 @56793 has 233 MA's), (54, 56775), (57, 56766), (74, 56679), (77, 56652), (99, 56604), (102, 56583), (104, 56571), (110, 56553), (113, 56517),

Gene: RedMaple_66 Start: 56386, Stop: 55955, Start Num: 27

Candidate Starts for RedMaple_66:

(11, 56449), (12, 56437), (18, 56410), (Start: 27 @56386 has 6 MA's), (32, 56371), (35, 56365), (Start: 51 @56314 has 233 MA's), (62, 56254), (66, 56233), (78, 56161), (82, 56146), (95, 56086), (99, 56071), (107, 56032),

Gene: Reprobate_63 Start: 57023, Stop: 56655, Start Num: 51

Candidate Starts for Reprobate_63:

(10, 57173), (31, 57095), (Start: 40 @57065 has 6 MA's), (Start: 51 @57023 has 233 MA's), (54, 57005), (56, 56999), (81, 56852), (96, 56783), (98, 56774), (100, 56765), (106, 56735),

Gene: Rhinoforte_61 Start: 54428, Stop: 54126, Start Num: 47

Candidate Starts for Rhinoforte_61:

(Start: 47 @54428 has 24 MA's), (Start: 58 @54386 has 8 MA's), (69, 54320), (76, 54278), (105, 54194), (114, 54131),

Gene: Rich_63 Start: 58173, Stop: 57790, Start Num: 40

Candidate Starts for Rich_63:

(Start: 40 @58173 has 6 MA's), (89, 57945), (98, 57909), (100, 57900), (106, 57870),

Gene: Ricotta_64 Start: 55637, Stop: 55212, Start Num: 30

Candidate Starts for Ricotta_64:

(Start: 30 @55637 has 31 MA's), (Start: 51 @55571 has 233 MA's), (65, 55493), (66, 55490), (78, 55418), (82, 55403), (95, 55343), (99, 55328), (107, 55289),

Gene: Riggan_66 Start: 55871, Stop: 55512, Start Num: 51

Candidate Starts for Riggan_66:

(Start: 30 @55937 has 31 MA's), (Start: 51 @55871 has 233 MA's), (62, 55811), (66, 55790), (78, 55718), (82, 55703), (95, 55643), (99, 55628), (107, 55589),

Gene: Rimu_68 Start: 56039, Stop: 55680, Start Num: 51

Candidate Starts for Rimu_68:

(Start: 30 @56105 has 31 MA's), (Start: 51 @56039 has 233 MA's), (65, 55961), (66, 55958), (78, 55886), (82, 55871), (95, 55811), (99, 55796), (107, 55757),

Gene: Rita1961_67 Start: 56446, Stop: 56177, Start Num: 59

Candidate Starts for Rita1961_67:

(Start: 59 @56446 has 42 MA's), (76, 56350), (81, 56329), (110, 56248), (111, 56233),

Gene: Robyn_65 Start: 55718, Stop: 55359, Start Num: 51

Candidate Starts for Robyn_65:

(Start: 33 @55778 has 6 MA's), (Start: 51 @55718 has 233 MA's), (62, 55658), (66, 55637), (78, 55565), (82, 55550), (95, 55490), (99, 55475), (107, 55436),

Gene: Roliet_63 Start: 54913, Stop: 54554, Start Num: 51

Candidate Starts for Roliet_63:

(Start: 51 @54913 has 233 MA's), (62, 54853), (66, 54832), (78, 54760), (82, 54745), (95, 54685), (99, 54670), (107, 54631),

Gene: RomaT_66 Start: 56645, Stop: 56376, Start Num: 59

Candidate Starts for RomaT_66:

(15, 56813), (39, 56729), (Start: 59 @56645 has 42 MA's), (76, 56549), (81, 56528), (110, 56447), (111, 56432),

Gene: Roscoe_66 Start: 56017, Stop: 55658, Start Num: 51

Candidate Starts for Roscoe_66:

(Start: 27 @56089 has 6 MA's), (32, 56074), (35, 56068), (Start: 51 @56017 has 233 MA's), (62, 55957), (66, 55936), (78, 55864), (82, 55849), (95, 55789), (99, 55774), (107, 55735),

Gene: Rosebush_60 Start: 54491, Stop: 54189, Start Num: 47

Candidate Starts for Rosebush_60:

(Start: 47 @54491 has 24 MA's), (Start: 58 @54449 has 8 MA's), (69, 54383), (76, 54341), (105, 54257), (114, 54194),

Gene: Roy17_63 Start: 55337, Stop: 54912, Start Num: 30

Candidate Starts for Roy17_63:

(Start: 30 @55337 has 31 MA's), (Start: 51 @55271 has 233 MA's), (65, 55193), (66, 55190), (78, 55118), (82, 55103), (95, 55043), (99, 55028), (107, 54989),

Gene: SDcharge11_65 Start: 55085, Stop: 54726, Start Num: 51

Candidate Starts for SDcharge11_65:

(Start: 51 @55085 has 233 MA's), (62, 55025), (66, 55004), (78, 54932), (82, 54917), (95, 54857), (99, 54842), (107, 54803),

Gene: Sabella_61 Start: 54327, Stop: 54025, Start Num: 47

Candidate Starts for Sabella_61:

(Start: 47 @54327 has 24 MA's), (Start: 58 @54285 has 8 MA's), (69, 54219), (76, 54177), (105, 54093), (114, 54030),

Gene: Saguaro_62 Start: 56449, Stop: 56135, Start Num: 51

Candidate Starts for Saguaro_62:

(Start: 51 @56449 has 233 MA's), (64, 56395), (71, 56356), (99, 56236), (102, 56215), (104, 56203), (107, 56197), (112, 56167),

Gene: Samaymay_65 Start: 55878, Stop: 55519, Start Num: 51

Candidate Starts for Samaymay_65:

(Start: 30 @55944 has 31 MA's), (Start: 51 @55878 has 233 MA's), (66, 55797), (78, 55725), (82, 55710), (95, 55650), (99, 55635), (107, 55596),

Gene: SassyCat97_64 Start: 55563, Stop: 55204, Start Num: 51

Candidate Starts for SassyCat97_64:

(Start: 51 @55563 has 233 MA's), (62, 55503), (66, 55482), (78, 55410), (82, 55395), (95, 55335), (99, 55320), (107, 55281),

Gene: Schadenfreude_65 Start: 55444, Stop: 55085, Start Num: 51

Candidate Starts for Schadenfreude_65:

(Start: 51 @55444 has 233 MA's), (62, 55384), (66, 55363), (78, 55291), (82, 55276), (95, 55216), (99, 55201), (107, 55162),

Gene: Schueller_66 Start: 55801, Stop: 55442, Start Num: 51

Candidate Starts for Schueller_66:

(Start: 51 @55801 has 233 MA's), (62, 55741), (66, 55720), (78, 55648), (82, 55633), (95, 55573), (99, 55558), (107, 55519),

Gene: Scoot17C_65 Start: 55571, Stop: 55146, Start Num: 30

Candidate Starts for Scoot17C_65:

(Start: 30 @55571 has 31 MA's), (Start: 51 @55505 has 233 MA's), (65, 55427), (66, 55424), (78, 55352), (82, 55337), (95, 55277), (99, 55262), (107, 55223),

Gene: Scrick_65 Start: 55577, Stop: 55218, Start Num: 51

Candidate Starts for Scrick_65:

(Start: 30 @55643 has 31 MA's), (Start: 51 @55577 has 233 MA's), (65, 55499), (66, 55496), (78, 55424), (82, 55409), (95, 55349), (99, 55334), (107, 55295),

Gene: Selr12_67 Start: 55653, Stop: 55228, Start Num: 30

Candidate Starts for Selr12_67:

(Start: 30 @55653 has 31 MA's), (Start: 51 @55587 has 233 MA's), (65, 55509), (66, 55506), (78, 55434), (82, 55419), (95, 55359), (99, 55344), (107, 55305),

Gene: Serendipitous_63 Start: 56571, Stop: 56188, Start Num: 40

Candidate Starts for Serendipitous_63:

(Start: 40 @56571 has 6 MA's), (100, 56298), (106, 56268),

Gene: Serendipity_64 Start: 55926, Stop: 55501, Start Num: 30

Candidate Starts for Serendipity_64:

(Start: 30 @55926 has 31 MA's), (Start: 51 @55860 has 233 MA's), (65, 55782), (66, 55779), (78, 55707), (82, 55692), (95, 55632), (99, 55617), (107, 55578),

Gene: Serpentine_0065 Start: 56009, Stop: 55584, Start Num: 30

Candidate Starts for Serpentine_0065:

(Start: 30 @56009 has 31 MA's), (Start: 51 @55943 has 233 MA's), (65, 55865), (66, 55862), (78, 55790), (82, 55775), (95, 55715), (99, 55700), (107, 55661),

Gene: Sheila_62 Start: 54945, Stop: 54586, Start Num: 51

Candidate Starts for Sheila_62:

(Start: 51 @54945 has 233 MA's), (62, 54885), (66, 54864), (78, 54792), (82, 54777), (95, 54717), (99, 54702), (107, 54663),

Gene: ShiVal_63 Start: 55582, Stop: 55223, Start Num: 51

Candidate Starts for ShiVal_63:

(Start: 51 @55582 has 233 MA's), (62, 55522), (66, 55501), (78, 55429), (82, 55414), (95, 55354), (99, 55339), (107, 55300),

Gene: Sigman_65 Start: 55538, Stop: 55179, Start Num: 51

Candidate Starts for Sigman_65:

(Start: 51 @55538 has 233 MA's), (62, 55478), (66, 55457), (78, 55385), (82, 55370), (95, 55310), (99, 55295), (107, 55256),

Gene: Simielle_65 Start: 55542, Stop: 55183, Start Num: 51

Candidate Starts for Simielle_65:

(Start: 30 @55608 has 31 MA's), (Start: 51 @55542 has 233 MA's), (65, 55464), (66, 55461), (78, 55389), (82, 55374), (95, 55314), (99, 55299), (107, 55260),

Gene: SirJeffery_64 Start: 57215, Stop: 56832, Start Num: 40

Candidate Starts for SirJeffery_64:

(Start: 40 @57215 has 6 MA's), (98, 56951), (100, 56942), (106, 56912),

Gene: Skippy_66 Start: 55796, Stop: 55437, Start Num: 51

Candidate Starts for Skippy_66:

(Start: 30 @55862 has 31 MA's), (Start: 51 @55796 has 233 MA's), (65, 55718), (66, 55715), (78, 55643), (82, 55628), (95, 55568), (99, 55553), (107, 55514),

Gene: Slatt_66 Start: 55861, Stop: 55502, Start Num: 51

Candidate Starts for Slatt_66:

(Start: 30 @55927 has 31 MA's), (Start: 51 @55861 has 233 MA's), (62, 55801), (66, 55780), (78, 55708), (82, 55693), (95, 55633), (99, 55618), (107, 55579),

Gene: SlippinJimmy_68 Start: 57246, Stop: 56977, Start Num: 59

Candidate Starts for SlippinJimmy_68:

(Start: 52 @57282 has 1 MA's), (53, 57276), (54, 57270), (Start: 59 @57246 has 42 MA's), (76, 57150), (81, 57129), (110, 57048), (111, 57033),

Gene: Soile_66 Start: 56092, Stop: 55733, Start Num: 51

Candidate Starts for Soile_66:

(Start: 30 @56158 has 31 MA's), (Start: 51 @56092 has 233 MA's), (65, 56014), (66, 56011), (78, 55939), (82, 55924), (95, 55864), (99, 55849), (107, 55810),

Gene: Solosis_64 Start: 55558, Stop: 55199, Start Num: 51

Candidate Starts for Solosis_64:

(Start: 51 @55558 has 233 MA's), (62, 55498), (65, 55480), (66, 55477), (78, 55405), (82, 55390), (95, 55330), (99, 55315), (107, 55276),

Gene: Sophia_64 Start: 55551, Stop: 55192, Start Num: 51

Candidate Starts for Sophia_64:

(Start: 51 @55551 has 233 MA's), (62, 55491), (65, 55473), (66, 55470), (78, 55398), (82, 55383), (95, 55323), (99, 55308), (107, 55269),

Gene: Soto_63 Start: 55118, Stop: 54759, Start Num: 51

Candidate Starts for Soto_63:

(Start: 51 @55118 has 233 MA's), (62, 55058), (66, 55037), (78, 54965), (82, 54950), (95, 54890), (99, 54875), (107, 54836),

Gene: Spartan300_65 Start: 55779, Stop: 55420, Start Num: 51

Candidate Starts for Spartan300_65:

(Start: 51 @55779 has 233 MA's), (62, 55719), (66, 55698), (78, 55626), (82, 55611), (95, 55551), (99, 55536), (107, 55497),

Gene: Squid_64 Start: 55563, Stop: 55204, Start Num: 51

Candidate Starts for Squid_64:

(5, 55722), (Start: 8 @55707 has 1 MA's), (17, 55662), (Start: 51 @55563 has 233 MA's), (62, 55503), (66, 55482), (78, 55410), (82, 55395), (95, 55335), (99, 55320), (107, 55281),

Gene: Squiggle_65 Start: 55571, Stop: 55212, Start Num: 51

Candidate Starts for Squiggle_65:

(Start: 30 @55637 has 31 MA's), (Start: 51 @55571 has 233 MA's), (62, 55511), (66, 55490), (78, 55418), (82, 55403), (95, 55343), (99, 55328), (107, 55289),

Gene: Stinger_60 Start: 55720, Stop: 55376, Start Num: 46

Candidate Starts for Stinger_60:

(Start: 46 @55720 has 1 MA's), (Start: 51 @55699 has 233 MA's), (71, 55594), (77, 55555), (82, 55534), (91, 55504), (97, 55480), (102, 55453), (110, 55423),

Gene: StinkyVeggy_64 Start: 57043, Stop: 56660, Start Num: 40

Candidate Starts for StinkyVeggy_64:

(Start: 40 @57043 has 6 MA's), (86, 56833), (96, 56788), (98, 56779), (100, 56770), (106, 56740),

Gene: Struggle_66 Start: 55655, Stop: 55296, Start Num: 51

Candidate Starts for Struggle_66:

(Start: 51 @55655 has 233 MA's), (62, 55595), (66, 55574), (78, 55502), (82, 55487), (95, 55427), (99, 55412), (107, 55373),

Gene: Suffolk_63 Start: 55066, Stop: 54707, Start Num: 51

Candidate Starts for Suffolk_63:

(5, 55225), (Start: 8 @55210 has 1 MA's), (17, 55165), (Start: 51 @55066 has 233 MA's), (65, 54988), (66, 54985), (78, 54913), (82, 54898), (95, 54838), (99, 54823), (107, 54784),

Gene: Suigeneris_66 Start: 57357, Stop: 56950, Start Num: 40

Candidate Starts for Suigeneris_66:

(Start: 40 @57357 has 6 MA's), (98, 57069), (100, 57060), (106, 57030),

Gene: Surely_65 Start: 55853, Stop: 55494, Start Num: 51

Candidate Starts for Surely_65:

(5, 56012), (Start: 8 @55997 has 1 MA's), (17, 55952), (Start: 51 @55853 has 233 MA's), (62, 55793), (66, 55772), (78, 55700), (82, 55685), (95, 55625), (99, 55610), (107, 55571),

Gene: Swiphy_69 Start: 56169, Stop: 55738, Start Num: 27

Candidate Starts for Swiphy_69:

(Start: 27 @56169 has 6 MA's), (32, 56154), (35, 56148), (Start: 51 @56097 has 233 MA's), (62, 56037), (66, 56016), (78, 55944), (82, 55929), (95, 55869), (99, 55854), (107, 55815),

Gene: Swish_66 Start: 55827, Stop: 55468, Start Num: 51

Candidate Starts for Swish_66:

(Start: 51 @55827 has 233 MA's), (62, 55767), (66, 55746), (78, 55674), (82, 55659), (95, 55599), (99, 55584), (107, 55545),

Gene: SynergyX_66 Start: 56085, Stop: 55816, Start Num: 59

Candidate Starts for SynergyX_66:

(Start: 59 @56085 has 42 MA's), (76, 55989), (81, 55968), (110, 55887), (111, 55872),

Gene: TA17A_61 Start: 54289, Stop: 54029, Start Num: 58

Candidate Starts for TA17A_61:

(Start: 47 @54331 has 24 MA's), (Start: 58 @54289 has 8 MA's), (69, 54223), (76, 54181), (105, 54097), (114, 54034),

Gene: TallGrassMM_64 Start: 55467, Stop: 55108, Start Num: 51

Candidate Starts for TallGrassMM_64:

(Start: 51 @55467 has 233 MA's), (62, 55407), (66, 55386), (78, 55314), (82, 55299), (95, 55239), (99, 55224), (107, 55185),

Gene: Telesworld_63 Start: 55738, Stop: 55313, Start Num: 30

Candidate Starts for Telesworld_63:

(Start: 30 @55738 has 31 MA's), (Start: 51 @55672 has 233 MA's), (62, 55612), (65, 55594), (66, 55591), (78, 55519), (82, 55504), (95, 55444), (99, 55429), (107, 55390),

Gene: Thonko_65 Start: 54991, Stop: 54698, Start Num: 58

Candidate Starts for Thonko_65:

(9, 55171), (Start: 30 @55099 has 31 MA's), (37, 55075), (Start: 58 @54991 has 8 MA's), (67, 54937), (73, 54916), (77, 54880), (78, 54874), (110, 54781), (111, 54766), (116, 54706),

Gene: Thora_64 Start: 55975, Stop: 55490, Start Num: 14

Candidate Starts for Thora_64:

(Start: 14 @55975 has 4 MA's), (Start: 33 @55909 has 6 MA's), (65, 55771), (66, 55768), (78, 55696), (82, 55681), (95, 55621), (99, 55606), (107, 55567),

Gene: ThreeOh3D2_66 Start: 56136, Stop: 55711, Start Num: 30

Candidate Starts for ThreeOh3D2_66:

(Start: 30 @56136 has 31 MA's), (Start: 51 @56070 has 233 MA's), (65, 55992), (66, 55989), (78, 55917), (82, 55902), (95, 55842), (99, 55827), (107, 55788),

Gene: Thunderbird_66 Start: 55810, Stop: 55451, Start Num: 51

Candidate Starts for Thunderbird_66:

(Start: 30 @55876 has 31 MA's), (Start: 51 @55810 has 233 MA's), (62, 55750), (66, 55729), (78, 55657), (82, 55642), (95, 55582), (99, 55567), (107, 55528),

Gene: Timmi_64 Start: 55552, Stop: 55193, Start Num: 51

Candidate Starts for Timmi_64:

(Start: 30 @55618 has 31 MA's), (Start: 51 @55552 has 233 MA's), (65, 55474), (66, 55471), (78, 55399), (82, 55384), (95, 55324), (99, 55309), (107, 55270),

Gene: Tinciduntolum_62 Start: 54494, Stop: 54192, Start Num: 47

Candidate Starts for Tinciduntolum_62:

(Start: 47 @54494 has 24 MA's), (Start: 58 @54452 has 8 MA's), (69, 54386), (76, 54344), (105, 54260), (114, 54197),

Gene: TomBombadil_65 Start: 55837, Stop: 55478, Start Num: 51

Candidate Starts for TomBombadil_65:

(5, 55996), (Start: 8 @55981 has 1 MA's), (17, 55936), (Start: 51 @55837 has 233 MA's), (62, 55777), (66, 55756), (78, 55684), (82, 55669), (95, 55609), (99, 55594), (107, 55555),

Gene: Tomlarah_66 Start: 56406, Stop: 56047, Start Num: 51

Candidate Starts for Tomlarah_66:

(Start: 30 @56472 has 31 MA's), (Start: 51 @56406 has 233 MA's), (65, 56328), (66, 56325), (78, 56253), (82, 56238), (95, 56178), (99, 56163), (107, 56124),

Gene: Toni_65 Start: 55999, Stop: 55640, Start Num: 51

Candidate Starts for Toni_65:

(Start: 30 @56065 has 31 MA's), (Start: 51 @55999 has 233 MA's), (65, 55921), (66, 55918), (78, 55846), (82, 55831), (95, 55771), (99, 55756), (107, 55717),

Gene: Tooj_63 Start: 55222, Stop: 54863, Start Num: 51

Candidate Starts for Tooj_63:

(Start: 51 @55222 has 233 MA's), (62, 55162), (66, 55141), (78, 55069), (82, 55054), (95, 54994), (99, 54979), (107, 54940),

Gene: Tres_61 Start: 54306, Stop: 54046, Start Num: 58

Candidate Starts for Tres_61:

(Start: 47 @54348 has 24 MA's), (Start: 58 @54306 has 8 MA's), (69, 54240), (76, 54198), (105, 54114), (114, 54051),

Gene: True_64 Start: 55562, Stop: 55203, Start Num: 51

Candidate Starts for True_64:

(Start: 30 @55628 has 31 MA's), (Start: 51 @55562 has 233 MA's), (66, 55481), (78, 55409), (82, 55394), (95, 55334), (99, 55319), (107, 55280),

Gene: Trypo_67 Start: 56360, Stop: 55875, Start Num: 14

Candidate Starts for Trypo_67:

(Start: 14 @56360 has 4 MA's), (Start: 33 @56294 has 6 MA's), (65, 56156), (66, 56153), (78, 56081), (82, 56066), (95, 56006), (99, 55991), (107, 55952),

Gene: Tydolla_63 Start: 56118, Stop: 55849, Start Num: 59
Candidate Starts for Tydolla_63:
(Start: 59 @56118 has 42 MA's), (76, 56022), (81, 56001), (110, 55920), (111, 55905),

Gene: TyrionL_66 Start: 55660, Stop: 55301, Start Num: 51
Candidate Starts for TyrionL_66:
(Start: 51 @55660 has 233 MA's), (66, 55579), (78, 55507), (82, 55492), (95, 55432), (99, 55417),
(107, 55378),

Gene: UAch1_65 Start: 55860, Stop: 55435, Start Num: 30
Candidate Starts for UAch1_65:
(Start: 30 @55860 has 31 MA's), (Start: 51 @55794 has 233 MA's), (66, 55713), (78, 55641), (82, 55626), (95, 55566), (99, 55551), (107, 55512),

Gene: UncleHowie_63 Start: 55330, Stop: 54905, Start Num: 30
Candidate Starts for UncleHowie_63:
(Start: 30 @55330 has 31 MA's), (Start: 51 @55264 has 233 MA's), (62, 55204), (66, 55183), (78, 55111), (82, 55096), (95, 55036), (99, 55021), (107, 54982),

Gene: Usavi_65 Start: 55932, Stop: 55573, Start Num: 51
Candidate Starts for Usavi_65:
(5, 56091), (Start: 8 @56076 has 1 MA's), (17, 56031), (Start: 51 @55932 has 233 MA's), (62, 55872), (66, 55851), (78, 55779), (82, 55764), (95, 55704), (99, 55689), (107, 55650),

Gene: Vaishali24_64 Start: 55527, Stop: 55108, Start Num: 33
Candidate Starts for Vaishali24_64:
(Start: 33 @55527 has 6 MA's), (Start: 51 @55467 has 233 MA's), (62, 55407), (66, 55386), (78, 55314), (82, 55299), (95, 55239), (99, 55224), (107, 55185),

Gene: Valjean_65 Start: 55789, Stop: 55430, Start Num: 51
Candidate Starts for Valjean_65:
(Start: 51 @55789 has 233 MA's), (62, 55729), (66, 55708), (78, 55636), (82, 55621), (95, 55561), (99, 55546), (107, 55507),

Gene: Vaticameos_62 Start: 54097, Stop: 53738, Start Num: 51
Candidate Starts for Vaticameos_62:
(Start: 30 @54163 has 31 MA's), (Start: 51 @54097 has 233 MA's), (62, 54037), (66, 54016), (78, 53944), (82, 53929), (95, 53869), (99, 53854), (107, 53815),

Gene: Veritas_65 Start: 55739, Stop: 55380, Start Num: 51
Candidate Starts for Veritas_65:
(6, 55892), (7, 55886), (9, 55880), (21, 55826), (22, 55820), (Start: 51 @55739 has 233 MA's), (62, 55679), (66, 55658), (78, 55586), (82, 55571), (95, 55511), (99, 55496), (107, 55457),

Gene: Vincenzo_62 Start: 58016, Stop: 57621, Start Num: 34
Candidate Starts for Vincenzo_62:
(Start: 34 @58016 has 2 MA's), (55, 57932), (68, 57863), (71, 57851), (74, 57839), (77, 57812), (78, 57806), (82, 57791), (85, 57776), (102, 57710), (110, 57680), (115, 57635),

Gene: VioletZ_61 Start: 56866, Stop: 56579, Start Num: 51
Candidate Starts for VioletZ_61:

(Start: 51 @56866 has 233 MA's), (54, 56848), (57, 56839), (74, 56752), (77, 56725), (99, 56677), (102, 56656), (104, 56644), (110, 56626), (113, 56590),

Gene: Virapocalypse_66 Start: 55888, Stop: 55529, Start Num: 51

Candidate Starts for Virapocalypse_66:

(Start: 51 @55888 has 233 MA's), (62, 55828), (66, 55807), (78, 55735), (82, 55720), (95, 55660), (99, 55645), (107, 55606),

Gene: Virgeve_64 Start: 55598, Stop: 55167, Start Num: 27

Candidate Starts for Virgeve_64:

(Start: 27 @55598 has 6 MA's), (32, 55583), (35, 55577), (Start: 51 @55526 has 233 MA's), (62, 55466), (66, 55445), (78, 55373), (82, 55358), (95, 55298), (99, 55283), (107, 55244),

Gene: Vista_64 Start: 55631, Stop: 55206, Start Num: 30

Candidate Starts for Vista_64:

(Start: 30 @55631 has 31 MA's), (Start: 51 @55565 has 233 MA's), (65, 55487), (66, 55484), (78, 55412), (82, 55397), (95, 55337), (99, 55322), (107, 55283),

Gene: Vivaldi_66 Start: 56024, Stop: 55689, Start Num: 51

Candidate Starts for Vivaldi_66:

(Start: 51 @56024 has 233 MA's), (62, 55964), (66, 55943), (78, 55871), (82, 55856), (95, 55796), (99, 55781), (107, 55742),

Gene: Vortex_64 Start: 55547, Stop: 55188, Start Num: 51

Candidate Starts for Vortex_64:

(5, 55706), (Start: 8 @55691 has 1 MA's), (17, 55646), (Start: 51 @55547 has 233 MA's), (62, 55487), (66, 55466), (78, 55394), (82, 55379), (95, 55319), (99, 55304), (107, 55265),

Gene: Waleliano_59 Start: 56807, Stop: 56520, Start Num: 51

Candidate Starts for Waleliano_59:

(Start: 51 @56807 has 233 MA's), (54, 56789), (57, 56780), (74, 56693), (77, 56666), (99, 56618), (102, 56597), (104, 56585), (110, 56567), (113, 56531),

Gene: Wallhey_66 Start: 55670, Stop: 55311, Start Num: 51

Candidate Starts for Wallhey_66:

(Start: 51 @55670 has 233 MA's), (62, 55610), (66, 55589), (78, 55517), (82, 55502), (95, 55442), (99, 55427), (107, 55388),

Gene: Waterdiva_65 Start: 55926, Stop: 55567, Start Num: 51

Candidate Starts for Waterdiva_65:

(Start: 30 @55992 has 31 MA's), (Start: 51 @55926 has 233 MA's), (65, 55848), (66, 55845), (78, 55773), (82, 55758), (95, 55698), (99, 55683), (107, 55644),

Gene: Weher20_63 Start: 56181, Stop: 55822, Start Num: 51

Candidate Starts for Weher20_63:

(Start: 51 @56181 has 233 MA's), (62, 56121), (66, 56100), (78, 56028), (82, 56013), (95, 55953), (99, 55938), (107, 55899),

Gene: West99_61 Start: 54521, Stop: 54219, Start Num: 47

Candidate Starts for West99_61:

(Start: 47 @54521 has 24 MA's), (Start: 58 @54479 has 8 MA's), (69, 54413), (76, 54371), (105, 54287), (114, 54224),

Gene: Windsor_65 Start: 56112, Stop: 55753, Start Num: 51

Candidate Starts for Windsor_65:

(Start: 27 @56184 has 6 MA's), (32, 56169), (35, 56163), (Start: 51 @56112 has 233 MA's), (62, 56052), (66, 56031), (78, 55959), (82, 55944), (95, 55884), (99, 55869), (107, 55830),

Gene: Xavier_64 Start: 55620, Stop: 55195, Start Num: 30

Candidate Starts for Xavier_64:

(Start: 30 @55620 has 31 MA's), (Start: 51 @55554 has 233 MA's), (62, 55494), (66, 55473), (78, 55401), (82, 55386), (95, 55326), (99, 55311), (107, 55272),

Gene: Yahalom_64 Start: 55892, Stop: 55623, Start Num: 59

Candidate Starts for Yahalom_64:

(Start: 59 @55892 has 42 MA's), (76, 55796), (81, 55775), (110, 55694), (111, 55679),

Gene: Yinz_66 Start: 55955, Stop: 55686, Start Num: 59

Candidate Starts for Yinz_66:

(Start: 59 @55955 has 42 MA's), (76, 55859), (81, 55838), (110, 55757), (111, 55742),

Gene: Yoshand_66 Start: 55840, Stop: 55481, Start Num: 51

Candidate Starts for Yoshand_66:

(Start: 51 @55840 has 233 MA's), (62, 55780), (66, 55759), (78, 55687), (82, 55672), (95, 55612), (99, 55597), (107, 55558),

Gene: YouGoGlencoco_66 Start: 55852, Stop: 55433, Start Num: 33

Candidate Starts for YouGoGlencoco_66:

(Start: 33 @55852 has 6 MA's), (62, 55732), (66, 55711), (78, 55639), (82, 55624), (95, 55564), (99, 55549), (107, 55510),

Gene: Zaider_66 Start: 56033, Stop: 55674, Start Num: 51

Candidate Starts for Zaider_66:

(Start: 30 @56099 has 31 MA's), (Start: 51 @56033 has 233 MA's), (65, 55955), (66, 55952), (78, 55880), (82, 55865), (95, 55805), (99, 55790), (107, 55751),

Gene: Zelda_66 Start: 56194, Stop: 55835, Start Num: 51

Candidate Starts for Zelda_66:

(Start: 30 @56260 has 31 MA's), (Start: 51 @56194 has 233 MA's), (62, 56134), (66, 56113), (78, 56041), (82, 56026), (95, 55966), (99, 55951), (107, 55912),

Gene: Zemanar_60 Start: 56639, Stop: 56352, Start Num: 51

Candidate Starts for Zemanar_60:

(Start: 51 @56639 has 233 MA's), (54, 56621), (57, 56612), (74, 56525), (77, 56498), (99, 56450), (102, 56429), (104, 56417), (110, 56399), (113, 56363),

Gene: Zenteno07_71 Start: 57544, Stop: 57197, Start Num: 44

Candidate Starts for Zenteno07_71:

(16, 57634), (29, 57598), (Start: 44 @57544 has 2 MA's), (65, 57448), (78, 57373), (82, 57358), (99, 57298), (100, 57292),

Gene: Zonia_66 Start: 56121, Stop: 55762, Start Num: 51

Candidate Starts for Zonia_66:

(Start: 51 @56121 has 233 MA's), (62, 56061), (66, 56040), (78, 55968), (82, 55953), (95, 55893), (99, 55878), (107, 55839),