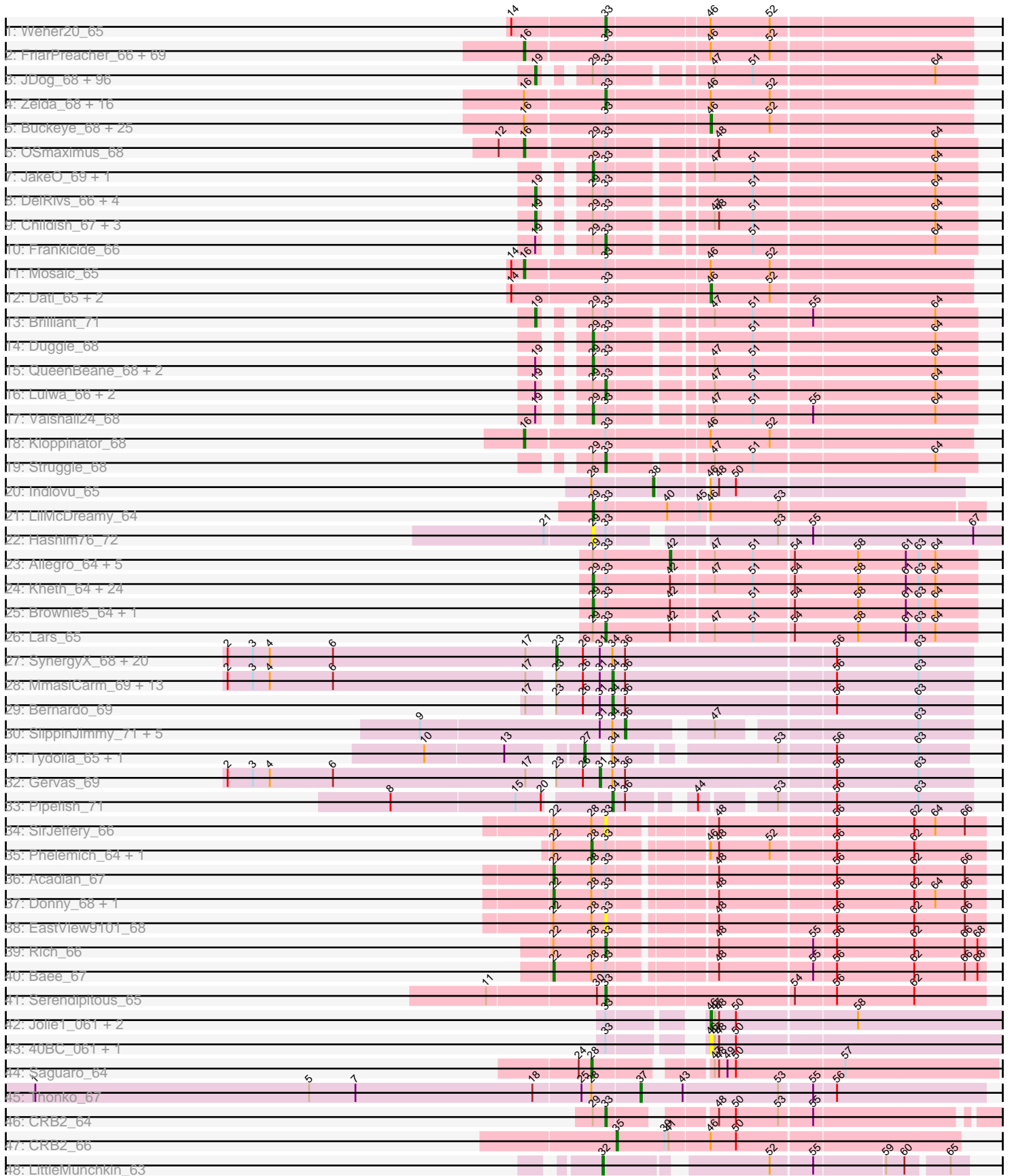


Pham 157510



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 157510 Report

This analysis was run 04/13/24 on database version 558.

Pham number 157510 has 342 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Weher20_65
- Track 2 : FriarPreacher_66, DirtJuice_68, Murdoc_65, Podrick_67, Mulan_67, Pherdinand_68, Soto_65, Prickles_69, Vista_66, Thora_66, Derpp_68, Zonia_68, Cher_68, Vortex_67, Pipsqueak_65, SDcharge11_67, Vivaldi_68, Banjo_66, MichaelPhcott_66, Iridoclysis_67, MitKao_67, Maru_67, FluffyNinja_68, Craff_71, UncleHowie_65, Phergie_68, PhrodoBaggins_69, Pinkman_67, LeeLot_67, PinheadLarry_67, Doddsville_66, TyrionL_68, Trypo_69, Yoshand_68, Kailash_66, Mana_66, Squid_67, Daffy_66, Lego3393_65, Fang_69, PhrankReynolds_67, LemonSlice_68, Cobra_68, Swish_68, Morgushi_66, PhenghisKhan_68, KingTut_59, Oline_67, Slatt_68, Harvey_65, Daka_70, SassyCat97_66, Squiggle_67, Phipps_67, Held_66, FugateOSU_68, Phamished_69, Placalicious_68, HighStump_69, TallGrassMM_66, Labeouficaum_68, Phleuron_66, Kwksand96_68, Haimas_66, Puhltonio_66, CharlieGBrown_66, Mesh1_68, DuchessDung_67, KingVeVeVe_66, BatteryCK_66
- Track 3 : JDog_68, Riggan_69, EmpTee_67, Orwigg_68, LuckyMarjie_65, Chaelin_69, Aelin_67, Tomlahar_69, PG1_67, Chah_69, Gareth_68, Serpentine_0068, Nicole21_69, Manad_67, Simielle_68, Waterdiva_68, Giraffe_68, Numberten_67, Freya_65, Chunky_68, Roy17_66, ThreeOh3D2_69, Bishoperium_68, Windsor_68, Schadenfreude_68, OliverWalter_67, Mutante_68, Piglet_0068, Serendipity_67, Mcshane_67, KLucky39_66, KlimbOn_67, Altwerkus_66, Suffolk_66, Kikipoo_69, Skippy_69, ProfessorX_66, Virapocalypse_69, Newman_66, Swiphy_72, Badfish_68, Antonia_67, ABU_67, Kwadwo_67, Dione_66, Longacauda_69, JangoPhett_102, DoesntMatter_65, Toni_68, Haleema_67, Lulumae_65, PhatLouie_70, Scoot17C_68, Sigman_68, Colbert_66, Megatron_68, Hertubise_67, Quisquiliae_69, IsaacEli_69, Spartan300_67, CheetO_67, Beaglebox_66, Xavier_67, Jillium_68, Eremos_67, True_66, Timmi_67, Katniss_69, JacAttac_68, Telesworld_66, Charles1_69, Phunky_66, Omniscient_69, PhatCats2014_68, Vaticameos_65, Robyn_68, Fringe_72, Keitherie_70, Tooj_66, ShiVal_66, Anderson_69, Nyala_67, HSavage_66, Apizium_67, Nacho_0071, Mecca_68, Carthage_68, Cannibal_68, Gophee_69, Kimbrough_69, Samaymay_68, Hetaeria_67, Oosterbaan_67, Lumine_69, Burr_68, Valjean_67, Morty_69
- Track 4 : Zelda_68, Veritas_67, Plmatters_66, Durga_70, Sophia_66, Etaye_67, Surely_68, LostAndPhound_67, Emiris_69, Legolas_69, Wallhey_68, Solosis_66, Roliet_65, Mag7_66, YouGoGlencoco_68, MRabcd_67, TomBombadil_68
- Track 5 : Buckeye_68, Basato_67, BlackStallion_68, ImtiyazSitla_68, Ashraf_68, Gyarad_0067, Grand2040_66, Chorkpop_68, GeneCoco_68, MiniBoss_65, Hamish_65, Horchata_65, Scrick_67, MelsMeow_67, Phareon_66, Inverness_66

Lasso_67, AltPhacts_66, Potter_65, DonSanchon_64, Mikota_65, Dingo_65, Sheila_64, Adriana_69, Matalotodo_67, Maskar_68

- Track 6 : OSmaximus_68
- Track 7 : JakeO_69, Pops_66
- Track 8 : DelRivs_66, Crownjwl_66, Soile_69, Roscoe_68, Rimu_71
- Track 9 : Childish_67, HenryJackson_68, Kahve_68, DaddyDaniels_70
- Track 10 : Frankicide_66
- Track 11 : Mosaic_65
- Track 12 : Dati_65, Melc17_65, BlueHusk_69
- Track 13 : Brilliant_71
- Track 14 : Duggie_68
- Track 15 : QueenBeane_68, CamL_68, Cosmolli16_69
- Track 16 : Lulwa_66, Usavi_69, Zaider_69
- Track 17 : Vaishali24_68
- Track 18 : Kloppinator_68
- Track 19 : Struggle_68
- Track 20 : Indlovu_65
- Track 21 : LilMcDreamy_64
- Track 22 : Hashim76_72
- Track 23 : Allegro_64, Kaleb_65, Faze9_63, Coffee_64, Phantasmagoria_63, TA17A_64
- Track 24 : Kheth_64, Bananafish_65, Glass_65, LizLemon_64, Lephleur_64, MasterPo_65, ItsyBitsy1_63, West99_64, Calamitous_65, Godines_65, Laurie_64, Rosebush_63, Opia_65, Eaglehorse_64, Qyrzula_58, Boyle_64, Arbiter_62, Hedgerow_64, Tres_64, Ares_64, Blocker23_64, FrenchFry_65, Holeinone_64, Sabella_64, Rhinoforte_64
- Track 25 : Brownie5_64, Tinciduntolum_65
- Track 26 : Lars_65
- Track 27 : SynergyX_68, Jackstina_64, Yinz_68, ChaChing_68, Phlyer_68, GlenHope_69, RagingRooster_67, Audrey_68, RomaT_68, Rita1961_69, Philly_67, Nozo_68, Corofin_68, Devonte_67, Heathcliff_68, Gadget_69, Deenasa_68, Abinghost_68, Casbah_68, Athena_70, OrangeOswald_68
- Track 28 : MmasiCarm_69, Ben11_68, Phaedrus_63, Akoma_68, Daisy_67, Kronus_68, Yahalom_66, Kamiyu_68, Mortcellus_68, Chandler_68, Compostia_67, Halfpint_68, Baloo_67, LestyG_66
- Track 29 : Bernardo_69
- Track 30 : SlippinJimmy_71, Briakila_68, Neos5_68, Obutu_70, Marley1013_69, Phayeta_71
- Track 31 : Tydolla_65, HarveySr_67
- Track 32 : Gervas_69
- Track 33 : Pipefish_71
- Track 34 : SirJeffery_66
- Track 35 : Phelemich_64, Reprobate_65
- Track 36 : Acadian_67
- Track 37 : Donny_68, Suigeneris_68
- Track 38 : EastView9101_68
- Track 39 : Rich_66
- Track 40 : Bae_67
- Track 41 : Serendipitous_65
- Track 42 : Jolie1_061, KayaCho_61, Hosp_059
- Track 43 : 40BC_061, 39HC_061
- Track 44 : Saguaro_64
- Track 45 : Thonko_67

- Track 46 : CRB2_64
- Track 47 : CRB2_66
- Track 48 : LittleMunchkin_63

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

The start number called the most often in the published annotations is 19, it was called in 102 of the 324 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_67, Aelin_67, Altwerkus_66, Anderson_69, Antonia_67, Apizium_67, Badfish_68, Beaglebox_66, Bishoperium_68, Brilliant_71, Burr_68, Cannibal_68, Carthage_68, Chaelin_69, Chah_69, Charles1_69, CheetO_67, Childish_67, Chunky_68, Colbert_66, Crownjwl_66, DaddyDaniels_70, DelRivs_66, Dione_66, DoesntMatter_65, EmpTee_67, Eremos_67, Freya_65, Fringe_72, Gareth_68, Giraffe_68, Gophee_69, HSavage_66, Haleema_67, HenryJackson_68, Hertubise_67, Hetaeria_67, IsaacEli_69, JDog_68, JacAttac_68, JangoPhett_102, Jillium_68, KLucky39_66, Kahve_68, Katniss_69, Keitherie_70, Kikipoo_69, Kimbrough_69, KlimbOn_67, Kwadwo_67, Longacauda_69, LuckyMarjie_65, Lulumae_65, Lumine_69, Manad_67, Mcshane_67, Mecca_68, Megatron_68, Morty_69, Mutante_68, Nacho_0071, Newman_66, Nicole21_69, Numberten_67, Nyala_67, OliverWalter_67, Omniscient_69, Oosterbaan_67, Orwigg_68, PG1_67, PhatCats2014_68, PhatLouie_70, Phunky_66, Piglet_0068, ProfessorX_66, Quisquilliae_69, Riggan_69, Rimu_71, Robyn_68, Roscoe_68, Roy17_66, Samaymay_68, Schadenfreude_68, Scoot17C_68, Serendipity_67, Serpentine_0068, ShiVal_66, Sigman_68, Simielle_68, Skippy_69, Soile_69, Spartan300_67, Suffolk_66, Swiphy_72, Telesworld_66, ThreeOh3D2_69, Timmi_67, Tomlarah_69, Toni_68, Tooj_66, True_66, Valjean_67, Vaticameos_65, Virapocalypse_69, Waterdiva_68, Windsor_68, Xavier_67,

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

- CamL_68, Cosmolli16_69, Frankicide_66, Lulwa_66, QueenBeane_68, Usavi_69, Vaishali24_68, Zaider_69,

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

- 39HC_061, 40BC_061, Abinghost_68, Acadian_67, Adriana_69, Akoma_68, Allegro_64, AltPhacts_66, Arbiter_62, Ares_64, Ashraf_68, Athena_70, Audrey_68, Bae_67, Baloo_67, Bananafish_65, Banjo_66, Basato_67, BatteryCK_66, Ben11_68, Bernardo_69, BlackStallion_68, Blocker23_64, BlueHusk_69, Boyle_64, Briakila_68, Brownie5_64, Buckeye_68, CRB2_64, CRB2_66, Calamitous_65, Casbah_68, ChaChing_68, Chandler_68, CharlieGBrown_66, Cher_68, Chorkpop_68, Cobra_68, Coffee_64, Compostia_67, Corofin_68, Craff_71, Daffy_66, Daisy_67, Daka_70, Dati_65, Deenasa_68, Derpp_68, Devonte_67, Dingo_65, DirtJuice_68, Doddsville_66, DonSanchon_64, Donny_68, DuchessDung_67, Duggie_68, Durga_70, Eaglehorse_64, EastView9101_68, Emiris_69, Etaye_67, Fang_69, Faze9_63, FluffyNinja_68, FrenchFry_65, FriarPreacher_66, FugateOSU_68, Gadjet_69, GeneCoco_68, Gervas_69, Glass_65, GlenHope_69, Godines_65, Grand2040_66, Gyarad_0067, Haimas_66, Halfpint_68, Hamish_65, HarveySr_67, Harvey_65, Hashim76_72, Heathcliff_68, Hedgerow_64, Held_66, HighStump_69, Holeinone_64, Horchata_65, Hosp_059, ImtiyazSitla_68, Indlovu_65,

Inverness_66, Iridoclysis_67, ItsyBitsy1_63, Jackstina_64, JakeO_69, Jolie1_061, Kailash_66, Kaleb_65, Kamiyu_68, KayaCho_61, Kheth_64, KingTut_59, KingVeVeVe_66, Kloppinator_68, Kronus_68, Kwksand96_68, Labeouficaum_68, Lars_65, Lasso_67, Laurie_64, LeeLot_67, Lego3393_65, Legolas_69, LemonSlice_68, Lephleur_64, LestyG_66, LilMcDreamy_64, LittleMunchkin_63, LizLemon_64, LostAndPhound_67, MRabcd_67, Mag7_66, Mana_66, Marley1013_69, Maru_67, Maskar_68, MasterPo_65, Matalotodo_67, Melc17_65, MelsMeow_67, Mesh1_68, MichaelPhcott_66, Mikota_65, MiniBoss_65, MitKao_67, MmasiCarm_69, Morgushi_66, Mortcellus_68, Mosaic_65, Mulan_67, Murdoc_65, Neos5_68, Nozo_68, OSmaximus_68, Obutu_70, Oline_67, Opia_65, OrangeOswald_68, Phaedrus_63, Phamished_69, Phantasmagoria_63, Phareon_66, Phayeta_71, Phelemich_64, PhenghisKhan_68, Pherdinand_68, Phergie_68, Philly_67, Phipps_67, Phleuron_66, Phlyer_68, PhrankReynolds_67, PhrodoBaggins_69, PinheadLarry_67, Pinkman_67, Pipefish_71, Pipsqueak_65, Placalicious_68, Plmatters_66, Podrick_67, Pops_66, Potter_65, Prickles_69, Puhltonio_66, Qyrzula_58, RagingRooster_67, Reprobate_65, Rhinoforte_64, Rich_66, Rita1961_69, Roliet_65, RomaT_68, Rosebush_63, SDcharge11_67, Sabella_64, Saguaro_64, SassyCat97_66, Scrick_67, Serendipitous_65, Sheila_64, SirJeffery_66, Slatt_68, SlippinJimmy_71, Solosis_66, Sophia_66, Soto_65, Squid_67, Squiggle_67, Struggle_68, Suigeneris_68, Surely_68, Swish_68, SynergyX_68, TA17A_64, TallGrassMM_66, Thonko_67, Thora_66, Tinciduntolum_65, TomBombadil_68, Tres_64, Trypo_69, Tydolla_65, TyrionL_68, UncleHowie_65, Veritas_67, Vista_66, Vivaldi_68, Vortex_67, Wallhey_68, Weher20_65, West99_64, Yahalom_66, Yinz_68, Yoshand_68, YouGoGlencoco_68, Zelda_68, Zonia_68,

Summary by start number:

Start 16:

- Found in 116 of 342 (33.9%) of genes in pham
- Manual Annotations of this start: 73 of 324
- Called 62.9% of time when present
- Phage (with cluster) where this start called: Banjo_66 (B1), BatteryCK_66 (B1), CharlieGBrown_66 (B1), Cher_68 (B1), Cobra_68 (B1), Craff_71 (B1), Daffy_66 (B1), Daka_70 (B1), Derpp_68 (B1), DirtJuice_68 (B1), Doddsville_66 (B1), DuchessDung_67 (B1), Fang_69 (B1), FluffyNinja_68 (B1), FriarPreacher_66 (B1), FugateOSU_68 (B1), Haimas_66 (B1), Harvey_65 (B1), Held_66 (B1), HighStump_69 (B1), Iridoclysis_67 (B1), Kailash_66 (B1), KingTut_59 (B1), KingVeVeVe_66 (B1), Kloppinator_68 (B1), Kwksand96_68 (B1), Labeouficaum_68 (B1), LeeLot_67 (B1), Lego3393_65 (B1), LemonSlice_68 (B1), Mana_66 (B1), Maru_67 (B1), Mesh1_68 (B1), MichaelPhcott_66 (B1), MitKao_67 (B1), Morgushi_66 (B1), Mosaic_65 (B1), Mulan_67 (B1), Murdoc_65 (B1), OSmaximus_68 (B1), Oline_67 (B1), Phamished_69 (B1), PhenghisKhan_68 (B1), Pherdinand_68 (B1), Phergie_68 (B1), Phipps_67 (B1), Phleuron_66 (B1), PhrankReynolds_67 (B1), PhrodoBaggins_69 (B1), PinheadLarry_67 (B1), Pinkman_67 (B1), Pipsqueak_65 (B1), Placalicious_68 (B1), Podrick_67 (B1), Prickles_69 (B1), Puhltonio_66 (B1), SDcharge11_67 (B1), SassyCat97_66 (B1), Slatt_68 (B1), Soto_65 (B1), Squid_67 (B1), Squiggle_67 (B1), Swish_68 (B1), TallGrassMM_66 (B1), Thora_66 (B1), Trypo_69 (B1), TyrionL_68 (B1), UncleHowie_65 (B1), Vista_66 (B1), Vivaldi_68 (B1), Vortex_67 (B1), Yoshand_68 (B1), Zonia_68 (B1),

Start 19:

- Found in 115 of 342 (33.6%) of genes in pham
- Manual Annotations of this start: 102 of 324
- Called 93.0% of time when present
- Phage (with cluster) where this start called: ABU_67 (B1), Aelin_67 (B1), Altwerkus_66 (B1), Anderson_69 (B1), Antonia_67 (B1), Apizium_67 (B1), Badfish_68 (B1), Beaglebox_66 (B1), Bishoperium_68 (B1), Brilliant_71 (B1), Burr_68 (B1), Cannibal_68 (B1), Carthage_68 (B1), Chaelin_69 (B1), Chah_69 (B1), Charles1_69 (B1), CheetO_67 (B1), Childish_67 (B1), Chunky_68 (B1), Colbert_66 (B1), Crownjwl_66 (B1), DaddyDaniels_70 (B1), DelRivs_66 (B1), Dione_66 (B1), DoesntMatter_65 (B1), EmpTee_67 (B1), Eremos_67 (B1), Freya_65 (B1), Fringe_72 (B1), Gareth_68 (B1), Giraffe_68 (B1), Gophee_69 (B1), HSavage_66 (B1), Haleema_67 (B1), HenryJackson_68 (B1), Hertubise_67 (B1), Hetaeria_67 (B1), IsaacEli_69 (B1), JDog_68 (B1), JacAttac_68 (B1), JangoPhett_102 (B1), Jillium_68 (B1), KLucky39_66 (B1), Kahve_68 (B1), Katniss_69 (B1), Keitherie_70 (B1), Kikipoo_69 (B1), Kimbrough_69 (B1), KlimbOn_67 (B1), Kwadwo_67 (B1), Longacauda_69 (B1), LuckyMarjie_65 (B1), Lulumae_65 (B1), Lumine_69 (B1), Manad_67 (B1), Mcshane_67 (B1), Mecca_68 (B1), Megatron_68 (B1), Morty_69 (B1), Mutante_68 (B1), Nacho_0071 (B1), Newman_66 (B1), Nicole21_69 (B1), Numberben_67 (B1), Nyala_67 (B1), OliverWalter_67 (B1), Omniscient_69 (B1), Oosterbaan_67 (B1), Orwigg_68 (B1), PG1_67 (B1), PhatCats2014_68 (B1), PhatLouie_70 (B1), Phunky_66 (B1), Piglet_0068 (B1), ProfessorX_66 (B1), Quisquilliae_69 (B1), Riggan_69 (B1), Rimu_71 (B1), Robyn_68 (B1), Roscoe_68 (B1), Roy17_66 (B1), Samaymay_68 (B1), Schadenfreude_68 (B1), Scoot17C_68 (B1), Serendipity_67 (B1), Serpentine_0068 (B1), ShiVal_66 (B1), Sigman_68 (B1), Simielle_68 (B1), Skippy_69 (B1), Soile_69 (B1), Spartan300_67 (B1), Suffolk_66 (B1), Swiphy_72 (B1), Telesworld_66 (B1), ThreeOh3D2_69 (B1), Timmi_67 (B1), Tomlarah_69 (B1), Toni_68 (B1), Tooj_66 (B1), True_66 (B1), Valjean_67 (B1), Vaticameos_65 (B1), Virapocalypse_69 (B1), Waterdiva_68 (B1), Windsor_68 (B1), Xavier_67 (B1),

Start 22:

- Found in 9 of 342 (2.6%) of genes in pham
- Manual Annotations of this start: 4 of 324
- Called 44.4% of time when present
- Phage (with cluster) where this start called: Acadian_67 (B5), Bae_67 (B5), Donny_68 (B5), Suigeneris_68 (B5),

Start 23:

- Found in 37 of 342 (10.8%) of genes in pham
- Manual Annotations of this start: 21 of 324
- Called 56.8% of time when present
- Phage (with cluster) where this start called: Abinghost_68 (B3), Athena_70 (B3), Audrey_68 (B3), Casbah_68 (B3), ChaChing_68 (B3), Corofin_68 (B3), Deenasa_68 (B3), Devonte_67 (B3), Gadget_69 (B3), GlenHope_69 (B3), Heathcliff_68 (B3), Jackstina_64 (B3), Nozo_68 (B3), OrangeOswald_68 (B3), Philly_67 (B3), Phlyer_68 (B3), RagingRooster_67 (B3), Rita1961_69 (B3), RomaT_68 (B3), SynergyX_68 (B3), Yinz_68 (B3),

Start 27:

- Found in 2 of 342 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 324
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HarveySr_67 (B3), Tydolla_65 (B3),

Start 28:

- Found in 12 of 342 (3.5%) of genes in pham
- Manual Annotations of this start: 3 of 324
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Phelemich_64 (B5), Reprobate_65 (B5), Saguaro_64 (B7),

Start 29:

- Found in 157 of 342 (45.9%) of genes in pham
- Manual Annotations of this start: 35 of 324
- Called 22.9% of time when present
- Phage (with cluster) where this start called: Arbiter_62 (B2), Ares_64 (B2), Bananafish_65 (B2), Blocker23_64 (B2), Boyle_64 (B2), Brownie5_64 (B2), Calamitous_65 (B2), CamL_68 (B1), Cosmolli16_69 (B1), Duggie_68 (B1), Eaglehorse_64 (B2), FrenchFry_65 (B2), Glass_65 (B2), Godines_65 (B2), Hashim76_72 (B13), Hedgerow_64 (B2), Holeinone_64 (B2), ItsyBitsy1_63 (B2), JakeO_69 (B1), Kheth_64 (B2), Laurie_64 (B2), Lephleur_64 (B2), LilMcDreamy_64 (B12), LizLemon_64 (B2), MasterPo_65 (B2), Opia_65 (B2), Pops_66 (B1), QueenBeane_68 (B1), Qyrzula_58 (B2), Rhinoforte_64 (B2), Rosebush_63 (B2), Sabella_64 (B2), Tinciduntolum_65 (B2), Tres_64 (B2), Vaishali24_68 (B1), West99_64 (B2),

Start 31:

- Found in 43 of 342 (12.6%) of genes in pham
- Manual Annotations of this start: 1 of 324
- Called 2.3% of time when present
- Phage (with cluster) where this start called: Gervas_69 (B3),

Start 32:

- Found in 1 of 342 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 324
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LittleMunchkin_63 (DR),

Start 33:

- Found in 291 of 342 (85.1%) of genes in pham
- Manual Annotations of this start: 27 of 324
- Called 10.0% of time when present
- Phage (with cluster) where this start called: CRB2_64 (B9), Durga_70 (B1), EastView9101_68 (B5), Emiris_69 (B1), Etaye_67 (B1), Frankicide_66 (B1), Lars_65 (B2), Legolas_69 (B1), LostAndPhound_67 (B1), Lulwa_66 (B1), MRabcd_67 (B1), Mag7_66 (B1), Plmatters_66 (B1), Rich_66 (B5), Roliet_65 (B1), Serendipitous_65 (B5), SirJeffery_66 (B5), Solosis_66 (B1), Sophia_66 (B1), Struggle_68 (B1), Surely_68 (B1), TomBombadil_68 (B1), Usavi_69 (B1), Veritas_67 (B1), Wallhey_68 (B1), Weher20_65 (B1), YouGoGlencoco_68 (B1), Zaider_69 (B1), Zelda_68 (B1),

Start 34:

- Found in 46 of 342 (13.5%) of genes in pham
- Manual Annotations of this start: 14 of 324
- Called 34.8% of time when present
- Phage (with cluster) where this start called: Akoma_68 (B3), Baloo_67 (B3), Ben11_68 (B3), Bernardo_69 (B3), Chandler_68 (B3), Compostia_67 (B3), Daisy_67

(B3), Halfpint_68 (B3), Kamiyu_68 (B3), Kronus_68 (B3), LestyG_66 (B3), MmasiCarm_69 (B3), Mortcellus_68 (B3), Phaedrus_63 (B3), Pipefish_71 (B3), Yahalom_66 (B3),

Start 35:

- Found in 1 of 342 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 324
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CRB2_66 (B9),

Start 36:

- Found in 44 of 342 (12.9%) of genes in pham
- Manual Annotations of this start: 5 of 324
- Called 13.6% of time when present
- Phage (with cluster) where this start called: Briakila_68 (B3), Marley1013_69 (B3), Neos5_68 (B3), Obutu_70 (B3), Phayeta_71 (B3), SlippinJimmy_71 (B3),

Start 37:

- Found in 1 of 342 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 324
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko_67 (B8),

Start 38:

- Found in 1 of 342 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 324
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlovu_65 (B11),

Start 42:

- Found in 34 of 342 (9.9%) of genes in pham
- Manual Annotations of this start: 4 of 324
- Called 17.6% of time when present
- Phage (with cluster) where this start called: Allegro_64 (B2), Coffee_64 (B2), Faze9_63 (B2), Kaleb_65 (B2), Phantasmagoria_63 (B2), TA17A_64 (B2),

Start 46:

- Found in 129 of 342 (37.7%) of genes in pham
- Manual Annotations of this start: 29 of 324
- Called 26.4% of time when present
- Phage (with cluster) where this start called: 39HC_061 (B6), 40BC_061 (B6), Adriana_69 (B1), AltPhacts_66 (B1), Ashraf_68 (B1), Basato_67 (B1), BlackStallion_68 (B1), BlueHusk_69 (B1), Buckeye_68 (B1), Chorkpop_68 (B1), Dati_65 (B1), Dingo_65 (B1), DonSancho_64 (B1), GeneCoco_68 (B1), Grand2040_66 (B1), Gyarad_0067 (B1), Hamish_65 (B1), Horchata_65 (B1), Hosp_059 (B6), ImtiyazSitla_68 (B1), Inverness_66 (B1), Jolie1_061 (B6), KayaCho_61 (B6), Lasso_67 (B1), Maskar_68 (B1), Matalotodo_67 (B1), Melc17_65 (B1), MelsMeow_67 (B1), Mikota_65 (B1), MiniBoss_65 (B1), Phareon_66 (B1), Potter_65 (B1), Scrick_67 (B1), Sheila_64 (B1),

Summary by clusters:

There are 12 clusters represented in this pham: B8, B11, B5, B6, B7, B12, B1, B2, B3, DR, B9, B13,

Info for manual annotations of cluster B1:

- Start number 16 was manually annotated 73 times for cluster B1.
- Start number 19 was manually annotated 102 times for cluster B1.
- Start number 29 was manually annotated 7 times for cluster B1.
- Start number 33 was manually annotated 23 times for cluster B1.
- Start number 46 was manually annotated 28 times for cluster B1.

Info for manual annotations of cluster B11:

- Start number 38 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 29 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B2:

- Start number 29 was manually annotated 27 times for cluster B2.
- Start number 33 was manually annotated 1 time for cluster B2.
- Start number 42 was manually annotated 4 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 23 was manually annotated 21 times for cluster B3.
- Start number 27 was manually annotated 2 times for cluster B3.
- Start number 31 was manually annotated 1 time for cluster B3.
- Start number 34 was manually annotated 14 times for cluster B3.
- Start number 36 was manually annotated 5 times for cluster B3.

Info for manual annotations of cluster B5:

- Start number 22 was manually annotated 4 times for cluster B5.
- Start number 28 was manually annotated 2 times for cluster B5.
- Start number 33 was manually annotated 2 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 46 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 28 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 37 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 33 was manually annotated 1 time for cluster B9.
- Start number 35 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster DR:

- Start number 32 was manually annotated 1 time for cluster DR.

Gene Information:

Gene: 39HC_061 Start: 56330, Stop: 56530, Start Num: 46
Candidate Starts for 39HC_061:
(Start: 33 @56279 has 27 MA's), (Start: 46 @56330 has 29 MA's), (47, 56333), (48, 56336), (50, 56348),

Gene: 40BC_061 Start: 56330, Stop: 56530, Start Num: 46
Candidate Starts for 40BC_061:
(Start: 33 @56279 has 27 MA's), (Start: 46 @56330 has 29 MA's), (47, 56333), (48, 56336), (50, 56348),

Gene: ABU_67 Start: 57301, Stop: 57573, Start Num: 19
Candidate Starts for ABU_67:
(Start: 19 @57301 has 102 MA's), (Start: 29 @57322 has 35 MA's), (Start: 33 @57331 has 27 MA's), (47, 57394), (51, 57421), (64, 57544),

Gene: Abinghost_68 Start: 57207, Stop: 57494, Start Num: 23
Candidate Starts for Abinghost_68:
(2, 56985), (3, 57003), (4, 57015), (6, 57060), (17, 57195), (Start: 23 @57207 has 21 MA's), (26, 57225), (Start: 31 @57237 has 1 MA's), (Start: 34 @57246 has 14 MA's), (Start: 36 @57255 has 5 MA's), (56, 57399), (63, 57456),

Gene: Acadian_67 Start: 58258, Stop: 58542, Start Num: 22
Candidate Starts for Acadian_67:
(Start: 22 @58258 has 4 MA's), (Start: 28 @58285 has 3 MA's), (Start: 33 @58294 has 27 MA's), (48, 58360), (56, 58438), (62, 58492), (66, 58528),

Gene: Adriana_69 Start: 57994, Stop: 58173, Start Num: 46
Candidate Starts for Adriana_69:
(Start: 16 @57871 has 73 MA's), (Start: 33 @57925 has 27 MA's), (Start: 46 @57994 has 29 MA's), (52, 58036),

Gene: Aelin_67 Start: 56821, Stop: 57093, Start Num: 19
Candidate Starts for Aelin_67:
(Start: 19 @56821 has 102 MA's), (Start: 29 @56842 has 35 MA's), (Start: 33 @56851 has 27 MA's), (47, 56914), (51, 56941), (64, 57064),

Gene: Akoma_68 Start: 57286, Stop: 57534, Start Num: 34
Candidate Starts for Akoma_68:
(2, 57025), (3, 57043), (4, 57055), (6, 57100), (17, 57235), (Start: 23 @57247 has 21 MA's), (26, 57265), (Start: 31 @57277 has 1 MA's), (Start: 34 @57286 has 14 MA's), (Start: 36 @57295 has 5 MA's), (56, 57439), (63, 57496),

Gene: Allegro_64 Start: 55516, Stop: 55722, Start Num: 42
Candidate Starts for Allegro_64:
(Start: 29 @55462 has 35 MA's), (Start: 33 @55471 has 27 MA's), (Start: 42 @55516 has 4 MA's), (47, 55543), (51, 55570), (54, 55597), (58, 55639), (61, 55672), (63, 55681), (64, 55693),

Gene: AltPhacts_66 Start: 56481, Stop: 56660, Start Num: 46
Candidate Starts for AltPhacts_66:
(Start: 16 @56358 has 73 MA's), (Start: 33 @56412 has 27 MA's), (Start: 46 @56481 has 29 MA's), (52, 56523),

Gene: Altwerkus_66 Start: 56464, Stop: 56736, Start Num: 19

Candidate Starts for Altwerkus_66:

(Start: 19 @56464 has 102 MA's), (Start: 29 @56485 has 35 MA's), (Start: 33 @56494 has 27 MA's), (47, 56557), (51, 56584), (64, 56707),

Gene: Anderson_69 Start: 57036, Stop: 57308, Start Num: 19

Candidate Starts for Anderson_69:

(Start: 19 @57036 has 102 MA's), (Start: 29 @57057 has 35 MA's), (Start: 33 @57066 has 27 MA's), (47, 57129), (51, 57156), (64, 57279),

Gene: Antonia_67 Start: 56820, Stop: 57092, Start Num: 19

Candidate Starts for Antonia_67:

(Start: 19 @56820 has 102 MA's), (Start: 29 @56841 has 35 MA's), (Start: 33 @56850 has 27 MA's), (47, 56913), (51, 56940), (64, 57063),

Gene: Apizium_67 Start: 56482, Stop: 56754, Start Num: 19

Candidate Starts for Apizium_67:

(Start: 19 @56482 has 102 MA's), (Start: 29 @56503 has 35 MA's), (Start: 33 @56512 has 27 MA's), (47, 56575), (51, 56602), (64, 56725),

Gene: Arbiter_62 Start: 55569, Stop: 55829, Start Num: 29

Candidate Starts for Arbiter_62:

(Start: 29 @55569 has 35 MA's), (Start: 33 @55578 has 27 MA's), (Start: 42 @55623 has 4 MA's), (47, 55650), (51, 55677), (54, 55704), (58, 55746), (61, 55779), (63, 55788), (64, 55800),

Gene: Ares_64 Start: 55540, Stop: 55800, Start Num: 29

Candidate Starts for Ares_64:

(Start: 29 @55540 has 35 MA's), (Start: 33 @55549 has 27 MA's), (Start: 42 @55594 has 4 MA's), (47, 55621), (51, 55648), (54, 55675), (58, 55717), (61, 55750), (63, 55759), (64, 55771),

Gene: Ashraf_68 Start: 57146, Stop: 57325, Start Num: 46

Candidate Starts for Ashraf_68:

(Start: 16 @57023 has 73 MA's), (Start: 33 @57077 has 27 MA's), (Start: 46 @57146 has 29 MA's), (52, 57188),

Gene: Athena_70 Start: 57982, Stop: 58269, Start Num: 23

Candidate Starts for Athena_70:

(2, 57760), (3, 57778), (4, 57790), (6, 57835), (17, 57970), (Start: 23 @57982 has 21 MA's), (26, 58000), (Start: 31 @58012 has 1 MA's), (Start: 34 @58021 has 14 MA's), (Start: 36 @58030 has 5 MA's), (56, 58174), (63, 58231),

Gene: Audrey_68 Start: 57246, Stop: 57533, Start Num: 23

Candidate Starts for Audrey_68:

(2, 57024), (3, 57042), (4, 57054), (6, 57099), (17, 57234), (Start: 23 @57246 has 21 MA's), (26, 57264), (Start: 31 @57276 has 1 MA's), (Start: 34 @57285 has 14 MA's), (Start: 36 @57294 has 5 MA's), (56, 57438), (63, 57495),

Gene: Badfish_68 Start: 57322, Stop: 57594, Start Num: 19

Candidate Starts for Badfish_68:

(Start: 19 @57322 has 102 MA's), (Start: 29 @57343 has 35 MA's), (Start: 33 @57352 has 27 MA's), (47, 57415), (51, 57442), (64, 57565),

Gene: Bae_67 Start: 59301, Stop: 59585, Start Num: 22

Candidate Starts for Bae_67:

(Start: 22 @59301 has 4 MA's), (Start: 28 @59328 has 3 MA's), (Start: 33 @59337 has 27 MA's), (48, 59403), (55, 59466), (56, 59481), (62, 59535), (66, 59571), (68, 59580),

Gene: Baloo_67 Start: 57118, Stop: 57366, Start Num: 34

Candidate Starts for Baloo_67:

(2, 56857), (3, 56875), (4, 56887), (6, 56932), (17, 57067), (Start: 23 @57079 has 21 MA's), (26, 57097), (Start: 31 @57109 has 1 MA's), (Start: 34 @57118 has 14 MA's), (Start: 36 @57127 has 5 MA's), (56, 57271), (63, 57328),

Gene: Bananafish_65 Start: 55470, Stop: 55730, Start Num: 29

Candidate Starts for Bananafish_65:

(Start: 29 @55470 has 35 MA's), (Start: 33 @55479 has 27 MA's), (Start: 42 @55524 has 4 MA's), (47, 55551), (51, 55578), (54, 55605), (58, 55647), (61, 55680), (63, 55689), (64, 55701),

Gene: Banjo_66 Start: 56800, Stop: 57102, Start Num: 16

Candidate Starts for Banjo_66:

(Start: 16 @56800 has 73 MA's), (Start: 33 @56854 has 27 MA's), (Start: 46 @56923 has 29 MA's), (52, 56965),

Gene: Basato_67 Start: 57199, Stop: 57378, Start Num: 46

Candidate Starts for Basato_67:

(Start: 16 @57076 has 73 MA's), (Start: 33 @57130 has 27 MA's), (Start: 46 @57199 has 29 MA's), (52, 57241),

Gene: BatteryCK_66 Start: 56770, Stop: 57072, Start Num: 16

Candidate Starts for BatteryCK_66:

(Start: 16 @56770 has 73 MA's), (Start: 33 @56824 has 27 MA's), (Start: 46 @56893 has 29 MA's), (52, 56935),

Gene: Beaglebox_66 Start: 56876, Stop: 57148, Start Num: 19

Candidate Starts for Beaglebox_66:

(Start: 19 @56876 has 102 MA's), (Start: 29 @56897 has 35 MA's), (Start: 33 @56906 has 27 MA's), (47, 56969), (51, 56996), (64, 57119),

Gene: Ben11_68 Start: 57503, Stop: 57751, Start Num: 34

Candidate Starts for Ben11_68:

(2, 57242), (3, 57260), (4, 57272), (6, 57317), (17, 57452), (Start: 23 @57464 has 21 MA's), (26, 57482), (Start: 31 @57494 has 1 MA's), (Start: 34 @57503 has 14 MA's), (Start: 36 @57512 has 5 MA's), (56, 57656), (63, 57713),

Gene: Bernardo_69 Start: 57484, Stop: 57732, Start Num: 34

Candidate Starts for Bernardo_69:

(17, 57433), (Start: 23 @57445 has 21 MA's), (26, 57463), (Start: 31 @57475 has 1 MA's), (Start: 34 @57484 has 14 MA's), (Start: 36 @57493 has 5 MA's), (56, 57637), (63, 57694),

Gene: Bishoperium_68 Start: 57350, Stop: 57622, Start Num: 19

Candidate Starts for Bishoperium_68:

(Start: 19 @57350 has 102 MA's), (Start: 29 @57371 has 35 MA's), (Start: 33 @57380 has 27 MA's), (47, 57443), (51, 57470), (64, 57593),

Gene: BlackStallion_68 Start: 57193, Stop: 57372, Start Num: 46

Candidate Starts for BlackStallion_68:

(Start: 16 @57070 has 73 MA's), (Start: 33 @57124 has 27 MA's), (Start: 46 @57193 has 29 MA's), (52, 57235),

Gene: Blocker23_64 Start: 55537, Stop: 55797, Start Num: 29

Candidate Starts for Blocker23_64:

(Start: 29 @55537 has 35 MA's), (Start: 33 @55546 has 27 MA's), (Start: 42 @55591 has 4 MA's), (47, 55618), (51, 55645), (54, 55672), (58, 55714), (61, 55747), (63, 55756), (64, 55768),

Gene: BlueHusk_69 Start: 56949, Stop: 57128, Start Num: 46

Candidate Starts for BlueHusk_69:

(14, 56817), (Start: 33 @56880 has 27 MA's), (Start: 46 @56949 has 29 MA's), (52, 56991),

Gene: Boyle_64 Start: 55578, Stop: 55838, Start Num: 29

Candidate Starts for Boyle_64:

(Start: 29 @55578 has 35 MA's), (Start: 33 @55587 has 27 MA's), (Start: 42 @55632 has 4 MA's), (47, 55659), (51, 55686), (54, 55713), (58, 55755), (61, 55788), (63, 55797), (64, 55809),

Gene: Briakila_68 Start: 57517, Stop: 57732, Start Num: 36

Candidate Starts for Briakila_68:

(9, 57373), (Start: 31 @57499 has 1 MA's), (Start: 34 @57508 has 14 MA's), (Start: 36 @57517 has 5 MA's), (47, 57568), (63, 57694),

Gene: Brilliant_71 Start: 57319, Stop: 57591, Start Num: 19

Candidate Starts for Brilliant_71:

(Start: 19 @57319 has 102 MA's), (Start: 29 @57340 has 35 MA's), (Start: 33 @57349 has 27 MA's), (47, 57412), (51, 57439), (55, 57478), (64, 57562),

Gene: Brownie5_64 Start: 55580, Stop: 55840, Start Num: 29

Candidate Starts for Brownie5_64:

(Start: 29 @55580 has 35 MA's), (Start: 33 @55589 has 27 MA's), (Start: 42 @55634 has 4 MA's), (51, 55688), (54, 55715), (58, 55757), (61, 55790), (63, 55799), (64, 55811),

Gene: Buckeye_68 Start: 58013, Stop: 58192, Start Num: 46

Candidate Starts for Buckeye_68:

(Start: 16 @57890 has 73 MA's), (Start: 33 @57944 has 27 MA's), (Start: 46 @58013 has 29 MA's), (52, 58055),

Gene: Burr_68 Start: 56786, Stop: 57058, Start Num: 19

Candidate Starts for Burr_68:

(Start: 19 @56786 has 102 MA's), (Start: 29 @56807 has 35 MA's), (Start: 33 @56816 has 27 MA's), (47, 56879), (51, 56906), (64, 57029),

Gene: CRB2_64 Start: 58911, Stop: 59153, Start Num: 33

Candidate Starts for CRB2_64:

(Start: 29 @58902 has 35 MA's), (Start: 33 @58911 has 27 MA's), (48, 58971), (50, 58983), (53, 59013), (55, 59034),

Gene: CRB2_66 Start: 60189, Stop: 60422, Start Num: 35

Candidate Starts for CRB2_66:

(Start: 35 @60189 has 1 MA's), (39, 60222), (41, 60225), (Start: 46 @60252 has 29 MA's), (50, 60270),

Gene: Calamitous_65 Start: 55468, Stop: 55728, Start Num: 29

Candidate Starts for Calamitous_65:

(Start: 29 @55468 has 35 MA's), (Start: 33 @55477 has 27 MA's), (Start: 42 @55522 has 4 MA's), (47, 55549), (51, 55576), (54, 55603), (58, 55645), (61, 55678), (63, 55687), (64, 55699),

Gene: CamL_68 Start: 57139, Stop: 57390, Start Num: 29

Candidate Starts for CamL_68:

(Start: 19 @57118 has 102 MA's), (Start: 29 @57139 has 35 MA's), (Start: 33 @57148 has 27 MA's), (47, 57211), (51, 57238), (64, 57361),

Gene: Cannibal_68 Start: 57060, Stop: 57332, Start Num: 19

Candidate Starts for Cannibal_68:

(Start: 19 @57060 has 102 MA's), (Start: 29 @57081 has 35 MA's), (Start: 33 @57090 has 27 MA's), (47, 57153), (51, 57180), (64, 57303),

Gene: Carthage_68 Start: 56724, Stop: 56996, Start Num: 19

Candidate Starts for Carthage_68:

(Start: 19 @56724 has 102 MA's), (Start: 29 @56745 has 35 MA's), (Start: 33 @56754 has 27 MA's), (47, 56817), (51, 56844), (64, 56967),

Gene: Casbah_68 Start: 57566, Stop: 57853, Start Num: 23

Candidate Starts for Casbah_68:

(2, 57344), (3, 57362), (4, 57374), (6, 57419), (17, 57554), (Start: 23 @57566 has 21 MA's), (26, 57584), (Start: 31 @57596 has 1 MA's), (Start: 34 @57605 has 14 MA's), (Start: 36 @57614 has 5 MA's), (56, 57758), (63, 57815),

Gene: ChaChing_68 Start: 57264, Stop: 57551, Start Num: 23

Candidate Starts for ChaChing_68:

(2, 57042), (3, 57060), (4, 57072), (6, 57117), (17, 57252), (Start: 23 @57264 has 21 MA's), (26, 57282), (Start: 31 @57294 has 1 MA's), (Start: 34 @57303 has 14 MA's), (Start: 36 @57312 has 5 MA's), (56, 57456), (63, 57513),

Gene: Chaelin_69 Start: 57349, Stop: 57621, Start Num: 19

Candidate Starts for Chaelin_69:

(Start: 19 @57349 has 102 MA's), (Start: 29 @57370 has 35 MA's), (Start: 33 @57379 has 27 MA's), (47, 57442), (51, 57469), (64, 57592),

Gene: Chah_69 Start: 56763, Stop: 57035, Start Num: 19

Candidate Starts for Chah_69:

(Start: 19 @56763 has 102 MA's), (Start: 29 @56784 has 35 MA's), (Start: 33 @56793 has 27 MA's), (47, 56856), (51, 56883), (64, 57006),

Gene: Chandler_68 Start: 58065, Stop: 58313, Start Num: 34

Candidate Starts for Chandler_68:

(2, 57804), (3, 57822), (4, 57834), (6, 57879), (17, 58014), (Start: 23 @58026 has 21 MA's), (26, 58044), (Start: 31 @58056 has 1 MA's), (Start: 34 @58065 has 14 MA's), (Start: 36 @58074 has 5 MA's), (56, 58218), (63, 58275),

Gene: Charles1_69 Start: 57073, Stop: 57345, Start Num: 19

Candidate Starts for Charles1_69:

(Start: 19 @57073 has 102 MA's), (Start: 29 @57094 has 35 MA's), (Start: 33 @57103 has 27 MA's), (47, 57166), (51, 57193), (64, 57316),

Gene: CharlieGBrown_66 Start: 56715, Stop: 57017, Start Num: 16

Candidate Starts for CharlieGBrown_66:

(Start: 16 @56715 has 73 MA's), (Start: 33 @56769 has 27 MA's), (Start: 46 @56838 has 29 MA's), (52, 56880),

Gene: CheetO_67 Start: 57036, Stop: 57308, Start Num: 19

Candidate Starts for CheetO_67:

(Start: 19 @57036 has 102 MA's), (Start: 29 @57057 has 35 MA's), (Start: 33 @57066 has 27 MA's), (47, 57129), (51, 57156), (64, 57279),

Gene: Cher_68 Start: 57320, Stop: 57622, Start Num: 16

Candidate Starts for Cher_68:

(Start: 16 @57320 has 73 MA's), (Start: 33 @57374 has 27 MA's), (Start: 46 @57443 has 29 MA's), (52, 57485),

Gene: Childish_67 Start: 57339, Stop: 57611, Start Num: 19

Candidate Starts for Childish_67:

(Start: 19 @57339 has 102 MA's), (Start: 29 @57360 has 35 MA's), (Start: 33 @57369 has 27 MA's), (47, 57432), (48, 57435), (51, 57459), (64, 57582),

Gene: Chorkpop_68 Start: 56930, Stop: 57109, Start Num: 46

Candidate Starts for Chorkpop_68:

(Start: 16 @56807 has 73 MA's), (Start: 33 @56861 has 27 MA's), (Start: 46 @56930 has 29 MA's), (52, 56972),

Gene: Chunky_68 Start: 56653, Stop: 56925, Start Num: 19

Candidate Starts for Chunky_68:

(Start: 19 @56653 has 102 MA's), (Start: 29 @56674 has 35 MA's), (Start: 33 @56683 has 27 MA's), (47, 56746), (51, 56773), (64, 56896),

Gene: Cobra_68 Start: 57351, Stop: 57653, Start Num: 16

Candidate Starts for Cobra_68:

(Start: 16 @57351 has 73 MA's), (Start: 33 @57405 has 27 MA's), (Start: 46 @57474 has 29 MA's), (52, 57516),

Gene: Coffee_64 Start: 55626, Stop: 55832, Start Num: 42

Candidate Starts for Coffee_64:

(Start: 29 @55572 has 35 MA's), (Start: 33 @55581 has 27 MA's), (Start: 42 @55626 has 4 MA's), (47, 55653), (51, 55680), (54, 55707), (58, 55749), (61, 55782), (63, 55791), (64, 55803),

Gene: Colbert_66 Start: 56375, Stop: 56647, Start Num: 19

Candidate Starts for Colbert_66:

(Start: 19 @56375 has 102 MA's), (Start: 29 @56396 has 35 MA's), (Start: 33 @56405 has 27 MA's), (47, 56468), (51, 56495), (64, 56618),

Gene: Compostia_67 Start: 57686, Stop: 57934, Start Num: 34

Candidate Starts for Compostia_67:

(2, 57425), (3, 57443), (4, 57455), (6, 57500), (17, 57635), (Start: 23 @57647 has 21 MA's), (26, 57665), (Start: 31 @57677 has 1 MA's), (Start: 34 @57686 has 14 MA's), (Start: 36 @57695 has 5 MA's), (56, 57839), (63, 57896),

Gene: Corofin_68 Start: 57277, Stop: 57564, Start Num: 23

Candidate Starts for Corofin_68:

(2, 57055), (3, 57073), (4, 57085), (6, 57130), (17, 57265), (Start: 23 @57277 has 21 MA's), (26, 57295), (Start: 31 @57307 has 1 MA's), (Start: 34 @57316 has 14 MA's), (Start: 36 @57325 has 5 MA's), (56, 57469), (63, 57526),

Gene: Cosmolli16_69 Start: 57541, Stop: 57792, Start Num: 29

Candidate Starts for Cosmolli16_69:

(Start: 19 @57520 has 102 MA's), (Start: 29 @57541 has 35 MA's), (Start: 33 @57550 has 27 MA's), (47, 57613), (51, 57640), (64, 57763),

Gene: Craff_71 Start: 57754, Stop: 58056, Start Num: 16

Candidate Starts for Craff_71:

(Start: 16 @57754 has 73 MA's), (Start: 33 @57808 has 27 MA's), (Start: 46 @57877 has 29 MA's), (52, 57919),

Gene: Crownjwl_66 Start: 56838, Stop: 57110, Start Num: 19

Candidate Starts for Crownjwl_66:

(Start: 19 @56838 has 102 MA's), (Start: 29 @56859 has 35 MA's), (Start: 33 @56868 has 27 MA's), (51, 56958), (64, 57081),

Gene: DaddyDaniels_70 Start: 57296, Stop: 57568, Start Num: 19

Candidate Starts for DaddyDaniels_70:

(Start: 19 @57296 has 102 MA's), (Start: 29 @57317 has 35 MA's), (Start: 33 @57326 has 27 MA's), (47, 57389), (48, 57392), (51, 57416), (64, 57539),

Gene: Daffy_66 Start: 56792, Stop: 57094, Start Num: 16

Candidate Starts for Daffy_66:

(Start: 16 @56792 has 73 MA's), (Start: 33 @56846 has 27 MA's), (Start: 46 @56915 has 29 MA's), (52, 56957),

Gene: Daisy_67 Start: 56849, Stop: 57097, Start Num: 34

Candidate Starts for Daisy_67:

(2, 56588), (3, 56606), (4, 56618), (6, 56663), (17, 56798), (Start: 23 @56810 has 21 MA's), (26, 56828), (Start: 31 @56840 has 1 MA's), (Start: 34 @56849 has 14 MA's), (Start: 36 @56858 has 5 MA's), (56, 57002), (63, 57059),

Gene: Daka_70 Start: 57306, Stop: 57608, Start Num: 16

Candidate Starts for Daka_70:

(Start: 16 @57306 has 73 MA's), (Start: 33 @57360 has 27 MA's), (Start: 46 @57429 has 29 MA's), (52, 57471),

Gene: Dati_65 Start: 57259, Stop: 57438, Start Num: 46

Candidate Starts for Dati_65:

(14, 57127), (Start: 33 @57190 has 27 MA's), (Start: 46 @57259 has 29 MA's), (52, 57301),

Gene: Deenasa_68 Start: 58113, Stop: 58400, Start Num: 23

Candidate Starts for Deenasa_68:

(2, 57891), (3, 57909), (4, 57921), (6, 57966), (17, 58101), (Start: 23 @58113 has 21 MA's), (26, 58131), (Start: 31 @58143 has 1 MA's), (Start: 34 @58152 has 14 MA's), (Start: 36 @58161 has 5 MA's), (56, 58305), (63, 58362),

Gene: DelRivs_66 Start: 56786, Stop: 57058, Start Num: 19

Candidate Starts for DelRivs_66:

(Start: 19 @56786 has 102 MA's), (Start: 29 @56807 has 35 MA's), (Start: 33 @56816 has 27 MA's), (51, 56906), (64, 57029),

Gene: Derpp_68 Start: 56891, Stop: 57193, Start Num: 16

Candidate Starts for Derpp_68:

(Start: 16 @56891 has 73 MA's), (Start: 33 @56945 has 27 MA's), (Start: 46 @57014 has 29 MA's), (52, 57056),

Gene: Devonte_67 Start: 56889, Stop: 57176, Start Num: 23

Candidate Starts for Devonte_67:

(2, 56667), (3, 56685), (4, 56697), (6, 56742), (17, 56877), (Start: 23 @56889 has 21 MA's), (26, 56907), (Start: 31 @56919 has 1 MA's), (Start: 34 @56928 has 14 MA's), (Start: 36 @56937 has 5 MA's), (56, 57081), (63, 57138),

Gene: Dingo_65 Start: 56457, Stop: 56636, Start Num: 46

Candidate Starts for Dingo_65:

(Start: 16 @56334 has 73 MA's), (Start: 33 @56388 has 27 MA's), (Start: 46 @56457 has 29 MA's), (52, 56499),

Gene: Dione_66 Start: 56518, Stop: 56790, Start Num: 19

Candidate Starts for Dione_66:

(Start: 19 @56518 has 102 MA's), (Start: 29 @56539 has 35 MA's), (Start: 33 @56548 has 27 MA's), (47, 56611), (51, 56638), (64, 56761),

Gene: DirtJuice_68 Start: 57097, Stop: 57399, Start Num: 16

Candidate Starts for DirtJuice_68:

(Start: 16 @57097 has 73 MA's), (Start: 33 @57151 has 27 MA's), (Start: 46 @57220 has 29 MA's), (52, 57262),

Gene: Doddsville_66 Start: 56854, Stop: 57156, Start Num: 16

Candidate Starts for Doddsville_66:

(Start: 16 @56854 has 73 MA's), (Start: 33 @56908 has 27 MA's), (Start: 46 @56977 has 29 MA's), (52, 57019),

Gene: DoesntMatter_65 Start: 56808, Stop: 57080, Start Num: 19

Candidate Starts for DoesntMatter_65:

(Start: 19 @56808 has 102 MA's), (Start: 29 @56829 has 35 MA's), (Start: 33 @56838 has 27 MA's), (47, 56901), (51, 56928), (64, 57051),

Gene: DonSanchon_64 Start: 56612, Stop: 56791, Start Num: 46

Candidate Starts for DonSanchon_64:

(Start: 16 @56489 has 73 MA's), (Start: 33 @56543 has 27 MA's), (Start: 46 @56612 has 29 MA's), (52, 56654),

Gene: Donny_68 Start: 58302, Stop: 58586, Start Num: 22

Candidate Starts for Donny_68:

(Start: 22 @58302 has 4 MA's), (Start: 28 @58329 has 3 MA's), (Start: 33 @58338 has 27 MA's), (48, 58404), (56, 58482), (62, 58536), (64, 58551), (66, 58572),

Gene: DuchessDung_67 Start: 56370, Stop: 56672, Start Num: 16

Candidate Starts for DuchessDung_67:

(Start: 16 @56370 has 73 MA's), (Start: 33 @56424 has 27 MA's), (Start: 46 @56493 has 29 MA's), (52, 56535),

Gene: Duggie_68 Start: 57082, Stop: 57333, Start Num: 29

Candidate Starts for Duggie_68:

(Start: 29 @57082 has 35 MA's), (Start: 33 @57091 has 27 MA's), (51, 57181), (64, 57304),

Gene: Durga_70 Start: 57651, Stop: 57899, Start Num: 33

Candidate Starts for Durga_70:

(Start: 16 @57597 has 73 MA's), (Start: 33 @57651 has 27 MA's), (Start: 46 @57720 has 29 MA's), (52, 57762),

Gene: Eaglehorse_64 Start: 55458, Stop: 55718, Start Num: 29

Candidate Starts for Eaglehorse_64:

(Start: 29 @55458 has 35 MA's), (Start: 33 @55467 has 27 MA's), (Start: 42 @55512 has 4 MA's), (47, 55539), (51, 55566), (54, 55593), (58, 55635), (61, 55668), (63, 55677), (64, 55689),

Gene: EastView9101_68 Start: 58038, Stop: 58286, Start Num: 33

Candidate Starts for EastView9101_68:

(Start: 22 @58002 has 4 MA's), (Start: 28 @58029 has 3 MA's), (Start: 33 @58038 has 27 MA's), (48, 58104), (56, 58182), (62, 58236), (66, 58272),

Gene: Emiris_69 Start: 57560, Stop: 57808, Start Num: 33

Candidate Starts for Emiris_69:

(Start: 16 @57506 has 73 MA's), (Start: 33 @57560 has 27 MA's), (Start: 46 @57629 has 29 MA's), (52, 57671),

Gene: EmpTee_67 Start: 57028, Stop: 57300, Start Num: 19

Candidate Starts for EmpTee_67:

(Start: 19 @57028 has 102 MA's), (Start: 29 @57049 has 35 MA's), (Start: 33 @57058 has 27 MA's), (47, 57121), (51, 57148), (64, 57271),

Gene: Eremos_67 Start: 57023, Stop: 57295, Start Num: 19

Candidate Starts for Eremos_67:

(Start: 19 @57023 has 102 MA's), (Start: 29 @57044 has 35 MA's), (Start: 33 @57053 has 27 MA's), (47, 57116), (51, 57143), (64, 57266),

Gene: Etaye_67 Start: 57703, Stop: 57951, Start Num: 33

Candidate Starts for Etaye_67:

(Start: 16 @57649 has 73 MA's), (Start: 33 @57703 has 27 MA's), (Start: 46 @57772 has 29 MA's), (52, 57814),

Gene: Fang_69 Start: 57339, Stop: 57641, Start Num: 16

Candidate Starts for Fang_69:

(Start: 16 @57339 has 73 MA's), (Start: 33 @57393 has 27 MA's), (Start: 46 @57462 has 29 MA's), (52, 57504),

Gene: Faze9_63 Start: 55651, Stop: 55857, Start Num: 42

Candidate Starts for Faze9_63:

(Start: 29 @55597 has 35 MA's), (Start: 33 @55606 has 27 MA's), (Start: 42 @55651 has 4 MA's), (47, 55678), (51, 55705), (54, 55732), (58, 55774), (61, 55807), (63, 55816), (64, 55828),

Gene: FluffyNinja_68 Start: 57071, Stop: 57373, Start Num: 16

Candidate Starts for FluffyNinja_68:

(Start: 16 @57071 has 73 MA's), (Start: 33 @57125 has 27 MA's), (Start: 46 @57194 has 29 MA's), (52, 57236),

Gene: Frankicide_66 Start: 56878, Stop: 57120, Start Num: 33

Candidate Starts for Frankicide_66:

(Start: 19 @56848 has 102 MA's), (Start: 29 @56869 has 35 MA's), (Start: 33 @56878 has 27 MA's), (51, 56968), (64, 57091),

Gene: FrenchFry_65 Start: 55583, Stop: 55843, Start Num: 29

Candidate Starts for FrenchFry_65:

(Start: 29 @55583 has 35 MA's), (Start: 33 @55592 has 27 MA's), (Start: 42 @55637 has 4 MA's), (47, 55664), (51, 55691), (54, 55718), (58, 55760), (61, 55793), (63, 55802), (64, 55814),

Gene: Freya_65 Start: 56508, Stop: 56780, Start Num: 19

Candidate Starts for Freya_65:

(Start: 19 @56508 has 102 MA's), (Start: 29 @56529 has 35 MA's), (Start: 33 @56538 has 27 MA's), (47, 56601), (51, 56628), (64, 56751),

Gene: FriarPreacher_66 Start: 56890, Stop: 57192, Start Num: 16

Candidate Starts for FriarPreacher_66:

(Start: 16 @56890 has 73 MA's), (Start: 33 @56944 has 27 MA's), (Start: 46 @57013 has 29 MA's), (52, 57055),

Gene: Fringe_72 Start: 57683, Stop: 57955, Start Num: 19

Candidate Starts for Fringe_72:

(Start: 19 @57683 has 102 MA's), (Start: 29 @57704 has 35 MA's), (Start: 33 @57713 has 27 MA's), (47, 57776), (51, 57803), (64, 57926),

Gene: FugateOSU_68 Start: 57843, Stop: 58145, Start Num: 16

Candidate Starts for FugateOSU_68:

(Start: 16 @57843 has 73 MA's), (Start: 33 @57897 has 27 MA's), (Start: 46 @57966 has 29 MA's), (52, 58008),

Gene: Gadget_69 Start: 57577, Stop: 57864, Start Num: 23

Candidate Starts for Gadget_69:

(2, 57355), (3, 57373), (4, 57385), (6, 57430), (17, 57565), (Start: 23 @57577 has 21 MA's), (26, 57595), (Start: 31 @57607 has 1 MA's), (Start: 34 @57616 has 14 MA's), (Start: 36 @57625 has 5 MA's), (56, 57769), (63, 57826),

Gene: Gareth_68 Start: 57304, Stop: 57576, Start Num: 19

Candidate Starts for Gareth_68:

(Start: 19 @57304 has 102 MA's), (Start: 29 @57325 has 35 MA's), (Start: 33 @57334 has 27 MA's), (47, 57397), (51, 57424), (64, 57547),

Gene: GeneCoco_68 Start: 57462, Stop: 57641, Start Num: 46

Candidate Starts for GeneCoco_68:

(Start: 16 @57339 has 73 MA's), (Start: 33 @57393 has 27 MA's), (Start: 46 @57462 has 29 MA's), (52, 57504),

Gene: Gervas_69 Start: 57701, Stop: 57958, Start Num: 31

Candidate Starts for Gervas_69:

(2, 57449), (3, 57467), (4, 57479), (6, 57524), (17, 57659), (Start: 23 @57671 has 21 MA's), (26, 57689), (Start: 31 @57701 has 1 MA's), (Start: 34 @57710 has 14 MA's), (Start: 36 @57719 has 5

MA's), (56, 57863), (63, 57920),

Gene: Giraffe_68 Start: 57299, Stop: 57571, Start Num: 19

Candidate Starts for Giraffe_68:

(Start: 19 @57299 has 102 MA's), (Start: 29 @57320 has 35 MA's), (Start: 33 @57329 has 27 MA's), (47, 57392), (51, 57419), (64, 57542),

Gene: Glass_65 Start: 55585, Stop: 55845, Start Num: 29

Candidate Starts for Glass_65:

(Start: 29 @55585 has 35 MA's), (Start: 33 @55594 has 27 MA's), (Start: 42 @55639 has 4 MA's), (47, 55666), (51, 55693), (54, 55720), (58, 55762), (61, 55795), (63, 55804), (64, 55816),

Gene: GlenHope_69 Start: 57237, Stop: 57524, Start Num: 23

Candidate Starts for GlenHope_69:

(2, 57015), (3, 57033), (4, 57045), (6, 57090), (17, 57225), (Start: 23 @57237 has 21 MA's), (26, 57255), (Start: 31 @57267 has 1 MA's), (Start: 34 @57276 has 14 MA's), (Start: 36 @57285 has 5 MA's), (56, 57429), (63, 57486),

Gene: Godines_65 Start: 55844, Stop: 56104, Start Num: 29

Candidate Starts for Godines_65:

(Start: 29 @55844 has 35 MA's), (Start: 33 @55853 has 27 MA's), (Start: 42 @55898 has 4 MA's), (47, 55925), (51, 55952), (54, 55979), (58, 56021), (61, 56054), (63, 56063), (64, 56075),

Gene: Gophee_69 Start: 57290, Stop: 57562, Start Num: 19

Candidate Starts for Gophee_69:

(Start: 19 @57290 has 102 MA's), (Start: 29 @57311 has 35 MA's), (Start: 33 @57320 has 27 MA's), (47, 57383), (51, 57410), (64, 57533),

Gene: Grand2040_66 Start: 57405, Stop: 57584, Start Num: 46

Candidate Starts for Grand2040_66:

(Start: 16 @57282 has 73 MA's), (Start: 33 @57336 has 27 MA's), (Start: 46 @57405 has 29 MA's), (52, 57447),

Gene: Gyarad_0067 Start: 56782, Stop: 56961, Start Num: 46

Candidate Starts for Gyarad_0067:

(Start: 16 @56659 has 73 MA's), (Start: 33 @56713 has 27 MA's), (Start: 46 @56782 has 29 MA's), (52, 56824),

Gene: HSavage_66 Start: 56826, Stop: 57098, Start Num: 19

Candidate Starts for HSavage_66:

(Start: 19 @56826 has 102 MA's), (Start: 29 @56847 has 35 MA's), (Start: 33 @56856 has 27 MA's), (47, 56919), (51, 56946), (64, 57069),

Gene: Haimas_66 Start: 56790, Stop: 57092, Start Num: 16

Candidate Starts for Haimas_66:

(Start: 16 @56790 has 73 MA's), (Start: 33 @56844 has 27 MA's), (Start: 46 @56913 has 29 MA's), (52, 56955),

Gene: Haleema_67 Start: 56845, Stop: 57117, Start Num: 19

Candidate Starts for Haleema_67:

(Start: 19 @56845 has 102 MA's), (Start: 29 @56866 has 35 MA's), (Start: 33 @56875 has 27 MA's), (47, 56938), (51, 56965), (64, 57088),

Gene: Halfpint_68 Start: 57027, Stop: 57275, Start Num: 34

Candidate Starts for Halfpint_68:

(2, 56766), (3, 56784), (4, 56796), (6, 56841), (17, 56976), (Start: 23 @56988 has 21 MA's), (26, 57006), (Start: 31 @57018 has 1 MA's), (Start: 34 @57027 has 14 MA's), (Start: 36 @57036 has 5 MA's), (56, 57180), (63, 57237),

Gene: Hamish_65 Start: 56845, Stop: 57024, Start Num: 46

Candidate Starts for Hamish_65:

(Start: 16 @56722 has 73 MA's), (Start: 33 @56776 has 27 MA's), (Start: 46 @56845 has 29 MA's), (52, 56887),

Gene: Harvey_65 Start: 56819, Stop: 57121, Start Num: 16

Candidate Starts for Harvey_65:

(Start: 16 @56819 has 73 MA's), (Start: 33 @56873 has 27 MA's), (Start: 46 @56942 has 29 MA's), (52, 56984),

Gene: HarveySr_67 Start: 56727, Stop: 56969, Start Num: 27

Candidate Starts for HarveySr_67:

(10, 56631), (13, 56685), (Start: 27 @56727 has 2 MA's), (Start: 34 @56739 has 14 MA's), (53, 56841), (56, 56877), (63, 56934),

Gene: Hashim76_72 Start: 58554, Stop: 58817, Start Num: 29

Candidate Starts for Hashim76_72:

(21, 58521), (Start: 29 @58554 has 35 MA's), (Start: 33 @58563 has 27 MA's), (53, 58665), (55, 58686), (67, 58797),

Gene: Heathcliff_68 Start: 57204, Stop: 57491, Start Num: 23

Candidate Starts for Heathcliff_68:

(2, 56982), (3, 57000), (4, 57012), (6, 57057), (17, 57192), (Start: 23 @57204 has 21 MA's), (26, 57222), (Start: 31 @57234 has 1 MA's), (Start: 34 @57243 has 14 MA's), (Start: 36 @57252 has 5 MA's), (56, 57396), (63, 57453),

Gene: Hedgerow_64 Start: 55555, Stop: 55815, Start Num: 29

Candidate Starts for Hedgerow_64:

(Start: 29 @55555 has 35 MA's), (Start: 33 @55564 has 27 MA's), (Start: 42 @55609 has 4 MA's), (47, 55636), (51, 55663), (54, 55690), (58, 55732), (61, 55765), (63, 55774), (64, 55786),

Gene: Held_66 Start: 56793, Stop: 57095, Start Num: 16

Candidate Starts for Held_66:

(Start: 16 @56793 has 73 MA's), (Start: 33 @56847 has 27 MA's), (Start: 46 @56916 has 29 MA's), (52, 56958),

Gene: HenryJackson_68 Start: 57328, Stop: 57600, Start Num: 19

Candidate Starts for HenryJackson_68:

(Start: 19 @57328 has 102 MA's), (Start: 29 @57349 has 35 MA's), (Start: 33 @57358 has 27 MA's), (47, 57421), (48, 57424), (51, 57448), (64, 57571),

Gene: Hertubise_67 Start: 57094, Stop: 57366, Start Num: 19

Candidate Starts for Hertubise_67:

(Start: 19 @57094 has 102 MA's), (Start: 29 @57115 has 35 MA's), (Start: 33 @57124 has 27 MA's), (47, 57187), (51, 57214), (64, 57337),

Gene: Hetaeria_67 Start: 57034, Stop: 57306, Start Num: 19

Candidate Starts for Hetaeria_67:

(Start: 19 @57034 has 102 MA's), (Start: 29 @57055 has 35 MA's), (Start: 33 @57064 has 27 MA's), (47, 57127), (51, 57154), (64, 57277),

Gene: HighStump_69 Start: 57296, Stop: 57598, Start Num: 16

Candidate Starts for HighStump_69:

(Start: 16 @57296 has 73 MA's), (Start: 33 @57350 has 27 MA's), (Start: 46 @57419 has 29 MA's), (52, 57461),

Gene: Holeinone_64 Start: 55443, Stop: 55703, Start Num: 29

Candidate Starts for Holeinone_64:

(Start: 29 @55443 has 35 MA's), (Start: 33 @55452 has 27 MA's), (Start: 42 @55497 has 4 MA's), (47, 55524), (51, 55551), (54, 55578), (58, 55620), (61, 55653), (63, 55662), (64, 55674),

Gene: Horchata_65 Start: 56937, Stop: 57116, Start Num: 46

Candidate Starts for Horchata_65:

(Start: 16 @56814 has 73 MA's), (Start: 33 @56868 has 27 MA's), (Start: 46 @56937 has 29 MA's), (52, 56979),

Gene: Hosp_059 Start: 54555, Stop: 54755, Start Num: 46

Candidate Starts for Hosp_059:

(Start: 33 @54504 has 27 MA's), (Start: 46 @54555 has 29 MA's), (47, 54558), (48, 54561), (50, 54573), (58, 54654),

Gene: ImtiyazSitla_68 Start: 57146, Stop: 57325, Start Num: 46

Candidate Starts for ImtiyazSitla_68:

(Start: 16 @57023 has 73 MA's), (Start: 33 @57077 has 27 MA's), (Start: 46 @57146 has 29 MA's), (52, 57188),

Gene: Indlovu_65 Start: 58320, Stop: 58526, Start Num: 38

Candidate Starts for Indlovu_65:

(Start: 28 @58278 has 3 MA's), (Start: 38 @58320 has 1 MA's), (Start: 46 @58353 has 29 MA's), (48, 58359), (50, 58371),

Gene: Inverness_66 Start: 56946, Stop: 57125, Start Num: 46

Candidate Starts for Inverness_66:

(Start: 16 @56823 has 73 MA's), (Start: 33 @56877 has 27 MA's), (Start: 46 @56946 has 29 MA's), (52, 56988),

Gene: Iridoclysis_67 Start: 57107, Stop: 57409, Start Num: 16

Candidate Starts for Iridoclysis_67:

(Start: 16 @57107 has 73 MA's), (Start: 33 @57161 has 27 MA's), (Start: 46 @57230 has 29 MA's), (52, 57272),

Gene: IsaacEli_69 Start: 57317, Stop: 57589, Start Num: 19

Candidate Starts for IsaacEli_69:

(Start: 19 @57317 has 102 MA's), (Start: 29 @57338 has 35 MA's), (Start: 33 @57347 has 27 MA's), (47, 57410), (51, 57437), (64, 57560),

Gene: ItsyBitsy1_63 Start: 55673, Stop: 55933, Start Num: 29

Candidate Starts for ItsyBitsy1_63:

(Start: 29 @55673 has 35 MA's), (Start: 33 @55682 has 27 MA's), (Start: 42 @55727 has 4 MA's), (47, 55754), (51, 55781), (54, 55808), (58, 55850), (61, 55883), (63, 55892), (64, 55904),

Gene: JDog_68 Start: 57338, Stop: 57610, Start Num: 19

Candidate Starts for JDog_68:

(Start: 19 @57338 has 102 MA's), (Start: 29 @57359 has 35 MA's), (Start: 33 @57368 has 27 MA's), (47, 57431), (51, 57458), (64, 57581),

Gene: JacAttac_68 Start: 56782, Stop: 57054, Start Num: 19

Candidate Starts for JacAttac_68:

(Start: 19 @56782 has 102 MA's), (Start: 29 @56803 has 35 MA's), (Start: 33 @56812 has 27 MA's), (47, 56875), (51, 56902), (64, 57025),

Gene: Jackstina_64 Start: 57129, Stop: 57416, Start Num: 23

Candidate Starts for Jackstina_64:

(2, 56907), (3, 56925), (4, 56937), (6, 56982), (17, 57117), (Start: 23 @57129 has 21 MA's), (26, 57147), (Start: 31 @57159 has 1 MA's), (Start: 34 @57168 has 14 MA's), (Start: 36 @57177 has 5 MA's), (56, 57321), (63, 57378),

Gene: JakeO_69 Start: 57084, Stop: 57335, Start Num: 29

Candidate Starts for JakeO_69:

(Start: 29 @57084 has 35 MA's), (Start: 33 @57093 has 27 MA's), (47, 57156), (51, 57183), (64, 57306),

Gene: JangoPhett_102 Start: 57123, Stop: 57395, Start Num: 19

Candidate Starts for JangoPhett_102:

(Start: 19 @57123 has 102 MA's), (Start: 29 @57144 has 35 MA's), (Start: 33 @57153 has 27 MA's), (47, 57216), (51, 57243), (64, 57366),

Gene: Jillium_68 Start: 57323, Stop: 57595, Start Num: 19

Candidate Starts for Jillium_68:

(Start: 19 @57323 has 102 MA's), (Start: 29 @57344 has 35 MA's), (Start: 33 @57353 has 27 MA's), (47, 57416), (51, 57443), (64, 57566),

Gene: Jolie1_061 Start: 56473, Stop: 56673, Start Num: 46

Candidate Starts for Jolie1_061:

(Start: 33 @56422 has 27 MA's), (Start: 46 @56473 has 29 MA's), (47, 56476), (48, 56479), (50, 56491), (58, 56572),

Gene: KLucky39_66 Start: 56669, Stop: 56941, Start Num: 19

Candidate Starts for KLucky39_66:

(Start: 19 @56669 has 102 MA's), (Start: 29 @56690 has 35 MA's), (Start: 33 @56699 has 27 MA's), (47, 56762), (51, 56789), (64, 56912),

Gene: Kahve_68 Start: 57325, Stop: 57597, Start Num: 19

Candidate Starts for Kahve_68:

(Start: 19 @57325 has 102 MA's), (Start: 29 @57346 has 35 MA's), (Start: 33 @57355 has 27 MA's), (47, 57418), (48, 57421), (51, 57445), (64, 57568),

Gene: Kailash_66 Start: 57214, Stop: 57516, Start Num: 16

Candidate Starts for Kailash_66:

(Start: 16 @57214 has 73 MA's), (Start: 33 @57268 has 27 MA's), (Start: 46 @57337 has 29 MA's), (52, 57379),

Gene: Kaleb_65 Start: 55644, Stop: 55850, Start Num: 42

Candidate Starts for Kaleb_65:

(Start: 29 @55590 has 35 MA's), (Start: 33 @55599 has 27 MA's), (Start: 42 @55644 has 4 MA's), (47, 55671), (51, 55698), (54, 55725), (58, 55767), (61, 55800), (63, 55809), (64, 55821),

Gene: Kamiyu_68 Start: 57245, Stop: 57493, Start Num: 34

Candidate Starts for Kamiyu_68:

(2, 56984), (3, 57002), (4, 57014), (6, 57059), (17, 57194), (Start: 23 @57206 has 21 MA's), (26, 57224), (Start: 31 @57236 has 1 MA's), (Start: 34 @57245 has 14 MA's), (Start: 36 @57254 has 5 MA's), (56, 57398), (63, 57455),

Gene: Katniss_69 Start: 56765, Stop: 57037, Start Num: 19

Candidate Starts for Katniss_69:

(Start: 19 @56765 has 102 MA's), (Start: 29 @56786 has 35 MA's), (Start: 33 @56795 has 27 MA's), (47, 56858), (51, 56885), (64, 57008),

Gene: KayaCho_61 Start: 56583, Stop: 56783, Start Num: 46

Candidate Starts for KayaCho_61:

(Start: 33 @56532 has 27 MA's), (Start: 46 @56583 has 29 MA's), (47, 56586), (48, 56589), (50, 56601), (58, 56682),

Gene: Keitherie_70 Start: 57387, Stop: 57659, Start Num: 19

Candidate Starts for Keitherie_70:

(Start: 19 @57387 has 102 MA's), (Start: 29 @57408 has 35 MA's), (Start: 33 @57417 has 27 MA's), (47, 57480), (51, 57507), (64, 57630),

Gene: Kheth_64 Start: 55502, Stop: 55762, Start Num: 29

Candidate Starts for Kheth_64:

(Start: 29 @55502 has 35 MA's), (Start: 33 @55511 has 27 MA's), (Start: 42 @55556 has 4 MA's), (47, 55583), (51, 55610), (54, 55637), (58, 55679), (61, 55712), (63, 55721), (64, 55733),

Gene: Kikipoo_69 Start: 57317, Stop: 57589, Start Num: 19

Candidate Starts for Kikipoo_69:

(Start: 19 @57317 has 102 MA's), (Start: 29 @57338 has 35 MA's), (Start: 33 @57347 has 27 MA's), (47, 57410), (51, 57437), (64, 57560),

Gene: Kimbrough_69 Start: 57367, Stop: 57639, Start Num: 19

Candidate Starts for Kimbrough_69:

(Start: 19 @57367 has 102 MA's), (Start: 29 @57388 has 35 MA's), (Start: 33 @57397 has 27 MA's), (47, 57460), (51, 57487), (64, 57610),

Gene: KingTut_59 Start: 53521, Stop: 53823, Start Num: 16

Candidate Starts for KingTut_59:

(Start: 16 @53521 has 73 MA's), (Start: 33 @53575 has 27 MA's), (Start: 46 @53644 has 29 MA's), (52, 53686),

Gene: KingVeVeVe_66 Start: 56324, Stop: 56626, Start Num: 16

Candidate Starts for KingVeVeVe_66:

(Start: 16 @56324 has 73 MA's), (Start: 33 @56378 has 27 MA's), (Start: 46 @56447 has 29 MA's), (52, 56489),

Gene: KlimbOn_67 Start: 56826, Stop: 57098, Start Num: 19

Candidate Starts for KlimbOn_67:

(Start: 19 @56826 has 102 MA's), (Start: 29 @56847 has 35 MA's), (Start: 33 @56856 has 27 MA's), (47, 56919), (51, 56946), (64, 57069),

Gene: Kloppinator_68 Start: 56982, Stop: 57284, Start Num: 16

Candidate Starts for Kloppinator_68:

(Start: 16 @56982 has 73 MA's), (Start: 33 @57036 has 27 MA's), (Start: 46 @57105 has 29 MA's), (52, 57147),

Gene: Kronus_68 Start: 58341, Stop: 58589, Start Num: 34

Candidate Starts for Kronus_68:

(2, 58080), (3, 58098), (4, 58110), (6, 58155), (17, 58290), (Start: 23 @58302 has 21 MA's), (26, 58320), (Start: 31 @58332 has 1 MA's), (Start: 34 @58341 has 14 MA's), (Start: 36 @58350 has 5 MA's), (56, 58494), (63, 58551),

Gene: Kwadwo_67 Start: 56776, Stop: 57048, Start Num: 19

Candidate Starts for Kwadwo_67:

(Start: 19 @56776 has 102 MA's), (Start: 29 @56797 has 35 MA's), (Start: 33 @56806 has 27 MA's), (47, 56869), (51, 56896), (64, 57019),

Gene: Kwksand96_68 Start: 56903, Stop: 57205, Start Num: 16

Candidate Starts for Kwksand96_68:

(Start: 16 @56903 has 73 MA's), (Start: 33 @56957 has 27 MA's), (Start: 46 @57026 has 29 MA's), (52, 57068),

Gene: Labeouficaum_68 Start: 56891, Stop: 57193, Start Num: 16

Candidate Starts for Labeouficaum_68:

(Start: 16 @56891 has 73 MA's), (Start: 33 @56945 has 27 MA's), (Start: 46 @57014 has 29 MA's), (52, 57056),

Gene: Lars_65 Start: 55572, Stop: 55823, Start Num: 33

Candidate Starts for Lars_65:

(Start: 29 @55563 has 35 MA's), (Start: 33 @55572 has 27 MA's), (Start: 42 @55617 has 4 MA's), (47, 55644), (51, 55671), (54, 55698), (58, 55740), (61, 55773), (63, 55782), (64, 55794),

Gene: Lasso_67 Start: 57164, Stop: 57343, Start Num: 46

Candidate Starts for Lasso_67:

(Start: 16 @57041 has 73 MA's), (Start: 33 @57095 has 27 MA's), (Start: 46 @57164 has 29 MA's), (52, 57206),

Gene: Laurie_64 Start: 55263, Stop: 55523, Start Num: 29

Candidate Starts for Laurie_64:

(Start: 29 @55263 has 35 MA's), (Start: 33 @55272 has 27 MA's), (Start: 42 @55317 has 4 MA's), (47, 55344), (51, 55371), (54, 55398), (58, 55440), (61, 55473), (63, 55482), (64, 55494),

Gene: LeeLot_67 Start: 57397, Stop: 57699, Start Num: 16

Candidate Starts for LeeLot_67:

(Start: 16 @57397 has 73 MA's), (Start: 33 @57451 has 27 MA's), (Start: 46 @57520 has 29 MA's), (52, 57562),

Gene: Lego3393_65 Start: 57349, Stop: 57651, Start Num: 16

Candidate Starts for Lego3393_65:

(Start: 16 @57349 has 73 MA's), (Start: 33 @57403 has 27 MA's), (Start: 46 @57472 has 29 MA's), (52, 57514),

Gene: Legolas_69 Start: 57190, Stop: 57438, Start Num: 33
Candidate Starts for Legolas_69:
(Start: 16 @57136 has 73 MA's), (Start: 33 @57190 has 27 MA's), (Start: 46 @57259 has 29 MA's),
(52, 57301),

Gene: LemonSlice_68 Start: 56788, Stop: 57090, Start Num: 16
Candidate Starts for LemonSlice_68:
(Start: 16 @56788 has 73 MA's), (Start: 33 @56842 has 27 MA's), (Start: 46 @56911 has 29 MA's),
(52, 56953),

Gene: Lephleur_64 Start: 55428, Stop: 55688, Start Num: 29
Candidate Starts for Lephleur_64:
(Start: 29 @55428 has 35 MA's), (Start: 33 @55437 has 27 MA's), (Start: 42 @55482 has 4 MA's),
(47, 55509), (51, 55536), (54, 55563), (58, 55605), (61, 55638), (63, 55647), (64, 55659),

Gene: LestyG_66 Start: 56771, Stop: 57019, Start Num: 34
Candidate Starts for LestyG_66:
(2, 56510), (3, 56528), (4, 56540), (6, 56585), (17, 56720), (Start: 23 @56732 has 21 MA's), (26,
56750), (Start: 31 @56762 has 1 MA's), (Start: 34 @56771 has 14 MA's), (Start: 36 @56780 has 5
MA's), (56, 56924), (63, 56981),

Gene: LilMcDreamy_64 Start: 57921, Stop: 58187, Start Num: 29
Candidate Starts for LilMcDreamy_64:
(Start: 29 @57921 has 35 MA's), (Start: 33 @57930 has 27 MA's), (40, 57972), (45, 57993), (Start: 46
@57999 has 29 MA's), (53, 58047),

Gene: LittleMunchkin_63 Start: 53357, Stop: 53581, Start Num: 32
Candidate Starts for LittleMunchkin_63:
(Start: 32 @53357 has 1 MA's), (52, 53456), (55, 53483), (59, 53531), (60, 53543), (65, 53570),

Gene: LizLemon_64 Start: 55590, Stop: 55850, Start Num: 29
Candidate Starts for LizLemon_64:
(Start: 29 @55590 has 35 MA's), (Start: 33 @55599 has 27 MA's), (Start: 42 @55644 has 4 MA's),
(47, 55671), (51, 55698), (54, 55725), (58, 55767), (61, 55800), (63, 55809), (64, 55821),

Gene: Longacauda_69 Start: 57172, Stop: 57444, Start Num: 19
Candidate Starts for Longacauda_69:
(Start: 19 @57172 has 102 MA's), (Start: 29 @57193 has 35 MA's), (Start: 33 @57202 has 27 MA's),
(47, 57265), (51, 57292), (64, 57415),

Gene: LostAndPhound_67 Start: 57395, Stop: 57643, Start Num: 33
Candidate Starts for LostAndPhound_67:
(Start: 16 @57341 has 73 MA's), (Start: 33 @57395 has 27 MA's), (Start: 46 @57464 has 29 MA's),
(52, 57506),

Gene: LuckyMarjie_65 Start: 56527, Stop: 56799, Start Num: 19
Candidate Starts for LuckyMarjie_65:
(Start: 19 @56527 has 102 MA's), (Start: 29 @56548 has 35 MA's), (Start: 33 @56557 has 27 MA's),
(47, 56620), (51, 56647), (64, 56770),

Gene: Lulumae_65 Start: 56511, Stop: 56783, Start Num: 19
Candidate Starts for Lulumae_65:

(Start: 19 @56511 has 102 MA's), (Start: 29 @56532 has 35 MA's), (Start: 33 @56541 has 27 MA's), (47, 56604), (51, 56631), (64, 56754),

Gene: Lulwa_66 Start: 56139, Stop: 56381, Start Num: 33

Candidate Starts for Lulwa_66:

(Start: 19 @56109 has 102 MA's), (Start: 29 @56130 has 35 MA's), (Start: 33 @56139 has 27 MA's), (47, 56202), (51, 56229), (64, 56352),

Gene: Lumine_69 Start: 56995, Stop: 57267, Start Num: 19

Candidate Starts for Lumine_69:

(Start: 19 @56995 has 102 MA's), (Start: 29 @57016 has 35 MA's), (Start: 33 @57025 has 27 MA's), (47, 57088), (51, 57115), (64, 57238),

Gene: MRabcd_67 Start: 57164, Stop: 57412, Start Num: 33

Candidate Starts for MRabcd_67:

(Start: 16 @57110 has 73 MA's), (Start: 33 @57164 has 27 MA's), (Start: 46 @57233 has 29 MA's), (52, 57275),

Gene: Mag7_66 Start: 56812, Stop: 57060, Start Num: 33

Candidate Starts for Mag7_66:

(Start: 16 @56758 has 73 MA's), (Start: 33 @56812 has 27 MA's), (Start: 46 @56881 has 29 MA's), (52, 56923),

Gene: Mana_66 Start: 56783, Stop: 57085, Start Num: 16

Candidate Starts for Mana_66:

(Start: 16 @56783 has 73 MA's), (Start: 33 @56837 has 27 MA's), (Start: 46 @56906 has 29 MA's), (52, 56948),

Gene: Manad_67 Start: 57078, Stop: 57350, Start Num: 19

Candidate Starts for Manad_67:

(Start: 19 @57078 has 102 MA's), (Start: 29 @57099 has 35 MA's), (Start: 33 @57108 has 27 MA's), (47, 57171), (51, 57198), (64, 57321),

Gene: Marley1013_69 Start: 58226, Stop: 58441, Start Num: 36

Candidate Starts for Marley1013_69:

(9, 58082), (Start: 31 @58208 has 1 MA's), (Start: 34 @58217 has 14 MA's), (Start: 36 @58226 has 5 MA's), (47, 58277), (63, 58403),

Gene: Maru_67 Start: 57222, Stop: 57524, Start Num: 16

Candidate Starts for Maru_67:

(Start: 16 @57222 has 73 MA's), (Start: 33 @57276 has 27 MA's), (Start: 46 @57345 has 29 MA's), (52, 57387),

Gene: Maskar_68 Start: 57146, Stop: 57325, Start Num: 46

Candidate Starts for Maskar_68:

(Start: 16 @57023 has 73 MA's), (Start: 33 @57077 has 27 MA's), (Start: 46 @57146 has 29 MA's), (52, 57188),

Gene: MasterPo_65 Start: 55460, Stop: 55720, Start Num: 29

Candidate Starts for MasterPo_65:

(Start: 29 @55460 has 35 MA's), (Start: 33 @55469 has 27 MA's), (Start: 42 @55514 has 4 MA's), (47, 55541), (51, 55568), (54, 55595), (58, 55637), (61, 55670), (63, 55679), (64, 55691),

Gene: Matalotodo_67 Start: 57745, Stop: 57924, Start Num: 46
Candidate Starts for Matalotodo_67:
(Start: 16 @57622 has 73 MA's), (Start: 33 @57676 has 27 MA's), (Start: 46 @57745 has 29 MA's),
(52, 57787),

Gene: Mcshane_67 Start: 56789, Stop: 57061, Start Num: 19
Candidate Starts for Mcshane_67:
(Start: 19 @56789 has 102 MA's), (Start: 29 @56810 has 35 MA's), (Start: 33 @56819 has 27 MA's),
(47, 56882), (51, 56909), (64, 57032),

Gene: Mecca_68 Start: 57354, Stop: 57626, Start Num: 19
Candidate Starts for Mecca_68:
(Start: 19 @57354 has 102 MA's), (Start: 29 @57375 has 35 MA's), (Start: 33 @57384 has 27 MA's),
(47, 57447), (51, 57474), (64, 57597),

Gene: Megatron_68 Start: 57304, Stop: 57576, Start Num: 19
Candidate Starts for Megatron_68:
(Start: 19 @57304 has 102 MA's), (Start: 29 @57325 has 35 MA's), (Start: 33 @57334 has 27 MA's),
(47, 57397), (51, 57424), (64, 57547),

Gene: Melc17_65 Start: 57547, Stop: 57726, Start Num: 46
Candidate Starts for Melc17_65:
(14, 57415), (Start: 33 @57478 has 27 MA's), (Start: 46 @57547 has 29 MA's), (52, 57589),

Gene: MelsMeow_67 Start: 57199, Stop: 57378, Start Num: 46
Candidate Starts for MelsMeow_67:
(Start: 16 @57076 has 73 MA's), (Start: 33 @57130 has 27 MA's), (Start: 46 @57199 has 29 MA's),
(52, 57241),

Gene: Mesh1_68 Start: 57358, Stop: 57660, Start Num: 16
Candidate Starts for Mesh1_68:
(Start: 16 @57358 has 73 MA's), (Start: 33 @57412 has 27 MA's), (Start: 46 @57481 has 29 MA's),
(52, 57523),

Gene: MichaelPhcott_66 Start: 56755, Stop: 57057, Start Num: 16
Candidate Starts for MichaelPhcott_66:
(Start: 16 @56755 has 73 MA's), (Start: 33 @56809 has 27 MA's), (Start: 46 @56878 has 29 MA's),
(52, 56920),

Gene: Mikota_65 Start: 56445, Stop: 56624, Start Num: 46
Candidate Starts for Mikota_65:
(Start: 16 @56322 has 73 MA's), (Start: 33 @56376 has 27 MA's), (Start: 46 @56445 has 29 MA's),
(52, 56487),

Gene: MiniBoss_65 Start: 56250, Stop: 56429, Start Num: 46
Candidate Starts for MiniBoss_65:
(Start: 16 @56127 has 73 MA's), (Start: 33 @56181 has 27 MA's), (Start: 46 @56250 has 29 MA's),
(52, 56292),

Gene: MitKao_67 Start: 56792, Stop: 57094, Start Num: 16
Candidate Starts for MitKao_67:
(Start: 16 @56792 has 73 MA's), (Start: 33 @56846 has 27 MA's), (Start: 46 @56915 has 29 MA's),
(52, 56957),

Gene: MmasiCarm_69 Start: 57696, Stop: 57944, Start Num: 34

Candidate Starts for MmasiCarm_69:

(2, 57435), (3, 57453), (4, 57465), (6, 57510), (17, 57645), (Start: 23 @57657 has 21 MA's), (26, 57675), (Start: 31 @57687 has 1 MA's), (Start: 34 @57696 has 14 MA's), (Start: 36 @57705 has 5 MA's), (56, 57849), (63, 57906),

Gene: Morgushi_66 Start: 56781, Stop: 57083, Start Num: 16

Candidate Starts for Morgushi_66:

(Start: 16 @56781 has 73 MA's), (Start: 33 @56835 has 27 MA's), (Start: 46 @56904 has 29 MA's), (52, 56946),

Gene: Mortcellus_68 Start: 58358, Stop: 58606, Start Num: 34

Candidate Starts for Mortcellus_68:

(2, 58097), (3, 58115), (4, 58127), (6, 58172), (17, 58307), (Start: 23 @58319 has 21 MA's), (26, 58337), (Start: 31 @58349 has 1 MA's), (Start: 34 @58358 has 14 MA's), (Start: 36 @58367 has 5 MA's), (56, 58511), (63, 58568),

Gene: Morty_69 Start: 57318, Stop: 57590, Start Num: 19

Candidate Starts for Morty_69:

(Start: 19 @57318 has 102 MA's), (Start: 29 @57339 has 35 MA's), (Start: 33 @57348 has 27 MA's), (47, 57411), (51, 57438), (64, 57561),

Gene: Mosaic_65 Start: 56787, Stop: 57089, Start Num: 16

Candidate Starts for Mosaic_65:

(14, 56778), (Start: 16 @56787 has 73 MA's), (Start: 33 @56841 has 27 MA's), (Start: 46 @56910 has 29 MA's), (52, 56952),

Gene: Mulan_67 Start: 57021, Stop: 57323, Start Num: 16

Candidate Starts for Mulan_67:

(Start: 16 @57021 has 73 MA's), (Start: 33 @57075 has 27 MA's), (Start: 46 @57144 has 29 MA's), (52, 57186),

Gene: Murdoc_65 Start: 57070, Stop: 57372, Start Num: 16

Candidate Starts for Murdoc_65:

(Start: 16 @57070 has 73 MA's), (Start: 33 @57124 has 27 MA's), (Start: 46 @57193 has 29 MA's), (52, 57235),

Gene: Mutante_68 Start: 56801, Stop: 57073, Start Num: 19

Candidate Starts for Mutante_68:

(Start: 19 @56801 has 102 MA's), (Start: 29 @56822 has 35 MA's), (Start: 33 @56831 has 27 MA's), (47, 56894), (51, 56921), (64, 57044),

Gene: Nacho_0071 Start: 57839, Stop: 58111, Start Num: 19

Candidate Starts for Nacho_0071:

(Start: 19 @57839 has 102 MA's), (Start: 29 @57860 has 35 MA's), (Start: 33 @57869 has 27 MA's), (47, 57932), (51, 57959), (64, 58082),

Gene: Neos5_68 Start: 57688, Stop: 57903, Start Num: 36

Candidate Starts for Neos5_68:

(9, 57544), (Start: 31 @57670 has 1 MA's), (Start: 34 @57679 has 14 MA's), (Start: 36 @57688 has 5 MA's), (47, 57739), (63, 57865),

Gene: Newman_66 Start: 57116, Stop: 57388, Start Num: 19
Candidate Starts for Newman_66:
(Start: 19 @57116 has 102 MA's), (Start: 29 @57137 has 35 MA's), (Start: 33 @57146 has 27 MA's),
(47, 57209), (51, 57236), (64, 57359),

Gene: Nicole21_69 Start: 57080, Stop: 57352, Start Num: 19
Candidate Starts for Nicole21_69:
(Start: 19 @57080 has 102 MA's), (Start: 29 @57101 has 35 MA's), (Start: 33 @57110 has 27 MA's),
(47, 57173), (51, 57200), (64, 57323),

Gene: Nozo_68 Start: 58013, Stop: 58300, Start Num: 23
Candidate Starts for Nozo_68:
(2, 57791), (3, 57809), (4, 57821), (6, 57866), (17, 58001), (Start: 23 @58013 has 21 MA's), (26,
58031), (Start: 31 @58043 has 1 MA's), (Start: 34 @58052 has 14 MA's), (Start: 36 @58061 has 5
MA's), (56, 58205), (63, 58262),

Gene: Numberten_67 Start: 57024, Stop: 57296, Start Num: 19
Candidate Starts for Numberten_67:
(Start: 19 @57024 has 102 MA's), (Start: 29 @57045 has 35 MA's), (Start: 33 @57054 has 27 MA's),
(47, 57117), (51, 57144), (64, 57267),

Gene: Nyala_67 Start: 56799, Stop: 57071, Start Num: 19
Candidate Starts for Nyala_67:
(Start: 19 @56799 has 102 MA's), (Start: 29 @56820 has 35 MA's), (Start: 33 @56829 has 27 MA's),
(47, 56892), (51, 56919), (64, 57042),

Gene: OSmaximus_68 Start: 57554, Stop: 57850, Start Num: 16
Candidate Starts for OSmaximus_68:
(12, 57536), (Start: 16 @57554 has 73 MA's), (Start: 29 @57599 has 35 MA's), (Start: 33 @57608 has
27 MA's), (48, 57674), (64, 57821),

Gene: Obutu_70 Start: 57908, Stop: 58123, Start Num: 36
Candidate Starts for Obutu_70:
(9, 57764), (Start: 31 @57890 has 1 MA's), (Start: 34 @57899 has 14 MA's), (Start: 36 @57908 has 5
MA's), (47, 57959), (63, 58085),

Gene: Oline_67 Start: 56953, Stop: 57255, Start Num: 16
Candidate Starts for Oline_67:
(Start: 16 @56953 has 73 MA's), (Start: 33 @57007 has 27 MA's), (Start: 46 @57076 has 29 MA's),
(52, 57118),

Gene: OliverWalter_67 Start: 57124, Stop: 57396, Start Num: 19
Candidate Starts for OliverWalter_67:
(Start: 19 @57124 has 102 MA's), (Start: 29 @57145 has 35 MA's), (Start: 33 @57154 has 27 MA's),
(47, 57217), (51, 57244), (64, 57367),

Gene: Omniscient_69 Start: 57662, Stop: 57934, Start Num: 19
Candidate Starts for Omniscient_69:
(Start: 19 @57662 has 102 MA's), (Start: 29 @57683 has 35 MA's), (Start: 33 @57692 has 27 MA's),
(47, 57755), (51, 57782), (64, 57905),

Gene: Oosterbaan_67 Start: 57081, Stop: 57353, Start Num: 19
Candidate Starts for Oosterbaan_67:

(Start: 19 @57081 has 102 MA's), (Start: 29 @57102 has 35 MA's), (Start: 33 @57111 has 27 MA's), (47, 57174), (51, 57201), (64, 57324),

Gene: Opia_65 Start: 55480, Stop: 55740, Start Num: 29

Candidate Starts for Opia_65:

(Start: 29 @55480 has 35 MA's), (Start: 33 @55489 has 27 MA's), (Start: 42 @55534 has 4 MA's), (47, 55561), (51, 55588), (54, 55615), (58, 55657), (61, 55690), (63, 55699), (64, 55711),

Gene: OrangeOswald_68 Start: 57254, Stop: 57541, Start Num: 23

Candidate Starts for OrangeOswald_68:

(2, 57032), (3, 57050), (4, 57062), (6, 57107), (17, 57242), (Start: 23 @57254 has 21 MA's), (26, 57272), (Start: 31 @57284 has 1 MA's), (Start: 34 @57293 has 14 MA's), (Start: 36 @57302 has 5 MA's), (56, 57446), (63, 57503),

Gene: Orwigg_68 Start: 56723, Stop: 56995, Start Num: 19

Candidate Starts for Orwigg_68:

(Start: 19 @56723 has 102 MA's), (Start: 29 @56744 has 35 MA's), (Start: 33 @56753 has 27 MA's), (47, 56816), (51, 56843), (64, 56966),

Gene: PG1_67 Start: 57314, Stop: 57586, Start Num: 19

Candidate Starts for PG1_67:

(Start: 19 @57314 has 102 MA's), (Start: 29 @57335 has 35 MA's), (Start: 33 @57344 has 27 MA's), (47, 57407), (51, 57434), (64, 57557),

Gene: Phaedrus_63 Start: 56718, Stop: 56966, Start Num: 34

Candidate Starts for Phaedrus_63:

(2, 56457), (3, 56475), (4, 56487), (6, 56532), (17, 56667), (Start: 23 @56679 has 21 MA's), (26, 56697), (Start: 31 @56709 has 1 MA's), (Start: 34 @56718 has 14 MA's), (Start: 36 @56727 has 5 MA's), (56, 56871), (63, 56928),

Gene: Phamished_69 Start: 57004, Stop: 57306, Start Num: 16

Candidate Starts for Phamished_69:

(Start: 16 @57004 has 73 MA's), (Start: 33 @57058 has 27 MA's), (Start: 46 @57127 has 29 MA's), (52, 57169),

Gene: Phantasmagoria_63 Start: 55526, Stop: 55732, Start Num: 42

Candidate Starts for Phantasmagoria_63:

(Start: 29 @55472 has 35 MA's), (Start: 33 @55481 has 27 MA's), (Start: 42 @55526 has 4 MA's), (47, 55553), (51, 55580), (54, 55607), (58, 55649), (61, 55682), (63, 55691), (64, 55703),

Gene: Phareon_66 Start: 56635, Stop: 56814, Start Num: 46

Candidate Starts for Phareon_66:

(Start: 16 @56512 has 73 MA's), (Start: 33 @56566 has 27 MA's), (Start: 46 @56635 has 29 MA's), (52, 56677),

Gene: PhatCats2014_68 Start: 57319, Stop: 57591, Start Num: 19

Candidate Starts for PhatCats2014_68:

(Start: 19 @57319 has 102 MA's), (Start: 29 @57340 has 35 MA's), (Start: 33 @57349 has 27 MA's), (47, 57412), (51, 57439), (64, 57562),

Gene: PhatLouie_70 Start: 57338, Stop: 57610, Start Num: 19

Candidate Starts for PhatLouie_70:

(Start: 19 @57338 has 102 MA's), (Start: 29 @57359 has 35 MA's), (Start: 33 @57368 has 27 MA's), (47, 57431), (51, 57458), (64, 57581),

Gene: Phayeta_71 Start: 57812, Stop: 58027, Start Num: 36

Candidate Starts for Phayeta_71:

(9, 57668), (Start: 31 @57794 has 1 MA's), (Start: 34 @57803 has 14 MA's), (Start: 36 @57812 has 5 MA's), (47, 57863), (63, 57989),

Gene: Phelemich_64 Start: 58168, Stop: 58425, Start Num: 28

Candidate Starts for Phelemich_64:

(Start: 22 @58141 has 4 MA's), (Start: 28 @58168 has 3 MA's), (Start: 33 @58177 has 27 MA's), (Start: 46 @58237 has 29 MA's), (48, 58243), (52, 58279), (56, 58321), (62, 58375),

Gene: PhenghisKhan_68 Start: 56960, Stop: 57262, Start Num: 16

Candidate Starts for PhenghisKhan_68:

(Start: 16 @56960 has 73 MA's), (Start: 33 @57014 has 27 MA's), (Start: 46 @57083 has 29 MA's), (52, 57125),

Gene: Pherdinand_68 Start: 57073, Stop: 57375, Start Num: 16

Candidate Starts for Pherdinand_68:

(Start: 16 @57073 has 73 MA's), (Start: 33 @57127 has 27 MA's), (Start: 46 @57196 has 29 MA's), (52, 57238),

Gene: Phergie_68 Start: 56952, Stop: 57254, Start Num: 16

Candidate Starts for Phergie_68:

(Start: 16 @56952 has 73 MA's), (Start: 33 @57006 has 27 MA's), (Start: 46 @57075 has 29 MA's), (52, 57117),

Gene: Philly_67 Start: 57066, Stop: 57353, Start Num: 23

Candidate Starts for Philly_67:

(2, 56844), (3, 56862), (4, 56874), (6, 56919), (17, 57054), (Start: 23 @57066 has 21 MA's), (26, 57084), (Start: 31 @57096 has 1 MA's), (Start: 34 @57105 has 14 MA's), (Start: 36 @57114 has 5 MA's), (56, 57258), (63, 57315),

Gene: Phipps_67 Start: 56871, Stop: 57173, Start Num: 16

Candidate Starts for Phipps_67:

(Start: 16 @56871 has 73 MA's), (Start: 33 @56925 has 27 MA's), (Start: 46 @56994 has 29 MA's), (52, 57036),

Gene: Phleuron_66 Start: 56758, Stop: 57060, Start Num: 16

Candidate Starts for Phleuron_66:

(Start: 16 @56758 has 73 MA's), (Start: 33 @56812 has 27 MA's), (Start: 46 @56881 has 29 MA's), (52, 56923),

Gene: Phlyer_68 Start: 57962, Stop: 58249, Start Num: 23

Candidate Starts for Phlyer_68:

(2, 57740), (3, 57758), (4, 57770), (6, 57815), (17, 57950), (Start: 23 @57962 has 21 MA's), (26, 57980), (Start: 31 @57992 has 1 MA's), (Start: 34 @58001 has 14 MA's), (Start: 36 @58010 has 5 MA's), (56, 58154), (63, 58211),

Gene: PhrankReynolds_67 Start: 56957, Stop: 57259, Start Num: 16

Candidate Starts for PhrankReynolds_67:

(Start: 16 @56957 has 73 MA's), (Start: 33 @57011 has 27 MA's), (Start: 46 @57080 has 29 MA's), (52, 57122),

Gene: PhrodoBaggins_69 Start: 57177, Stop: 57479, Start Num: 16

Candidate Starts for PhrodoBaggins_69:

(Start: 16 @57177 has 73 MA's), (Start: 33 @57231 has 27 MA's), (Start: 46 @57300 has 29 MA's), (52, 57342),

Gene: Phunky_66 Start: 56822, Stop: 57094, Start Num: 19

Candidate Starts for Phunky_66:

(Start: 19 @56822 has 102 MA's), (Start: 29 @56843 has 35 MA's), (Start: 33 @56852 has 27 MA's), (47, 56915), (51, 56942), (64, 57065),

Gene: Piglet_0068 Start: 57291, Stop: 57563, Start Num: 19

Candidate Starts for Piglet_0068:

(Start: 19 @57291 has 102 MA's), (Start: 29 @57312 has 35 MA's), (Start: 33 @57321 has 27 MA's), (47, 57384), (51, 57411), (64, 57534),

Gene: PinheadLarry_67 Start: 57119, Stop: 57421, Start Num: 16

Candidate Starts for PinheadLarry_67:

(Start: 16 @57119 has 73 MA's), (Start: 33 @57173 has 27 MA's), (Start: 46 @57242 has 29 MA's), (52, 57284),

Gene: Pinkman_67 Start: 56895, Stop: 57197, Start Num: 16

Candidate Starts for Pinkman_67:

(Start: 16 @56895 has 73 MA's), (Start: 33 @56949 has 27 MA's), (Start: 46 @57018 has 29 MA's), (52, 57060),

Gene: Pipefish_71 Start: 58442, Stop: 58660, Start Num: 34

Candidate Starts for Pipefish_71:

(8, 58295), (15, 58382), (20, 58400), (Start: 34 @58442 has 14 MA's), (Start: 36 @58451 has 5 MA's), (44, 58487), (53, 58529), (56, 58565), (63, 58622),

Gene: Pipsqueak_65 Start: 56798, Stop: 57100, Start Num: 16

Candidate Starts for Pipsqueak_65:

(Start: 16 @56798 has 73 MA's), (Start: 33 @56852 has 27 MA's), (Start: 46 @56921 has 29 MA's), (52, 56963),

Gene: Placalicious_68 Start: 57839, Stop: 58141, Start Num: 16

Candidate Starts for Placalicious_68:

(Start: 16 @57839 has 73 MA's), (Start: 33 @57893 has 27 MA's), (Start: 46 @57962 has 29 MA's), (52, 58004),

Gene: Plmatters_66 Start: 56864, Stop: 57112, Start Num: 33

Candidate Starts for Plmatters_66:

(Start: 16 @56810 has 73 MA's), (Start: 33 @56864 has 27 MA's), (Start: 46 @56933 has 29 MA's), (52, 56975),

Gene: Podrick_67 Start: 56879, Stop: 57181, Start Num: 16

Candidate Starts for Podrick_67:

(Start: 16 @56879 has 73 MA's), (Start: 33 @56933 has 27 MA's), (Start: 46 @57002 has 29 MA's), (52, 57044),

Gene: Pops_66 Start: 56842, Stop: 57093, Start Num: 29

Candidate Starts for Pops_66:

(Start: 29 @56842 has 35 MA's), (Start: 33 @56851 has 27 MA's), (47, 56914), (51, 56941), (64, 57064),

Gene: Potter_65 Start: 56927, Stop: 57106, Start Num: 46

Candidate Starts for Potter_65:

(Start: 16 @56804 has 73 MA's), (Start: 33 @56858 has 27 MA's), (Start: 46 @56927 has 29 MA's), (52, 56969),

Gene: Prickles_69 Start: 57305, Stop: 57607, Start Num: 16

Candidate Starts for Prickles_69:

(Start: 16 @57305 has 73 MA's), (Start: 33 @57359 has 27 MA's), (Start: 46 @57428 has 29 MA's), (52, 57470),

Gene: ProfessorX_66 Start: 56815, Stop: 57087, Start Num: 19

Candidate Starts for ProfessorX_66:

(Start: 19 @56815 has 102 MA's), (Start: 29 @56836 has 35 MA's), (Start: 33 @56845 has 27 MA's), (47, 56908), (51, 56935), (64, 57058),

Gene: Puhltonio_66 Start: 57079, Stop: 57381, Start Num: 16

Candidate Starts for Puhltonio_66:

(Start: 16 @57079 has 73 MA's), (Start: 33 @57133 has 27 MA's), (Start: 46 @57202 has 29 MA's), (52, 57244),

Gene: QueenBeane_68 Start: 57139, Stop: 57390, Start Num: 29

Candidate Starts for QueenBeane_68:

(Start: 19 @57118 has 102 MA's), (Start: 29 @57139 has 35 MA's), (Start: 33 @57148 has 27 MA's), (47, 57211), (51, 57238), (64, 57361),

Gene: Quisquilliae_69 Start: 57079, Stop: 57351, Start Num: 19

Candidate Starts for Quisquilliae_69:

(Start: 19 @57079 has 102 MA's), (Start: 29 @57100 has 35 MA's), (Start: 33 @57109 has 27 MA's), (47, 57172), (51, 57199), (64, 57322),

Gene: Qyrzula_58 Start: 55591, Stop: 55851, Start Num: 29

Candidate Starts for Qyrzula_58:

(Start: 29 @55591 has 35 MA's), (Start: 33 @55600 has 27 MA's), (Start: 42 @55645 has 4 MA's), (47, 55672), (51, 55699), (54, 55726), (58, 55768), (61, 55801), (63, 55810), (64, 55822),

Gene: RagingRooster_67 Start: 56894, Stop: 57181, Start Num: 23

Candidate Starts for RagingRooster_67:

(2, 56672), (3, 56690), (4, 56702), (6, 56747), (17, 56882), (Start: 23 @56894 has 21 MA's), (26, 56912), (Start: 31 @56924 has 1 MA's), (Start: 34 @56933 has 14 MA's), (Start: 36 @56942 has 5 MA's), (56, 57086), (63, 57143),

Gene: Reprobate_65 Start: 58173, Stop: 58430, Start Num: 28

Candidate Starts for Reprobate_65:

(Start: 22 @58146 has 4 MA's), (Start: 28 @58173 has 3 MA's), (Start: 33 @58182 has 27 MA's), (Start: 46 @58242 has 29 MA's), (48, 58248), (52, 58284), (56, 58326), (62, 58380),

Gene: Rhinoforte_64 Start: 55513, Stop: 55773, Start Num: 29

Candidate Starts for Rhinoforte_64:

(Start: 29 @55513 has 35 MA's), (Start: 33 @55522 has 27 MA's), (Start: 42 @55567 has 4 MA's), (47, 55594), (51, 55621), (54, 55648), (58, 55690), (61, 55723), (63, 55732), (64, 55744),

Gene: Rich_66 Start: 59397, Stop: 59645, Start Num: 33

Candidate Starts for Rich_66:

(Start: 22 @59361 has 4 MA's), (Start: 28 @59388 has 3 MA's), (Start: 33 @59397 has 27 MA's), (48, 59463), (55, 59526), (56, 59541), (62, 59595), (66, 59631), (68, 59640),

Gene: Riggan_69 Start: 57111, Stop: 57383, Start Num: 19

Candidate Starts for Riggan_69:

(Start: 19 @57111 has 102 MA's), (Start: 29 @57132 has 35 MA's), (Start: 33 @57141 has 27 MA's), (47, 57204), (51, 57231), (64, 57354),

Gene: Rimu_71 Start: 57279, Stop: 57551, Start Num: 19

Candidate Starts for Rimu_71:

(Start: 19 @57279 has 102 MA's), (Start: 29 @57300 has 35 MA's), (Start: 33 @57309 has 27 MA's), (51, 57399), (64, 57522),

Gene: Rita1961_69 Start: 57612, Stop: 57899, Start Num: 23

Candidate Starts for Rita1961_69:

(2, 57390), (3, 57408), (4, 57420), (6, 57465), (17, 57600), (Start: 23 @57612 has 21 MA's), (26, 57630), (Start: 31 @57642 has 1 MA's), (Start: 34 @57651 has 14 MA's), (Start: 36 @57660 has 5 MA's), (56, 57804), (63, 57861),

Gene: Robyn_68 Start: 57384, Stop: 57656, Start Num: 19

Candidate Starts for Robyn_68:

(Start: 19 @57384 has 102 MA's), (Start: 29 @57405 has 35 MA's), (Start: 33 @57414 has 27 MA's), (47, 57477), (51, 57504), (64, 57627),

Gene: Roliet_65 Start: 56199, Stop: 56447, Start Num: 33

Candidate Starts for Roliet_65:

(Start: 16 @56145 has 73 MA's), (Start: 33 @56199 has 27 MA's), (Start: 46 @56268 has 29 MA's), (52, 56310),

Gene: RomaT_68 Start: 57813, Stop: 58100, Start Num: 23

Candidate Starts for RomaT_68:

(2, 57591), (3, 57609), (4, 57621), (6, 57666), (17, 57801), (Start: 23 @57813 has 21 MA's), (26, 57831), (Start: 31 @57843 has 1 MA's), (Start: 34 @57852 has 14 MA's), (Start: 36 @57861 has 5 MA's), (56, 58005), (63, 58062),

Gene: Roscoe_68 Start: 57258, Stop: 57530, Start Num: 19

Candidate Starts for Roscoe_68:

(Start: 19 @57258 has 102 MA's), (Start: 29 @57279 has 35 MA's), (Start: 33 @57288 has 27 MA's), (51, 57378), (64, 57501),

Gene: Rosebush_63 Start: 55576, Stop: 55836, Start Num: 29

Candidate Starts for Rosebush_63:

(Start: 29 @55576 has 35 MA's), (Start: 33 @55585 has 27 MA's), (Start: 42 @55630 has 4 MA's), (47, 55657), (51, 55684), (54, 55711), (58, 55753), (61, 55786), (63, 55795), (64, 55807),

Gene: Roy17_66 Start: 56511, Stop: 56783, Start Num: 19

Candidate Starts for Roy17_66:

(Start: 19 @56511 has 102 MA's), (Start: 29 @56532 has 35 MA's), (Start: 33 @56541 has 27 MA's), (47, 56604), (51, 56631), (64, 56754),

Gene: SDcharge11_67 Start: 56317, Stop: 56619, Start Num: 16

Candidate Starts for SDcharge11_67:

(Start: 16 @56317 has 73 MA's), (Start: 33 @56371 has 27 MA's), (Start: 46 @56440 has 29 MA's), (52, 56482),

Gene: Sabella_64 Start: 55412, Stop: 55672, Start Num: 29

Candidate Starts for Sabella_64:

(Start: 29 @55412 has 35 MA's), (Start: 33 @55421 has 27 MA's), (Start: 42 @55466 has 4 MA's), (47, 55493), (51, 55520), (54, 55547), (58, 55589), (61, 55622), (63, 55631), (64, 55643),

Gene: Saguaro_64 Start: 57561, Stop: 57827, Start Num: 28

Candidate Starts for Saguaro_64:

(24, 57552), (Start: 28 @57561 has 3 MA's), (47, 57630), (48, 57633), (49, 57639), (50, 57645), (57, 57720),

Gene: Samaymay_68 Start: 57118, Stop: 57390, Start Num: 19

Candidate Starts for Samaymay_68:

(Start: 19 @57118 has 102 MA's), (Start: 29 @57139 has 35 MA's), (Start: 33 @57148 has 27 MA's), (47, 57211), (51, 57238), (64, 57361),

Gene: SassyCat97_66 Start: 56794, Stop: 57096, Start Num: 16

Candidate Starts for SassyCat97_66:

(Start: 16 @56794 has 73 MA's), (Start: 33 @56848 has 27 MA's), (Start: 46 @56917 has 29 MA's), (52, 56959),

Gene: Schadenfreude_68 Start: 56686, Stop: 56958, Start Num: 19

Candidate Starts for Schadenfreude_68:

(Start: 19 @56686 has 102 MA's), (Start: 29 @56707 has 35 MA's), (Start: 33 @56716 has 27 MA's), (47, 56779), (51, 56806), (64, 56929),

Gene: Scoot17C_68 Start: 56745, Stop: 57017, Start Num: 19

Candidate Starts for Scoot17C_68:

(Start: 19 @56745 has 102 MA's), (Start: 29 @56766 has 35 MA's), (Start: 33 @56775 has 27 MA's), (47, 56838), (51, 56865), (64, 56988),

Gene: Scrick_67 Start: 56929, Stop: 57108, Start Num: 46

Candidate Starts for Scrick_67:

(Start: 16 @56806 has 73 MA's), (Start: 33 @56860 has 27 MA's), (Start: 46 @56929 has 29 MA's), (52, 56971),

Gene: Serendipitous_65 Start: 57769, Stop: 58026, Start Num: 33

Candidate Starts for Serendipitous_65:

(11, 57688), (30, 57763), (Start: 33 @57769 has 27 MA's), (54, 57895), (56, 57922), (62, 57976),

Gene: Serendipity_67 Start: 57100, Stop: 57372, Start Num: 19

Candidate Starts for Serendipity_67:

(Start: 19 @57100 has 102 MA's), (Start: 29 @57121 has 35 MA's), (Start: 33 @57130 has 27 MA's), (47, 57193), (51, 57220), (64, 57343),

Gene: Serpentine_0068 Start: 57183, Stop: 57455, Start Num: 19

Candidate Starts for Serpentine_0068:

(Start: 19 @57183 has 102 MA's), (Start: 29 @57204 has 35 MA's), (Start: 33 @57213 has 27 MA's), (47, 57276), (51, 57303), (64, 57426),

Gene: Sheila_64 Start: 56299, Stop: 56478, Start Num: 46

Candidate Starts for Sheila_64:

(Start: 16 @56176 has 73 MA's), (Start: 33 @56230 has 27 MA's), (Start: 46 @56299 has 29 MA's), (52, 56341),

Gene: ShiVal_66 Start: 56826, Stop: 57098, Start Num: 19

Candidate Starts for ShiVal_66:

(Start: 19 @56826 has 102 MA's), (Start: 29 @56847 has 35 MA's), (Start: 33 @56856 has 27 MA's), (47, 56919), (51, 56946), (64, 57069),

Gene: Sigman_68 Start: 56782, Stop: 57054, Start Num: 19

Candidate Starts for Sigman_68:

(Start: 19 @56782 has 102 MA's), (Start: 29 @56803 has 35 MA's), (Start: 33 @56812 has 27 MA's), (47, 56875), (51, 56902), (64, 57025),

Gene: Simielle_68 Start: 56783, Stop: 57055, Start Num: 19

Candidate Starts for Simielle_68:

(Start: 19 @56783 has 102 MA's), (Start: 29 @56804 has 35 MA's), (Start: 33 @56813 has 27 MA's), (47, 56876), (51, 56903), (64, 57026),

Gene: SirJeffery_66 Start: 58371, Stop: 58619, Start Num: 33

Candidate Starts for SirJeffery_66:

(Start: 22 @58335 has 4 MA's), (Start: 28 @58362 has 3 MA's), (Start: 33 @58371 has 27 MA's), (48, 58437), (56, 58515), (62, 58569), (64, 58584), (66, 58605),

Gene: Skippy_69 Start: 57036, Stop: 57308, Start Num: 19

Candidate Starts for Skippy_69:

(Start: 19 @57036 has 102 MA's), (Start: 29 @57057 has 35 MA's), (Start: 33 @57066 has 27 MA's), (47, 57129), (51, 57156), (64, 57279),

Gene: Slatt_68 Start: 57090, Stop: 57392, Start Num: 16

Candidate Starts for Slatt_68:

(Start: 16 @57090 has 73 MA's), (Start: 33 @57144 has 27 MA's), (Start: 46 @57213 has 29 MA's), (52, 57255),

Gene: SlippinJimmy_71 Start: 58709, Stop: 58924, Start Num: 36

Candidate Starts for SlippinJimmy_71:

(9, 58565), (Start: 31 @58691 has 1 MA's), (Start: 34 @58700 has 14 MA's), (Start: 36 @58709 has 5 MA's), (47, 58760), (63, 58886),

Gene: Soile_69 Start: 57332, Stop: 57604, Start Num: 19

Candidate Starts for Soile_69:

(Start: 19 @57332 has 102 MA's), (Start: 29 @57353 has 35 MA's), (Start: 33 @57362 has 27 MA's), (51, 57452), (64, 57575),

Gene: Solosis_66 Start: 56843, Stop: 57091, Start Num: 33

Candidate Starts for Solosis_66:

(Start: 16 @56789 has 73 MA's), (Start: 33 @56843 has 27 MA's), (Start: 46 @56912 has 29 MA's), (52, 56954),

Gene: Sophia_66 Start: 56836, Stop: 57084, Start Num: 33
Candidate Starts for Sophia_66:
(Start: 16 @56782 has 73 MA's), (Start: 33 @56836 has 27 MA's), (Start: 46 @56905 has 29 MA's),
(52, 56947),

Gene: Soto_65 Start: 56349, Stop: 56651, Start Num: 16
Candidate Starts for Soto_65:
(Start: 16 @56349 has 73 MA's), (Start: 33 @56403 has 27 MA's), (Start: 46 @56472 has 29 MA's),
(52, 56514),

Gene: Spartan300_67 Start: 57023, Stop: 57295, Start Num: 19
Candidate Starts for Spartan300_67:
(Start: 19 @57023 has 102 MA's), (Start: 29 @57044 has 35 MA's), (Start: 33 @57053 has 27 MA's),
(47, 57116), (51, 57143), (64, 57266),

Gene: Squid_67 Start: 57082, Stop: 57384, Start Num: 16
Candidate Starts for Squid_67:
(Start: 16 @57082 has 73 MA's), (Start: 33 @57136 has 27 MA's), (Start: 46 @57205 has 29 MA's),
(52, 57247),

Gene: Squiggle_67 Start: 56801, Stop: 57103, Start Num: 16
Candidate Starts for Squiggle_67:
(Start: 16 @56801 has 73 MA's), (Start: 33 @56855 has 27 MA's), (Start: 46 @56924 has 29 MA's),
(52, 56966),

Gene: Struggle_68 Start: 56927, Stop: 57169, Start Num: 33
Candidate Starts for Struggle_68:
(Start: 29 @56918 has 35 MA's), (Start: 33 @56927 has 27 MA's), (47, 56990), (51, 57017), (64,
57140),

Gene: Suffolk_66 Start: 56596, Stop: 56868, Start Num: 19
Candidate Starts for Suffolk_66:
(Start: 19 @56596 has 102 MA's), (Start: 29 @56617 has 35 MA's), (Start: 33 @56626 has 27 MA's),
(47, 56689), (51, 56716), (64, 56839),

Gene: Suigeneris_68 Start: 58477, Stop: 58761, Start Num: 22
Candidate Starts for Suigeneris_68:
(Start: 22 @58477 has 4 MA's), (Start: 28 @58504 has 3 MA's), (Start: 33 @58513 has 27 MA's), (48,
58579), (56, 58657), (62, 58711), (64, 58726), (66, 58747),

Gene: Surely_68 Start: 57426, Stop: 57674, Start Num: 33
Candidate Starts for Surely_68:
(Start: 16 @57372 has 73 MA's), (Start: 33 @57426 has 27 MA's), (Start: 46 @57495 has 29 MA's),
(52, 57537),

Gene: Swiphy_72 Start: 57338, Stop: 57610, Start Num: 19
Candidate Starts for Swiphy_72:
(Start: 19 @57338 has 102 MA's), (Start: 29 @57359 has 35 MA's), (Start: 33 @57368 has 27 MA's),
(47, 57431), (51, 57458), (64, 57581),

Gene: Swish_68 Start: 57058, Stop: 57360, Start Num: 16
Candidate Starts for Swish_68:

(Start: 16 @57058 has 73 MA's), (Start: 33 @57112 has 27 MA's), (Start: 46 @57181 has 29 MA's), (52, 57223),

Gene: SynergyX_68 Start: 57251, Stop: 57538, Start Num: 23

Candidate Starts for SynergyX_68:

(2, 57029), (3, 57047), (4, 57059), (6, 57104), (17, 57239), (Start: 23 @57251 has 21 MA's), (26, 57269), (Start: 31 @57281 has 1 MA's), (Start: 34 @57290 has 14 MA's), (Start: 36 @57299 has 5 MA's), (56, 57443), (63, 57500),

Gene: TA17A_64 Start: 55472, Stop: 55678, Start Num: 42

Candidate Starts for TA17A_64:

(Start: 29 @55418 has 35 MA's), (Start: 33 @55427 has 27 MA's), (Start: 42 @55472 has 4 MA's), (47, 55499), (51, 55526), (54, 55553), (58, 55595), (61, 55628), (63, 55637), (64, 55649),

Gene: TallGrassMM_66 Start: 56698, Stop: 57000, Start Num: 16

Candidate Starts for TallGrassMM_66:

(Start: 16 @56698 has 73 MA's), (Start: 33 @56752 has 27 MA's), (Start: 46 @56821 has 29 MA's), (52, 56863),

Gene: Telesworld_66 Start: 56912, Stop: 57184, Start Num: 19

Candidate Starts for Telesworld_66:

(Start: 19 @56912 has 102 MA's), (Start: 29 @56933 has 35 MA's), (Start: 33 @56942 has 27 MA's), (47, 57005), (51, 57032), (64, 57155),

Gene: Thonko_67 Start: 56230, Stop: 56466, Start Num: 37

Candidate Starts for Thonko_67:

(1, 55804), (5, 55999), (7, 56032), (18, 56158), (25, 56191), (Start: 28 @56197 has 3 MA's), (Start: 37 @56230 has 1 MA's), (43, 56260), (53, 56326), (55, 56347), (56, 56362),

Gene: Thora_66 Start: 57138, Stop: 57440, Start Num: 16

Candidate Starts for Thora_66:

(Start: 16 @57138 has 73 MA's), (Start: 33 @57192 has 27 MA's), (Start: 46 @57261 has 29 MA's), (52, 57303),

Gene: ThreeOh3D2_69 Start: 57310, Stop: 57582, Start Num: 19

Candidate Starts for ThreeOh3D2_69:

(Start: 19 @57310 has 102 MA's), (Start: 29 @57331 has 35 MA's), (Start: 33 @57340 has 27 MA's), (47, 57403), (51, 57430), (64, 57553),

Gene: Timmi_67 Start: 56794, Stop: 57066, Start Num: 19

Candidate Starts for Timmi_67:

(Start: 19 @56794 has 102 MA's), (Start: 29 @56815 has 35 MA's), (Start: 33 @56824 has 27 MA's), (47, 56887), (51, 56914), (64, 57037),

Gene: Tinciduntolum_65 Start: 55579, Stop: 55839, Start Num: 29

Candidate Starts for Tinciduntolum_65:

(Start: 29 @55579 has 35 MA's), (Start: 33 @55588 has 27 MA's), (Start: 42 @55633 has 4 MA's), (51, 55687), (54, 55714), (58, 55756), (61, 55789), (63, 55798), (64, 55810),

Gene: TomBombadil_68 Start: 57410, Stop: 57658, Start Num: 33

Candidate Starts for TomBombadil_68:

(Start: 16 @57356 has 73 MA's), (Start: 33 @57410 has 27 MA's), (Start: 46 @57479 has 29 MA's), (52, 57521),

Gene: Tomlarah_69 Start: 57647, Stop: 57919, Start Num: 19

Candidate Starts for Tomlarah_69:

(Start: 19 @57647 has 102 MA's), (Start: 29 @57668 has 35 MA's), (Start: 33 @57677 has 27 MA's), (47, 57740), (51, 57767), (64, 57890),

Gene: Toni_68 Start: 57239, Stop: 57511, Start Num: 19

Candidate Starts for Toni_68:

(Start: 19 @57239 has 102 MA's), (Start: 29 @57260 has 35 MA's), (Start: 33 @57269 has 27 MA's), (47, 57332), (51, 57359), (64, 57482),

Gene: Tooj_66 Start: 56464, Stop: 56736, Start Num: 19

Candidate Starts for Tooj_66:

(Start: 19 @56464 has 102 MA's), (Start: 29 @56485 has 35 MA's), (Start: 33 @56494 has 27 MA's), (47, 56557), (51, 56584), (64, 56707),

Gene: Tres_64 Start: 55433, Stop: 55693, Start Num: 29

Candidate Starts for Tres_64:

(Start: 29 @55433 has 35 MA's), (Start: 33 @55442 has 27 MA's), (Start: 42 @55487 has 4 MA's), (47, 55514), (51, 55541), (54, 55568), (58, 55610), (61, 55643), (63, 55652), (64, 55664),

Gene: True_66 Start: 56803, Stop: 57075, Start Num: 19

Candidate Starts for True_66:

(Start: 19 @56803 has 102 MA's), (Start: 29 @56824 has 35 MA's), (Start: 33 @56833 has 27 MA's), (47, 56896), (51, 56923), (64, 57046),

Gene: Trypo_69 Start: 57523, Stop: 57825, Start Num: 16

Candidate Starts for Trypo_69:

(Start: 16 @57523 has 73 MA's), (Start: 33 @57577 has 27 MA's), (Start: 46 @57646 has 29 MA's), (52, 57688),

Gene: Tydolla_65 Start: 57176, Stop: 57418, Start Num: 27

Candidate Starts for Tydolla_65:

(10, 57080), (13, 57134), (Start: 27 @57176 has 2 MA's), (Start: 34 @57188 has 14 MA's), (53, 57290), (56, 57326), (63, 57383),

Gene: TyrionL_68 Start: 56891, Stop: 57193, Start Num: 16

Candidate Starts for TyrionL_68:

(Start: 16 @56891 has 73 MA's), (Start: 33 @56945 has 27 MA's), (Start: 46 @57014 has 29 MA's), (52, 57056),

Gene: UncleHowie_65 Start: 56493, Stop: 56795, Start Num: 16

Candidate Starts for UncleHowie_65:

(Start: 16 @56493 has 73 MA's), (Start: 33 @56547 has 27 MA's), (Start: 46 @56616 has 29 MA's), (52, 56658),

Gene: Usavi_69 Start: 57492, Stop: 57734, Start Num: 33

Candidate Starts for Usavi_69:

(Start: 19 @57462 has 102 MA's), (Start: 29 @57483 has 35 MA's), (Start: 33 @57492 has 27 MA's), (47, 57555), (51, 57582), (64, 57705),

Gene: Vaishali24_68 Start: 57154, Stop: 57405, Start Num: 29

Candidate Starts for Vaishali24_68:

(Start: 19 @57133 has 102 MA's), (Start: 29 @57154 has 35 MA's), (Start: 33 @57163 has 27 MA's), (47, 57226), (51, 57253), (55, 57292), (64, 57376),

Gene: Valjean_67 Start: 57033, Stop: 57305, Start Num: 19

Candidate Starts for Valjean_67:

(Start: 19 @57033 has 102 MA's), (Start: 29 @57054 has 35 MA's), (Start: 33 @57063 has 27 MA's), (47, 57126), (51, 57153), (64, 57276),

Gene: Vaticameos_65 Start: 55337, Stop: 55609, Start Num: 19

Candidate Starts for Vaticameos_65:

(Start: 19 @55337 has 102 MA's), (Start: 29 @55358 has 35 MA's), (Start: 33 @55367 has 27 MA's), (47, 55430), (51, 55457), (64, 55580),

Gene: Veritas_67 Start: 57024, Stop: 57272, Start Num: 33

Candidate Starts for Veritas_67:

(Start: 16 @56970 has 73 MA's), (Start: 33 @57024 has 27 MA's), (Start: 46 @57093 has 29 MA's), (52, 57135),

Gene: Virapocalypse_69 Start: 57132, Stop: 57404, Start Num: 19

Candidate Starts for Virapocalypse_69:

(Start: 19 @57132 has 102 MA's), (Start: 29 @57153 has 35 MA's), (Start: 33 @57162 has 27 MA's), (47, 57225), (51, 57252), (64, 57375),

Gene: Vista_66 Start: 56794, Stop: 57096, Start Num: 16

Candidate Starts for Vista_66:

(Start: 16 @56794 has 73 MA's), (Start: 33 @56848 has 27 MA's), (Start: 46 @56917 has 29 MA's), (52, 56959),

Gene: Vivaldi_68 Start: 57255, Stop: 57557, Start Num: 16

Candidate Starts for Vivaldi_68:

(Start: 16 @57255 has 73 MA's), (Start: 33 @57309 has 27 MA's), (Start: 46 @57378 has 29 MA's), (52, 57420),

Gene: Vortex_67 Start: 57078, Stop: 57380, Start Num: 16

Candidate Starts for Vortex_67:

(Start: 16 @57078 has 73 MA's), (Start: 33 @57132 has 27 MA's), (Start: 46 @57201 has 29 MA's), (52, 57243),

Gene: Wallhey_68 Start: 56955, Stop: 57203, Start Num: 33

Candidate Starts for Wallhey_68:

(Start: 16 @56901 has 73 MA's), (Start: 33 @56955 has 27 MA's), (Start: 46 @57024 has 29 MA's), (52, 57066),

Gene: Waterdiva_68 Start: 57166, Stop: 57438, Start Num: 19

Candidate Starts for Waterdiva_68:

(Start: 19 @57166 has 102 MA's), (Start: 29 @57187 has 35 MA's), (Start: 33 @57196 has 27 MA's), (47, 57259), (51, 57286), (64, 57409),

Gene: Weher20_65 Start: 57467, Stop: 57715, Start Num: 33

Candidate Starts for Weher20_65:

(14, 57404), (Start: 33 @57467 has 27 MA's), (Start: 46 @57536 has 29 MA's), (52, 57578),

Gene: West99_64 Start: 55606, Stop: 55866, Start Num: 29

Candidate Starts for West99_64:

(Start: 29 @55606 has 35 MA's), (Start: 33 @55615 has 27 MA's), (Start: 42 @55660 has 4 MA's), (47, 55687), (51, 55714), (54, 55741), (58, 55783), (61, 55816), (63, 55825), (64, 55837),

Gene: Windsor_68 Start: 57353, Stop: 57625, Start Num: 19

Candidate Starts for Windsor_68:

(Start: 19 @57353 has 102 MA's), (Start: 29 @57374 has 35 MA's), (Start: 33 @57383 has 27 MA's), (47, 57446), (51, 57473), (64, 57596),

Gene: Xavier_67 Start: 56794, Stop: 57066, Start Num: 19

Candidate Starts for Xavier_67:

(Start: 19 @56794 has 102 MA's), (Start: 29 @56815 has 35 MA's), (Start: 33 @56824 has 27 MA's), (47, 56887), (51, 56914), (64, 57037),

Gene: Yahalom_66 Start: 57095, Stop: 57343, Start Num: 34

Candidate Starts for Yahalom_66:

(2, 56834), (3, 56852), (4, 56864), (6, 56909), (17, 57044), (Start: 23 @57056 has 21 MA's), (26, 57074), (Start: 31 @57086 has 1 MA's), (Start: 34 @57095 has 14 MA's), (Start: 36 @57104 has 5 MA's), (56, 57248), (63, 57305),

Gene: Yinz_68 Start: 57121, Stop: 57408, Start Num: 23

Candidate Starts for Yinz_68:

(2, 56899), (3, 56917), (4, 56929), (6, 56974), (17, 57109), (Start: 23 @57121 has 21 MA's), (26, 57139), (Start: 31 @57151 has 1 MA's), (Start: 34 @57160 has 14 MA's), (Start: 36 @57169 has 5 MA's), (56, 57313), (63, 57370),

Gene: Yoshand_68 Start: 57071, Stop: 57373, Start Num: 16

Candidate Starts for Yoshand_68:

(Start: 16 @57071 has 73 MA's), (Start: 33 @57125 has 27 MA's), (Start: 46 @57194 has 29 MA's), (52, 57236),

Gene: YouGoGlencoco_68 Start: 57137, Stop: 57385, Start Num: 33

Candidate Starts for YouGoGlencoco_68:

(Start: 16 @57083 has 73 MA's), (Start: 33 @57137 has 27 MA's), (Start: 46 @57206 has 29 MA's), (52, 57248),

Gene: Zaider_69 Start: 57303, Stop: 57545, Start Num: 33

Candidate Starts for Zaider_69:

(Start: 19 @57273 has 102 MA's), (Start: 29 @57294 has 35 MA's), (Start: 33 @57303 has 27 MA's), (47, 57366), (51, 57393), (64, 57516),

Gene: Zelda_68 Start: 57477, Stop: 57725, Start Num: 33

Candidate Starts for Zelda_68:

(Start: 16 @57423 has 73 MA's), (Start: 33 @57477 has 27 MA's), (Start: 46 @57546 has 29 MA's), (52, 57588),

Gene: Zonia_68 Start: 57352, Stop: 57654, Start Num: 16

Candidate Starts for Zonia_68:

(Start: 16 @57352 has 73 MA's), (Start: 33 @57406 has 27 MA's), (Start: 46 @57475 has 29 MA's), (52, 57517),