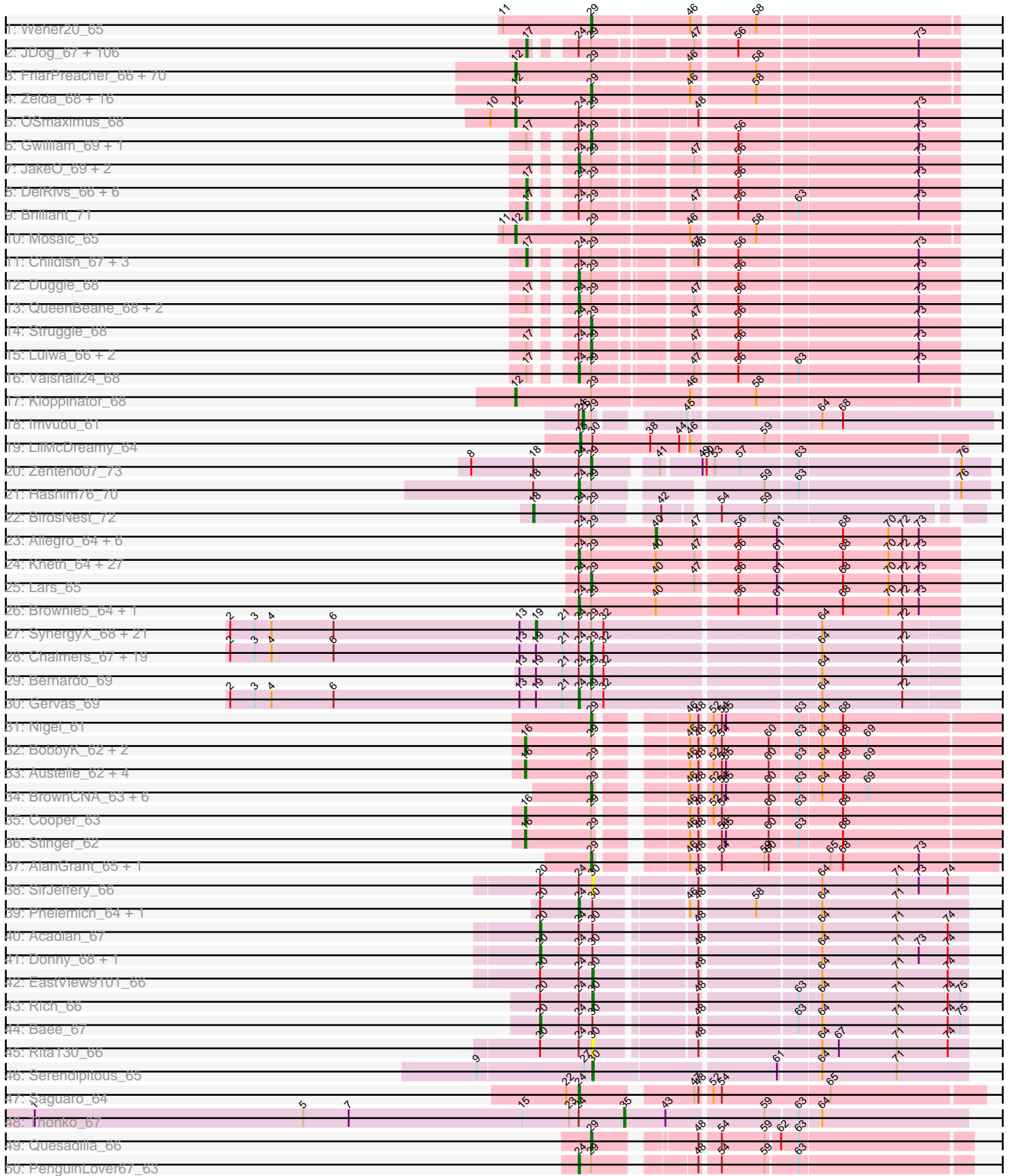
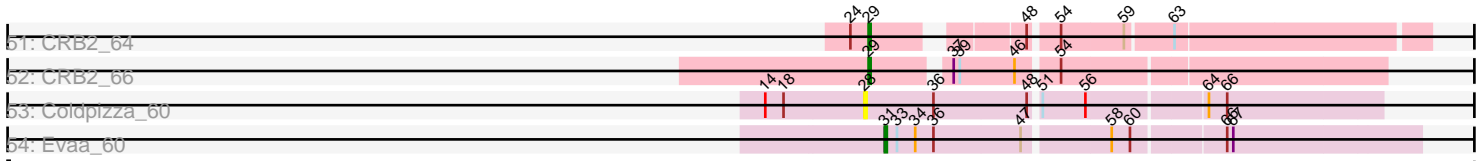


Pham 224193



Pham 224193



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 224193 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224193 has 351 members, 19 are drafts.

Phages represented in each track:

- Track 1 : Weher20_65
- Track 2 : JDog_67, Riggan_69, EmpTee_67, Riverton_67, Orwigg_67, LuckyMarjie_65, Chaelin_69, Aelin_67, Tomlarah_69, PG1_67, Pacifista_67, Chah_69, Gareth_68, Serpentine_0068, Nicole21_69, Manad_67, Simielle_68, Waterdiva_68, Giraffe_68, Numberten_67, Freya_65, Selr12_69, Chunky_68, Roy17_66, ThreeOh3D2_69, Bishoperium_68, Windsor_68, Schadenfreude_68, OliverWalter_67, Mutante_68, 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, Hertubise_67, Antonia_67, ABU_67, Kwadwo_67, Dione_66, Longacauda_69, Mecca_68, DoesntMatter_65, Toni_68, Haleema_67, Olak_67, Lulumae_65, PhatLouie_70, Scoot17C_68, Sigman_68, Colbert_66, Megatron_68, Quisquilliae_69, IsaacEli_69, Spartan300_67, CheetO_67, Beaglebox_66, Xavier_67, Jillium_68, Eremos_67, True_66, Dice_67, Katniss_69, Orfeu_67, JacAttac_68, Telesworld_66, Charles1_69, Phunky_66, Omniscient_69, PhatCats2014_68, Hartsy_67, Vaticameos_65, Piglet_0068, Robyn_68, Fringe_72, Timmi_67, Keitherie_70, CampRoach_69, Andre_70, Tooj_66, ShiVal_66, Anderson_69, Nyala_67, HSavage_66, Apizium_67, Nacho_0071, JangoPhett_102, Carthage_68, SirBeauregard_69, Cannibal_68, Gophee_69, Kimbrough_69, Samaymay_68, Hetaeria_67, Oosterbaan_67, Lumine_69, Burr_68, Valjean_67, Morty_69
- Track 3 : FriarPreacher_66, DirtJuice_68, Murdoc_65, Podrick_67, Mulan_67, Pherdinand_68, Soto_65, Prickles_69, Vista_66, Thora_66, Derpp_68, CharlieGBrown_66, 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, SassyCat97_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, 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, Mesh1_68, DuchessDung_67, Matalotodo_66, KingVeVeVe_66, BatteryCK_66
- Track 4 : Zelda_68, Plmatters_66, Durga_70, Sophia_66, Etaye_67, Surely_68, LostAndPhound_67, Emiris_69, Legolas_69, Wallhey_68, Solosis_66, Roliet_65, Veritas_67, Mag7_66, YouGoGlencoco_68, MRabcd_67, TomBombadil_68
- Track 5 : OSmaximus_68

- Track 6 : Gwilliam_69, Frankicide_66
- Track 7 : JakeO_69, Pops_66, Thunderbird_68
- Track 8 : DelRivs_66, Crownjwl_66, Soile_69, Ricotta_68, Jiraiya_69, Rimu_71, Roscoe_68
- Track 9 : Brilliant_71
- Track 10 : Mosaic_65
- Track 11 : Childish_67, HenryJackson_68, Kahve_68, DaddyDaniels_70
- Track 12 : Duggie_68
- Track 13 : QueenBeane_68, CamL_68, Cosmolli16_69
- Track 14 : Struggle_68
- Track 15 : Lulwa_66, Usavi_69, Zaider_69
- Track 16 : Vaishali24_68
- Track 17 : Kloppinator_68
- Track 18 : Imvubu_61
- Track 19 : LilMcDreamy_64
- Track 20 : Zenteno07_73
- Track 21 : Hashim76_70
- Track 22 : BirdsNest_72
- Track 23 : Allegro_64, Kaleb_65, Phantasmagoria_63, Vic9_00063, Faze9_63, Coffee_64, PrinceCharming_65
- Track 24 : Kheth_64, Glass_65, LizLemon_64, Lephleur_64, MasterPo_65, ItsyBitsy1_63, West99_64, Calamitous_65, Kolhan_65, Godines_65, Laurie_64, Rosebush_63, TA17A_66, Opia_65, Rhinoforte_64, Holeinone_64, Eaglehorse_64, Qyrzula_58, Boyle_64, Arbiter_62, Hedgerow_64, LilSmirk_64, Tres_64, Ares_64, Blocker23_64, Bananafish_65, FrenchFry_65, Sabella_64
- Track 25 : Lars_65
- Track 26 : Brownie5_64, Tinciduntolum_65
- Track 27 : SynergyX_68, Jackstina_64, Yinz_68, ChaChing_68, Phlyer_68, GlenHope_69, RagingRooster_67, Audrey_68, Devonte_67, RomaT_68, Rita1961_69, Philly_67, Nozo_68, Corofin_68, Heathcliff_68, Gadget_69, Deenasa_68, Abinghost_68, Casbah_68, Halfpint_67, Athena_70, OrangeOswald_68
- Track 28 : Chalmers_67, Kamiyu_68, Ben11_68, Glubnar_68, Olivio_68, Marlia_69, MmasiCarm_69, Phaedrus_63, Akoma_68, Daisy_67, Kronus_68, Yahalom_66, Mortcellus_68, Chandler_68, Compostia_67, Baloo_67, Shenandoah_67, SwainyDoc_69, LestyG_66, TinyTerror_69
- Track 29 : Bernardo_69
- Track 30 : Gervas_69
- Track 31 : Nigel_61
- Track 32 : BobbyK_62, Frederick_62, ChrisnMich_61
- Track 33 : Austelle_62, Mudslide_61, Prince_61, Hydro_61, Apex_62
- Track 34 : BrownCNA_63, Waleliano_61, Mithril_61, Hangman_61, Fortunato_62, VioletZ_63, Lolalove_62
- Track 35 : Cooper_63
- Track 36 : Stinger_62
- Track 37 : AlanGrant_65, Vincenzo_64
- Track 38 : SirJeffery_66
- Track 39 : Phelemich_64, Reprobate_65
- Track 40 : Acadian_67
- Track 41 : Donny_68, Suigeneris_68
- Track 42 : EastView9101_66
- Track 43 : Rich_66
- Track 44 : Bae_67
- Track 45 : Rita130_66

- Track 46 : Serendipitous_65
- Track 47 : Saguaro_64
- Track 48 : Thonko_67
- Track 49 : Quesadilla_66
- Track 50 : PenguinLover67_63
- Track 51 : CRB2_64
- Track 52 : CRB2_66
- Track 53 : Coldpizza_60
- Track 54 : Evaa_60

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

The start number called the most often in the published annotations is 17, it was called in 115 of the 332 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_67, Aelin_67, Altwerkus_66, Anderson_69, Andre_70, Antonia_67, Apizium_67, Badfish_68, Beaglebox_66, Bishoperium_68, Brilliant_71, Burr_68, CampRoach_69, Cannibal_68, Carthage_68, Chaelin_69, Chah_69, Charles1_69, CheetO_67, Childish_67, Chunky_68, Colbert_66, Crownjwl_66, DaddyDaniels_70, DelRivs_66, Dice_67, Dione_66, DoesntMatter_65, EmpTee_67, Eremos_67, Freya_65, Fringe_72, Gareth_68, Giraffe_68, Gophee_69, HSavage_66, Haleema_67, Hartsy_67, HenryJackson_68, Hertubise_67, Hetaeria_67, IsaacEli_69, JDog_67, JacAttac_68, JangoPhett_102, Jillium_68, Jiraiya_69, 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, Olak_67, OliverWalter_67, Omniscient_69, Oosterbaan_67, Orfeu_67, Orwigg_67, PG1_67, Pacifista_67, PhatCats2014_68, PhatLouie_70, Phunky_66, Piglet_0068, ProfessorX_66, Quisquilliae_69, Ricotta_68, Riggan_69, Rimu_71, Riverton_67, Robyn_68, Roscoe_68, Roy17_66, Samaymay_68, Schadenfreude_68, Scoot17C_68, Selr12_69, Serendipity_67, Serpentine_0068, ShiVal_66, Sigman_68, Simielle_68, SirBeauregard_69, 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, Gwilliam_69, Lulwa_66, QueenBeane_68, Usavi_69, Vaishali24_68, Zaider_69,

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

- Abinghost_68, Acadian_67, Akoma_68, AlanGrant_65, Allegro_64, Apex_62, Arbiter_62, Ares_64, Athena_70, Audrey_68, Austelle_62, Bae_67, Baloo_67, Bananafish_65, Banjo_66, BatteryCK_66, Ben11_68, Bernardo_69, BirdsNest_72, Blocker23_64, BobbyK_62, Boyle_64, BrownCNA_63, Brownie5_64, CRB2_64, CRB2_66, Calamitous_65, Casbah_68, ChaChing_68, Chalmers_67, Chandler_68, CharlieGBrown_66, Cher_68, ChrisnMich_61, Cobra_68, Coffee_64, Coldpizza_60, Compostia_67, Cooper_63, Corofin_68, Craff_71, Daffy_66, Daisy_67, Daka_70,

Deenasa_68, Derpp_68, Devonte_67, DirtJuice_68, Doddsville_66, Donny_68, DuchessDung_67, Duggie_68, Durga_70, Eaglehorse_64, EastView9101_66, Emiris_69, Etaye_67, Evaa_60, Fang_69, Faze9_63, FluffyNinja_68, Fortunato_62, Frederick_62, FrenchFry_65, FriarPreacher_66, FugateOSU_68, Gadget_69, Gervas_69, Glass_65, GlenHope_69, Glubnar_68, Godines_65, Haimas_66, Halfpint_67, Hangman_61, Harvey_65, Hashim76_70, Heathcliff_68, Hedgerow_64, Held_66, HighStump_69, Holeinone_64, Hydro_61, Imvubu_61, Iridoclysis_67, ItsyBitsy1_63, Jackstina_64, JakeO_69, Kailash_66, Kaleb_65, Kamiyu_68, Kheth_64, KingTut_59, KingVeVeVe_66, Kloppinator_68, Kolhan_65, Kronus_68, Kwksand96_68, Labeouficaum_68, Lars_65, Laurie_64, LeeLot_67, Lego3393_65, Legolas_69, LemonSlice_68, Lephleur_64, LestyG_66, LilMcDreamy_64, LilSmirk_64, LizLemon_64, Lolalove_62, LostAndPhound_67, MRabcd_67, Mag7_66, Mana_66, Marlia_69, Maru_67, MasterPo_65, Matalotodo_66, Mesh1_68, MichaelPhcott_66, MitKao_67, Mithril_61, MmasiCarm_69, Morgushi_66, Mortcellus_68, Mosaic_65, Mudslide_61, Mulan_67, Murdoc_65, Nigel_61, Nozo_68, OSmaximus_68, Oline_67, Olivio_68, Opia_65, OrangeOswald_68, PenguinLover67_63, Phaedrus_63, Phamished_69, Phantasmagoria_63, Phelemich_64, PhenghisKhan_68, Pherdinand_68, Phergie_68, Philly_67, Phipps_67, Phleuron_66, Phlyer_68, PhrankReynolds_67, PhrodoBaggins_69, PinheadLarry_67, Pinkman_67, Pipsqueak_65, Placalicious_68, Plmatters_66, Podrick_67, Pops_66, Prickles_69, PrinceCharming_65, Prince_61, Puhltonio_66, Quesadilla_66, Qyrzula_58, RagingRooster_67, Reprobate_65, Rhinoforte_64, Rich_66, Rita130_66, Rita1961_69, Roliet_65, RomaT_68, Rosebush_63, SDcharge11_67, Sabella_64, Saguaro_64, SassyCat97_66, Serendipitous_65, Shenandoah_67, SirJeffery_66, Slatt_68, Solosis_66, Sophia_66, Soto_65, Squid_67, Squiggle_67, Stinger_62, Struggle_68, Suigeneris_68, Surely_68, SwainyDoc_69, Swish_68, SynergyX_68, TA17A_66, TallGrassMM_66, Thonko_67, Thora_66, Thunderbird_68, Tinciduntolum_65, TinyTerror_69, TomBombadil_68, Tres_64, Trypo_69, TyrionL_68, UncleHowie_65, Veritas_67, Vic9_00063, Vincenzo_64, VioletZ_63, Vista_66, Vivaldi_68, Vortex_67, Waleliano_61, Wallhey_68, Weher20_65, West99_64, Yahalom_66, Yinz_68, Yoshand_68, YouGoGlencoco_68, Zelda_68, Zenteno07_73, Zonia_68,

Summary by start number:

Start 12:

- Found in 91 of 351 (25.9%) of genes in pham
- Manual Annotations of this start: 74 of 332
- Called 81.3% 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), Matalotodo_66 (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 16:

- Found in 10 of 351 (2.8%) of genes in pham
- Manual Annotations of this start: 10 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apex_62 (B4), Austelle_62 (B4), BobbyK_62 (B4), ChrisnMich_61 (B4), Cooper_63 (B4), Frederick_62 (B4), Hydro_61 (B4), Mudslide_61 (B4), Prince_61 (B4), Stinger_62 (B4),

Start 17:

- Found in 128 of 351 (36.5%) of genes in pham
- Manual Annotations of this start: 115 of 332
- 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), Andre_70 (B1), Antonia_67 (B1), Apizium_67 (B1), Badfish_68 (B1), Beaglebox_66 (B1), Bishoperium_68 (B1), Brilliant_71 (B1), Burr_68 (B1), CampRoach_69 (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), Dice_67 (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), Hartsy_67 (B1), HenryJackson_68 (B1), Hertubise_67 (B1), Hetaeria_67 (B1), IsaacEli_69 (B1), JDog_67 (B1), JacAttac_68 (B1), JangoPhett_102 (B1), Jillium_68 (B1), Jiraiya_69 (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), Numberten_67 (B1), Nyala_67 (B1), Olak_67 (B1), OliverWalter_67 (B1), Omniscient_69 (B1), Oosterbaan_67 (B1), Orfeu_67 (B1), Orwigg_67 (B1), PG1_67 (B1), Pacifista_67 (B1), PhatCats2014_68 (B1), PhatLouie_70 (B1), Phunky_66 (B1), Piglet_0068 (B1), ProfessorX_66 (B1), Quisquilliae_69 (B1), Ricotta_68 (B1), Riggan_69 (B1), Rimu_71 (B1), Riverton_67 (B1), Robyn_68 (B1), Roscoe_68 (B1), Roy17_66 (B1), Samaymay_68 (B1), Schadenfreude_68 (B1), Scoot17C_68 (B1), Selr12_69 (B1), Serendipity_67 (B1), Serpentine_0068 (B1), ShiVal_66 (B1), Sigman_68 (B1), Simielle_68 (B1), SirBeauregard_69 (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 18:

- Found in 4 of 351 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 25.0% of time when present
- Phage (with cluster) where this start called: BirdsNest_72 (B13),

Start 19:

- Found in 44 of 351 (12.5%) of genes in pham
- Manual Annotations of this start: 22 of 332
- Called 50.0% 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), Halfpint_67 (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 20:

- Found in 10 of 351 (2.8%) of genes in pham
- Manual Annotations of this start: 4 of 332
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Acadian_67 (B5), Bae_67 (B5), Donny_68 (B5), Suigeneris_68 (B5),

Start 24:

- Found in 234 of 351 (66.7%) of genes in pham
- Manual Annotations of this start: 42 of 332
- Called 18.8% 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), Gervas_69 (B3), Glass_65 (B2), Godines_65 (B2), Hashim76_70 (B13), Hedgerow_64 (B2), Holeinone_64 (B2), ItsyBitsy1_63 (B2), JakeO_69 (B1), Kheth_64 (B2), Kolhan_65 (B2), Laurie_64 (B2), Lephleur_64 (B2), LilSmirk_64 (B2), LizLemon_64 (B2), MasterPo_65 (B2), Opia_65 (B2), PenguinLover67_63 (B9), Phelemich_64 (B5), Pops_66 (B1), QueenBeane_68 (B1), Qyrzula_58 (B2), Reprobate_65 (B5), Rhinoforte_64 (B2), Rosebush_63 (B2), Sabella_64 (B2), Saguaro_64 (B7), TA17A_66 (B2), Thunderbird_68 (B1), Tinciduntolum_65 (B2), Tres_64 (B2), Vaishali24_68 (B1), West99_64 (B2),

Start 25:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilMcDreamy_64 (B12),

Start 26:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu_61 (B10),

Start 28:

- Found in 1 of 351 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Coldpizza_60 (DR),

Start 29:

- Found in 335 of 351 (95.4%) of genes in pham

- Manual Annotations of this start: 52 of 332
- Called 17.9% of time when present
- Phage (with cluster) where this start called: Akoma_68 (B3), AlanGrant_65 (B4), Baloo_67 (B3), Ben11_68 (B3), Bernardo_69 (B3), BrownCNA_63 (B4), CRB2_64 (B9), CRB2_66 (B9), Chalmers_67 (B3), Chandler_68 (B3), Compostia_67 (B3), Daisy_67 (B3), Durga_70 (B1), Emiris_69 (B1), Etaye_67 (B1), Fortunato_62 (B4), Frankicide_66 (B1), Glubnar_68 (B3), Gwilliam_69 (B1), Hangman_61 (B4), Kamiyu_68 (B3), Kronus_68 (B3), Lars_65 (B2), Legolas_69 (B1), LestyG_66 (B3), Lolalove_62 (B4), LostAndPhound_67 (B1), Lulwa_66 (B1), MRabcd_67 (B1), Mag7_66 (B1), Marlia_69 (B3), Mithril_61 (B4), MmasiCarm_69 (B3), Mortcellus_68 (B3), Nigel_61 (B4), Olivio_68 (B3), Phaedrus_63 (B3), Plmatters_66 (B1), Quesadilla_66 (B9), Roliet_65 (B1), Shenandoah_67 (B3), Solosis_66 (B1), Sophia_66 (B1), Struggle_68 (B1), Surely_68 (B1), SwainyDoc_69 (B3), TinyTerror_69 (B3), TomBombadil_68 (B1), Usavi_69 (B1), Veritas_67 (B1), Vincenzo_64 (B4), VioletZ_63 (B4), Waleliano_61 (B4), Wallhey_68 (B1), Weher20_65 (B1), Yahalom_66 (B3), YouGoGlencoco_68 (B1), Zaider_69 (B1), Zelda_68 (B1), Zenteno07_73 (B13),

Start 30:

- Found in 12 of 351 (3.4%) of genes in pham
- Manual Annotations of this start: 3 of 332
- Called 41.7% of time when present
- Phage (with cluster) where this start called: EastView9101_66 (B5), Rich_66 (B5), Rita130_66 (B5), Serendipitous_65 (B5), SirJeffery_66 (B5),

Start 31:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa_60 (DR),

Start 35:

- Found in 1 of 351 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 332
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Thonko_67 (B8),

Start 40:

- Found in 38 of 351 (10.8%) of genes in pham
- Manual Annotations of this start: 5 of 332
- Called 18.4% 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), PrinceCharming_65 (B2), Vic9_00063 (B2),

Summary by clusters:

There are 12 clusters represented in this pham: B10, B8, B4, B5, B7, B12, B1, B2, B3, DR, B9, B13,

Info for manual annotations of cluster B1:

- Start number 12 was manually annotated 74 times for cluster B1.
- Start number 17 was manually annotated 115 times for cluster B1.

- Start number 24 was manually annotated 8 times for cluster B1.
- Start number 29 was manually annotated 24 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 26 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B12:

- Start number 25 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 18 was manually annotated 1 time for cluster B13.
- Start number 24 was manually annotated 1 time for cluster B13.
- Start number 29 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B2:

- Start number 24 was manually annotated 28 times for cluster B2.
- Start number 29 was manually annotated 1 time for cluster B2.
- Start number 40 was manually annotated 5 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 19 was manually annotated 22 times for cluster B3.
- Start number 24 was manually annotated 1 time for cluster B3.
- Start number 29 was manually annotated 13 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 16 was manually annotated 10 times for cluster B4.
- Start number 29 was manually annotated 10 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 20 was manually annotated 4 times for cluster B5.
- Start number 24 was manually annotated 2 times for cluster B5.
- Start number 30 was manually annotated 3 times for cluster B5.

Info for manual annotations of cluster B7:

- Start number 24 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 35 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 24 was manually annotated 1 time for cluster B9.
- Start number 29 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster DR:

- Start number 31 was manually annotated 1 time for cluster DR.

Gene Information:

Gene: ABU_67 Start: 57301, Stop: 57573, Start Num: 17

Candidate Starts for ABU_67:

(Start: 17 @57301 has 115 MA's), (Start: 24 @57322 has 42 MA's), (Start: 29 @57331 has 52 MA's), (47, 57394), (56, 57421), (73, 57544),

Gene: Abinghost_68 Start: 57207, Stop: 57494, Start Num: 19

Candidate Starts for Abinghost_68:

(2, 56985), (3, 57003), (4, 57015), (6, 57060), (13, 57195), (Start: 19 @57207 has 22 MA's), (21, 57225), (Start: 24 @57237 has 42 MA's), (Start: 29 @57246 has 52 MA's), (32, 57255), (64, 57399), (72, 57456),

Gene: Acadian_67 Start: 58258, Stop: 58542, Start Num: 20

Candidate Starts for Acadian_67:

(Start: 20 @58258 has 4 MA's), (Start: 24 @58285 has 42 MA's), (Start: 30 @58294 has 3 MA's), (48, 58360), (64, 58438), (71, 58492), (74, 58528),

Gene: Aelin_67 Start: 56821, Stop: 57093, Start Num: 17

Candidate Starts for Aelin_67:

(Start: 17 @56821 has 115 MA's), (Start: 24 @56842 has 42 MA's), (Start: 29 @56851 has 52 MA's), (47, 56914), (56, 56941), (73, 57064),

Gene: Akoma_68 Start: 57286, Stop: 57534, Start Num: 29

Candidate Starts for Akoma_68:

(2, 57025), (3, 57043), (4, 57055), (6, 57100), (13, 57235), (Start: 19 @57247 has 22 MA's), (21, 57265), (Start: 24 @57277 has 42 MA's), (Start: 29 @57286 has 52 MA's), (32, 57295), (64, 57439), (72, 57496),

Gene: AlanGrant_65 Start: 59138, Stop: 59395, Start Num: 29

Candidate Starts for AlanGrant_65:

(Start: 29 @59138 has 52 MA's), (46, 59189), (48, 59195), (54, 59207), (59, 59237), (60, 59240), (65, 59279), (68, 59288), (73, 59342),

Gene: Allegro_64 Start: 55516, Stop: 55722, Start Num: 40

Candidate Starts for Allegro_64:

(Start: 24 @55462 has 42 MA's), (Start: 29 @55471 has 52 MA's), (Start: 40 @55516 has 5 MA's), (47, 55543), (56, 55570), (61, 55597), (68, 55639), (70, 55672), (72, 55681), (73, 55693),

Gene: Altwerkus_66 Start: 56464, Stop: 56736, Start Num: 17

Candidate Starts for Altwerkus_66:

(Start: 17 @56464 has 115 MA's), (Start: 24 @56485 has 42 MA's), (Start: 29 @56494 has 52 MA's), (47, 56557), (56, 56584), (73, 56707),

Gene: Anderson_69 Start: 57036, Stop: 57308, Start Num: 17

Candidate Starts for Anderson_69:

(Start: 17 @57036 has 115 MA's), (Start: 24 @57057 has 42 MA's), (Start: 29 @57066 has 52 MA's), (47, 57129), (56, 57156), (73, 57279),

Gene: Andre_70 Start: 57216, Stop: 57488, Start Num: 17

Candidate Starts for Andre_70:

(Start: 17 @57216 has 115 MA's), (Start: 24 @57237 has 42 MA's), (Start: 29 @57246 has 52 MA's), (47, 57309), (56, 57336), (73, 57459),

Gene: Antonia_67 Start: 56820, Stop: 57092, Start Num: 17

Candidate Starts for Antonia_67:

(Start: 17 @56820 has 115 MA's), (Start: 24 @56841 has 42 MA's), (Start: 29 @56850 has 52 MA's), (47, 56913), (56, 56940), (73, 57063),

Gene: Apex_62 Start: 58091, Stop: 58408, Start Num: 16

Candidate Starts for Apex_62:

(Start: 16 @58091 has 10 MA's), (Start: 29 @58139 has 52 MA's), (46, 58190), (48, 58196), (52, 58202), (54, 58208), (55, 58211), (60, 58241), (63, 58259), (64, 58274), (68, 58289), (69, 58307),

Gene: Apizium_67 Start: 56482, Stop: 56754, Start Num: 17

Candidate Starts for Apizium_67:

(Start: 17 @56482 has 115 MA's), (Start: 24 @56503 has 42 MA's), (Start: 29 @56512 has 52 MA's), (47, 56575), (56, 56602), (73, 56725),

Gene: Arbiter_62 Start: 55569, Stop: 55829, Start Num: 24

Candidate Starts for Arbiter_62:

(Start: 24 @55569 has 42 MA's), (Start: 29 @55578 has 52 MA's), (Start: 40 @55623 has 5 MA's), (47, 55650), (56, 55677), (61, 55704), (68, 55746), (70, 55779), (72, 55788), (73, 55800),

Gene: Ares_64 Start: 55540, Stop: 55800, Start Num: 24

Candidate Starts for Ares_64:

(Start: 24 @55540 has 42 MA's), (Start: 29 @55549 has 52 MA's), (Start: 40 @55594 has 5 MA's), (47, 55621), (56, 55648), (61, 55675), (68, 55717), (70, 55750), (72, 55759), (73, 55771),

Gene: Athena_70 Start: 57982, Stop: 58269, Start Num: 19

Candidate Starts for Athena_70:

(2, 57760), (3, 57778), (4, 57790), (6, 57835), (13, 57970), (Start: 19 @57982 has 22 MA's), (21, 58000), (Start: 24 @58012 has 42 MA's), (Start: 29 @58021 has 52 MA's), (32, 58030), (64, 58174), (72, 58231),

Gene: Audrey_68 Start: 57246, Stop: 57533, Start Num: 19

Candidate Starts for Audrey_68:

(2, 57024), (3, 57042), (4, 57054), (6, 57099), (13, 57234), (Start: 19 @57246 has 22 MA's), (21, 57264), (Start: 24 @57276 has 42 MA's), (Start: 29 @57285 has 52 MA's), (32, 57294), (64, 57438), (72, 57495),

Gene: Austelle_62 Start: 58545, Stop: 58862, Start Num: 16

Candidate Starts for Austelle_62:

(Start: 16 @58545 has 10 MA's), (Start: 29 @58593 has 52 MA's), (46, 58644), (48, 58650), (52, 58656), (54, 58662), (55, 58665), (60, 58695), (63, 58713), (64, 58728), (68, 58743), (69, 58761),

Gene: Badfish_68 Start: 57322, Stop: 57594, Start Num: 17

Candidate Starts for Badfish_68:

(Start: 17 @57322 has 115 MA's), (Start: 24 @57343 has 42 MA's), (Start: 29 @57352 has 52 MA's), (47, 57415), (56, 57442), (73, 57565),

Gene: Bae_67 Start: 59301, Stop: 59585, Start Num: 20

Candidate Starts for Bae_67:

(Start: 20 @59301 has 4 MA's), (Start: 24 @59328 has 42 MA's), (Start: 30 @59337 has 3 MA's), (48, 59403), (63, 59466), (64, 59481), (71, 59535), (74, 59571), (75, 59580),

Gene: Baloo_67 Start: 57118, Stop: 57366, Start Num: 29

Candidate Starts for Baloo_67:

(2, 56857), (3, 56875), (4, 56887), (6, 56932), (13, 57067), (Start: 19 @57079 has 22 MA's), (21, 57097), (Start: 24 @57109 has 42 MA's), (Start: 29 @57118 has 52 MA's), (32, 57127), (64, 57271), (72, 57328),

Gene: Bananafish_65 Start: 55470, Stop: 55730, Start Num: 24

Candidate Starts for Bananafish_65:

(Start: 24 @55470 has 42 MA's), (Start: 29 @55479 has 52 MA's), (Start: 40 @55524 has 5 MA's), (47, 55551), (56, 55578), (61, 55605), (68, 55647), (70, 55680), (72, 55689), (73, 55701),

Gene: Banjo_66 Start: 56800, Stop: 57102, Start Num: 12

Candidate Starts for Banjo_66:

(Start: 12 @56800 has 74 MA's), (Start: 29 @56854 has 52 MA's), (46, 56923), (58, 56965),

Gene: BatteryCK_66 Start: 56770, Stop: 57072, Start Num: 12

Candidate Starts for BatteryCK_66:

(Start: 12 @56770 has 74 MA's), (Start: 29 @56824 has 52 MA's), (46, 56893), (58, 56935),

Gene: Beaglebox_66 Start: 56876, Stop: 57148, Start Num: 17

Candidate Starts for Beaglebox_66:

(Start: 17 @56876 has 115 MA's), (Start: 24 @56897 has 42 MA's), (Start: 29 @56906 has 52 MA's), (47, 56969), (56, 56996), (73, 57119),

Gene: Ben11_68 Start: 57503, Stop: 57751, Start Num: 29

Candidate Starts for Ben11_68:

(2, 57242), (3, 57260), (4, 57272), (6, 57317), (13, 57452), (Start: 19 @57464 has 22 MA's), (21, 57482), (Start: 24 @57494 has 42 MA's), (Start: 29 @57503 has 52 MA's), (32, 57512), (64, 57656), (72, 57713),

Gene: Bernardo_69 Start: 57484, Stop: 57732, Start Num: 29

Candidate Starts for Bernardo_69:

(13, 57433), (Start: 19 @57445 has 22 MA's), (21, 57463), (Start: 24 @57475 has 42 MA's), (Start: 29 @57484 has 52 MA's), (32, 57493), (64, 57637), (72, 57694),

Gene: BirdsNest_72 Start: 58539, Stop: 58814, Start Num: 18

Candidate Starts for BirdsNest_72:

(Start: 18 @58539 has 1 MA's), (Start: 24 @58572 has 42 MA's), (Start: 29 @58581 has 52 MA's), (42, 58617), (54, 58647), (59, 58677),

Gene: Bishoperium_68 Start: 57350, Stop: 57622, Start Num: 17

Candidate Starts for Bishoperium_68:

(Start: 17 @57350 has 115 MA's), (Start: 24 @57371 has 42 MA's), (Start: 29 @57380 has 52 MA's), (47, 57443), (56, 57470), (73, 57593),

Gene: Blocker23_64 Start: 55537, Stop: 55797, Start Num: 24

Candidate Starts for Blocker23_64:

(Start: 24 @55537 has 42 MA's), (Start: 29 @55546 has 52 MA's), (Start: 40 @55591 has 5 MA's), (47, 55618), (56, 55645), (61, 55672), (68, 55714), (70, 55747), (72, 55756), (73, 55768),

Gene: BobbyK_62 Start: 57853, Stop: 58170, Start Num: 16

Candidate Starts for BobbyK_62:

(Start: 16 @57853 has 10 MA's), (Start: 29 @57901 has 52 MA's), (46, 57952), (48, 57958), (52, 57964), (54, 57970), (60, 58003), (63, 58021), (64, 58036), (68, 58051), (69, 58069),

Gene: Boyle_64 Start: 55578, Stop: 55838, Start Num: 24

Candidate Starts for Boyle_64:

(Start: 24 @55578 has 42 MA's), (Start: 29 @55587 has 52 MA's), (Start: 40 @55632 has 5 MA's), (47, 55659), (56, 55686), (61, 55713), (68, 55755), (70, 55788), (72, 55797), (73, 55809),

Gene: Brilliant_71 Start: 57319, Stop: 57591, Start Num: 17

Candidate Starts for Brilliant_71:

(Start: 17 @57319 has 115 MA's), (Start: 24 @57340 has 42 MA's), (Start: 29 @57349 has 52 MA's), (47, 57412), (56, 57439), (63, 57478), (73, 57562),

Gene: BrownCNA_63 Start: 58302, Stop: 58568, Start Num: 29

Candidate Starts for BrownCNA_63:

(Start: 29 @58302 has 52 MA's), (46, 58353), (48, 58359), (52, 58365), (54, 58371), (55, 58374), (60, 58404), (63, 58422), (64, 58437), (68, 58452), (69, 58470),

Gene: Brownie5_64 Start: 55580, Stop: 55840, Start Num: 24

Candidate Starts for Brownie5_64:

(Start: 24 @55580 has 42 MA's), (Start: 29 @55589 has 52 MA's), (Start: 40 @55634 has 5 MA's), (56, 55688), (61, 55715), (68, 55757), (70, 55790), (72, 55799), (73, 55811),

Gene: Burr_68 Start: 56786, Stop: 57058, Start Num: 17

Candidate Starts for Burr_68:

(Start: 17 @56786 has 115 MA's), (Start: 24 @56807 has 42 MA's), (Start: 29 @56816 has 52 MA's), (47, 56879), (56, 56906), (73, 57029),

Gene: CRB2_64 Start: 58911, Stop: 59153, Start Num: 29

Candidate Starts for CRB2_64:

(Start: 24 @58902 has 42 MA's), (Start: 29 @58911 has 52 MA's), (48, 58971), (54, 58983), (59, 59013), (63, 59034),

Gene: CRB2_66 Start: 60189, Stop: 60422, Start Num: 29

Candidate Starts for CRB2_66:

(Start: 29 @60189 has 52 MA's), (37, 60222), (39, 60225), (46, 60252), (54, 60270),

Gene: Calamitous_65 Start: 55468, Stop: 55728, Start Num: 24

Candidate Starts for Calamitous_65:

(Start: 24 @55468 has 42 MA's), (Start: 29 @55477 has 52 MA's), (Start: 40 @55522 has 5 MA's), (47, 55549), (56, 55576), (61, 55603), (68, 55645), (70, 55678), (72, 55687), (73, 55699),

Gene: CamL_68 Start: 57139, Stop: 57390, Start Num: 24

Candidate Starts for CamL_68:

(Start: 17 @57118 has 115 MA's), (Start: 24 @57139 has 42 MA's), (Start: 29 @57148 has 52 MA's), (47, 57211), (56, 57238), (73, 57361),

Gene: CampRoach_69 Start: 57225, Stop: 57497, Start Num: 17

Candidate Starts for CampRoach_69:

(Start: 17 @57225 has 115 MA's), (Start: 24 @57246 has 42 MA's), (Start: 29 @57255 has 52 MA's), (47, 57318), (56, 57345), (73, 57468),

Gene: Cannibal_68 Start: 57060, Stop: 57332, Start Num: 17

Candidate Starts for Cannibal_68:

(Start: 17 @57060 has 115 MA's), (Start: 24 @57081 has 42 MA's), (Start: 29 @57090 has 52 MA's), (47, 57153), (56, 57180), (73, 57303),

Gene: Carthage_68 Start: 56724, Stop: 56996, Start Num: 17

Candidate Starts for Carthage_68:

(Start: 17 @56724 has 115 MA's), (Start: 24 @56745 has 42 MA's), (Start: 29 @56754 has 52 MA's), (47, 56817), (56, 56844), (73, 56967),

Gene: Casbah_68 Start: 57566, Stop: 57853, Start Num: 19

Candidate Starts for Casbah_68:

(2, 57344), (3, 57362), (4, 57374), (6, 57419), (13, 57554), (Start: 19 @57566 has 22 MA's), (21, 57584), (Start: 24 @57596 has 42 MA's), (Start: 29 @57605 has 52 MA's), (32, 57614), (64, 57758), (72, 57815),

Gene: ChaChing_68 Start: 57264, Stop: 57551, Start Num: 19

Candidate Starts for ChaChing_68:

(2, 57042), (3, 57060), (4, 57072), (6, 57117), (13, 57252), (Start: 19 @57264 has 22 MA's), (21, 57282), (Start: 24 @57294 has 42 MA's), (Start: 29 @57303 has 52 MA's), (32, 57312), (64, 57456), (72, 57513),

Gene: Chaelin_69 Start: 57349, Stop: 57621, Start Num: 17

Candidate Starts for Chaelin_69:

(Start: 17 @57349 has 115 MA's), (Start: 24 @57370 has 42 MA's), (Start: 29 @57379 has 52 MA's), (47, 57442), (56, 57469), (73, 57592),

Gene: Chah_69 Start: 56763, Stop: 57035, Start Num: 17

Candidate Starts for Chah_69:

(Start: 17 @56763 has 115 MA's), (Start: 24 @56784 has 42 MA's), (Start: 29 @56793 has 52 MA's), (47, 56856), (56, 56883), (73, 57006),

Gene: Chalmers_67 Start: 57736, Stop: 57984, Start Num: 29

Candidate Starts for Chalmers_67:

(2, 57475), (3, 57493), (4, 57505), (6, 57550), (13, 57685), (Start: 19 @57697 has 22 MA's), (21, 57715), (Start: 24 @57727 has 42 MA's), (Start: 29 @57736 has 52 MA's), (32, 57745), (64, 57889), (72, 57946),

Gene: Chandler_68 Start: 58065, Stop: 58313, Start Num: 29

Candidate Starts for Chandler_68:

(2, 57804), (3, 57822), (4, 57834), (6, 57879), (13, 58014), (Start: 19 @58026 has 22 MA's), (21, 58044), (Start: 24 @58056 has 42 MA's), (Start: 29 @58065 has 52 MA's), (32, 58074), (64, 58218), (72, 58275),

Gene: Charles1_69 Start: 57073, Stop: 57345, Start Num: 17

Candidate Starts for Charles1_69:

(Start: 17 @57073 has 115 MA's), (Start: 24 @57094 has 42 MA's), (Start: 29 @57103 has 52 MA's), (47, 57166), (56, 57193), (73, 57316),

Gene: CharlieGBrown_66 Start: 56715, Stop: 57017, Start Num: 12

Candidate Starts for CharlieGBrown_66:

(Start: 12 @56715 has 74 MA's), (Start: 29 @56769 has 52 MA's), (46, 56838), (58, 56880),

Gene: CheetO_67 Start: 57036, Stop: 57308, Start Num: 17

Candidate Starts for CheetO_67:

(Start: 17 @57036 has 115 MA's), (Start: 24 @57057 has 42 MA's), (Start: 29 @57066 has 52 MA's), (47, 57129), (56, 57156), (73, 57279),

Gene: Cher_68 Start: 57320, Stop: 57622, Start Num: 12

Candidate Starts for Cher_68:

(Start: 12 @57320 has 74 MA's), (Start: 29 @57374 has 52 MA's), (46, 57443), (58, 57485),

Gene: Childish_67 Start: 57339, Stop: 57611, Start Num: 17

Candidate Starts for Childish_67:

(Start: 17 @57339 has 115 MA's), (Start: 24 @57360 has 42 MA's), (Start: 29 @57369 has 52 MA's), (47, 57432), (48, 57435), (56, 57459), (73, 57582),

Gene: ChrisnMich_61 Start: 56895, Stop: 57212, Start Num: 16

Candidate Starts for ChrisnMich_61:

(Start: 16 @56895 has 10 MA's), (Start: 29 @56943 has 52 MA's), (46, 56994), (48, 57000), (52, 57006), (54, 57012), (60, 57045), (63, 57063), (64, 57078), (68, 57093), (69, 57111),

Gene: Chunky_68 Start: 56653, Stop: 56925, Start Num: 17

Candidate Starts for Chunky_68:

(Start: 17 @56653 has 115 MA's), (Start: 24 @56674 has 42 MA's), (Start: 29 @56683 has 52 MA's), (47, 56746), (56, 56773), (73, 56896),

Gene: Cobra_68 Start: 57351, Stop: 57653, Start Num: 12

Candidate Starts for Cobra_68:

(Start: 12 @57351 has 74 MA's), (Start: 29 @57405 has 52 MA's), (46, 57474), (58, 57516),

Gene: Coffee_64 Start: 55626, Stop: 55832, Start Num: 40

Candidate Starts for Coffee_64:

(Start: 24 @55572 has 42 MA's), (Start: 29 @55581 has 52 MA's), (Start: 40 @55626 has 5 MA's), (47, 55653), (56, 55680), (61, 55707), (68, 55749), (70, 55782), (72, 55791), (73, 55803),

Gene: Colbert_66 Start: 56375, Stop: 56647, Start Num: 17

Candidate Starts for Colbert_66:

(Start: 17 @56375 has 115 MA's), (Start: 24 @56396 has 42 MA's), (Start: 29 @56405 has 52 MA's), (47, 56468), (56, 56495), (73, 56618),

Gene: Coldpizza_60 Start: 52390, Stop: 52629, Start Num: 28

Candidate Starts for Coldpizza_60:

(14, 52342), (Start: 18 @52351 has 1 MA's), (28, 52390), (36, 52423), (48, 52468), (51, 52471), (56, 52492), (64, 52546), (66, 52555),

Gene: Compostia_67 Start: 57686, Stop: 57934, Start Num: 29

Candidate Starts for Compostia_67:

(2, 57425), (3, 57443), (4, 57455), (6, 57500), (13, 57635), (Start: 19 @57647 has 22 MA's), (21, 57665), (Start: 24 @57677 has 42 MA's), (Start: 29 @57686 has 52 MA's), (32, 57695), (64, 57839), (72, 57896),

Gene: Cooper_63 Start: 57347, Stop: 57664, Start Num: 16

Candidate Starts for Cooper_63:

(Start: 16 @57347 has 10 MA's), (Start: 29 @57395 has 52 MA's), (46, 57446), (48, 57452), (52, 57458), (54, 57464), (60, 57497), (63, 57515), (68, 57545),

Gene: Corofin_68 Start: 57277, Stop: 57564, Start Num: 19

Candidate Starts for Corofin_68:

(2, 57055), (3, 57073), (4, 57085), (6, 57130), (13, 57265), (Start: 19 @57277 has 22 MA's), (21, 57295), (Start: 24 @57307 has 42 MA's), (Start: 29 @57316 has 52 MA's), (32, 57325), (64, 57469), (72, 57526),

Gene: Cosmolli16_69 Start: 57541, Stop: 57792, Start Num: 24

Candidate Starts for Cosmolli16_69:

(Start: 17 @57520 has 115 MA's), (Start: 24 @57541 has 42 MA's), (Start: 29 @57550 has 52 MA's), (47, 57613), (56, 57640), (73, 57763),

Gene: Craff_71 Start: 57754, Stop: 58056, Start Num: 12

Candidate Starts for Craff_71:

(Start: 12 @57754 has 74 MA's), (Start: 29 @57808 has 52 MA's), (46, 57877), (58, 57919),

Gene: Crownjwl_66 Start: 56838, Stop: 57110, Start Num: 17

Candidate Starts for Crownjwl_66:

(Start: 17 @56838 has 115 MA's), (Start: 24 @56859 has 42 MA's), (Start: 29 @56868 has 52 MA's), (56, 56958), (73, 57081),

Gene: DaddyDaniels_70 Start: 57296, Stop: 57568, Start Num: 17

Candidate Starts for DaddyDaniels_70:

(Start: 17 @57296 has 115 MA's), (Start: 24 @57317 has 42 MA's), (Start: 29 @57326 has 52 MA's), (47, 57389), (48, 57392), (56, 57416), (73, 57539),

Gene: Daffy_66 Start: 56792, Stop: 57094, Start Num: 12

Candidate Starts for Daffy_66:

(Start: 12 @56792 has 74 MA's), (Start: 29 @56846 has 52 MA's), (46, 56915), (58, 56957),

Gene: Daisy_67 Start: 56849, Stop: 57097, Start Num: 29

Candidate Starts for Daisy_67:

(2, 56588), (3, 56606), (4, 56618), (6, 56663), (13, 56798), (Start: 19 @56810 has 22 MA's), (21, 56828), (Start: 24 @56840 has 42 MA's), (Start: 29 @56849 has 52 MA's), (32, 56858), (64, 57002), (72, 57059),

Gene: Daka_70 Start: 57306, Stop: 57608, Start Num: 12

Candidate Starts for Daka_70:

(Start: 12 @57306 has 74 MA's), (Start: 29 @57360 has 52 MA's), (46, 57429), (58, 57471),

Gene: Deenasa_68 Start: 58113, Stop: 58400, Start Num: 19

Candidate Starts for Deenasa_68:

(2, 57891), (3, 57909), (4, 57921), (6, 57966), (13, 58101), (Start: 19 @58113 has 22 MA's), (21, 58131), (Start: 24 @58143 has 42 MA's), (Start: 29 @58152 has 52 MA's), (32, 58161), (64, 58305), (72, 58362),

Gene: DelRivs_66 Start: 56786, Stop: 57058, Start Num: 17

Candidate Starts for DelRivs_66:

(Start: 17 @56786 has 115 MA's), (Start: 24 @56807 has 42 MA's), (Start: 29 @56816 has 52 MA's), (56, 56906), (73, 57029),

Gene: Derpp_68 Start: 56891, Stop: 57193, Start Num: 12

Candidate Starts for Derpp_68:

(Start: 12 @56891 has 74 MA's), (Start: 29 @56945 has 52 MA's), (46, 57014), (58, 57056),

Gene: Devonte_67 Start: 56889, Stop: 57176, Start Num: 19

Candidate Starts for Devonte_67:

(2, 56667), (3, 56685), (4, 56697), (6, 56742), (13, 56877), (Start: 19 @56889 has 22 MA's), (21, 56907), (Start: 24 @56919 has 42 MA's), (Start: 29 @56928 has 52 MA's), (32, 56937), (64, 57081), (72, 57138),

Gene: Dice_67 Start: 56784, Stop: 57056, Start Num: 17

Candidate Starts for Dice_67:

(Start: 17 @56784 has 115 MA's), (Start: 24 @56805 has 42 MA's), (Start: 29 @56814 has 52 MA's), (47, 56877), (56, 56904), (73, 57027),

Gene: Dione_66 Start: 56518, Stop: 56790, Start Num: 17

Candidate Starts for Dione_66:

(Start: 17 @56518 has 115 MA's), (Start: 24 @56539 has 42 MA's), (Start: 29 @56548 has 52 MA's), (47, 56611), (56, 56638), (73, 56761),

Gene: DirtJuice_68 Start: 57097, Stop: 57399, Start Num: 12

Candidate Starts for DirtJuice_68:

(Start: 12 @57097 has 74 MA's), (Start: 29 @57151 has 52 MA's), (46, 57220), (58, 57262),

Gene: Doddsville_66 Start: 56854, Stop: 57156, Start Num: 12

Candidate Starts for Doddsville_66:

(Start: 12 @56854 has 74 MA's), (Start: 29 @56908 has 52 MA's), (46, 56977), (58, 57019),

Gene: DoesntMatter_65 Start: 56808, Stop: 57080, Start Num: 17

Candidate Starts for DoesntMatter_65:

(Start: 17 @56808 has 115 MA's), (Start: 24 @56829 has 42 MA's), (Start: 29 @56838 has 52 MA's), (47, 56901), (56, 56928), (73, 57051),

Gene: Donny_68 Start: 58302, Stop: 58586, Start Num: 20

Candidate Starts for Donny_68:

(Start: 20 @58302 has 4 MA's), (Start: 24 @58329 has 42 MA's), (Start: 30 @58338 has 3 MA's), (48, 58404), (64, 58482), (71, 58536), (73, 58551), (74, 58572),

Gene: DuchessDung_67 Start: 56370, Stop: 56672, Start Num: 12

Candidate Starts for DuchessDung_67:

(Start: 12 @56370 has 74 MA's), (Start: 29 @56424 has 52 MA's), (46, 56493), (58, 56535),

Gene: Duggie_68 Start: 57082, Stop: 57333, Start Num: 24

Candidate Starts for Duggie_68:

(Start: 24 @57082 has 42 MA's), (Start: 29 @57091 has 52 MA's), (56, 57181), (73, 57304),

Gene: Durga_70 Start: 57651, Stop: 57899, Start Num: 29

Candidate Starts for Durga_70:

(Start: 12 @57597 has 74 MA's), (Start: 29 @57651 has 52 MA's), (46, 57720), (58, 57762),

Gene: Eaglehorse_64 Start: 55458, Stop: 55718, Start Num: 24

Candidate Starts for Eaglehorse_64:

(Start: 24 @55458 has 42 MA's), (Start: 29 @55467 has 52 MA's), (Start: 40 @55512 has 5 MA's), (47, 55539), (56, 55566), (61, 55593), (68, 55635), (70, 55668), (72, 55677), (73, 55689),

Gene: EastView9101_66 Start: 58038, Stop: 58286, Start Num: 30

Candidate Starts for EastView9101_66:

(Start: 20 @58002 has 4 MA's), (Start: 24 @58029 has 42 MA's), (Start: 30 @58038 has 3 MA's), (48, 58104), (64, 58182), (71, 58236), (74, 58272),

Gene: Emiris_69 Start: 57560, Stop: 57808, Start Num: 29

Candidate Starts for Emiris_69:

(Start: 12 @57506 has 74 MA's), (Start: 29 @57560 has 52 MA's), (46, 57629), (58, 57671),

Gene: EmpTee_67 Start: 57028, Stop: 57300, Start Num: 17

Candidate Starts for EmpTee_67:

(Start: 17 @57028 has 115 MA's), (Start: 24 @57049 has 42 MA's), (Start: 29 @57058 has 52 MA's), (47, 57121), (56, 57148), (73, 57271),

Gene: Eremos_67 Start: 57023, Stop: 57295, Start Num: 17

Candidate Starts for Eremos_67:

(Start: 17 @57023 has 115 MA's), (Start: 24 @57044 has 42 MA's), (Start: 29 @57053 has 52 MA's), (47, 57116), (56, 57143), (73, 57266),

Gene: Etaye_67 Start: 57703, Stop: 57951, Start Num: 29

Candidate Starts for Etaye_67:

(Start: 12 @57649 has 74 MA's), (Start: 29 @57703 has 52 MA's), (46, 57772), (58, 57814),

Gene: Evaa_60 Start: 49769, Stop: 50017, Start Num: 31

Candidate Starts for Evaa_60:

(Start: 31 @49769 has 1 MA's), (33, 49775), (34, 49784), (36, 49793), (47, 49835), (58, 49874), (60, 49883), (66, 49925), (67, 49928),

Gene: Fang_69 Start: 57339, Stop: 57641, Start Num: 12

Candidate Starts for Fang_69:

(Start: 12 @57339 has 74 MA's), (Start: 29 @57393 has 52 MA's), (46, 57462), (58, 57504),

Gene: Faze9_63 Start: 55651, Stop: 55857, Start Num: 40

Candidate Starts for Faze9_63:

(Start: 24 @55597 has 42 MA's), (Start: 29 @55606 has 52 MA's), (Start: 40 @55651 has 5 MA's), (47, 55678), (56, 55705), (61, 55732), (68, 55774), (70, 55807), (72, 55816), (73, 55828),

Gene: FluffyNinja_68 Start: 57071, Stop: 57373, Start Num: 12

Candidate Starts for FluffyNinja_68:

(Start: 12 @57071 has 74 MA's), (Start: 29 @57125 has 52 MA's), (46, 57194), (58, 57236),

Gene: Fortunato_62 Start: 58000, Stop: 58269, Start Num: 29

Candidate Starts for Fortunato_62:

(Start: 29 @58000 has 52 MA's), (46, 58051), (48, 58057), (52, 58063), (54, 58069), (55, 58072), (60, 58102), (63, 58120), (64, 58135), (68, 58150), (69, 58168),

Gene: Frankicide_66 Start: 56878, Stop: 57120, Start Num: 29

Candidate Starts for Frankicide_66:

(Start: 17 @56848 has 115 MA's), (Start: 24 @56869 has 42 MA's), (Start: 29 @56878 has 52 MA's), (56, 56968), (73, 57091),

Gene: Frederick_62 Start: 57795, Stop: 58112, Start Num: 16

Candidate Starts for Frederick_62:

(Start: 16 @57795 has 10 MA's), (Start: 29 @57843 has 52 MA's), (46, 57894), (48, 57900), (52, 57906), (54, 57912), (60, 57945), (63, 57963), (64, 57978), (68, 57993), (69, 58011),

Gene: FrenchFry_65 Start: 55583, Stop: 55843, Start Num: 24

Candidate Starts for FrenchFry_65:

(Start: 24 @55583 has 42 MA's), (Start: 29 @55592 has 52 MA's), (Start: 40 @55637 has 5 MA's), (47, 55664), (56, 55691), (61, 55718), (68, 55760), (70, 55793), (72, 55802), (73, 55814),

Gene: Freya_65 Start: 56508, Stop: 56780, Start Num: 17

Candidate Starts for Freya_65:

(Start: 17 @56508 has 115 MA's), (Start: 24 @56529 has 42 MA's), (Start: 29 @56538 has 52 MA's), (47, 56601), (56, 56628), (73, 56751),

Gene: FriarPreacher_66 Start: 56890, Stop: 57192, Start Num: 12

Candidate Starts for FriarPreacher_66:

(Start: 12 @56890 has 74 MA's), (Start: 29 @56944 has 52 MA's), (46, 57013), (58, 57055),

Gene: Fringe_72 Start: 57683, Stop: 57955, Start Num: 17

Candidate Starts for Fringe_72:

(Start: 17 @57683 has 115 MA's), (Start: 24 @57704 has 42 MA's), (Start: 29 @57713 has 52 MA's), (47, 57776), (56, 57803), (73, 57926),

Gene: FugateOSU_68 Start: 57843, Stop: 58145, Start Num: 12

Candidate Starts for FugateOSU_68:

(Start: 12 @57843 has 74 MA's), (Start: 29 @57897 has 52 MA's), (46, 57966), (58, 58008),

Gene: Gadget_69 Start: 57577, Stop: 57864, Start Num: 19

Candidate Starts for Gadget_69:

(2, 57355), (3, 57373), (4, 57385), (6, 57430), (13, 57565), (Start: 19 @57577 has 22 MA's), (21, 57595), (Start: 24 @57607 has 42 MA's), (Start: 29 @57616 has 52 MA's), (32, 57625), (64, 57769), (72, 57826),

Gene: Gareth_68 Start: 57304, Stop: 57576, Start Num: 17

Candidate Starts for Gareth_68:

(Start: 17 @57304 has 115 MA's), (Start: 24 @57325 has 42 MA's), (Start: 29 @57334 has 52 MA's), (47, 57397), (56, 57424), (73, 57547),

Gene: Gervas_69 Start: 57701, Stop: 57958, Start Num: 24

Candidate Starts for Gervas_69:

(2, 57449), (3, 57467), (4, 57479), (6, 57524), (13, 57659), (Start: 19 @57671 has 22 MA's), (21, 57689), (Start: 24 @57701 has 42 MA's), (Start: 29 @57710 has 52 MA's), (32, 57719), (64, 57863), (72, 57920),

Gene: Giraffe_68 Start: 57299, Stop: 57571, Start Num: 17

Candidate Starts for Giraffe_68:

(Start: 17 @57299 has 115 MA's), (Start: 24 @57320 has 42 MA's), (Start: 29 @57329 has 52 MA's), (47, 57392), (56, 57419), (73, 57542),

Gene: Glass_65 Start: 55585, Stop: 55845, Start Num: 24

Candidate Starts for Glass_65:

(Start: 24 @55585 has 42 MA's), (Start: 29 @55594 has 52 MA's), (Start: 40 @55639 has 5 MA's), (47, 55666), (56, 55693), (61, 55720), (68, 55762), (70, 55795), (72, 55804), (73, 55816),

Gene: GlenHope_69 Start: 57237, Stop: 57524, Start Num: 19

Candidate Starts for GlenHope_69:

(2, 57015), (3, 57033), (4, 57045), (6, 57090), (13, 57225), (Start: 19 @57237 has 22 MA's), (21, 57255), (Start: 24 @57267 has 42 MA's), (Start: 29 @57276 has 52 MA's), (32, 57285), (64, 57429), (72, 57486),

Gene: Glubnar_68 Start: 57182, Stop: 57430, Start Num: 29

Candidate Starts for Glubnar_68:

(2, 56921), (3, 56939), (4, 56951), (6, 56996), (13, 57131), (Start: 19 @57143 has 22 MA's), (21, 57161), (Start: 24 @57173 has 42 MA's), (Start: 29 @57182 has 52 MA's), (32, 57191), (64, 57335), (72, 57392),

Gene: Godines_65 Start: 55844, Stop: 56104, Start Num: 24

Candidate Starts for Godines_65:

(Start: 24 @55844 has 42 MA's), (Start: 29 @55853 has 52 MA's), (Start: 40 @55898 has 5 MA's), (47, 55925), (56, 55952), (61, 55979), (68, 56021), (70, 56054), (72, 56063), (73, 56075),

Gene: Gophee_69 Start: 57290, Stop: 57562, Start Num: 17

Candidate Starts for Gophee_69:

(Start: 17 @57290 has 115 MA's), (Start: 24 @57311 has 42 MA's), (Start: 29 @57320 has 52 MA's), (47, 57383), (56, 57410), (73, 57533),

Gene: Gwilliam_69 Start: 57728, Stop: 57970, Start Num: 29

Candidate Starts for Gwilliam_69:

(Start: 17 @57698 has 115 MA's), (Start: 24 @57719 has 42 MA's), (Start: 29 @57728 has 52 MA's), (56, 57818), (73, 57941),

Gene: HSavage_66 Start: 56826, Stop: 57098, Start Num: 17

Candidate Starts for HSavage_66:

(Start: 17 @56826 has 115 MA's), (Start: 24 @56847 has 42 MA's), (Start: 29 @56856 has 52 MA's), (47, 56919), (56, 56946), (73, 57069),

Gene: Haimas_66 Start: 56790, Stop: 57092, Start Num: 12

Candidate Starts for Haimas_66:

(Start: 12 @56790 has 74 MA's), (Start: 29 @56844 has 52 MA's), (46, 56913), (58, 56955),

Gene: Haleema_67 Start: 56845, Stop: 57117, Start Num: 17

Candidate Starts for Haleema_67:

(Start: 17 @56845 has 115 MA's), (Start: 24 @56866 has 42 MA's), (Start: 29 @56875 has 52 MA's), (47, 56938), (56, 56965), (73, 57088),

Gene: Halfpint_67 Start: 56988, Stop: 57275, Start Num: 19

Candidate Starts for Halfpint_67:

(2, 56766), (3, 56784), (4, 56796), (6, 56841), (13, 56976), (Start: 19 @56988 has 22 MA's), (21, 57006), (Start: 24 @57018 has 42 MA's), (Start: 29 @57027 has 52 MA's), (32, 57036), (64, 57180), (72, 57237),

Gene: Hangman_61 Start: 58042, Stop: 58311, Start Num: 29

Candidate Starts for Hangman_61:

(Start: 29 @58042 has 52 MA's), (46, 58093), (48, 58099), (52, 58105), (54, 58111), (55, 58114), (60, 58144), (63, 58162), (64, 58177), (68, 58192), (69, 58210),

Gene: Hartsy_67 Start: 56987, Stop: 57259, Start Num: 17

Candidate Starts for Hartsy_67:

(Start: 17 @56987 has 115 MA's), (Start: 24 @57008 has 42 MA's), (Start: 29 @57017 has 52 MA's), (47, 57080), (56, 57107), (73, 57230),

Gene: Harvey_65 Start: 56819, Stop: 57121, Start Num: 12

Candidate Starts for Harvey_65:

(Start: 12 @56819 has 74 MA's), (Start: 29 @56873 has 52 MA's), (46, 56942), (58, 56984),

Gene: Hashim76_70 Start: 58554, Stop: 58817, Start Num: 24

Candidate Starts for Hashim76_70:

(Start: 18 @58521 has 1 MA's), (Start: 24 @58554 has 42 MA's), (Start: 29 @58563 has 52 MA's), (59, 58665), (63, 58686), (76, 58797),

Gene: Heathcliff_68 Start: 57204, Stop: 57491, Start Num: 19

Candidate Starts for Heathcliff_68:

(2, 56982), (3, 57000), (4, 57012), (6, 57057), (13, 57192), (Start: 19 @57204 has 22 MA's), (21, 57222), (Start: 24 @57234 has 42 MA's), (Start: 29 @57243 has 52 MA's), (32, 57252), (64, 57396), (72, 57453),

Gene: Hedgerow_64 Start: 55555, Stop: 55815, Start Num: 24

Candidate Starts for Hedgerow_64:

(Start: 24 @55555 has 42 MA's), (Start: 29 @55564 has 52 MA's), (Start: 40 @55609 has 5 MA's), (47, 55636), (56, 55663), (61, 55690), (68, 55732), (70, 55765), (72, 55774), (73, 55786),

Gene: Held_66 Start: 56793, Stop: 57095, Start Num: 12

Candidate Starts for Held_66:

(Start: 12 @56793 has 74 MA's), (Start: 29 @56847 has 52 MA's), (46, 56916), (58, 56958),

Gene: HenryJackson_68 Start: 57328, Stop: 57600, Start Num: 17

Candidate Starts for HenryJackson_68:

(Start: 17 @57328 has 115 MA's), (Start: 24 @57349 has 42 MA's), (Start: 29 @57358 has 52 MA's), (47, 57421), (48, 57424), (56, 57448), (73, 57571),

Gene: Hertubise_67 Start: 57094, Stop: 57366, Start Num: 17

Candidate Starts for Hertubise_67:

(Start: 17 @57094 has 115 MA's), (Start: 24 @57115 has 42 MA's), (Start: 29 @57124 has 52 MA's), (47, 57187), (56, 57214), (73, 57337),

Gene: Hetaeria_67 Start: 57034, Stop: 57306, Start Num: 17

Candidate Starts for Hetaeria_67:

(Start: 17 @57034 has 115 MA's), (Start: 24 @57055 has 42 MA's), (Start: 29 @57064 has 52 MA's), (47, 57127), (56, 57154), (73, 57277),

Gene: HighStump_69 Start: 57296, Stop: 57598, Start Num: 12

Candidate Starts for HighStump_69:

(Start: 12 @57296 has 74 MA's), (Start: 29 @57350 has 52 MA's), (46, 57419), (58, 57461),

Gene: Holeinone_64 Start: 55443, Stop: 55703, Start Num: 24

Candidate Starts for Holeinone_64:

(Start: 24 @55443 has 42 MA's), (Start: 29 @55452 has 52 MA's), (Start: 40 @55497 has 5 MA's), (47, 55524), (56, 55551), (61, 55578), (68, 55620), (70, 55653), (72, 55662), (73, 55674),

Gene: Hydro_61 Start: 57932, Stop: 58249, Start Num: 16

Candidate Starts for Hydro_61:

(Start: 16 @57932 has 10 MA's), (Start: 29 @57980 has 52 MA's), (46, 58031), (48, 58037), (52, 58043), (54, 58049), (55, 58052), (60, 58082), (63, 58100), (64, 58115), (68, 58130), (69, 58148),

Gene: Imvubu_61 Start: 56360, Stop: 56623, Start Num: 26

Candidate Starts for Imvubu_61:

(Start: 24 @56357 has 42 MA's), (Start: 26 @56360 has 1 MA's), (Start: 29 @56366 has 52 MA's), (45, 56417), (64, 56501), (68, 56516),

Gene: Iridoclysis_67 Start: 57107, Stop: 57409, Start Num: 12

Candidate Starts for Iridoclysis_67:

(Start: 12 @57107 has 74 MA's), (Start: 29 @57161 has 52 MA's), (46, 57230), (58, 57272),

Gene: IsaacEli_69 Start: 57317, Stop: 57589, Start Num: 17

Candidate Starts for IsaacEli_69:

(Start: 17 @57317 has 115 MA's), (Start: 24 @57338 has 42 MA's), (Start: 29 @57347 has 52 MA's), (47, 57410), (56, 57437), (73, 57560),

Gene: ItsyBitsy1_63 Start: 55673, Stop: 55933, Start Num: 24

Candidate Starts for ItsyBitsy1_63:

(Start: 24 @55673 has 42 MA's), (Start: 29 @55682 has 52 MA's), (Start: 40 @55727 has 5 MA's), (47, 55754), (56, 55781), (61, 55808), (68, 55850), (70, 55883), (72, 55892), (73, 55904),

Gene: JDog_67 Start: 57338, Stop: 57610, Start Num: 17

Candidate Starts for JDog_67:

(Start: 17 @57338 has 115 MA's), (Start: 24 @57359 has 42 MA's), (Start: 29 @57368 has 52 MA's), (47, 57431), (56, 57458), (73, 57581),

Gene: JacAttac_68 Start: 56782, Stop: 57054, Start Num: 17

Candidate Starts for JacAttac_68:

(Start: 17 @56782 has 115 MA's), (Start: 24 @56803 has 42 MA's), (Start: 29 @56812 has 52 MA's), (47, 56875), (56, 56902), (73, 57025),

Gene: Jackstina_64 Start: 57129, Stop: 57416, Start Num: 19

Candidate Starts for Jackstina_64:

(2, 56907), (3, 56925), (4, 56937), (6, 56982), (13, 57117), (Start: 19 @57129 has 22 MA's), (21, 57147), (Start: 24 @57159 has 42 MA's), (Start: 29 @57168 has 52 MA's), (32, 57177), (64, 57321), (72, 57378),

Gene: JakeO_69 Start: 57084, Stop: 57335, Start Num: 24

Candidate Starts for JakeO_69:

(Start: 24 @57084 has 42 MA's), (Start: 29 @57093 has 52 MA's), (47, 57156), (56, 57183), (73, 57306),

Gene: JangoPhett_102 Start: 57123, Stop: 57395, Start Num: 17

Candidate Starts for JangoPhett_102:

(Start: 17 @57123 has 115 MA's), (Start: 24 @57144 has 42 MA's), (Start: 29 @57153 has 52 MA's), (47, 57216), (56, 57243), (73, 57366),

Gene: Jillium_68 Start: 57323, Stop: 57595, Start Num: 17

Candidate Starts for Jillium_68:

(Start: 17 @57323 has 115 MA's), (Start: 24 @57344 has 42 MA's), (Start: 29 @57353 has 52 MA's), (47, 57416), (56, 57443), (73, 57566),

Gene: Jiraiya_69 Start: 57095, Stop: 57367, Start Num: 17
Candidate Starts for Jiraiya_69:
(Start: 17 @57095 has 115 MA's), (Start: 24 @57116 has 42 MA's), (Start: 29 @57125 has 52 MA's),
(56, 57215), (73, 57338),

Gene: KLucky39_66 Start: 56669, Stop: 56941, Start Num: 17
Candidate Starts for KLucky39_66:
(Start: 17 @56669 has 115 MA's), (Start: 24 @56690 has 42 MA's), (Start: 29 @56699 has 52 MA's),
(47, 56762), (56, 56789), (73, 56912),

Gene: Kahve_68 Start: 57325, Stop: 57597, Start Num: 17
Candidate Starts for Kahve_68:
(Start: 17 @57325 has 115 MA's), (Start: 24 @57346 has 42 MA's), (Start: 29 @57355 has 52 MA's),
(47, 57418), (48, 57421), (56, 57445), (73, 57568),

Gene: Kailash_66 Start: 57214, Stop: 57516, Start Num: 12
Candidate Starts for Kailash_66:
(Start: 12 @57214 has 74 MA's), (Start: 29 @57268 has 52 MA's), (46, 57337), (58, 57379),

Gene: Kaleb_65 Start: 55644, Stop: 55850, Start Num: 40
Candidate Starts for Kaleb_65:
(Start: 24 @55590 has 42 MA's), (Start: 29 @55599 has 52 MA's), (Start: 40 @55644 has 5 MA's), (47,
55671), (56, 55698), (61, 55725), (68, 55767), (70, 55800), (72, 55809), (73, 55821),

Gene: Kamiyu_68 Start: 57245, Stop: 57493, Start Num: 29
Candidate Starts for Kamiyu_68:
(2, 56984), (3, 57002), (4, 57014), (6, 57059), (13, 57194), (Start: 19 @57206 has 22 MA's), (21,
57224), (Start: 24 @57236 has 42 MA's), (Start: 29 @57245 has 52 MA's), (32, 57254), (64, 57398),
(72, 57455),

Gene: Katniss_69 Start: 56765, Stop: 57037, Start Num: 17
Candidate Starts for Katniss_69:
(Start: 17 @56765 has 115 MA's), (Start: 24 @56786 has 42 MA's), (Start: 29 @56795 has 52 MA's),
(47, 56858), (56, 56885), (73, 57008),

Gene: Keitherie_70 Start: 57387, Stop: 57659, Start Num: 17
Candidate Starts for Keitherie_70:
(Start: 17 @57387 has 115 MA's), (Start: 24 @57408 has 42 MA's), (Start: 29 @57417 has 52 MA's),
(47, 57480), (56, 57507), (73, 57630),

Gene: Kheth_64 Start: 55502, Stop: 55762, Start Num: 24
Candidate Starts for Kheth_64:
(Start: 24 @55502 has 42 MA's), (Start: 29 @55511 has 52 MA's), (Start: 40 @55556 has 5 MA's), (47,
55583), (56, 55610), (61, 55637), (68, 55679), (70, 55712), (72, 55721), (73, 55733),

Gene: Kikipoo_69 Start: 57317, Stop: 57589, Start Num: 17
Candidate Starts for Kikipoo_69:
(Start: 17 @57317 has 115 MA's), (Start: 24 @57338 has 42 MA's), (Start: 29 @57347 has 52 MA's),
(47, 57410), (56, 57437), (73, 57560),

Gene: Kimbrough_69 Start: 57367, Stop: 57639, Start Num: 17
Candidate Starts for Kimbrough_69:

(Start: 17 @57367 has 115 MA's), (Start: 24 @57388 has 42 MA's), (Start: 29 @57397 has 52 MA's), (47, 57460), (56, 57487), (73, 57610),

Gene: KingTut_59 Start: 53521, Stop: 53823, Start Num: 12

Candidate Starts for KingTut_59:

(Start: 12 @53521 has 74 MA's), (Start: 29 @53575 has 52 MA's), (46, 53644), (58, 53686),

Gene: KingVeVeVe_66 Start: 56324, Stop: 56626, Start Num: 12

Candidate Starts for KingVeVeVe_66:

(Start: 12 @56324 has 74 MA's), (Start: 29 @56378 has 52 MA's), (46, 56447), (58, 56489),

Gene: KlimbOn_67 Start: 56826, Stop: 57098, Start Num: 17

Candidate Starts for KlimbOn_67:

(Start: 17 @56826 has 115 MA's), (Start: 24 @56847 has 42 MA's), (Start: 29 @56856 has 52 MA's), (47, 56919), (56, 56946), (73, 57069),

Gene: Kloppinator_68 Start: 56982, Stop: 57284, Start Num: 12

Candidate Starts for Kloppinator_68:

(Start: 12 @56982 has 74 MA's), (Start: 29 @57036 has 52 MA's), (46, 57105), (58, 57147),

Gene: Kolhan_65 Start: 55479, Stop: 55739, Start Num: 24

Candidate Starts for Kolhan_65:

(Start: 24 @55479 has 42 MA's), (Start: 29 @55488 has 52 MA's), (Start: 40 @55533 has 5 MA's), (47, 55560), (56, 55587), (61, 55614), (68, 55656), (70, 55689), (72, 55698), (73, 55710),

Gene: Kronus_68 Start: 58341, Stop: 58589, Start Num: 29

Candidate Starts for Kronus_68:

(2, 58080), (3, 58098), (4, 58110), (6, 58155), (13, 58290), (Start: 19 @58302 has 22 MA's), (21, 58320), (Start: 24 @58332 has 42 MA's), (Start: 29 @58341 has 52 MA's), (32, 58350), (64, 58494), (72, 58551),

Gene: Kwadwo_67 Start: 56776, Stop: 57048, Start Num: 17

Candidate Starts for Kwadwo_67:

(Start: 17 @56776 has 115 MA's), (Start: 24 @56797 has 42 MA's), (Start: 29 @56806 has 52 MA's), (47, 56869), (56, 56896), (73, 57019),

Gene: Kwksand96_68 Start: 56903, Stop: 57205, Start Num: 12

Candidate Starts for Kwksand96_68:

(Start: 12 @56903 has 74 MA's), (Start: 29 @56957 has 52 MA's), (46, 57026), (58, 57068),

Gene: Labeouficaum_68 Start: 56891, Stop: 57193, Start Num: 12

Candidate Starts for Labeouficaum_68:

(Start: 12 @56891 has 74 MA's), (Start: 29 @56945 has 52 MA's), (46, 57014), (58, 57056),

Gene: Lars_65 Start: 55572, Stop: 55823, Start Num: 29

Candidate Starts for Lars_65:

(Start: 24 @55563 has 42 MA's), (Start: 29 @55572 has 52 MA's), (Start: 40 @55617 has 5 MA's), (47, 55644), (56, 55671), (61, 55698), (68, 55740), (70, 55773), (72, 55782), (73, 55794),

Gene: Laurie_64 Start: 55263, Stop: 55523, Start Num: 24

Candidate Starts for Laurie_64:

(Start: 24 @55263 has 42 MA's), (Start: 29 @55272 has 52 MA's), (Start: 40 @55317 has 5 MA's), (47, 55344), (56, 55371), (61, 55398), (68, 55440), (70, 55473), (72, 55482), (73, 55494),

Gene: LeeLot_67 Start: 57397, Stop: 57699, Start Num: 12
Candidate Starts for LeeLot_67:
(Start: 12 @57397 has 74 MA's), (Start: 29 @57451 has 52 MA's), (46, 57520), (58, 57562),

Gene: Lego3393_65 Start: 57349, Stop: 57651, Start Num: 12
Candidate Starts for Lego3393_65:
(Start: 12 @57349 has 74 MA's), (Start: 29 @57403 has 52 MA's), (46, 57472), (58, 57514),

Gene: Legolas_69 Start: 57190, Stop: 57438, Start Num: 29
Candidate Starts for Legolas_69:
(Start: 12 @57136 has 74 MA's), (Start: 29 @57190 has 52 MA's), (46, 57259), (58, 57301),

Gene: LemonSlice_68 Start: 56788, Stop: 57090, Start Num: 12
Candidate Starts for LemonSlice_68:
(Start: 12 @56788 has 74 MA's), (Start: 29 @56842 has 52 MA's), (46, 56911), (58, 56953),

Gene: Lephleur_64 Start: 55428, Stop: 55688, Start Num: 24
Candidate Starts for Lephleur_64:
(Start: 24 @55428 has 42 MA's), (Start: 29 @55437 has 52 MA's), (Start: 40 @55482 has 5 MA's), (47, 55509), (56, 55536), (61, 55563), (68, 55605), (70, 55638), (72, 55647), (73, 55659),

Gene: LestyG_66 Start: 56771, Stop: 57019, Start Num: 29
Candidate Starts for LestyG_66:
(2, 56510), (3, 56528), (4, 56540), (6, 56585), (13, 56720), (Start: 19 @56732 has 22 MA's), (21, 56750), (Start: 24 @56762 has 42 MA's), (Start: 29 @56771 has 52 MA's), (32, 56780), (64, 56924), (72, 56981),

Gene: LilMcDreamy_64 Start: 57921, Stop: 58187, Start Num: 25
Candidate Starts for LilMcDreamy_64:
(Start: 25 @57921 has 1 MA's), (Start: 30 @57930 has 3 MA's), (38, 57972), (44, 57993), (46, 57999), (59, 58047),

Gene: LilSmirk_64 Start: 55461, Stop: 55721, Start Num: 24
Candidate Starts for LilSmirk_64:
(Start: 24 @55461 has 42 MA's), (Start: 29 @55470 has 52 MA's), (Start: 40 @55515 has 5 MA's), (47, 55542), (56, 55569), (61, 55596), (68, 55638), (70, 55671), (72, 55680), (73, 55692),

Gene: LizLemon_64 Start: 55590, Stop: 55850, Start Num: 24
Candidate Starts for LizLemon_64:
(Start: 24 @55590 has 42 MA's), (Start: 29 @55599 has 52 MA's), (Start: 40 @55644 has 5 MA's), (47, 55671), (56, 55698), (61, 55725), (68, 55767), (70, 55800), (72, 55809), (73, 55821),

Gene: Lolalove_62 Start: 58003, Stop: 58272, Start Num: 29
Candidate Starts for Lolalove_62:
(Start: 29 @58003 has 52 MA's), (46, 58054), (48, 58060), (52, 58066), (54, 58072), (55, 58075), (60, 58105), (63, 58123), (64, 58138), (68, 58153), (69, 58171),

Gene: Longacauda_69 Start: 57172, Stop: 57444, Start Num: 17
Candidate Starts for Longacauda_69:
(Start: 17 @57172 has 115 MA's), (Start: 24 @57193 has 42 MA's), (Start: 29 @57202 has 52 MA's), (47, 57265), (56, 57292), (73, 57415),

Gene: LostAndPhound_67 Start: 57395, Stop: 57643, Start Num: 29

Candidate Starts for LostAndPhound_67:

(Start: 12 @57341 has 74 MA's), (Start: 29 @57395 has 52 MA's), (46, 57464), (58, 57506),

Gene: LuckyMarjie_65 Start: 56527, Stop: 56799, Start Num: 17

Candidate Starts for LuckyMarjie_65:

(Start: 17 @56527 has 115 MA's), (Start: 24 @56548 has 42 MA's), (Start: 29 @56557 has 52 MA's), (47, 56620), (56, 56647), (73, 56770),

Gene: Lulumae_65 Start: 56511, Stop: 56783, Start Num: 17

Candidate Starts for Lulumae_65:

(Start: 17 @56511 has 115 MA's), (Start: 24 @56532 has 42 MA's), (Start: 29 @56541 has 52 MA's), (47, 56604), (56, 56631), (73, 56754),

Gene: Lulwa_66 Start: 56139, Stop: 56381, Start Num: 29

Candidate Starts for Lulwa_66:

(Start: 17 @56109 has 115 MA's), (Start: 24 @56130 has 42 MA's), (Start: 29 @56139 has 52 MA's), (47, 56202), (56, 56229), (73, 56352),

Gene: Lumine_69 Start: 56995, Stop: 57267, Start Num: 17

Candidate Starts for Lumine_69:

(Start: 17 @56995 has 115 MA's), (Start: 24 @57016 has 42 MA's), (Start: 29 @57025 has 52 MA's), (47, 57088), (56, 57115), (73, 57238),

Gene: MRabcd_67 Start: 57164, Stop: 57412, Start Num: 29

Candidate Starts for MRabcd_67:

(Start: 12 @57110 has 74 MA's), (Start: 29 @57164 has 52 MA's), (46, 57233), (58, 57275),

Gene: Mag7_66 Start: 56812, Stop: 57060, Start Num: 29

Candidate Starts for Mag7_66:

(Start: 12 @56758 has 74 MA's), (Start: 29 @56812 has 52 MA's), (46, 56881), (58, 56923),

Gene: Mana_66 Start: 56783, Stop: 57085, Start Num: 12

Candidate Starts for Mana_66:

(Start: 12 @56783 has 74 MA's), (Start: 29 @56837 has 52 MA's), (46, 56906), (58, 56948),

Gene: Manad_67 Start: 57078, Stop: 57350, Start Num: 17

Candidate Starts for Manad_67:

(Start: 17 @57078 has 115 MA's), (Start: 24 @57099 has 42 MA's), (Start: 29 @57108 has 52 MA's), (47, 57171), (56, 57198), (73, 57321),

Gene: Marlia_69 Start: 57714, Stop: 57962, Start Num: 29

Candidate Starts for Marlia_69:

(2, 57453), (3, 57471), (4, 57483), (6, 57528), (13, 57663), (Start: 19 @57675 has 22 MA's), (21, 57693), (Start: 24 @57705 has 42 MA's), (Start: 29 @57714 has 52 MA's), (32, 57723), (64, 57867), (72, 57924),

Gene: Maru_67 Start: 57222, Stop: 57524, Start Num: 12

Candidate Starts for Maru_67:

(Start: 12 @57222 has 74 MA's), (Start: 29 @57276 has 52 MA's), (46, 57345), (58, 57387),

Gene: MasterPo_65 Start: 55460, Stop: 55720, Start Num: 24

Candidate Starts for MasterPo_65:

(Start: 24 @55460 has 42 MA's), (Start: 29 @55469 has 52 MA's), (Start: 40 @55514 has 5 MA's), (47, 55541), (56, 55568), (61, 55595), (68, 55637), (70, 55670), (72, 55679), (73, 55691),

Gene: Matalotodo_66 Start: 57622, Stop: 57924, Start Num: 12

Candidate Starts for Matalotodo_66:

(Start: 12 @57622 has 74 MA's), (Start: 29 @57676 has 52 MA's), (46, 57745), (58, 57787),

Gene: Mcshane_67 Start: 56789, Stop: 57061, Start Num: 17

Candidate Starts for Mcshane_67:

(Start: 17 @56789 has 115 MA's), (Start: 24 @56810 has 42 MA's), (Start: 29 @56819 has 52 MA's), (47, 56882), (56, 56909), (73, 57032),

Gene: Mecca_68 Start: 57354, Stop: 57626, Start Num: 17

Candidate Starts for Mecca_68:

(Start: 17 @57354 has 115 MA's), (Start: 24 @57375 has 42 MA's), (Start: 29 @57384 has 52 MA's), (47, 57447), (56, 57474), (73, 57597),

Gene: Megatron_68 Start: 57304, Stop: 57576, Start Num: 17

Candidate Starts for Megatron_68:

(Start: 17 @57304 has 115 MA's), (Start: 24 @57325 has 42 MA's), (Start: 29 @57334 has 52 MA's), (47, 57397), (56, 57424), (73, 57547),

Gene: Mesh1_68 Start: 57358, Stop: 57660, Start Num: 12

Candidate Starts for Mesh1_68:

(Start: 12 @57358 has 74 MA's), (Start: 29 @57412 has 52 MA's), (46, 57481), (58, 57523),

Gene: MichaelPhcott_66 Start: 56755, Stop: 57057, Start Num: 12

Candidate Starts for MichaelPhcott_66:

(Start: 12 @56755 has 74 MA's), (Start: 29 @56809 has 52 MA's), (46, 56878), (58, 56920),

Gene: MitKao_67 Start: 56792, Stop: 57094, Start Num: 12

Candidate Starts for MitKao_67:

(Start: 12 @56792 has 74 MA's), (Start: 29 @56846 has 52 MA's), (46, 56915), (58, 56957),

Gene: Mithril_61 Start: 58157, Stop: 58423, Start Num: 29

Candidate Starts for Mithril_61:

(Start: 29 @58157 has 52 MA's), (46, 58208), (48, 58214), (52, 58220), (54, 58226), (55, 58229), (60, 58259), (63, 58277), (64, 58292), (68, 58307), (69, 58325),

Gene: MmasiCarm_69 Start: 57696, Stop: 57944, Start Num: 29

Candidate Starts for MmasiCarm_69:

(2, 57435), (3, 57453), (4, 57465), (6, 57510), (13, 57645), (Start: 19 @57657 has 22 MA's), (21, 57675), (Start: 24 @57687 has 42 MA's), (Start: 29 @57696 has 52 MA's), (32, 57705), (64, 57849), (72, 57906),

Gene: Morgushi_66 Start: 56781, Stop: 57083, Start Num: 12

Candidate Starts for Morgushi_66:

(Start: 12 @56781 has 74 MA's), (Start: 29 @56835 has 52 MA's), (46, 56904), (58, 56946),

Gene: Mortcellus_68 Start: 58358, Stop: 58606, Start Num: 29

Candidate Starts for Mortcellus_68:

(2, 58097), (3, 58115), (4, 58127), (6, 58172), (13, 58307), (Start: 19 @58319 has 22 MA's), (21, 58337), (Start: 24 @58349 has 42 MA's), (Start: 29 @58358 has 52 MA's), (32, 58367), (64, 58511),

(72, 58568),

Gene: Morty_69 Start: 57318, Stop: 57590, Start Num: 17

Candidate Starts for Morty_69:

(Start: 17 @57318 has 115 MA's), (Start: 24 @57339 has 42 MA's), (Start: 29 @57348 has 52 MA's), (47, 57411), (56, 57438), (73, 57561),

Gene: Mosaic_65 Start: 56787, Stop: 57089, Start Num: 12

Candidate Starts for Mosaic_65:

(11, 56778), (Start: 12 @56787 has 74 MA's), (Start: 29 @56841 has 52 MA's), (46, 56910), (58, 56952),

Gene: Mudslide_61 Start: 58184, Stop: 58498, Start Num: 16

Candidate Starts for Mudslide_61:

(Start: 16 @58184 has 10 MA's), (Start: 29 @58232 has 52 MA's), (46, 58283), (48, 58289), (52, 58295), (54, 58301), (55, 58304), (60, 58334), (63, 58352), (64, 58367), (68, 58382), (69, 58400),

Gene: Mulan_67 Start: 57021, Stop: 57323, Start Num: 12

Candidate Starts for Mulan_67:

(Start: 12 @57021 has 74 MA's), (Start: 29 @57075 has 52 MA's), (46, 57144), (58, 57186),

Gene: Murdoc_65 Start: 57070, Stop: 57372, Start Num: 12

Candidate Starts for Murdoc_65:

(Start: 12 @57070 has 74 MA's), (Start: 29 @57124 has 52 MA's), (46, 57193), (58, 57235),

Gene: Mutante_68 Start: 56801, Stop: 57073, Start Num: 17

Candidate Starts for Mutante_68:

(Start: 17 @56801 has 115 MA's), (Start: 24 @56822 has 42 MA's), (Start: 29 @56831 has 52 MA's), (47, 56894), (56, 56921), (73, 57044),

Gene: Nacho_0071 Start: 57839, Stop: 58111, Start Num: 17

Candidate Starts for Nacho_0071:

(Start: 17 @57839 has 115 MA's), (Start: 24 @57860 has 42 MA's), (Start: 29 @57869 has 52 MA's), (47, 57932), (56, 57959), (73, 58082),

Gene: Newman_66 Start: 57116, Stop: 57388, Start Num: 17

Candidate Starts for Newman_66:

(Start: 17 @57116 has 115 MA's), (Start: 24 @57137 has 42 MA's), (Start: 29 @57146 has 52 MA's), (47, 57209), (56, 57236), (73, 57359),

Gene: Nicole21_69 Start: 57080, Stop: 57352, Start Num: 17

Candidate Starts for Nicole21_69:

(Start: 17 @57080 has 115 MA's), (Start: 24 @57101 has 42 MA's), (Start: 29 @57110 has 52 MA's), (47, 57173), (56, 57200), (73, 57323),

Gene: Nigel_61 Start: 57023, Stop: 57292, Start Num: 29

Candidate Starts for Nigel_61:

(Start: 29 @57023 has 52 MA's), (46, 57074), (48, 57080), (52, 57086), (54, 57092), (55, 57095), (63, 57143), (64, 57158), (68, 57173),

Gene: Nozo_68 Start: 58013, Stop: 58300, Start Num: 19

Candidate Starts for Nozo_68:

(2, 57791), (3, 57809), (4, 57821), (6, 57866), (13, 58001), (Start: 19 @58013 has 22 MA's), (21, 58031), (Start: 24 @58043 has 42 MA's), (Start: 29 @58052 has 52 MA's), (32, 58061), (64, 58205), (72, 58262),

Gene: Numberten_67 Start: 57024, Stop: 57296, Start Num: 17

Candidate Starts for Numberten_67:

(Start: 17 @57024 has 115 MA's), (Start: 24 @57045 has 42 MA's), (Start: 29 @57054 has 52 MA's), (47, 57117), (56, 57144), (73, 57267),

Gene: Nyala_67 Start: 56799, Stop: 57071, Start Num: 17

Candidate Starts for Nyala_67:

(Start: 17 @56799 has 115 MA's), (Start: 24 @56820 has 42 MA's), (Start: 29 @56829 has 52 MA's), (47, 56892), (56, 56919), (73, 57042),

Gene: OSmaximus_68 Start: 57554, Stop: 57850, Start Num: 12

Candidate Starts for OSmaximus_68:

(10, 57536), (Start: 12 @57554 has 74 MA's), (Start: 24 @57599 has 42 MA's), (Start: 29 @57608 has 52 MA's), (48, 57674), (73, 57821),

Gene: Olak_67 Start: 56805, Stop: 57077, Start Num: 17

Candidate Starts for Olak_67:

(Start: 17 @56805 has 115 MA's), (Start: 24 @56826 has 42 MA's), (Start: 29 @56835 has 52 MA's), (47, 56898), (56, 56925), (73, 57048),

Gene: Oline_67 Start: 56953, Stop: 57255, Start Num: 12

Candidate Starts for Oline_67:

(Start: 12 @56953 has 74 MA's), (Start: 29 @57007 has 52 MA's), (46, 57076), (58, 57118),

Gene: OliverWalter_67 Start: 57124, Stop: 57396, Start Num: 17

Candidate Starts for OliverWalter_67:

(Start: 17 @57124 has 115 MA's), (Start: 24 @57145 has 42 MA's), (Start: 29 @57154 has 52 MA's), (47, 57217), (56, 57244), (73, 57367),

Gene: Olivio_68 Start: 57508, Stop: 57756, Start Num: 29

Candidate Starts for Olivio_68:

(2, 57247), (3, 57265), (4, 57277), (6, 57322), (13, 57457), (Start: 19 @57469 has 22 MA's), (21, 57487), (Start: 24 @57499 has 42 MA's), (Start: 29 @57508 has 52 MA's), (32, 57517), (64, 57661), (72, 57718),

Gene: Omniscient_69 Start: 57662, Stop: 57934, Start Num: 17

Candidate Starts for Omniscient_69:

(Start: 17 @57662 has 115 MA's), (Start: 24 @57683 has 42 MA's), (Start: 29 @57692 has 52 MA's), (47, 57755), (56, 57782), (73, 57905),

Gene: Oosterbaan_67 Start: 57081, Stop: 57353, Start Num: 17

Candidate Starts for Oosterbaan_67:

(Start: 17 @57081 has 115 MA's), (Start: 24 @57102 has 42 MA's), (Start: 29 @57111 has 52 MA's), (47, 57174), (56, 57201), (73, 57324),

Gene: Opia_65 Start: 55480, Stop: 55740, Start Num: 24

Candidate Starts for Opia_65:

(Start: 24 @55480 has 42 MA's), (Start: 29 @55489 has 52 MA's), (Start: 40 @55534 has 5 MA's), (47, 55561), (56, 55588), (61, 55615), (68, 55657), (70, 55690), (72, 55699), (73, 55711),

Gene: OrangeOswald_68 Start: 57254, Stop: 57541, Start Num: 19

Candidate Starts for OrangeOswald_68:

(2, 57032), (3, 57050), (4, 57062), (6, 57107), (13, 57242), (Start: 19 @57254 has 22 MA's), (21, 57272), (Start: 24 @57284 has 42 MA's), (Start: 29 @57293 has 52 MA's), (32, 57302), (64, 57446), (72, 57503),

Gene: Orfeu_67 Start: 57338, Stop: 57610, Start Num: 17

Candidate Starts for Orfeu_67:

(Start: 17 @57338 has 115 MA's), (Start: 24 @57359 has 42 MA's), (Start: 29 @57368 has 52 MA's), (47, 57431), (56, 57458), (73, 57581),

Gene: Orwigg_67 Start: 56723, Stop: 56995, Start Num: 17

Candidate Starts for Orwigg_67:

(Start: 17 @56723 has 115 MA's), (Start: 24 @56744 has 42 MA's), (Start: 29 @56753 has 52 MA's), (47, 56816), (56, 56843), (73, 56966),

Gene: PG1_67 Start: 57314, Stop: 57586, Start Num: 17

Candidate Starts for PG1_67:

(Start: 17 @57314 has 115 MA's), (Start: 24 @57335 has 42 MA's), (Start: 29 @57344 has 52 MA's), (47, 57407), (56, 57434), (73, 57557),

Gene: Pacifista_67 Start: 56800, Stop: 57072, Start Num: 17

Candidate Starts for Pacifista_67:

(Start: 17 @56800 has 115 MA's), (Start: 24 @56821 has 42 MA's), (Start: 29 @56830 has 52 MA's), (47, 56893), (56, 56920), (73, 57043),

Gene: PenguinLover67_63 Start: 57825, Stop: 58076, Start Num: 24

Candidate Starts for PenguinLover67_63:

(Start: 24 @57825 has 42 MA's), (Start: 29 @57834 has 52 MA's), (48, 57894), (54, 57906), (59, 57936), (63, 57957),

Gene: Phaedrus_63 Start: 56718, Stop: 56966, Start Num: 29

Candidate Starts for Phaedrus_63:

(2, 56457), (3, 56475), (4, 56487), (6, 56532), (13, 56667), (Start: 19 @56679 has 22 MA's), (21, 56697), (Start: 24 @56709 has 42 MA's), (Start: 29 @56718 has 52 MA's), (32, 56727), (64, 56871), (72, 56928),

Gene: Phamished_69 Start: 57004, Stop: 57306, Start Num: 12

Candidate Starts for Phamished_69:

(Start: 12 @57004 has 74 MA's), (Start: 29 @57058 has 52 MA's), (46, 57127), (58, 57169),

Gene: Phantasmagoria_63 Start: 55526, Stop: 55732, Start Num: 40

Candidate Starts for Phantasmagoria_63:

(Start: 24 @55472 has 42 MA's), (Start: 29 @55481 has 52 MA's), (Start: 40 @55526 has 5 MA's), (47, 55553), (56, 55580), (61, 55607), (68, 55649), (70, 55682), (72, 55691), (73, 55703),

Gene: PhatCats2014_68 Start: 57319, Stop: 57591, Start Num: 17

Candidate Starts for PhatCats2014_68:

(Start: 17 @57319 has 115 MA's), (Start: 24 @57340 has 42 MA's), (Start: 29 @57349 has 52 MA's), (47, 57412), (56, 57439), (73, 57562),

Gene: PhatLouie_70 Start: 57338, Stop: 57610, Start Num: 17

Candidate Starts for PhatLouie_70:

(Start: 17 @57338 has 115 MA's), (Start: 24 @57359 has 42 MA's), (Start: 29 @57368 has 52 MA's), (47, 57431), (56, 57458), (73, 57581),

Gene: Phelemich_64 Start: 58168, Stop: 58425, Start Num: 24

Candidate Starts for Phelemich_64:

(Start: 20 @58141 has 4 MA's), (Start: 24 @58168 has 42 MA's), (Start: 30 @58177 has 3 MA's), (46, 58237), (48, 58243), (58, 58279), (64, 58321), (71, 58375),

Gene: PhenghisKhan_68 Start: 56960, Stop: 57262, Start Num: 12

Candidate Starts for PhenghisKhan_68:

(Start: 12 @56960 has 74 MA's), (Start: 29 @57014 has 52 MA's), (46, 57083), (58, 57125),

Gene: Pherdinand_68 Start: 57073, Stop: 57375, Start Num: 12

Candidate Starts for Pherdinand_68:

(Start: 12 @57073 has 74 MA's), (Start: 29 @57127 has 52 MA's), (46, 57196), (58, 57238),

Gene: Phergie_68 Start: 56952, Stop: 57254, Start Num: 12

Candidate Starts for Phergie_68:

(Start: 12 @56952 has 74 MA's), (Start: 29 @57006 has 52 MA's), (46, 57075), (58, 57117),

Gene: Philly_67 Start: 57066, Stop: 57353, Start Num: 19

Candidate Starts for Philly_67:

(2, 56844), (3, 56862), (4, 56874), (6, 56919), (13, 57054), (Start: 19 @57066 has 22 MA's), (21, 57084), (Start: 24 @57096 has 42 MA's), (Start: 29 @57105 has 52 MA's), (32, 57114), (64, 57258), (72, 57315),

Gene: Phipps_67 Start: 56871, Stop: 57173, Start Num: 12

Candidate Starts for Phipps_67:

(Start: 12 @56871 has 74 MA's), (Start: 29 @56925 has 52 MA's), (46, 56994), (58, 57036),

Gene: Phleuron_66 Start: 56758, Stop: 57060, Start Num: 12

Candidate Starts for Phleuron_66:

(Start: 12 @56758 has 74 MA's), (Start: 29 @56812 has 52 MA's), (46, 56881), (58, 56923),

Gene: Phlyer_68 Start: 57962, Stop: 58249, Start Num: 19

Candidate Starts for Phlyer_68:

(2, 57740), (3, 57758), (4, 57770), (6, 57815), (13, 57950), (Start: 19 @57962 has 22 MA's), (21, 57980), (Start: 24 @57992 has 42 MA's), (Start: 29 @58001 has 52 MA's), (32, 58010), (64, 58154), (72, 58211),

Gene: PhrankReynolds_67 Start: 56957, Stop: 57259, Start Num: 12

Candidate Starts for PhrankReynolds_67:

(Start: 12 @56957 has 74 MA's), (Start: 29 @57011 has 52 MA's), (46, 57080), (58, 57122),

Gene: PhrodoBaggins_69 Start: 57177, Stop: 57479, Start Num: 12

Candidate Starts for PhrodoBaggins_69:

(Start: 12 @57177 has 74 MA's), (Start: 29 @57231 has 52 MA's), (46, 57300), (58, 57342),

Gene: Phunky_66 Start: 56822, Stop: 57094, Start Num: 17

Candidate Starts for Phunky_66:

(Start: 17 @56822 has 115 MA's), (Start: 24 @56843 has 42 MA's), (Start: 29 @56852 has 52 MA's), (47, 56915), (56, 56942), (73, 57065),

Gene: Piglet_0068 Start: 57291, Stop: 57563, Start Num: 17
Candidate Starts for Piglet_0068:
(Start: 17 @57291 has 115 MA's), (Start: 24 @57312 has 42 MA's), (Start: 29 @57321 has 52 MA's),
(47, 57384), (56, 57411), (73, 57534),

Gene: PinheadLarry_67 Start: 57119, Stop: 57421, Start Num: 12
Candidate Starts for PinheadLarry_67:
(Start: 12 @57119 has 74 MA's), (Start: 29 @57173 has 52 MA's), (46, 57242), (58, 57284),

Gene: Pinkman_67 Start: 56895, Stop: 57197, Start Num: 12
Candidate Starts for Pinkman_67:
(Start: 12 @56895 has 74 MA's), (Start: 29 @56949 has 52 MA's), (46, 57018), (58, 57060),

Gene: Pipsqueak_65 Start: 56798, Stop: 57100, Start Num: 12
Candidate Starts for Pipsqueak_65:
(Start: 12 @56798 has 74 MA's), (Start: 29 @56852 has 52 MA's), (46, 56921), (58, 56963),

Gene: Placalicious_68 Start: 57839, Stop: 58141, Start Num: 12
Candidate Starts for Placalicious_68:
(Start: 12 @57839 has 74 MA's), (Start: 29 @57893 has 52 MA's), (46, 57962), (58, 58004),

Gene: Plmatters_66 Start: 56864, Stop: 57112, Start Num: 29
Candidate Starts for Plmatters_66:
(Start: 12 @56810 has 74 MA's), (Start: 29 @56864 has 52 MA's), (46, 56933), (58, 56975),

Gene: Podrick_67 Start: 56879, Stop: 57181, Start Num: 12
Candidate Starts for Podrick_67:
(Start: 12 @56879 has 74 MA's), (Start: 29 @56933 has 52 MA's), (46, 57002), (58, 57044),

Gene: Pops_66 Start: 56842, Stop: 57093, Start Num: 24
Candidate Starts for Pops_66:
(Start: 24 @56842 has 42 MA's), (Start: 29 @56851 has 52 MA's), (47, 56914), (56, 56941), (73,
57064),

Gene: Prickles_69 Start: 57305, Stop: 57607, Start Num: 12
Candidate Starts for Prickles_69:
(Start: 12 @57305 has 74 MA's), (Start: 29 @57359 has 52 MA's), (46, 57428), (58, 57470),

Gene: Prince_61 Start: 58088, Stop: 58405, Start Num: 16
Candidate Starts for Prince_61:
(Start: 16 @58088 has 10 MA's), (Start: 29 @58136 has 52 MA's), (46, 58187), (48, 58193), (52,
58199), (54, 58205), (55, 58208), (60, 58238), (63, 58256), (64, 58271), (68, 58286), (69, 58304),

Gene: PrinceCharming_65 Start: 55569, Stop: 55775, Start Num: 40
Candidate Starts for PrinceCharming_65:
(Start: 24 @55515 has 42 MA's), (Start: 29 @55524 has 52 MA's), (Start: 40 @55569 has 5 MA's), (47,
55596), (56, 55623), (61, 55650), (68, 55692), (70, 55725), (72, 55734), (73, 55746),

Gene: ProfessorX_66 Start: 56815, Stop: 57087, Start Num: 17
Candidate Starts for ProfessorX_66:
(Start: 17 @56815 has 115 MA's), (Start: 24 @56836 has 42 MA's), (Start: 29 @56845 has 52 MA's),
(47, 56908), (56, 56935), (73, 57058),

Gene: Puhltonio_66 Start: 57079, Stop: 57381, Start Num: 12

Candidate Starts for Puhltonio_66:

(Start: 12 @57079 has 74 MA's), (Start: 29 @57133 has 52 MA's), (46, 57202), (58, 57244),

Gene: QueenBeane_68 Start: 57139, Stop: 57390, Start Num: 24

Candidate Starts for QueenBeane_68:

(Start: 17 @57118 has 115 MA's), (Start: 24 @57139 has 42 MA's), (Start: 29 @57148 has 52 MA's), (47, 57211), (56, 57238), (73, 57361),

Gene: Quesadilla_66 Start: 58228, Stop: 58470, Start Num: 29

Candidate Starts for Quesadilla_66:

(Start: 29 @58228 has 52 MA's), (48, 58288), (54, 58300), (59, 58330), (62, 58339), (63, 58351),

Gene: Quisquilliae_69 Start: 57079, Stop: 57351, Start Num: 17

Candidate Starts for Quisquilliae_69:

(Start: 17 @57079 has 115 MA's), (Start: 24 @57100 has 42 MA's), (Start: 29 @57109 has 52 MA's), (47, 57172), (56, 57199), (73, 57322),

Gene: Qyrzula_58 Start: 55591, Stop: 55851, Start Num: 24

Candidate Starts for Qyrzula_58:

(Start: 24 @55591 has 42 MA's), (Start: 29 @55600 has 52 MA's), (Start: 40 @55645 has 5 MA's), (47, 55672), (56, 55699), (61, 55726), (68, 55768), (70, 55801), (72, 55810), (73, 55822),

Gene: RagingRooster_67 Start: 56894, Stop: 57181, Start Num: 19

Candidate Starts for RagingRooster_67:

(2, 56672), (3, 56690), (4, 56702), (6, 56747), (13, 56882), (Start: 19 @56894 has 22 MA's), (21, 56912), (Start: 24 @56924 has 42 MA's), (Start: 29 @56933 has 52 MA's), (32, 56942), (64, 57086), (72, 57143),

Gene: Reprobate_65 Start: 58173, Stop: 58430, Start Num: 24

Candidate Starts for Reprobate_65:

(Start: 20 @58146 has 4 MA's), (Start: 24 @58173 has 42 MA's), (Start: 30 @58182 has 3 MA's), (46, 58242), (48, 58248), (58, 58284), (64, 58326), (71, 58380),

Gene: Rhinoforte_64 Start: 55513, Stop: 55773, Start Num: 24

Candidate Starts for Rhinoforte_64:

(Start: 24 @55513 has 42 MA's), (Start: 29 @55522 has 52 MA's), (Start: 40 @55567 has 5 MA's), (47, 55594), (56, 55621), (61, 55648), (68, 55690), (70, 55723), (72, 55732), (73, 55744),

Gene: Rich_66 Start: 59397, Stop: 59645, Start Num: 30

Candidate Starts for Rich_66:

(Start: 20 @59361 has 4 MA's), (Start: 24 @59388 has 42 MA's), (Start: 30 @59397 has 3 MA's), (48, 59463), (63, 59526), (64, 59541), (71, 59595), (74, 59631), (75, 59640),

Gene: Ricotta_68 Start: 56812, Stop: 57084, Start Num: 17

Candidate Starts for Ricotta_68:

(Start: 17 @56812 has 115 MA's), (Start: 24 @56833 has 42 MA's), (Start: 29 @56842 has 52 MA's), (56, 56932), (73, 57055),

Gene: Riggan_69 Start: 57111, Stop: 57383, Start Num: 17

Candidate Starts for Riggan_69:

(Start: 17 @57111 has 115 MA's), (Start: 24 @57132 has 42 MA's), (Start: 29 @57141 has 52 MA's), (47, 57204), (56, 57231), (73, 57354),

Gene: Rimu_71 Start: 57279, Stop: 57551, Start Num: 17

Candidate Starts for Rimu_71:

(Start: 17 @57279 has 115 MA's), (Start: 24 @57300 has 42 MA's), (Start: 29 @57309 has 52 MA's), (56, 57399), (73, 57522),

Gene: Rita130_66 Start: 58235, Stop: 58483, Start Num: 30

Candidate Starts for Rita130_66:

(Start: 20 @58199 has 4 MA's), (Start: 24 @58226 has 42 MA's), (Start: 30 @58235 has 3 MA's), (48, 58301), (64, 58379), (67, 58391), (71, 58433), (74, 58469),

Gene: Rita1961_69 Start: 57612, Stop: 57899, Start Num: 19

Candidate Starts for Rita1961_69:

(2, 57390), (3, 57408), (4, 57420), (6, 57465), (13, 57600), (Start: 19 @57612 has 22 MA's), (21, 57630), (Start: 24 @57642 has 42 MA's), (Start: 29 @57651 has 52 MA's), (32, 57660), (64, 57804), (72, 57861),

Gene: Riverton_67 Start: 57041, Stop: 57313, Start Num: 17

Candidate Starts for Riverton_67:

(Start: 17 @57041 has 115 MA's), (Start: 24 @57062 has 42 MA's), (Start: 29 @57071 has 52 MA's), (47, 57134), (56, 57161), (73, 57284),

Gene: Robyn_68 Start: 57384, Stop: 57656, Start Num: 17

Candidate Starts for Robyn_68:

(Start: 17 @57384 has 115 MA's), (Start: 24 @57405 has 42 MA's), (Start: 29 @57414 has 52 MA's), (47, 57477), (56, 57504), (73, 57627),

Gene: Roliet_65 Start: 56199, Stop: 56447, Start Num: 29

Candidate Starts for Roliet_65:

(Start: 12 @56145 has 74 MA's), (Start: 29 @56199 has 52 MA's), (46, 56268), (58, 56310),

Gene: RomaT_68 Start: 57813, Stop: 58100, Start Num: 19

Candidate Starts for RomaT_68:

(2, 57591), (3, 57609), (4, 57621), (6, 57666), (13, 57801), (Start: 19 @57813 has 22 MA's), (21, 57831), (Start: 24 @57843 has 42 MA's), (Start: 29 @57852 has 52 MA's), (32, 57861), (64, 58005), (72, 58062),

Gene: Roscoe_68 Start: 57258, Stop: 57530, Start Num: 17

Candidate Starts for Roscoe_68:

(Start: 17 @57258 has 115 MA's), (Start: 24 @57279 has 42 MA's), (Start: 29 @57288 has 52 MA's), (56, 57378), (73, 57501),

Gene: Rosebush_63 Start: 55576, Stop: 55836, Start Num: 24

Candidate Starts for Rosebush_63:

(Start: 24 @55576 has 42 MA's), (Start: 29 @55585 has 52 MA's), (Start: 40 @55630 has 5 MA's), (47, 55657), (56, 55684), (61, 55711), (68, 55753), (70, 55786), (72, 55795), (73, 55807),

Gene: Roy17_66 Start: 56511, Stop: 56783, Start Num: 17

Candidate Starts for Roy17_66:

(Start: 17 @56511 has 115 MA's), (Start: 24 @56532 has 42 MA's), (Start: 29 @56541 has 52 MA's), (47, 56604), (56, 56631), (73, 56754),

Gene: SDcharge11_67 Start: 56317, Stop: 56619, Start Num: 12
Candidate Starts for SDcharge11_67:
(Start: 12 @56317 has 74 MA's), (Start: 29 @56371 has 52 MA's), (46, 56440), (58, 56482),

Gene: Sabella_64 Start: 55412, Stop: 55672, Start Num: 24
Candidate Starts for Sabella_64:
(Start: 24 @55412 has 42 MA's), (Start: 29 @55421 has 52 MA's), (Start: 40 @55466 has 5 MA's), (47, 55493), (56, 55520), (61, 55547), (68, 55589), (70, 55622), (72, 55631), (73, 55643),

Gene: Saguaro_64 Start: 57561, Stop: 57827, Start Num: 24
Candidate Starts for Saguaro_64:
(22, 57552), (Start: 24 @57561 has 42 MA's), (47, 57630), (48, 57633), (52, 57639), (54, 57645), (65, 57720),

Gene: Samaymay_68 Start: 57118, Stop: 57390, Start Num: 17
Candidate Starts for Samaymay_68:
(Start: 17 @57118 has 115 MA's), (Start: 24 @57139 has 42 MA's), (Start: 29 @57148 has 52 MA's), (47, 57211), (56, 57238), (73, 57361),

Gene: SassyCat97_66 Start: 56794, Stop: 57096, Start Num: 12
Candidate Starts for SassyCat97_66:
(Start: 12 @56794 has 74 MA's), (Start: 29 @56848 has 52 MA's), (46, 56917), (58, 56959),

Gene: Schadenfreude_68 Start: 56686, Stop: 56958, Start Num: 17
Candidate Starts for Schadenfreude_68:
(Start: 17 @56686 has 115 MA's), (Start: 24 @56707 has 42 MA's), (Start: 29 @56716 has 52 MA's), (47, 56779), (56, 56806), (73, 56929),

Gene: Scoot17C_68 Start: 56745, Stop: 57017, Start Num: 17
Candidate Starts for Scoot17C_68:
(Start: 17 @56745 has 115 MA's), (Start: 24 @56766 has 42 MA's), (Start: 29 @56775 has 52 MA's), (47, 56838), (56, 56865), (73, 56988),

Gene: Selr12_69 Start: 56827, Stop: 57099, Start Num: 17
Candidate Starts for Selr12_69:
(Start: 17 @56827 has 115 MA's), (Start: 24 @56848 has 42 MA's), (Start: 29 @56857 has 52 MA's), (47, 56920), (56, 56947), (73, 57070),

Gene: Serendipitous_65 Start: 57769, Stop: 58026, Start Num: 30
Candidate Starts for Serendipitous_65:
(9, 57688), (27, 57763), (Start: 30 @57769 has 3 MA's), (61, 57895), (64, 57922), (71, 57976),

Gene: Serendipity_67 Start: 57100, Stop: 57372, Start Num: 17
Candidate Starts for Serendipity_67:
(Start: 17 @57100 has 115 MA's), (Start: 24 @57121 has 42 MA's), (Start: 29 @57130 has 52 MA's), (47, 57193), (56, 57220), (73, 57343),

Gene: Serpentine_0068 Start: 57183, Stop: 57455, Start Num: 17
Candidate Starts for Serpentine_0068:
(Start: 17 @57183 has 115 MA's), (Start: 24 @57204 has 42 MA's), (Start: 29 @57213 has 52 MA's), (47, 57276), (56, 57303), (73, 57426),

Gene: Shenandoah_67 Start: 56910, Stop: 57158, Start Num: 29

Candidate Starts for Shenandoah_67:

(2, 56649), (3, 56667), (4, 56679), (6, 56724), (13, 56859), (Start: 19 @56871 has 22 MA's), (21, 56889), (Start: 24 @56901 has 42 MA's), (Start: 29 @56910 has 52 MA's), (32, 56919), (64, 57063), (72, 57120),

Gene: ShiVal_66 Start: 56826, Stop: 57098, Start Num: 17

Candidate Starts for ShiVal_66:

(Start: 17 @56826 has 115 MA's), (Start: 24 @56847 has 42 MA's), (Start: 29 @56856 has 52 MA's), (47, 56919), (56, 56946), (73, 57069),

Gene: Sigman_68 Start: 56782, Stop: 57054, Start Num: 17

Candidate Starts for Sigman_68:

(Start: 17 @56782 has 115 MA's), (Start: 24 @56803 has 42 MA's), (Start: 29 @56812 has 52 MA's), (47, 56875), (56, 56902), (73, 57025),

Gene: Simielle_68 Start: 56783, Stop: 57055, Start Num: 17

Candidate Starts for Simielle_68:

(Start: 17 @56783 has 115 MA's), (Start: 24 @56804 has 42 MA's), (Start: 29 @56813 has 52 MA's), (47, 56876), (56, 56903), (73, 57026),

Gene: SirBeauregard_69 Start: 57349, Stop: 57621, Start Num: 17

Candidate Starts for SirBeauregard_69:

(Start: 17 @57349 has 115 MA's), (Start: 24 @57370 has 42 MA's), (Start: 29 @57379 has 52 MA's), (47, 57442), (56, 57469), (73, 57592),

Gene: SirJeffery_66 Start: 58371, Stop: 58619, Start Num: 30

Candidate Starts for SirJeffery_66:

(Start: 20 @58335 has 4 MA's), (Start: 24 @58362 has 42 MA's), (Start: 30 @58371 has 3 MA's), (48, 58437), (64, 58515), (71, 58569), (73, 58584), (74, 58605),

Gene: Skippy_69 Start: 57036, Stop: 57308, Start Num: 17

Candidate Starts for Skippy_69:

(Start: 17 @57036 has 115 MA's), (Start: 24 @57057 has 42 MA's), (Start: 29 @57066 has 52 MA's), (47, 57129), (56, 57156), (73, 57279),

Gene: Slatt_68 Start: 57090, Stop: 57392, Start Num: 12

Candidate Starts for Slatt_68:

(Start: 12 @57090 has 74 MA's), (Start: 29 @57144 has 52 MA's), (46, 57213), (58, 57255),

Gene: Soile_69 Start: 57332, Stop: 57604, Start Num: 17

Candidate Starts for Soile_69:

(Start: 17 @57332 has 115 MA's), (Start: 24 @57353 has 42 MA's), (Start: 29 @57362 has 52 MA's), (56, 57452), (73, 57575),

Gene: Solosis_66 Start: 56843, Stop: 57091, Start Num: 29

Candidate Starts for Solosis_66:

(Start: 12 @56789 has 74 MA's), (Start: 29 @56843 has 52 MA's), (46, 56912), (58, 56954),

Gene: Sophia_66 Start: 56836, Stop: 57084, Start Num: 29

Candidate Starts for Sophia_66:

(Start: 12 @56782 has 74 MA's), (Start: 29 @56836 has 52 MA's), (46, 56905), (58, 56947),

Gene: Soto_65 Start: 56349, Stop: 56651, Start Num: 12

Candidate Starts for Soto_65:

(Start: 12 @56349 has 74 MA's), (Start: 29 @56403 has 52 MA's), (46, 56472), (58, 56514),

Gene: Spartan300_67 Start: 57023, Stop: 57295, Start Num: 17

Candidate Starts for Spartan300_67:

(Start: 17 @57023 has 115 MA's), (Start: 24 @57044 has 42 MA's), (Start: 29 @57053 has 52 MA's), (47, 57116), (56, 57143), (73, 57266),

Gene: Squid_67 Start: 57082, Stop: 57384, Start Num: 12

Candidate Starts for Squid_67:

(Start: 12 @57082 has 74 MA's), (Start: 29 @57136 has 52 MA's), (46, 57205), (58, 57247),

Gene: Squiggle_67 Start: 56801, Stop: 57103, Start Num: 12

Candidate Starts for Squiggle_67:

(Start: 12 @56801 has 74 MA's), (Start: 29 @56855 has 52 MA's), (46, 56924), (58, 56966),

Gene: Stinger_62 Start: 56901, Stop: 57218, Start Num: 16

Candidate Starts for Stinger_62:

(Start: 16 @56901 has 10 MA's), (Start: 29 @56949 has 52 MA's), (46, 57000), (48, 57006), (54, 57018), (55, 57021), (60, 57051), (63, 57069), (68, 57099),

Gene: Struggle_68 Start: 56927, Stop: 57169, Start Num: 29

Candidate Starts for Struggle_68:

(Start: 24 @56918 has 42 MA's), (Start: 29 @56927 has 52 MA's), (47, 56990), (56, 57017), (73, 57140),

Gene: Suffolk_66 Start: 56596, Stop: 56868, Start Num: 17

Candidate Starts for Suffolk_66:

(Start: 17 @56596 has 115 MA's), (Start: 24 @56617 has 42 MA's), (Start: 29 @56626 has 52 MA's), (47, 56689), (56, 56716), (73, 56839),

Gene: Suigeneris_68 Start: 58477, Stop: 58761, Start Num: 20

Candidate Starts for Suigeneris_68:

(Start: 20 @58477 has 4 MA's), (Start: 24 @58504 has 42 MA's), (Start: 30 @58513 has 3 MA's), (48, 58579), (64, 58657), (71, 58711), (73, 58726), (74, 58747),

Gene: Surely_68 Start: 57426, Stop: 57674, Start Num: 29

Candidate Starts for Surely_68:

(Start: 12 @57372 has 74 MA's), (Start: 29 @57426 has 52 MA's), (46, 57495), (58, 57537),

Gene: SwainyDoc_69 Start: 57674, Stop: 57922, Start Num: 29

Candidate Starts for SwainyDoc_69:

(2, 57413), (3, 57431), (4, 57443), (6, 57488), (13, 57623), (Start: 19 @57635 has 22 MA's), (21, 57653), (Start: 24 @57665 has 42 MA's), (Start: 29 @57674 has 52 MA's), (32, 57683), (64, 57827), (72, 57884),

Gene: Swiphy_72 Start: 57338, Stop: 57610, Start Num: 17

Candidate Starts for Swiphy_72:

(Start: 17 @57338 has 115 MA's), (Start: 24 @57359 has 42 MA's), (Start: 29 @57368 has 52 MA's), (47, 57431), (56, 57458), (73, 57581),

Gene: Swish_68 Start: 57058, Stop: 57360, Start Num: 12

Candidate Starts for Swish_68:

(Start: 12 @57058 has 74 MA's), (Start: 29 @57112 has 52 MA's), (46, 57181), (58, 57223),

Gene: SynergyX_68 Start: 57251, Stop: 57538, Start Num: 19

Candidate Starts for SynergyX_68:

(2, 57029), (3, 57047), (4, 57059), (6, 57104), (13, 57239), (Start: 19 @57251 has 22 MA's), (21, 57269), (Start: 24 @57281 has 42 MA's), (Start: 29 @57290 has 52 MA's), (32, 57299), (64, 57443), (72, 57500),

Gene: TA17A_66 Start: 55418, Stop: 55678, Start Num: 24

Candidate Starts for TA17A_66:

(Start: 24 @55418 has 42 MA's), (Start: 29 @55427 has 52 MA's), (Start: 40 @55472 has 5 MA's), (47, 55499), (56, 55526), (61, 55553), (68, 55595), (70, 55628), (72, 55637), (73, 55649),

Gene: TallGrassMM_66 Start: 56698, Stop: 57000, Start Num: 12

Candidate Starts for TallGrassMM_66:

(Start: 12 @56698 has 74 MA's), (Start: 29 @56752 has 52 MA's), (46, 56821), (58, 56863),

Gene: Telesworld_66 Start: 56912, Stop: 57184, Start Num: 17

Candidate Starts for Telesworld_66:

(Start: 17 @56912 has 115 MA's), (Start: 24 @56933 has 42 MA's), (Start: 29 @56942 has 52 MA's), (47, 57005), (56, 57032), (73, 57155),

Gene: Thonko_67 Start: 56230, Stop: 56466, Start Num: 35

Candidate Starts for Thonko_67:

(1, 55804), (5, 55999), (7, 56032), (15, 56158), (23, 56191), (Start: 24 @56197 has 42 MA's), (Start: 35 @56230 has 1 MA's), (43, 56260), (59, 56326), (63, 56347), (64, 56362),

Gene: Thora_66 Start: 57138, Stop: 57440, Start Num: 12

Candidate Starts for Thora_66:

(Start: 12 @57138 has 74 MA's), (Start: 29 @57192 has 52 MA's), (46, 57261), (58, 57303),

Gene: ThreeOh3D2_69 Start: 57310, Stop: 57582, Start Num: 17

Candidate Starts for ThreeOh3D2_69:

(Start: 17 @57310 has 115 MA's), (Start: 24 @57331 has 42 MA's), (Start: 29 @57340 has 52 MA's), (47, 57403), (56, 57430), (73, 57553),

Gene: Thunderbird_68 Start: 57071, Stop: 57322, Start Num: 24

Candidate Starts for Thunderbird_68:

(Start: 24 @57071 has 42 MA's), (Start: 29 @57080 has 52 MA's), (47, 57143), (56, 57170), (73, 57293),

Gene: Timmi_67 Start: 56794, Stop: 57066, Start Num: 17

Candidate Starts for Timmi_67:

(Start: 17 @56794 has 115 MA's), (Start: 24 @56815 has 42 MA's), (Start: 29 @56824 has 52 MA's), (47, 56887), (56, 56914), (73, 57037),

Gene: Tinciduntolum_65 Start: 55579, Stop: 55839, Start Num: 24

Candidate Starts for Tinciduntolum_65:

(Start: 24 @55579 has 42 MA's), (Start: 29 @55588 has 52 MA's), (Start: 40 @55633 has 5 MA's), (56, 55687), (61, 55714), (68, 55756), (70, 55789), (72, 55798), (73, 55810),

Gene: TinyTerror_69 Start: 57712, Stop: 57960, Start Num: 29

Candidate Starts for TinyTerror_69:

(2, 57451), (3, 57469), (4, 57481), (6, 57526), (13, 57661), (Start: 19 @57673 has 22 MA's), (21, 57691), (Start: 24 @57703 has 42 MA's), (Start: 29 @57712 has 52 MA's), (32, 57721), (64, 57865), (72, 57922),

Gene: TomBombadil_68 Start: 57410, Stop: 57658, Start Num: 29

Candidate Starts for TomBombadil_68:

(Start: 12 @57356 has 74 MA's), (Start: 29 @57410 has 52 MA's), (46, 57479), (58, 57521),

Gene: Tomlarah_69 Start: 57647, Stop: 57919, Start Num: 17

Candidate Starts for Tomlarah_69:

(Start: 17 @57647 has 115 MA's), (Start: 24 @57668 has 42 MA's), (Start: 29 @57677 has 52 MA's), (47, 57740), (56, 57767), (73, 57890),

Gene: Toni_68 Start: 57239, Stop: 57511, Start Num: 17

Candidate Starts for Toni_68:

(Start: 17 @57239 has 115 MA's), (Start: 24 @57260 has 42 MA's), (Start: 29 @57269 has 52 MA's), (47, 57332), (56, 57359), (73, 57482),

Gene: Tooj_66 Start: 56464, Stop: 56736, Start Num: 17

Candidate Starts for Tooj_66:

(Start: 17 @56464 has 115 MA's), (Start: 24 @56485 has 42 MA's), (Start: 29 @56494 has 52 MA's), (47, 56557), (56, 56584), (73, 56707),

Gene: Tres_64 Start: 55433, Stop: 55693, Start Num: 24

Candidate Starts for Tres_64:

(Start: 24 @55433 has 42 MA's), (Start: 29 @55442 has 52 MA's), (Start: 40 @55487 has 5 MA's), (47, 55514), (56, 55541), (61, 55568), (68, 55610), (70, 55643), (72, 55652), (73, 55664),

Gene: True_66 Start: 56803, Stop: 57075, Start Num: 17

Candidate Starts for True_66:

(Start: 17 @56803 has 115 MA's), (Start: 24 @56824 has 42 MA's), (Start: 29 @56833 has 52 MA's), (47, 56896), (56, 56923), (73, 57046),

Gene: Trypo_69 Start: 57523, Stop: 57825, Start Num: 12

Candidate Starts for Trypo_69:

(Start: 12 @57523 has 74 MA's), (Start: 29 @57577 has 52 MA's), (46, 57646), (58, 57688),

Gene: TyrionL_68 Start: 56891, Stop: 57193, Start Num: 12

Candidate Starts for TyrionL_68:

(Start: 12 @56891 has 74 MA's), (Start: 29 @56945 has 52 MA's), (46, 57014), (58, 57056),

Gene: UncleHowie_65 Start: 56493, Stop: 56795, Start Num: 12

Candidate Starts for UncleHowie_65:

(Start: 12 @56493 has 74 MA's), (Start: 29 @56547 has 52 MA's), (46, 56616), (58, 56658),

Gene: Usavi_69 Start: 57492, Stop: 57734, Start Num: 29

Candidate Starts for Usavi_69:

(Start: 17 @57462 has 115 MA's), (Start: 24 @57483 has 42 MA's), (Start: 29 @57492 has 52 MA's), (47, 57555), (56, 57582), (73, 57705),

Gene: Vaishali24_68 Start: 57154, Stop: 57405, Start Num: 24

Candidate Starts for Vaishali24_68:

(Start: 17 @57133 has 115 MA's), (Start: 24 @57154 has 42 MA's), (Start: 29 @57163 has 52 MA's), (47, 57226), (56, 57253), (63, 57292), (73, 57376),

Gene: Valjean_67 Start: 57033, Stop: 57305, Start Num: 17

Candidate Starts for Valjean_67:

(Start: 17 @57033 has 115 MA's), (Start: 24 @57054 has 42 MA's), (Start: 29 @57063 has 52 MA's), (47, 57126), (56, 57153), (73, 57276),

Gene: Vaticameos_65 Start: 55337, Stop: 55609, Start Num: 17

Candidate Starts for Vaticameos_65:

(Start: 17 @55337 has 115 MA's), (Start: 24 @55358 has 42 MA's), (Start: 29 @55367 has 52 MA's), (47, 55430), (56, 55457), (73, 55580),

Gene: Veritas_67 Start: 57024, Stop: 57272, Start Num: 29

Candidate Starts for Veritas_67:

(Start: 12 @56970 has 74 MA's), (Start: 29 @57024 has 52 MA's), (46, 57093), (58, 57135),

Gene: Vic9_00063 Start: 56338, Stop: 56544, Start Num: 40

Candidate Starts for Vic9_00063:

(Start: 24 @56284 has 42 MA's), (Start: 29 @56293 has 52 MA's), (Start: 40 @56338 has 5 MA's), (47, 56365), (56, 56392), (61, 56419), (68, 56461), (70, 56494), (72, 56503), (73, 56515),

Gene: Vincenzo_64 Start: 59168, Stop: 59425, Start Num: 29

Candidate Starts for Vincenzo_64:

(Start: 29 @59168 has 52 MA's), (46, 59219), (48, 59225), (54, 59237), (59, 59267), (60, 59270), (65, 59309), (68, 59318), (73, 59372),

Gene: VioletZ_63 Start: 58094, Stop: 58360, Start Num: 29

Candidate Starts for VioletZ_63:

(Start: 29 @58094 has 52 MA's), (46, 58145), (48, 58151), (52, 58157), (54, 58163), (55, 58166), (60, 58196), (63, 58214), (64, 58229), (68, 58244), (69, 58262),

Gene: Virapocalypse_69 Start: 57132, Stop: 57404, Start Num: 17

Candidate Starts for Virapocalypse_69:

(Start: 17 @57132 has 115 MA's), (Start: 24 @57153 has 42 MA's), (Start: 29 @57162 has 52 MA's), (47, 57225), (56, 57252), (73, 57375),

Gene: Vista_66 Start: 56794, Stop: 57096, Start Num: 12

Candidate Starts for Vista_66:

(Start: 12 @56794 has 74 MA's), (Start: 29 @56848 has 52 MA's), (46, 56917), (58, 56959),

Gene: Vivaldi_68 Start: 57255, Stop: 57557, Start Num: 12

Candidate Starts for Vivaldi_68:

(Start: 12 @57255 has 74 MA's), (Start: 29 @57309 has 52 MA's), (46, 57378), (58, 57420),

Gene: Vortex_67 Start: 57078, Stop: 57380, Start Num: 12

Candidate Starts for Vortex_67:

(Start: 12 @57078 has 74 MA's), (Start: 29 @57132 has 52 MA's), (46, 57201), (58, 57243),

Gene: Waleliano_61 Start: 58034, Stop: 58300, Start Num: 29

Candidate Starts for Waleliano_61:

(Start: 29 @58034 has 52 MA's), (46, 58085), (48, 58091), (52, 58097), (54, 58103), (55, 58106), (60, 58136), (63, 58154), (64, 58169), (68, 58184), (69, 58202),

Gene: Wallhey_68 Start: 56955, Stop: 57203, Start Num: 29
Candidate Starts for Wallhey_68:
(Start: 12 @56901 has 74 MA's), (Start: 29 @56955 has 52 MA's), (46, 57024), (58, 57066),

Gene: Waterdiva_68 Start: 57166, Stop: 57438, Start Num: 17
Candidate Starts for Waterdiva_68:
(Start: 17 @57166 has 115 MA's), (Start: 24 @57187 has 42 MA's), (Start: 29 @57196 has 52 MA's),
(47, 57259), (56, 57286), (73, 57409),

Gene: Weher20_65 Start: 57467, Stop: 57715, Start Num: 29
Candidate Starts for Weher20_65:
(11, 57404), (Start: 29 @57467 has 52 MA's), (46, 57536), (58, 57578),

Gene: West99_64 Start: 55606, Stop: 55866, Start Num: 24
Candidate Starts for West99_64:
(Start: 24 @55606 has 42 MA's), (Start: 29 @55615 has 52 MA's), (Start: 40 @55660 has 5 MA's), (47,
55687), (56, 55714), (61, 55741), (68, 55783), (70, 55816), (72, 55825), (73, 55837),

Gene: Windsor_68 Start: 57353, Stop: 57625, Start Num: 17
Candidate Starts for Windsor_68:
(Start: 17 @57353 has 115 MA's), (Start: 24 @57374 has 42 MA's), (Start: 29 @57383 has 52 MA's),
(47, 57446), (56, 57473), (73, 57596),

Gene: Xavier_67 Start: 56794, Stop: 57066, Start Num: 17
Candidate Starts for Xavier_67:
(Start: 17 @56794 has 115 MA's), (Start: 24 @56815 has 42 MA's), (Start: 29 @56824 has 52 MA's),
(47, 56887), (56, 56914), (73, 57037),

Gene: Yahalom_66 Start: 57095, Stop: 57343, Start Num: 29
Candidate Starts for Yahalom_66:
(2, 56834), (3, 56852), (4, 56864), (6, 56909), (13, 57044), (Start: 19 @57056 has 22 MA's), (21,
57074), (Start: 24 @57086 has 42 MA's), (Start: 29 @57095 has 52 MA's), (32, 57104), (64, 57248),
(72, 57305),

Gene: Yinz_68 Start: 57121, Stop: 57408, Start Num: 19
Candidate Starts for Yinz_68:
(2, 56899), (3, 56917), (4, 56929), (6, 56974), (13, 57109), (Start: 19 @57121 has 22 MA's), (21,
57139), (Start: 24 @57151 has 42 MA's), (Start: 29 @57160 has 52 MA's), (32, 57169), (64, 57313),
(72, 57370),

Gene: Yoshand_68 Start: 57071, Stop: 57373, Start Num: 12
Candidate Starts for Yoshand_68:
(Start: 12 @57071 has 74 MA's), (Start: 29 @57125 has 52 MA's), (46, 57194), (58, 57236),

Gene: YouGoGlencoco_68 Start: 57137, Stop: 57385, Start Num: 29
Candidate Starts for YouGoGlencoco_68:
(Start: 12 @57083 has 74 MA's), (Start: 29 @57137 has 52 MA's), (46, 57206), (58, 57248),

Gene: Zaider_69 Start: 57303, Stop: 57545, Start Num: 29
Candidate Starts for Zaider_69:
(Start: 17 @57273 has 115 MA's), (Start: 24 @57294 has 42 MA's), (Start: 29 @57303 has 52 MA's),
(47, 57366), (56, 57393), (73, 57516),

Gene: Zelda_68 Start: 57477, Stop: 57725, Start Num: 29

Candidate Starts for Zelda_68:

(Start: 12 @57423 has 74 MA's), (Start: 29 @57477 has 52 MA's), (46, 57546), (58, 57588),

Gene: Zenteno07_73 Start: 58751, Stop: 59014, Start Num: 29

Candidate Starts for Zenteno07_73:

(8, 58664), (Start: 18 @58709 has 1 MA's), (Start: 24 @58742 has 42 MA's), (Start: 29 @58751 has 52 MA's), (41, 58790), (49, 58817), (50, 58820), (53, 58826), (57, 58844), (63, 58883), (76, 58994),

Gene: Zonia_68 Start: 57352, Stop: 57654, Start Num: 12

Candidate Starts for Zonia_68:

(Start: 12 @57352 has 74 MA's), (Start: 29 @57406 has 52 MA's), (46, 57475), (58, 57517),