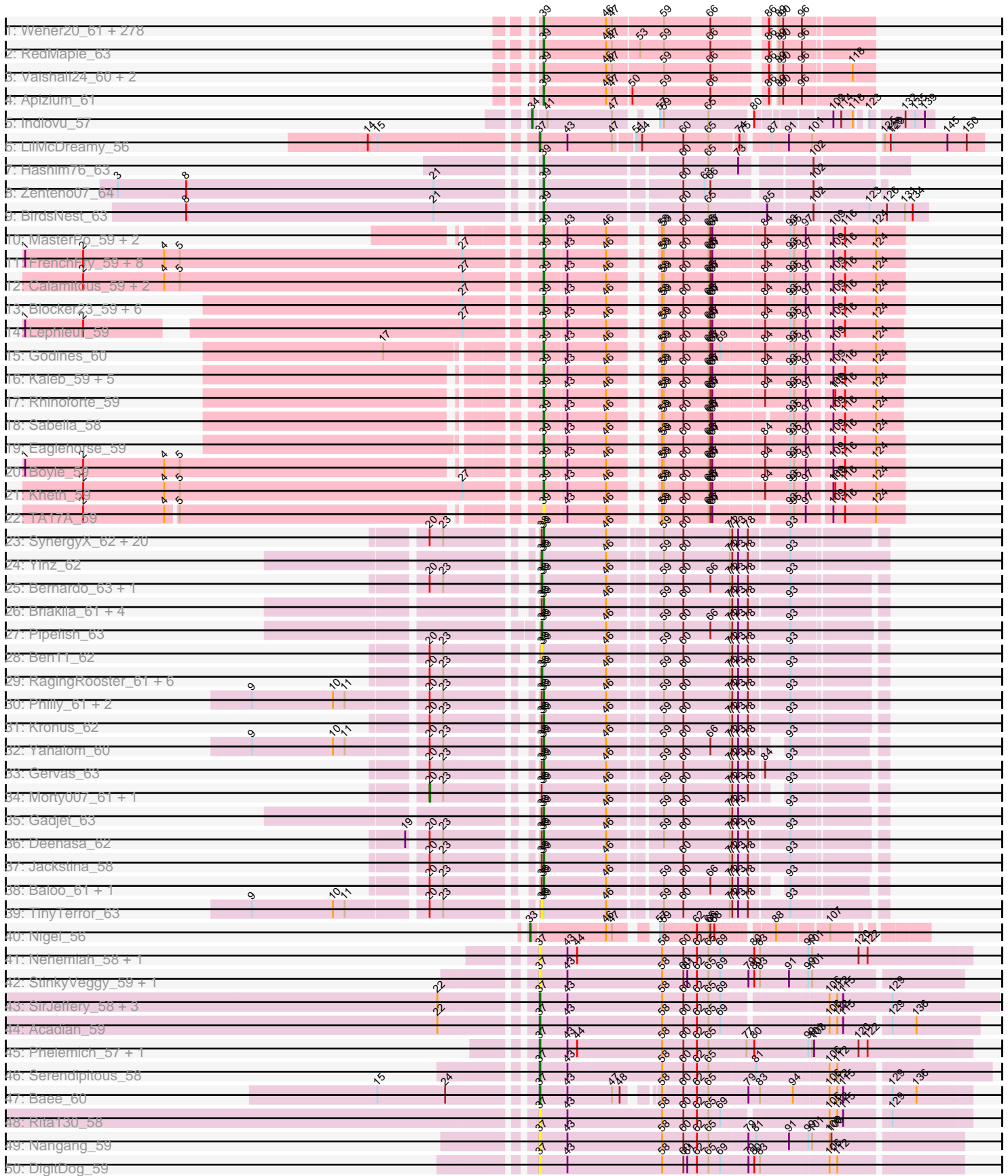
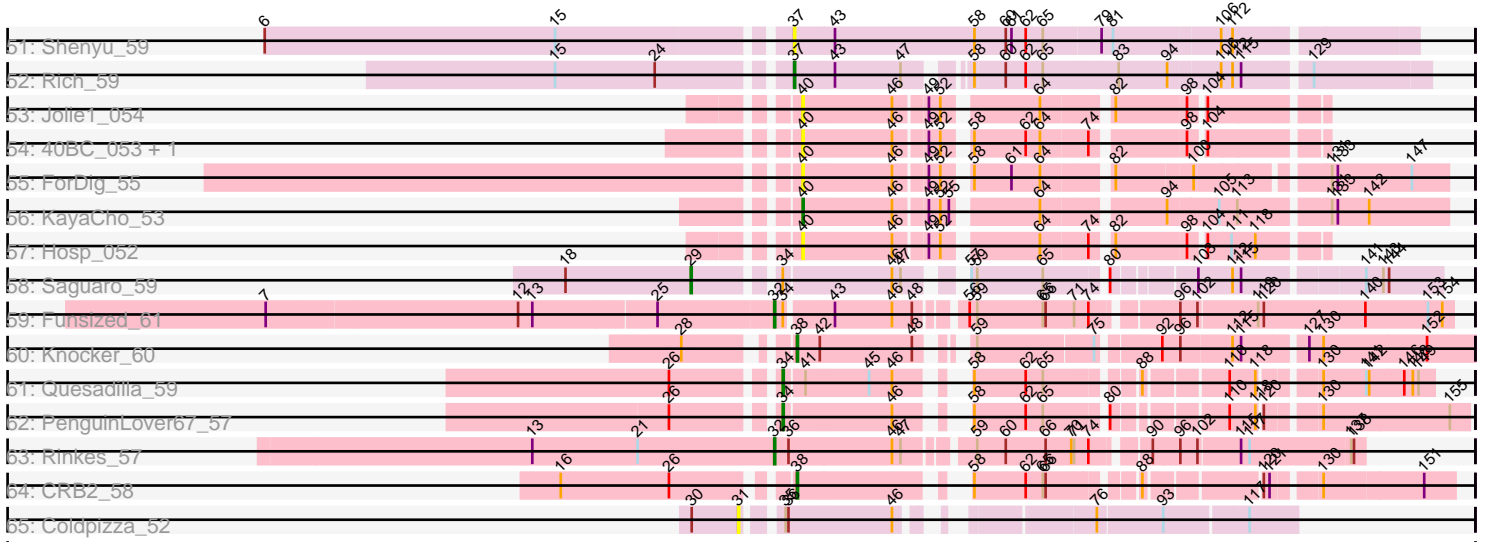


Pham 202582



Pham 202582



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 202582 Report

This analysis was run 01/18/25 on database version 583.

Pham number 202582 has 410 members, 48 are drafts.

Phages represented in each track:

- Track 1 : Weher20_61, JDog_60, Magic8_62, FriarPreacher_61, Zelda_62, Murdoc_60, DirtJuice_62, EmpTee_61, Podrick_60, Mulan_61, Pherdinand_63, Prickles_63, Soto_60, Buckeye_62, Orwigg_62, Thora_61, ImtiyazSitla_63, Altwerkus_59, Basato_62, Derpp_61, Fringe_65, Swiphy_65, Melc17_61, Zonia_63, Boehler_61, Chaelin_62, Mesmerelda_63, Aelin_61, Cher_61, Tomlahrah_62, OSmaximus_63, ShiVal_59, PG1_62, Vortex_61, Megamind20_62, Pipsqueak_60, Pacifista_60, Chah_63, Gwilliam_63, Vivaldi_63, SDcharge11_61, Plmatters_60, Jiminy_62, Gareth_61, Serpentine_0061, Skippy_62, Nacho_0063, Iridoclysis_62, Andre_63, Nicole21_62, Numberten_61, JakeO_62, Manad_61, Simielle_61, DelRivs_60, Giraffe_62, Waterdiva_61, DoesntMatter_59, MitKao_61, Vista_61, Dione_59, Maru_61, Selr12_62, Pops_61, Rimu_64, Chunky_60, Pinkman_61, ThreeOh3D2_63, Roy17_60, BlackStallion_63, AltPhacts_61, FluffyNinja_63, Bishoperium_61, Windsor_61, Schadenfreude_61, Mcshane_60, Olive_61, Yoshand_63, Ashraf_63, UncleHowie_60, SilverBell_62, OliverWalter_60, ProfessorX_61, Eugenia_61, Oline_62, Serendipity_61, Mutante_61, Inchworm_63, MiniBoss_59, Phergie_63, AngelCake_60, Gyarad_0060, Frankicide_60, Mosaic_60, LeeLot_62, Mikota_60, KLucky39_60, Thunderbird_61, Grand2040_61, KlimbOn_61, Inverness_60, PinheadLarry_62, Suffolk_60, Kikipoo_63, Doddsville_62, Coletti_64, Lopsy_60, Sophia_60, Etaye_63, Surely_61, TyrionL_62, Chorkpop_61, Morgushi_61, Dati_61, Childish_61, Duggie_62, Virapocalypse_62, Newman_60, Crownjwl_61, Trypo_64, Hocus_61, Kailash_62, Badfish_62, Schueller_63, Squid_61, Morty_62, Mana_60, Daffy_61, Hertubise_61, QueenBeane_61, Antonia_61, Chute_63, ABU_62, Cornobble_61, Hamish_60, Kwadwo_60, Freya_59, JangoPhett_61, Longacauda_62, Virgeve_61, Lego3393_60, Toni_61, LostAndPhound_62, Horchata_60, Scrick_62, Haleema_60, Spartan300_61, Olak_60, Mesh1_63, Fang_63, AbsoluteMadLad_62, Keitherie_63, PhrankReynolds_61, Orion_63, Sigman_62, Durga_64, MelsMeow_62, Scoot17C_62, Legolas_63, Emiris_64, Colbert_60, LemonSlice_62, Phareon_60, Cobra_63, Megatron_62, GeneCoco_62, Wallhey_62, Swish_63, Quisquilliae_62, Bluephacebaby_61, Gwennie1_61, IsaacEli_63, PhrodoBaggins_62, DuchessDung_63, Xavier_60, Beaglebox_61, CheetO_61, Jillium_61, LasagnaCat_63, Vaticameos_58, KingTut_54, Slatt_62, PhenghisKhan_62, Eremos_61, Solosis_60, Katniss_62, Jesabah_62, Dice_60, True_60, Harvey_60, JacAttac_63, Charles1_62, DaddyDaniels_63, Riggan_62, Veritas_63, Brilliant_64, SassyCat97_60, Lasso_62, UAch1_61, Phunky_60, Squiggle_62, Ricotta_61, Omniscient_62, PhatCats2014_62, Phipps_61, Held_61, Potter_60, Iridessa_63, Hartsy_62, Soile_62, Piglet_0061, HenryJackson_61, Fozzie_62, CamL_61,

FugateOSU_62, Sheila_59, BlueHusk_63, Orfeu_60, LuckyMarjie_59, Phamished_63, Timmi_60, Mag7_62, Lulumae_59, Banjo_60, CampRoach_63, PhatLouie_63, Kahve_61, LeiMonet_64, Tooj_60, Telesworld_59, YouGoGlencoco_62, Nathan_62, Nyala_60, Anderson_62, Khan1_62, CharlieGBrown_62, Jiraiya_65, HSavage_60, Placalicious_62, TallGrassMM_61, HighStump_63, Mecca_61, Cosmolli16_62, Labeouficaum_62, Lulwa_59, Phleuron_62, Kwksand96_62, MichaelPhcott_62, Haimas_60, MRabcd_61, Cannibal_61, Gophee_63, Puhltonio_61, Adriana_63, Roliet_59, Dingo_60, Samaymay_61, Kimbrough_62, Roscoe_62, Daka_64, Hetaeria_61, Usavi_61, Oosterbaan_61, Lumine_62, Craff_64, Burr_61, Kloppinator_62, Matalotodo_61, Maskar_63, KingVeVeVe_60, Zaider_62, Valjean_61, TomBombadil_61, Struggle_62, ElvisPhasley_67, MrPhizzler_62, BatteryCK_62, DonSanchon_59, Caspiroi_64

- Track 2 : RedMaple_63
- Track 3 : Vaishali24_60, Robyn_61, Carthage_60
- Track 4 : Apizium_61
- Track 5 : Indlovu_57
- Track 6 : LilMcDreamy_56
- Track 7 : Hashim76_63
- Track 8 : Zenteno07_64
- Track 9 : BirdsNest_63
- Track 10 : MasterPo_59, Laurie_59, Vic9_60
- Track 11 : FrenchFry_59, Bananafish_59, Holeinone_59, Lars_59, Opia_59, Glass_59, Arbiter_58, LizLemon_59, Ares_59
- Track 12 : Calamitous_59, Kolhan_59, Qyrzula_54
- Track 13 : Blocker23_59, Coffee_59, West99_59, Phantasmagoria_59, Faze9_58, Allegro_59, LilSmirk_59
- Track 14 : Lephleur_59
- Track 15 : Godines_60
- Track 16 : Kaleb_59, Brownie5_59, Tinciduntsolum_60, Tres_59, Rosebush_58, Hedgerow_59
- Track 17 : Rhinoforte_59
- Track 18 : Sabella_58
- Track 19 : Eaglehorse_59
- Track 20 : Boyle_59
- Track 21 : Kheth_59
- Track 22 : TA17A_59
- Track 23 : SynergyX_62, MmasiCarm_63, Chalmers_61, Kamiyu_62, Athena_64, ChaChing_62, Glubnar_62, Neos5_61, GlenHope_63, SlippinJimmy_64, Marley1013_62, Akoma_62, Daisy_61, Rita1961_63, HarveySr_61, Nozo_62, Corofin_62, Tydolla_59, Devonte_61, Chandler_62, OrangeOswald_62
- Track 24 : Yinz_62
- Track 25 : Bernardo_63, LestyG_60
- Track 26 : Briakila_61, Casbah_62, Phayeta_64, Halfpint_61, SwainyDoc_63
- Track 27 : Pipefish_63
- Track 28 : Ben11_62
- Track 29 : RagingRooster_61, RomaT_62, Chentzyk_63, Audrey_62, Mortcellus_62, Heathcliff_62, Abinghost_62
- Track 30 : Philly_61, Obutu_63, Compostia_62
- Track 31 : Kronus_62
- Track 32 : Yahalom_60
- Track 33 : Gervas_63
- Track 34 : Morty007_61, Phaedrus_58

- Track 35 : Gadget_63
- Track 36 : Deenasa_62
- Track 37 : Jackstina_58
- Track 38 : Baloo_61, Phlyer_62
- Track 39 : TinyTerror_63
- Track 40 : Nigel_56
- Track 41 : Nehemiah_58, Mysterious_59
- Track 42 : StinkyVeggy_59, KarasumaRum_59
- Track 43 : SirJeffery_58, Donny_60, Suigeneris_60, EastView9101_58
- Track 44 : Acadian_59
- Track 45 : Phelemich_57, Reprobate_58
- Track 46 : Serendipitous_58
- Track 47 : Bae_60
- Track 48 : Rita130_58
- Track 49 : Nangang_59
- Track 50 : DigitDog_59
- Track 51 : Shenyu_59
- Track 52 : Rich_59
- Track 53 : Jolie1_054
- Track 54 : 40BC_053, 39HC_053
- Track 55 : ForDig_55
- Track 56 : KayaCho_53
- Track 57 : Hosp_052
- Track 58 : Saguaro_59
- Track 59 : Funsized_61
- Track 60 : Knocker_60
- Track 61 : Quesadilla_59
- Track 62 : PenguinLover67_57
- Track 63 : Rinkes_57
- Track 64 : CRB2_58
- Track 65 : Coldpizza_52

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

The start number called the most often in the published annotations is 39, it was called in 330 of the 362 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABU_62, AbsoluteMadLad_62, Adriana_63, Aelin_61, Akoma_62, Allegro_59, AltPhacts_61, Altwerkus_59, Anderson_62, Andre_63, AngelCake_60, Antonia_61, Apizium_61, Arbiter_58, Ares_59, Ashraf_63, Athena_64, Badfish_62, Baloo_61, Bananafish_59, Banjo_60, Basato_62, BatteryCK_62, Beaglebox_61, BirdsNest_63, Bishoperium_61, BlackStallion_63, Blocker23_59, BlueHusk_63, Bluephacebaby_61, Boehler_61, Boyle_59, Briakila_61, Brilliant_64, Brownie5_59, Buckeye_62, Burr_61, Calamitous_59, CamL_61, CampRoach_63, Cannibal_61, Carthage_60, Casbah_62, Caspiboi_64, ChaChing_62, Chaelin_62, Chah_63, Chalmers_61, Chandler_62, Charles1_62, CharlieGBrown_62, CheetO_61, Cher_61, Childish_61, Chorkpop_61, Chunky_60, Chute_63, Cobra_63, Coffee_59, Colbert_60, Coletti_64, Compostia_62, Cornobble_61, Corofin_62, Cosmolli16_62, Craff_64, Crownjwl_61, DaddyDaniels_63, Daffy_61, Daisy_61, Daka_64, Dati_61, Deenasa_62, DelRivs_60,

Derpp_61, Devonte_61, Dice_60, Dingo_60, Dione_59, DirtJuice_62, Doddsville_62, DoesntMatter_59, DonSanchon_59, DuchessDung_63, Duggie_62, Durga_64, Eaglehorse_59, ElvisPhasley_67, Emiris_64, EmpTee_61, Eremos_61, Etaye_63, Eugenia_61, Fang_63, Faze9_58, FluffyNinja_63, Fozzie_62, Frankicide_60, FrenchFry_59, Freya_59, FriarPreacher_61, Fringe_65, FugateOSU_62, Gadget_63, Gareth_61, GeneCoco_62, Gervas_63, Giraffe_62, Glass_59, GlenHope_63, Glubnar_62, Godines_60, Gophee_63, Grand2040_61, Gwennie1_61, Gwilliam_63, Gyarad_0060, HSavage_60, Haimas_60, Haleema_60, Halfpint_61, Hamish_60, Hartsy_62, HarveySr_61, Harvey_60, Hashim76_63, Hedgerow_59, Held_61, HenryJackson_61, Hertubise_61, Hetaeria_61, HighStump_63, Hocus_61, Holeinone_59, Horchata_60, ImtiyazSitla_63, Inchworm_63, Inverness_60, Iridessa_63, Iridoclysis_62, IsaacEli_63, JDog_60, JacAttac_63, Jackstina_58, JakeO_62, JangoPhett_61, Jesabah_62, Jillium_61, Jiminy_62, Jiraiya_65, KLucky39_60, Kahve_61, Kailash_62, Kaleb_59, Kamiyu_62, Katniss_62, Keitherie_63, Khan1_62, Kheth_59, Kikipoo_63, Kimbrough_62, KingTut_54, KingVeVeVe_60, KlimbOn_61, Kloppinator_62, Kolhan_59, Kronus_62, Kwadwo_60, Kwksand96_62, Labeouficaum_62, Lars_59, LasagnaCat_63, Lasso_62, Laurie_59, LeeLot_62, Lego3393_60, Legolas_63, LeiMonet_64, LemonSlice_62, Lephleur_59, LilSmirk_59, LizLemon_59, Longacauda_62, Lopsy_60, LostAndPhound_62, LuckyMarjie_59, Lulumae_59, Lulwa_59, Lumine_62, MRabcd_61, Mag7_62, Magic8_62, Mana_60, Manad_61, Marley1013_62, Maru_61, Maskar_63, MasterPo_59, Matalotodo_61, Mcshane_60, Mecca_61, Megamind20_62, Megatron_62, Melc17_61, MelsMeow_62, Mesh1_63, Mesmerelda_63, MichaelPhcott_62, Mikota_60, MiniBoss_59, MitKao_61, MmasiCarm_63, Morgushi_61, Morty_62, Mosaic_60, MrPhizzler_62, Mulan_61, Murdoc_60, Mutante_61, Nacho_0063, Nathan_62, Neos5_61, Newman_60, Nicole21_62, Nozo_62, Numberten_61, Nyala_60, OSmaximus_63, Obutu_63, Olak_60, Oline_62, Olive_61, OliverWalter_60, Omniscient_62, Oosterbaan_61, Opia_59, OrangeOswald_62, Orfeu_60, Orion_63, Orwigg_62, PG1_62, Pacifista_60, Phamished_63, Phantasmagoria_59, Phareon_60, PhatCats2014_62, PhatLouie_63, Phayeta_64, PhenghisKhan_62, Pherdinand_63, Phergie_63, Philly_61, Phipps_61, Phleuron_62, Phlyer_62, PhrankReynolds_61, PhrodoBaggins_62, Phunky_60, Piglet_0061, PinheadLarry_62, Pinkman_61, Pipsqueak_60, Placalicious_62, Plmatters_60, Podrick_60, Pops_61, Potter_60, Prickles_63, ProfessorX_61, Puhltonio_61, QueenBeane_61, Quisquilliae_62, Qyrzula_54, RedMaple_63, Rhinoforte_59, Ricotta_61, Riggan_62, Rimu_64, Rita1961_63, Robyn_61, Roliet_59, Roscoe_62, Rosebush_58, Roy17_60, SDcharge11_61, Sabella_58, Samaymay_61, SassyCat97_60, Schadenfreude_61, Schueller_63, Scoot17C_62, Scrick_62, Selr12_62, Serendipity_61, Serpentine_0061, Sheila_59, ShiVal_59, Sigman_62, SilverBell_62, Simielle_61, Skippy_62, Slatt_62, SlippinJimmy_64, Soile_62, Solosis_60, Sophia_60, Soto_60, Spartan300_61, Squid_61, Squiggle_62, Struggle_62, Suffolk_60, Surely_61, SwainyDoc_63, Swiphy_65, Swish_63, SynergyX_62, TA17A_59, TallGrassMM_61, Telesworld_59, Thora_61, ThreeOh3D2_63, Thunderbird_61, Timmi_60, Tinciduntolum_60, TomBombadil_61, Tomlarah_62, Toni_61, Tooj_60, Tres_59, True_60, Trypo_64, Tydolla_59, TyrionL_62, UAch1_61, UncleHowie_60, Usavi_61, Vaishali24_60, Valjean_61, Vaticameos_58, Veritas_63, Vic9_60, Virapocalypse_62, Virgeve_61, Vista_61, Vivaldi_63, Vortex_61, Wallhey_62, Waterdiva_61, Weher20_61, West99_59, Windsor_61, Xavier_60, Yahalom_60, Yoshand_63, YouGoGlencoco_62, Zaider_62, Zelda_62, Zenteno07_64, Zonia_63,

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

- Abinghost_62, Audrey_62, Ben11_62, Bernardo_63, Chentzyk_63, Heathcliff_62, LestyG_60, Mortcellus_62, Morty007_61, Phaedrus_58, Pipefish_63, RagingRooster_61, RomaT_62, TinyTerror_63, Yinz_62,

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

- 39HC_053, 40BC_053, Acadian_59, Bae_60, CRB2_58, Coldpizza_52, DigitDog_59, Donny_60, EastView9101_58, ForDig_55, Funsized_61, Hosp_052, Indlovu_57, Jolie1_054, KarasumaRum_59, KayaCho_53, Knocker_60, LilMcDreamy_56, Mysterious_59, Nangang_59, Nehemiah_58, Nigel_56, PenguinLover67_57, Phelemich_57, Quesadilla_59, Reprobate_58, Rich_59, Rinkes_57, Rita130_58, Saguario_59, Serendipitous_58, Shenyu_59, SirJeffery_58, StinkyVeggy_59, Suigeneris_60,

Summary by start number:

Start 20:

- Found in 44 of 410 (10.7%) of genes in pham
- Manual Annotations of this start: 2 of 362
- Called 4.5% of time when present
- Phage (with cluster) where this start called: Morty007_61 (B3), Phaedrus_58 (B3),

Start 29:

- Found in 1 of 410 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Saguario_59 (B7),

Start 31:

- Found in 1 of 410 (0.2%) 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_52 (DR),

Start 32:

- Found in 2 of 410 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Funsized_61 (B9), Rinkes_57 (B9),

Start 33:

- Found in 1 of 410 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nigel_56 (B4),

Start 34:

- Found in 5 of 410 (1.2%) of genes in pham
- Manual Annotations of this start: 3 of 362
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Indlovu_57 (B11), PenguinLover67_57 (B9), Quesadilla_59 (B9),

Start 37:

- Found in 19 of 410 (4.6%) of genes in pham
- Manual Annotations of this start: 10 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian_59 (B5), Bae_60 (B5), DigitDog_59 (B5), Donny_60 (B5), EastView9101_58 (B5), KarasumaRum_59 (B5), LilMcDreamy_56 (B12), Mysterious_59 (B5), Nangang_59 (B5), Nehemiah_58 (B5), Phelemich_57 (B5), Reprobate_58 (B5), Rich_59 (B5), Rita130_58 (B5), Serendipitous_58 (B5), Shenyu_59 (B5), SirJeffery_58 (B5), StinkyVeggy_59 (B5), Suigeneris_60 (B5),

Start 38:

- Found in 54 of 410 (13.2%) of genes in pham
- Manual Annotations of this start: 12 of 362
- Called 27.8% of time when present
- Phage (with cluster) where this start called: Abinghost_62 (B3), Audrey_62 (B3), Ben11_62 (B3), Bernardo_63 (B3), CRB2_58 (B9), Chentzyk_63 (B3), Heathcliff_62 (B3), Knocker_60 (B9), LestyG_60 (B3), Mortcellus_62 (B3), Pipefish_63 (B3), RagingRooster_61 (B3), RomaT_62 (B3), TinyTerror_63 (B3), Yinz_62 (B3),

Start 39:

- Found in 375 of 410 (91.5%) of genes in pham
- Manual Annotations of this start: 330 of 362
- Called 96.0% of time when present
- Phage (with cluster) where this start called: ABU_62 (B1), AbsoluteMadLad_62 (B1), Adriana_63 (B1), Aelin_61 (B1), Akoma_62 (B3), Allegro_59 (B2), AltPhacts_61 (B1), Altwerkus_59 (B1), Anderson_62 (B1), Andre_63 (B1), AngelCake_60 (B1), Antonia_61 (B1), Apizium_61 (B1), Arbitr_58 (B2), Ares_59 (B2), Ashraf_63 (B1), Athena_64 (B3), Badfish_62 (B1), Baloo_61 (B3), Bananafish_59 (B2), Banjo_60 (B1), Basato_62 (B1), BatteryCK_62 (B1), Beaglebox_61 (B1), BirdsNest_63 (B13), Bishoperium_61 (B1), BlackStallion_63 (B1), Blocker23_59 (B2), BlueHusk_63 (B1), Bluephacebaby_61 (B1), Boehler_61 (B1), Boyle_59 (B2), Briakila_61 (B3), Brilliant_64 (B1), Brownie5_59 (B2), Buckeye_62 (B1), Burr_61 (B1), Calamitous_59 (B2), CamL_61 (B1), CampRoach_63 (B1), Cannibal_61 (B1), Carthage_60 (B1), Casbah_62 (B3), Caspiboi_64 (B1), ChaChing_62 (B3), Chaelin_62 (B1), Chah_63 (B1), Chalmers_61 (B3), Chandler_62 (B3), Charles1_62 (B1), CharlieGBrown_62 (B1), CheetO_61 (B1), Cher_61 (B1), Childish_61 (B1), Chorkpop_61 (B1), Chunky_60 (B1), Chute_63 (B1), Cobra_63 (B1), Coffee_59 (B2), Colbert_60 (B1), Coletti_64 (B1), Compostia_62 (B3), Cornobble_61 (B1), Corofin_62 (B3), Cosmolli16_62 (B1), Craff_64 (B1), Crownjwl_61 (B1), DaddyDaniels_63 (B1), Daffy_61 (B1), Daisy_61 (B3), Daka_64 (B1), Dati_61 (B1), Deenasa_62 (B3), DelRivs_60 (B1), Derpp_61 (B1), Devonte_61 (B3), Dice_60 (B1), Dingo_60 (B1), Dione_59 (B1), DirtJuice_62 (B1), Doddsville_62 (B1), DoesntMatter_59 (B1), DonSanchon_59 (B1), DuchessDung_63 (B1), Duggie_62 (B1), Durga_64 (B1), Eaglehorse_59 (B2), ElvisPhasley_67 (B1), Emiris_64 (B1), EmpTee_61 (B1), Eremos_61 (B1), Etaye_63 (B1), Eugenia_61 (B1), Fang_63 (B1), Faze9_58 (B2), FluffyNinja_63 (B1), Fozzie_62 (B1), Frankicide_60 (B1), FrenchFry_59 (B2), Freya_59 (B1), FriarPreacher_61 (B1), Fringe_65 (B1), FugateOSU_62 (B1), Gadget_63 (B3), Gareth_61 (B1), GeneCoco_62 (B1), Gervas_63 (B3), Giraffe_62 (B1), Glass_59 (B2), GlenHope_63 (B3), Glubnar_62 (B3), Godines_60 (B2), Gophee_63 (B1), Grand2040_61 (B1), Gwennie1_61 (B1), Gwilliam_63 (B1), Gyarad_0060 (B1), HSavage_60 (B1), Haimas_60 (B1), Haleema_60 (B1), Halfpint_61 (B3), Hamish_60 (B1), Hartsy_62 (B1), HarveySr_61 (B3), Harvey_60 (B1), Hashim76_63 (B13), Hedgerow_59 (B2), Held_61 (B1), HenryJackson_61 (B1),

Hertubise_61 (B1), Hetaeria_61 (B1), HighStump_63 (B1), Hocus_61 (B1), Holeinone_59 (B2), Horchata_60 (B1), ImtiyazSitla_63 (B1), Inchworm_63 (B1), Inverness_60 (B1), Iridessa_63 (B1), Iridoclysis_62 (B1), IsaacEli_63 (B1), JDog_60 (B1), JacAttac_63 (B1), Jackstina_58 (B3), JakeO_62 (B1), JangoPhett_61 (B1), Jesabah_62 (B1), Jillium_61 (B1), Jiminy_62 (B1), Jiraiya_65 (B1), KLucky39_60 (B1), Kahve_61 (B1), Kailash_62 (B1), Kaleb_59 (B2), Kamiyu_62 (B3), Katniss_62 (B1), Keitherie_63 (B1), Khan1_62 (B1), Kheth_59 (B2), Kikipoo_63 (B1), Kimbrough_62 (B1), KingTut_54 (B1), KingVeVeVe_60 (B1), KlimbOn_61 (B1), Kloppinator_62 (B1), Kolhan_59 (B2), Kronus_62 (B3), Kwadwo_60 (B1), Kwksand96_62 (B1), Labeouficaum_62 (B1), Lars_59 (B2), LasagnaCat_63 (B1), Lasso_62 (B1), Laurie_59 (B2), LeeLot_62 (B1), Lego3393_60 (B1), Legolas_63 (B1), LeiMonet_64 (B1), LemonSlice_62 (B1), Lephleur_59 (B2), LilSmirk_59 (B2), LizLemon_59 (B2), Longacauda_62 (B1), Lopsy_60 (B1), LostAndPhound_62 (B1), LuckyMarjie_59 (B1), Lulumae_59 (B1), Lulwa_59 (B1), Lumine_62 (B1), MRabcd_61 (B1), Mag7_62 (B1), Magic8_62 (B1), Mana_60 (B1), Manad_61 (B1), Marley1013_62 (B3), Maru_61 (B1), Maskar_63 (B1), MasterPo_59 (B2), Matalotodo_61 (B1), Mcshane_60 (B1), Mecca_61 (B1), Megamind20_62 (B1), Megatron_62 (B1), Melc17_61 (B1), MelsMeow_62 (B1), Mesh1_63 (B1), Mesmerelda_63 (B1), MichaelPhcott_62 (B1), Mikota_60 (B1), MiniBoss_59 (B1), MitKao_61 (B1), MmasiCarm_63 (B3), Morgushi_61 (B1), Morty_62 (B1), Mosaic_60 (B1), MrPhizzler_62 (B1), Mulan_61 (B1), Murdoc_60 (B1), Mutante_61 (B1), Nacho_0063 (B1), Nathan_62 (B1), Neos5_61 (B3), Newman_60 (B1), Nicole21_62 (B1), Nozo_62 (B3), Numberten_61 (B1), Nyala_60 (B1), OSmaximus_63 (B1), Obutu_63 (B3), Olak_60 (B1), Oline_62 (B1), Olive_61 (B1), OliverWalter_60 (B1), Omniscient_62 (B1), Oosterbaan_61 (B1), Opia_59 (B2), OrangeOswald_62 (B3), Orfeu_60 (B1), Orion_63 (B1), Orwigg_62 (B1), PG1_62 (B1), Pacifista_60 (B1), Phamished_63 (B1), Phantasmagoria_59 (B2), Phareon_60 (B1), PhatCats2014_62 (B1), PhatLouie_63 (B1), Phayeta_64 (B3), PhenghisKhan_62 (B1), Pherdinand_63 (B1), Phergie_63 (B1), Philly_61 (B3), Phipps_61 (B1), Phleuron_62 (B1), Phlyer_62 (B3), PhrankReynolds_61 (B1), PhrodoBaggins_62 (B1), Phunky_60 (B1), Piglet_0061 (B1), PinheadLarry_62 (B1), Pinkman_61 (B1), Pipsqueak_60 (B1), Placalicious_62 (B1), Plmatters_60 (B1), Podrick_60 (B1), Pops_61 (B1), Potter_60 (B1), Prickles_63 (B1), ProfessorX_61 (B1), Puhltonio_61 (B1), QueenBeane_61 (B1), Quisquillae_62 (B1), Qyrzula_54 (B2), RedMaple_63 (B1), Rhinoforte_59 (B2), Ricotta_61 (B1), Riggan_62 (B1), Rimu_64 (B1), Rita1961_63 (B3), Robyn_61 (B1), Roliet_59 (B1), Roscoe_62 (B1), Rosebush_58 (B2), Roy17_60 (B1), SDcharge11_61 (B1), Sabella_58 (B2), Samaymay_61 (B1), SassyCat97_60 (B1), Schadenfreude_61 (B1), Schueller_63 (B1), Scoot17C_62 (B1), Scrick_62 (B1), Selr12_62 (B1), Serendipity_61 (B1), Serpentine_0061 (B1), Sheila_59 (B1), ShiVal_59 (B1), Sigman_62 (B1), SilverBell_62 (B1), Simielle_61 (B1), Skippy_62 (B1), Slatt_62 (B1), SlippinJimmy_64 (B3), Soile_62 (B1), Solosis_60 (B1), Sophia_60 (B1), Soto_60 (B1), Spartan300_61 (B1), Squid_61 (B1), Squiggle_62 (B1), Struggle_62 (B1), Suffolk_60 (B1), Surely_61 (B1), SwainyDoc_63 (B3), Swiphy_65 (B1), Swish_63 (B1), SynergyX_62 (B3), TA17A_59 (B2), TallGrassMM_61 (B1), Telesworld_59 (B1), Thora_61 (B1), ThreeOh3D2_63 (B1), Thunderbird_61 (B1), Timmi_60 (B1), Tinciduntolum_60 (B2), TomBombadil_61 (B1), Tomlarah_62 (B1), Toni_61 (B1), Tooj_60 (B1), Tres_59 (B2), True_60 (B1), Trypo_64 (B1), Tydolla_59 (B3), TyrionL_62 (B1), UAch1_61 (B1), UncleHowie_60 (B1), Usavi_61 (B1), Vaishali24_60 (B1), Valjean_61 (B1), Vaticameos_58 (B1), Veritas_63 (B1), Vic9_60 (B2), Virapocalypse_62 (B1), Virgeve_61 (B1), Vista_61 (B1), Vivaldi_63 (B1), Vortex_61 (B1), Wallhey_62 (B1), Waterdiva_61 (B1), Weher20_61 (B1), West99_59 (B2), Windsor_61 (B1), Xavier_60 (B1), Yahalom_60 (B3), Yoshand_63 (B1), YouGoGlencoco_62 (B1), Zaider_62 (B1), Zelda_62 (B1),

Zenteno07_64 (B13), Zonia_63 (B1),

Start 40:

- Found in 6 of 410 (1.5%) of genes in pham
- Manual Annotations of this start: 1 of 362
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_053 (B6), 40BC_053 (B6), ForDig_55 (B6), Hosp_052 (B6), Jolie1_054 (B6), KayaCho_53 (B6),

Summary by clusters:

There are 12 clusters represented in this pham: B11, B4, B5, B6, B7, B12, B1, B2, B3, DR, B9, B13,

Info for manual annotations of cluster B1:

- Start number 39 was manually annotated 263 times for cluster B1.

Info for manual annotations of cluster B11:

- Start number 34 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 37 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 39 was manually annotated 3 times for cluster B13.

Info for manual annotations of cluster B2:

- Start number 39 was manually annotated 31 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 20 was manually annotated 2 times for cluster B3.
- Start number 38 was manually annotated 10 times for cluster B3.
- Start number 39 was manually annotated 33 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 33 was manually annotated 1 time for cluster B4.

Info for manual annotations of cluster B5:

- Start number 37 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 40 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 29 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B9:

- Start number 32 was manually annotated 2 times for cluster B9.
- Start number 34 was manually annotated 2 times for cluster B9.
- Start number 38 was manually annotated 2 times for cluster B9.

Gene Information:

Gene: 39HC_053 Start: 53120, Stop: 52647, Start Num: 40

Candidate Starts for 39HC_053:

(Start: 40 @53120 has 1 MA's), (46, 53027), (49, 52997), (52, 52985), (58, 52967), (62, 52913), (64, 52898), (74, 52853), (98, 52766), (104, 52754),

Gene: 40BC_053 Start: 53120, Stop: 52647, Start Num: 40

Candidate Starts for 40BC_053:

(Start: 40 @53120 has 1 MA's), (46, 53027), (49, 52997), (52, 52985), (58, 52967), (62, 52913), (64, 52898), (74, 52853), (98, 52766), (104, 52754),

Gene: ABU_62 Start: 54987, Stop: 54529, Start Num: 39

Candidate Starts for ABU_62:

(Start: 39 @54987 has 330 MA's), (46, 54891), (47, 54882), (59, 54807), (66, 54735), (86, 54669), (89, 54663), (90, 54657), (96, 54630),

Gene: Abinghost_62 Start: 54965, Stop: 54486, Start Num: 38

Candidate Starts for Abinghost_62:

(Start: 20 @55097 has 2 MA's), (23, 55076), (Start: 38 @54965 has 12 MA's), (Start: 39 @54962 has 330 MA's), (46, 54866), (59, 54800), (60, 54770), (71, 54698), (72, 54695), (73, 54686), (78, 54671), (93, 54614),

Gene: AbsoluteMadLad_62 Start: 54941, Stop: 54483, Start Num: 39

Candidate Starts for AbsoluteMadLad_62:

(Start: 39 @54941 has 330 MA's), (46, 54845), (47, 54836), (59, 54761), (66, 54689), (86, 54623), (89, 54617), (90, 54611), (96, 54584),

Gene: Acadian_59 Start: 55108, Stop: 54467, Start Num: 37

Candidate Starts for Acadian_59:

(22, 55234), (Start: 37 @55108 has 10 MA's), (43, 55066), (58, 54919), (60, 54886), (62, 54865), (65, 54847), (69, 54829), (106, 54682), (112, 54670), (115, 54661), (129, 54598), (136, 54562),

Gene: Adriana_63 Start: 55568, Stop: 55110, Start Num: 39

Candidate Starts for Adriana_63:

(Start: 39 @55568 has 330 MA's), (46, 55472), (47, 55463), (59, 55388), (66, 55316), (86, 55250), (89, 55244), (90, 55238), (96, 55211),

Gene: Aelin_61 Start: 54505, Stop: 54047, Start Num: 39

Candidate Starts for Aelin_61:

(Start: 39 @54505 has 330 MA's), (46, 54409), (47, 54400), (59, 54325), (66, 54253), (86, 54187), (89, 54181), (90, 54175), (96, 54148),

Gene: Akoma_62 Start: 55010, Stop: 54534, Start Num: 39

Candidate Starts for Akoma_62:

(Start: 20 @55145 has 2 MA's), (23, 55124), (Start: 38 @55013 has 12 MA's), (Start: 39 @55010 has 330 MA's), (46, 54914), (59, 54848), (60, 54818), (71, 54746), (72, 54743), (73, 54734), (78, 54719), (93, 54662),

Gene: Allegro_59 Start: 53342, Stop: 52851, Start Num: 39

Candidate Starts for Allegro_59:

(27, 53444), (Start: 39 @53342 has 330 MA's), (43, 53309), (46, 53249), (58, 53207), (59, 53204), (60, 53174), (65, 53135), (66, 53132), (67, 53129), (84, 53054), (93, 53015), (95, 53009), (97, 52991), (109,

52958), (116, 52940), (124, 52895),

Gene: AltPhacts_61 Start: 54054, Stop: 53596, Start Num: 39

Candidate Starts for AltPhacts_61:

(Start: 39 @54054 has 330 MA's), (46, 53958), (47, 53949), (59, 53874), (66, 53802), (86, 53736), (89, 53730), (90, 53724), (96, 53697),

Gene: Altwerkus_59 Start: 54151, Stop: 53693, Start Num: 39

Candidate Starts for Altwerkus_59:

(Start: 39 @54151 has 330 MA's), (46, 54055), (47, 54046), (59, 53971), (66, 53899), (86, 53833), (89, 53827), (90, 53821), (96, 53794),

Gene: Anderson_62 Start: 54723, Stop: 54265, Start Num: 39

Candidate Starts for Anderson_62:

(Start: 39 @54723 has 330 MA's), (46, 54627), (47, 54618), (59, 54543), (66, 54471), (86, 54405), (89, 54399), (90, 54393), (96, 54366),

Gene: Andre_63 Start: 54899, Stop: 54441, Start Num: 39

Candidate Starts for Andre_63:

(Start: 39 @54899 has 330 MA's), (46, 54803), (47, 54794), (59, 54719), (66, 54647), (86, 54581), (89, 54575), (90, 54569), (96, 54542),

Gene: AngelCake_60 Start: 54826, Stop: 54368, Start Num: 39

Candidate Starts for AngelCake_60:

(Start: 39 @54826 has 330 MA's), (46, 54730), (47, 54721), (59, 54646), (66, 54574), (86, 54508), (89, 54502), (90, 54496), (96, 54469),

Gene: Antonia_61 Start: 54505, Stop: 54047, Start Num: 39

Candidate Starts for Antonia_61:

(Start: 39 @54505 has 330 MA's), (46, 54409), (47, 54400), (59, 54325), (66, 54253), (86, 54187), (89, 54181), (90, 54175), (96, 54148),

Gene: Apizium_61 Start: 54172, Stop: 53708, Start Num: 39

Candidate Starts for Apizium_61:

(Start: 39 @54172 has 330 MA's), (46, 54076), (47, 54067), (50, 54040), (59, 53992), (66, 53920), (86, 53854), (89, 53848), (90, 53842), (96, 53815),

Gene: Arbiter_58 Start: 53454, Stop: 52963, Start Num: 39

Candidate Starts for Arbiter_58:

(1, 54234), (2, 54144), (4, 54018), (5, 53994), (27, 53556), (Start: 39 @53454 has 330 MA's), (43, 53421), (46, 53361), (58, 53319), (59, 53316), (60, 53286), (65, 53247), (66, 53244), (67, 53241), (84, 53166), (93, 53127), (95, 53121), (97, 53103), (109, 53070), (116, 53052), (124, 53007),

Gene: Ares_59 Start: 53423, Stop: 52935, Start Num: 39

Candidate Starts for Ares_59:

(1, 54203), (2, 54113), (4, 53987), (5, 53963), (27, 53525), (Start: 39 @53423 has 330 MA's), (43, 53390), (46, 53330), (58, 53288), (59, 53285), (60, 53255), (65, 53216), (66, 53213), (67, 53210), (84, 53135), (93, 53096), (95, 53090), (97, 53072), (109, 53039), (116, 53021), (124, 52976),

Gene: Ashraf_63 Start: 54718, Stop: 54254, Start Num: 39

Candidate Starts for Ashraf_63:

(Start: 39 @54718 has 330 MA's), (46, 54622), (47, 54613), (59, 54538), (66, 54466), (86, 54400), (89, 54394), (90, 54388), (96, 54361),

Gene: Athena_64 Start: 55745, Stop: 55269, Start Num: 39

Candidate Starts for Athena_64:

(Start: 20 @55880 has 2 MA's), (23, 55859), (Start: 38 @55748 has 12 MA's), (Start: 39 @55745 has 330 MA's), (46, 55649), (59, 55583), (60, 55553), (71, 55481), (72, 55478), (73, 55469), (78, 55454), (93, 55397),

Gene: Audrey_62 Start: 55004, Stop: 54525, Start Num: 38

Candidate Starts for Audrey_62:

(Start: 20 @55136 has 2 MA's), (23, 55115), (Start: 38 @55004 has 12 MA's), (Start: 39 @55001 has 330 MA's), (46, 54905), (59, 54839), (60, 54809), (71, 54737), (72, 54734), (73, 54725), (78, 54710), (93, 54653),

Gene: Badfish_62 Start: 55009, Stop: 54551, Start Num: 39

Candidate Starts for Badfish_62:

(Start: 39 @55009 has 330 MA's), (46, 54913), (47, 54904), (59, 54829), (66, 54757), (86, 54691), (89, 54685), (90, 54679), (96, 54652),

Gene: Bae_60 Start: 56166, Stop: 55558, Start Num: 37

Candidate Starts for Bae_60:

(15, 56388), (24, 56283), (Start: 37 @56166 has 10 MA's), (43, 56124), (47, 56055), (48, 56043), (58, 56007), (60, 55977), (62, 55956), (65, 55938), (79, 55881), (83, 55863), (94, 55812), (106, 55761), (112, 55749), (115, 55740), (129, 55677), (136, 55641),

Gene: Baloo_61 Start: 54834, Stop: 54385, Start Num: 39

Candidate Starts for Baloo_61:

(Start: 20 @54969 has 2 MA's), (23, 54948), (Start: 38 @54837 has 12 MA's), (Start: 39 @54834 has 330 MA's), (46, 54738), (59, 54672), (60, 54642), (66, 54600), (71, 54570), (72, 54567), (73, 54558), (78, 54543), (93, 54510),

Gene: Bananafish_59 Start: 53354, Stop: 52863, Start Num: 39

Candidate Starts for Bananafish_59:

(1, 54134), (2, 54044), (4, 53918), (5, 53894), (27, 53456), (Start: 39 @53354 has 330 MA's), (43, 53321), (46, 53261), (58, 53219), (59, 53216), (60, 53186), (65, 53147), (66, 53144), (67, 53141), (84, 53066), (93, 53027), (95, 53021), (97, 53003), (109, 52970), (116, 52952), (124, 52907),

Gene: Banjo_60 Start: 54498, Stop: 54040, Start Num: 39

Candidate Starts for Banjo_60:

(Start: 39 @54498 has 330 MA's), (46, 54402), (47, 54393), (59, 54318), (66, 54246), (86, 54180), (89, 54174), (90, 54168), (96, 54141),

Gene: Basato_62 Start: 54772, Stop: 54314, Start Num: 39

Candidate Starts for Basato_62:

(Start: 39 @54772 has 330 MA's), (46, 54676), (47, 54667), (59, 54592), (66, 54520), (86, 54454), (89, 54448), (90, 54442), (96, 54415),

Gene: BatteryCK_62 Start: 54654, Stop: 54190, Start Num: 39

Candidate Starts for BatteryCK_62:

(Start: 39 @54654 has 330 MA's), (46, 54558), (47, 54549), (59, 54474), (66, 54402), (86, 54336), (89, 54330), (90, 54324), (96, 54297),

Gene: Beaglebox_61 Start: 54562, Stop: 54104, Start Num: 39

Candidate Starts for Beaglebox_61:

(Start: 39 @54562 has 330 MA's), (46, 54466), (47, 54457), (59, 54382), (66, 54310), (86, 54244), (89, 54238), (90, 54232), (96, 54205),

Gene: Ben11_62 Start: 55219, Stop: 54740, Start Num: 38

Candidate Starts for Ben11_62:

(Start: 20 @55354 has 2 MA's), (23, 55333), (Start: 38 @55219 has 12 MA's), (Start: 39 @55216 has 330 MA's), (46, 55120), (59, 55054), (60, 55024), (71, 54952), (72, 54949), (73, 54940), (78, 54925), (93, 54868),

Gene: Bernardo_63 Start: 55359, Stop: 54877, Start Num: 38

Candidate Starts for Bernardo_63:

(Start: 20 @55491 has 2 MA's), (23, 55470), (Start: 38 @55359 has 12 MA's), (Start: 39 @55356 has 330 MA's), (46, 55260), (59, 55194), (60, 55164), (66, 55122), (71, 55092), (72, 55089), (73, 55080), (78, 55065), (93, 55005),

Gene: BirdsNest_63 Start: 54973, Stop: 54419, Start Num: 39

Candidate Starts for BirdsNest_63:

(8, 55486), (21, 55102), (Start: 39 @54973 has 330 MA's), (60, 54775), (65, 54736), (85, 54652), (102, 54586), (123, 54508), (126, 54481), (131, 54454), (134, 54442),

Gene: Bishoperium_61 Start: 55037, Stop: 54579, Start Num: 39

Candidate Starts for Bishoperium_61:

(Start: 39 @55037 has 330 MA's), (46, 54941), (47, 54932), (59, 54857), (66, 54785), (86, 54719), (89, 54713), (90, 54707), (96, 54680),

Gene: BlackStallion_63 Start: 54766, Stop: 54308, Start Num: 39

Candidate Starts for BlackStallion_63:

(Start: 39 @54766 has 330 MA's), (46, 54670), (47, 54661), (59, 54586), (66, 54514), (86, 54448), (89, 54442), (90, 54436), (96, 54409),

Gene: Blocker23_59 Start: 53464, Stop: 52973, Start Num: 39

Candidate Starts for Blocker23_59:

(27, 53566), (Start: 39 @53464 has 330 MA's), (43, 53431), (46, 53371), (58, 53329), (59, 53326), (60, 53296), (65, 53257), (66, 53254), (67, 53251), (84, 53176), (93, 53137), (95, 53131), (97, 53113), (109, 53080), (116, 53062), (124, 53017),

Gene: BlueHusk_63 Start: 54521, Stop: 54063, Start Num: 39

Candidate Starts for BlueHusk_63:

(Start: 39 @54521 has 330 MA's), (46, 54425), (47, 54416), (59, 54341), (66, 54269), (86, 54203), (89, 54197), (90, 54191), (96, 54164),

Gene: Bluephacebaby_61 Start: 55040, Stop: 54582, Start Num: 39

Candidate Starts for Bluephacebaby_61:

(Start: 39 @55040 has 330 MA's), (46, 54944), (47, 54935), (59, 54860), (66, 54788), (86, 54722), (89, 54716), (90, 54710), (96, 54683),

Gene: Boehler_61 Start: 54684, Stop: 54226, Start Num: 39

Candidate Starts for Boehler_61:

(Start: 39 @54684 has 330 MA's), (46, 54588), (47, 54579), (59, 54504), (66, 54432), (86, 54366), (89, 54360), (90, 54354), (96, 54327),

Gene: Boyle_59 Start: 53493, Stop: 53002, Start Num: 39

Candidate Starts for Boyle_59:

(1, 54243), (2, 54153), (4, 54027), (5, 54003), (Start: 39 @53493 has 330 MA's), (43, 53460), (46, 53400), (58, 53358), (59, 53355), (60, 53325), (65, 53286), (66, 53283), (67, 53280), (84, 53205), (93, 53166), (95, 53160), (97, 53142), (109, 53109), (116, 53091), (124, 53046),

Gene: Briakila_61 Start: 54974, Stop: 54498, Start Num: 39

Candidate Starts for Briakila_61:

(Start: 38 @54977 has 12 MA's), (Start: 39 @54974 has 330 MA's), (46, 54878), (59, 54812), (60, 54782), (71, 54710), (72, 54707), (73, 54698), (78, 54683), (93, 54626),

Gene: Brilliant_64 Start: 55005, Stop: 54541, Start Num: 39

Candidate Starts for Brilliant_64:

(Start: 39 @55005 has 330 MA's), (46, 54909), (47, 54900), (59, 54825), (66, 54753), (86, 54687), (89, 54681), (90, 54675), (96, 54648),

Gene: Brownie5_59 Start: 53503, Stop: 53015, Start Num: 39

Candidate Starts for Brownie5_59:

(Start: 39 @53503 has 330 MA's), (43, 53470), (46, 53410), (58, 53368), (59, 53365), (60, 53335), (65, 53296), (66, 53293), (67, 53290), (84, 53215), (93, 53176), (95, 53170), (97, 53152), (109, 53119), (116, 53101), (124, 53056),

Gene: Buckeye_62 Start: 55298, Stop: 54840, Start Num: 39

Candidate Starts for Buckeye_62:

(Start: 39 @55298 has 330 MA's), (46, 55202), (47, 55193), (59, 55118), (66, 55046), (86, 54980), (89, 54974), (90, 54968), (96, 54941),

Gene: Burr_61 Start: 54473, Stop: 54015, Start Num: 39

Candidate Starts for Burr_61:

(Start: 39 @54473 has 330 MA's), (46, 54377), (47, 54368), (59, 54293), (66, 54221), (86, 54155), (89, 54149), (90, 54143), (96, 54116),

Gene: CRB2_58 Start: 56218, Stop: 55649, Start Num: 38

Candidate Starts for CRB2_58:

(16, 56434), (26, 56320), (Start: 38 @56218 has 12 MA's), (58, 56080), (62, 56026), (65, 56008), (66, 56005), (88, 55930), (120, 55828), (121, 55822), (130, 55783), (151, 55681),

Gene: Calamitous_59 Start: 53353, Stop: 52862, Start Num: 39

Candidate Starts for Calamitous_59:

(2, 54043), (4, 53917), (5, 53893), (27, 53455), (Start: 39 @53353 has 330 MA's), (43, 53320), (46, 53260), (58, 53218), (59, 53215), (60, 53185), (65, 53146), (66, 53143), (67, 53140), (84, 53065), (93, 53026), (95, 53020), (97, 53002), (109, 52969), (116, 52951), (124, 52906),

Gene: CamL_61 Start: 54805, Stop: 54347, Start Num: 39

Candidate Starts for CamL_61:

(Start: 39 @54805 has 330 MA's), (46, 54709), (47, 54700), (59, 54625), (66, 54553), (86, 54487), (89, 54481), (90, 54475), (96, 54448),

Gene: CampRoach_63 Start: 54909, Stop: 54445, Start Num: 39

Candidate Starts for CampRoach_63:

(Start: 39 @54909 has 330 MA's), (46, 54813), (47, 54804), (59, 54729), (66, 54657), (86, 54591), (89, 54585), (90, 54579), (96, 54552),

Gene: Cannibal_61 Start: 54747, Stop: 54289, Start Num: 39

Candidate Starts for Cannibal_61:

(Start: 39 @54747 has 330 MA's), (46, 54651), (47, 54642), (59, 54567), (66, 54495), (86, 54429), (89, 54423), (90, 54417), (96, 54390),

Gene: Carthage_60 Start: 53984, Stop: 53526, Start Num: 39

Candidate Starts for Carthage_60:

(Start: 39 @53984 has 330 MA's), (46, 53888), (47, 53879), (59, 53804), (66, 53732), (86, 53666), (89, 53660), (90, 53654), (96, 53627), (118, 53558),

Gene: Casbah_62 Start: 55319, Stop: 54843, Start Num: 39

Candidate Starts for Casbah_62:

(Start: 38 @55322 has 12 MA's), (Start: 39 @55319 has 330 MA's), (46, 55223), (59, 55157), (60, 55127), (71, 55055), (72, 55052), (73, 55043), (78, 55028), (93, 54971),

Gene: Caspiboi_64 Start: 54731, Stop: 54267, Start Num: 39

Candidate Starts for Caspiboi_64:

(Start: 39 @54731 has 330 MA's), (46, 54635), (47, 54626), (59, 54551), (66, 54479), (86, 54413), (89, 54407), (90, 54401), (96, 54374),

Gene: ChaChing_62 Start: 55021, Stop: 54545, Start Num: 39

Candidate Starts for ChaChing_62:

(Start: 20 @55156 has 2 MA's), (23, 55135), (Start: 38 @55024 has 12 MA's), (Start: 39 @55021 has 330 MA's), (46, 54925), (59, 54859), (60, 54829), (71, 54757), (72, 54754), (73, 54745), (78, 54730), (93, 54673),

Gene: Chaelin_62 Start: 55035, Stop: 54577, Start Num: 39

Candidate Starts for Chaelin_62:

(Start: 39 @55035 has 330 MA's), (46, 54939), (47, 54930), (59, 54855), (66, 54783), (86, 54717), (89, 54711), (90, 54705), (96, 54678),

Gene: Chah_63 Start: 54450, Stop: 53992, Start Num: 39

Candidate Starts for Chah_63:

(Start: 39 @54450 has 330 MA's), (46, 54354), (47, 54345), (59, 54270), (66, 54198), (86, 54132), (89, 54126), (90, 54120), (96, 54093),

Gene: Chalmers_61 Start: 55460, Stop: 54984, Start Num: 39

Candidate Starts for Chalmers_61:

(Start: 20 @55595 has 2 MA's), (23, 55574), (Start: 38 @55463 has 12 MA's), (Start: 39 @55460 has 330 MA's), (46, 55364), (59, 55298), (60, 55268), (71, 55196), (72, 55193), (73, 55184), (78, 55169), (93, 55112),

Gene: Chandler_62 Start: 55789, Stop: 55313, Start Num: 39

Candidate Starts for Chandler_62:

(Start: 20 @55924 has 2 MA's), (23, 55903), (Start: 38 @55792 has 12 MA's), (Start: 39 @55789 has 330 MA's), (46, 55693), (59, 55627), (60, 55597), (71, 55525), (72, 55522), (73, 55513), (78, 55498), (93, 55441),

Gene: Charles1_62 Start: 54759, Stop: 54301, Start Num: 39

Candidate Starts for Charles1_62:

(Start: 39 @54759 has 330 MA's), (46, 54663), (47, 54654), (59, 54579), (66, 54507), (86, 54441), (89, 54435), (90, 54429), (96, 54402),

Gene: CharlieGBrown_62 Start: 54598, Stop: 54140, Start Num: 39

Candidate Starts for CharlieGBrown_62:

(Start: 39 @54598 has 330 MA's), (46, 54502), (47, 54493), (59, 54418), (66, 54346), (86, 54280), (89, 54274), (90, 54268), (96, 54241),

Gene: CheetO_61 Start: 54721, Stop: 54263, Start Num: 39

Candidate Starts for CheetO_61:

(Start: 39 @54721 has 330 MA's), (46, 54625), (47, 54616), (59, 54541), (66, 54469), (86, 54403), (89, 54397), (90, 54391), (96, 54364),

Gene: Chentzyk_63 Start: 55729, Stop: 55265, Start Num: 38

Candidate Starts for Chentzyk_63:

(Start: 20 @55861 has 2 MA's), (23, 55840), (Start: 38 @55729 has 12 MA's), (Start: 39 @55726 has 330 MA's), (46, 55630), (59, 55564), (60, 55534), (71, 55462), (72, 55459), (73, 55450), (78, 55435), (93, 55402),

Gene: Cher_61 Start: 55015, Stop: 54557, Start Num: 39

Candidate Starts for Cher_61:

(Start: 39 @55015 has 330 MA's), (46, 54919), (47, 54910), (59, 54835), (66, 54763), (86, 54697), (89, 54691), (90, 54685), (96, 54658),

Gene: Childish_61 Start: 55026, Stop: 54568, Start Num: 39

Candidate Starts for Childish_61:

(Start: 39 @55026 has 330 MA's), (46, 54930), (47, 54921), (59, 54846), (66, 54774), (86, 54708), (89, 54702), (90, 54696), (96, 54669),

Gene: Chorkpop_61 Start: 54502, Stop: 54044, Start Num: 39

Candidate Starts for Chorkpop_61:

(Start: 39 @54502 has 330 MA's), (46, 54406), (47, 54397), (59, 54322), (66, 54250), (86, 54184), (89, 54178), (90, 54172), (96, 54145),

Gene: Chunky_60 Start: 54051, Stop: 53593, Start Num: 39

Candidate Starts for Chunky_60:

(Start: 39 @54051 has 330 MA's), (46, 53955), (47, 53946), (59, 53871), (66, 53799), (86, 53733), (89, 53727), (90, 53721), (96, 53694),

Gene: Chute_63 Start: 55063, Stop: 54605, Start Num: 39

Candidate Starts for Chute_63:

(Start: 39 @55063 has 330 MA's), (46, 54967), (47, 54958), (59, 54883), (66, 54811), (86, 54745), (89, 54739), (90, 54733), (96, 54706),

Gene: Cobra_63 Start: 55047, Stop: 54583, Start Num: 39

Candidate Starts for Cobra_63:

(Start: 39 @55047 has 330 MA's), (46, 54951), (47, 54942), (59, 54867), (66, 54795), (86, 54729), (89, 54723), (90, 54717), (96, 54690),

Gene: Coffee_59 Start: 53465, Stop: 52974, Start Num: 39

Candidate Starts for Coffee_59:

(27, 53567), (Start: 39 @53465 has 330 MA's), (43, 53432), (46, 53372), (58, 53330), (59, 53327), (60, 53297), (65, 53258), (66, 53255), (67, 53252), (84, 53177), (93, 53138), (95, 53132), (97, 53114), (109, 53081), (116, 53063), (124, 53018),

Gene: Colbert_60 Start: 54061, Stop: 53603, Start Num: 39

Candidate Starts for Colbert_60:

(Start: 39 @54061 has 330 MA's), (46, 53965), (47, 53956), (59, 53881), (66, 53809), (86, 53743), (89, 53737), (90, 53731), (96, 53704),

Gene: Coldpizza_52 Start: 49032, Stop: 48547, Start Num: 31

Candidate Starts for Coldpizza_52:

(30, 49080), (31, 49032), (35, 49005), (36, 49002), (46, 48894), (76, 48747), (93, 48681), (117, 48597),

Gene: Coletti_64 Start: 55563, Stop: 55105, Start Num: 39

Candidate Starts for Coletti_64:

(Start: 39 @55563 has 330 MA's), (46, 55467), (47, 55458), (59, 55383), (66, 55311), (86, 55245), (89, 55239), (90, 55233), (96, 55206),

Gene: Compostia_62 Start: 55408, Stop: 54932, Start Num: 39

Candidate Starts for Compostia_62:

(9, 55801), (10, 55675), (11, 55657), (Start: 20 @55543 has 2 MA's), (23, 55522), (Start: 38 @55411 has 12 MA's), (Start: 39 @55408 has 330 MA's), (46, 55312), (59, 55246), (60, 55216), (71, 55144), (72, 55141), (73, 55132), (78, 55117), (93, 55060),

Gene: Cornobble_61 Start: 54495, Stop: 54037, Start Num: 39

Candidate Starts for Cornobble_61:

(Start: 39 @54495 has 330 MA's), (46, 54399), (47, 54390), (59, 54315), (66, 54243), (86, 54177), (89, 54171), (90, 54165), (96, 54138),

Gene: Corofin_62 Start: 55032, Stop: 54556, Start Num: 39

Candidate Starts for Corofin_62:

(Start: 20 @55167 has 2 MA's), (23, 55146), (Start: 38 @55035 has 12 MA's), (Start: 39 @55032 has 330 MA's), (46, 54936), (59, 54870), (60, 54840), (71, 54768), (72, 54765), (73, 54756), (78, 54741), (93, 54684),

Gene: Cosmolli16_62 Start: 55205, Stop: 54747, Start Num: 39

Candidate Starts for Cosmolli16_62:

(Start: 39 @55205 has 330 MA's), (46, 55109), (47, 55100), (59, 55025), (66, 54953), (86, 54887), (89, 54881), (90, 54875), (96, 54848),

Gene: Craff_64 Start: 55450, Stop: 54992, Start Num: 39

Candidate Starts for Craff_64:

(Start: 39 @55450 has 330 MA's), (46, 55354), (47, 55345), (59, 55270), (66, 55198), (86, 55132), (89, 55126), (90, 55120), (96, 55093),

Gene: Crownjwl_61 Start: 54524, Stop: 54066, Start Num: 39

Candidate Starts for Crownjwl_61:

(Start: 39 @54524 has 330 MA's), (46, 54428), (47, 54419), (59, 54344), (66, 54272), (86, 54206), (89, 54200), (90, 54194), (96, 54167),

Gene: DaddyDaniels_63 Start: 54983, Stop: 54525, Start Num: 39

Candidate Starts for DaddyDaniels_63:

(Start: 39 @54983 has 330 MA's), (46, 54887), (47, 54878), (59, 54803), (66, 54731), (86, 54665), (89, 54659), (90, 54653), (96, 54626),

Gene: Daffy_61 Start: 54488, Stop: 54030, Start Num: 39

Candidate Starts for Daffy_61:

(Start: 39 @54488 has 330 MA's), (46, 54392), (47, 54383), (59, 54308), (66, 54236), (86, 54170), (89, 54164), (90, 54158), (96, 54131),

Gene: Daisy_61 Start: 54565, Stop: 54089, Start Num: 39

Candidate Starts for Daisy_61:

(Start: 20 @54700 has 2 MA's), (23, 54679), (Start: 38 @54568 has 12 MA's), (Start: 39 @54565 has 330 MA's), (46, 54469), (59, 54403), (60, 54373), (71, 54301), (72, 54298), (73, 54289), (78, 54274), (93, 54217),

Gene: Daka_64 Start: 55004, Stop: 54546, Start Num: 39

Candidate Starts for Daka_64:

(Start: 39 @55004 has 330 MA's), (46, 54908), (47, 54899), (59, 54824), (66, 54752), (86, 54686), (89, 54680), (90, 54674), (96, 54647),

Gene: Dati_61 Start: 55019, Stop: 54561, Start Num: 39

Candidate Starts for Dati_61:

(Start: 39 @55019 has 330 MA's), (46, 54923), (47, 54914), (59, 54839), (66, 54767), (86, 54701), (89, 54695), (90, 54689), (96, 54662),

Gene: Deenasa_62 Start: 55870, Stop: 55394, Start Num: 39

Candidate Starts for Deenasa_62:

(19, 56029), (Start: 20 @56005 has 2 MA's), (23, 55984), (Start: 38 @55873 has 12 MA's), (Start: 39 @55870 has 330 MA's), (46, 55774), (59, 55708), (60, 55678), (71, 55606), (72, 55603), (73, 55594), (78, 55579), (93, 55522),

Gene: DelRivs_60 Start: 54472, Stop: 54008, Start Num: 39

Candidate Starts for DelRivs_60:

(Start: 39 @54472 has 330 MA's), (46, 54376), (47, 54367), (59, 54292), (66, 54220), (86, 54154), (89, 54148), (90, 54142), (96, 54115),

Gene: Derpp_61 Start: 54586, Stop: 54128, Start Num: 39

Candidate Starts for Derpp_61:

(Start: 39 @54586 has 330 MA's), (46, 54490), (47, 54481), (59, 54406), (66, 54334), (86, 54268), (89, 54262), (90, 54256), (96, 54229),

Gene: Devonte_61 Start: 54644, Stop: 54168, Start Num: 39

Candidate Starts for Devonte_61:

(Start: 20 @54779 has 2 MA's), (23, 54758), (Start: 38 @54647 has 12 MA's), (Start: 39 @54644 has 330 MA's), (46, 54548), (59, 54482), (60, 54452), (71, 54380), (72, 54377), (73, 54368), (78, 54353), (93, 54296),

Gene: Dice_60 Start: 54471, Stop: 54013, Start Num: 39

Candidate Starts for Dice_60:

(Start: 39 @54471 has 330 MA's), (46, 54375), (47, 54366), (59, 54291), (66, 54219), (86, 54153), (89, 54147), (90, 54141), (96, 54114),

Gene: DigitDog_59 Start: 55051, Stop: 54422, Start Num: 37

Candidate Starts for DigitDog_59:

(Start: 37 @55051 has 10 MA's), (43, 55009), (58, 54862), (60, 54829), (61, 54823), (62, 54808), (65, 54790), (69, 54772), (79, 54733), (80, 54724), (83, 54715), (106, 54613), (112, 54601),

Gene: Dingo_60 Start: 54030, Stop: 53572, Start Num: 39

Candidate Starts for Dingo_60:

(Start: 39 @54030 has 330 MA's), (46, 53934), (47, 53925), (59, 53850), (66, 53778), (86, 53712), (89, 53706), (90, 53700), (96, 53673),

Gene: Dione_59 Start: 54202, Stop: 53744, Start Num: 39

Candidate Starts for Dione_59:

(Start: 39 @54202 has 330 MA's), (46, 54106), (47, 54097), (59, 54022), (66, 53950), (86, 53884), (89, 53878), (90, 53872), (96, 53845),

Gene: DirtJuice_62 Start: 54792, Stop: 54334, Start Num: 39

Candidate Starts for DirtJuice_62:

(Start: 39 @54792 has 330 MA's), (46, 54696), (47, 54687), (59, 54612), (66, 54540), (86, 54474), (89, 54468), (90, 54462), (96, 54435),

Gene: Doddsville_62 Start: 54738, Stop: 54280, Start Num: 39

Candidate Starts for Doddsville_62:

(Start: 39 @54738 has 330 MA's), (46, 54642), (47, 54633), (59, 54558), (66, 54486), (86, 54420), (89, 54414), (90, 54408), (96, 54381),

Gene: DoesntMatter_59 Start: 54495, Stop: 54037, Start Num: 39

Candidate Starts for DoesntMatter_59:

(Start: 39 @54495 has 330 MA's), (46, 54399), (47, 54390), (59, 54315), (66, 54243), (86, 54177), (89, 54171), (90, 54165), (96, 54138),

Gene: DonSanchon_59 Start: 54185, Stop: 53727, Start Num: 39

Candidate Starts for DonSanchon_59:

(Start: 39 @54185 has 330 MA's), (46, 54089), (47, 54080), (59, 54005), (66, 53933), (86, 53867), (89, 53861), (90, 53855), (96, 53828),

Gene: Donny_60 Start: 55154, Stop: 54513, Start Num: 37

Candidate Starts for Donny_60:

(22, 55280), (Start: 37 @55154 has 10 MA's), (43, 55112), (58, 54965), (60, 54932), (62, 54911), (65, 54893), (69, 54875), (106, 54728), (112, 54716), (115, 54707), (129, 54644),

Gene: DuchessDung_63 Start: 54255, Stop: 53797, Start Num: 39

Candidate Starts for DuchessDung_63:

(Start: 39 @54255 has 330 MA's), (46, 54159), (47, 54150), (59, 54075), (66, 54003), (86, 53937), (89, 53931), (90, 53925), (96, 53898),

Gene: Duggie_62 Start: 54745, Stop: 54281, Start Num: 39

Candidate Starts for Duggie_62:

(Start: 39 @54745 has 330 MA's), (46, 54649), (47, 54640), (59, 54565), (66, 54493), (86, 54427), (89, 54421), (90, 54415), (96, 54388),

Gene: Durga_64 Start: 55235, Stop: 54777, Start Num: 39

Candidate Starts for Durga_64:

(Start: 39 @55235 has 330 MA's), (46, 55139), (47, 55130), (59, 55055), (66, 54983), (86, 54917), (89, 54911), (90, 54905), (96, 54878),

Gene: Eaglehorse_59 Start: 53403, Stop: 52912, Start Num: 39

Candidate Starts for Eaglehorse_59:

(Start: 39 @53403 has 330 MA's), (43, 53370), (46, 53310), (58, 53268), (59, 53265), (60, 53235), (65, 53196), (66, 53193), (67, 53190), (84, 53115), (93, 53076), (95, 53070), (97, 53052), (109, 53019), (116, 53001), (124, 52956),

Gene: EastView9101_58 Start: 54963, Stop: 54334, Start Num: 37

Candidate Starts for EastView9101_58:

(22, 55089), (Start: 37 @54963 has 10 MA's), (43, 54921), (58, 54774), (60, 54741), (62, 54720), (65, 54702), (69, 54684), (106, 54537), (112, 54525), (115, 54516), (129, 54453),

Gene: ElvisPhasley_67 Start: 55231, Stop: 54773, Start Num: 39

Candidate Starts for ElvisPhasley_67:

(Start: 39 @55231 has 330 MA's), (46, 55135), (47, 55126), (59, 55051), (66, 54979), (86, 54913), (89, 54907), (90, 54901), (96, 54874),

Gene: Emiris_64 Start: 55202, Stop: 54744, Start Num: 39

Candidate Starts for Emiris_64:

(Start: 39 @55202 has 330 MA's), (46, 55106), (47, 55097), (59, 55022), (66, 54950), (86, 54884), (89, 54878), (90, 54872), (96, 54845),

Gene: EmpTee_61 Start: 54711, Stop: 54253, Start Num: 39

Candidate Starts for EmpTee_61:

(Start: 39 @54711 has 330 MA's), (46, 54615), (47, 54606), (59, 54531), (66, 54459), (86, 54393), (89, 54387), (90, 54381), (96, 54354),

Gene: Eremos_61 Start: 54701, Stop: 54243, Start Num: 39

Candidate Starts for Eremos_61:

(Start: 39 @54701 has 330 MA's), (46, 54605), (47, 54596), (59, 54521), (66, 54449), (86, 54383), (89, 54377), (90, 54371), (96, 54344),

Gene: Etaye_63 Start: 55532, Stop: 55074, Start Num: 39

Candidate Starts for Etaye_63:

(Start: 39 @55532 has 330 MA's), (46, 55436), (47, 55427), (59, 55352), (66, 55280), (86, 55214), (89, 55208), (90, 55202), (96, 55175),

Gene: Eugenia_61 Start: 54854, Stop: 54396, Start Num: 39

Candidate Starts for Eugenia_61:

(Start: 39 @54854 has 330 MA's), (46, 54758), (47, 54749), (59, 54674), (66, 54602), (86, 54536), (89, 54530), (90, 54524), (96, 54497),

Gene: Fang_63 Start: 54747, Stop: 54289, Start Num: 39

Candidate Starts for Fang_63:

(Start: 39 @54747 has 330 MA's), (46, 54651), (47, 54642), (59, 54567), (66, 54495), (86, 54429), (89, 54423), (90, 54417), (96, 54390),

Gene: Faze9_58 Start: 53488, Stop: 52997, Start Num: 39

Candidate Starts for Faze9_58:

(27, 53590), (Start: 39 @53488 has 330 MA's), (43, 53455), (46, 53395), (58, 53353), (59, 53350), (60, 53320), (65, 53281), (66, 53278), (67, 53275), (84, 53200), (93, 53161), (95, 53155), (97, 53137), (109, 53104), (116, 53086), (124, 53041),

Gene: FluffyNinja_63 Start: 54767, Stop: 54309, Start Num: 39

Candidate Starts for FluffyNinja_63:

(Start: 39 @54767 has 330 MA's), (46, 54671), (47, 54662), (59, 54587), (66, 54515), (86, 54449), (89, 54443), (90, 54437), (96, 54410),

Gene: ForDig_55 Start: 53442, Stop: 52843, Start Num: 40

Candidate Starts for ForDig_55:

(Start: 40 @53442 has 1 MA's), (46, 53349), (49, 53319), (52, 53307), (58, 53289), (61, 53250), (64, 53220), (82, 53160), (100, 53085), (131, 52965), (133, 52959), (147, 52881),

Gene: Fozzie_62 Start: 54992, Stop: 54534, Start Num: 39

Candidate Starts for Fozzie_62:

(Start: 39 @54992 has 330 MA's), (46, 54896), (47, 54887), (59, 54812), (66, 54740), (86, 54674), (89, 54668), (90, 54662), (96, 54635),

Gene: Frankicide_60 Start: 54532, Stop: 54074, Start Num: 39

Candidate Starts for Frankicide_60:

(Start: 39 @54532 has 330 MA's), (46, 54436), (47, 54427), (59, 54352), (66, 54280), (86, 54214), (89, 54208), (90, 54202), (96, 54175),

Gene: FrenchFry_59 Start: 53464, Stop: 52973, Start Num: 39

Candidate Starts for FrenchFry_59:

(1, 54244), (2, 54154), (4, 54028), (5, 54004), (27, 53566), (Start: 39 @53464 has 330 MA's), (43, 53431), (46, 53371), (58, 53329), (59, 53326), (60, 53296), (65, 53257), (66, 53254), (67, 53251), (84, 53176), (93, 53137), (95, 53131), (97, 53113), (109, 53080), (116, 53062), (124, 53017),

Gene: Freya_59 Start: 54193, Stop: 53735, Start Num: 39

Candidate Starts for Freya_59:

(Start: 39 @54193 has 330 MA's), (46, 54097), (47, 54088), (59, 54013), (66, 53941), (86, 53875), (89, 53869), (90, 53863), (96, 53836),

Gene: FriarPreacher_61 Start: 54585, Stop: 54121, Start Num: 39

Candidate Starts for FriarPreacher_61:

(Start: 39 @54585 has 330 MA's), (46, 54489), (47, 54480), (59, 54405), (66, 54333), (86, 54267), (89, 54261), (90, 54255), (96, 54228),

Gene: Fringe_65 Start: 55369, Stop: 54911, Start Num: 39

Candidate Starts for Fringe_65:

(Start: 39 @55369 has 330 MA's), (46, 55273), (47, 55264), (59, 55189), (66, 55117), (86, 55051), (89, 55045), (90, 55039), (96, 55012),

Gene: FugateOSU_62 Start: 55538, Stop: 55080, Start Num: 39

Candidate Starts for FugateOSU_62:

(Start: 39 @55538 has 330 MA's), (46, 55442), (47, 55433), (59, 55358), (66, 55286), (86, 55220), (89, 55214), (90, 55208), (96, 55181),

Gene: Funsized_61 Start: 57221, Stop: 56568, Start Num: 32

Candidate Starts for Funsized_61:

(7, 57734), (12, 57476), (13, 57461), (25, 57338), (Start: 32 @57221 has 2 MA's), (Start: 34 @57212 has 3 MA's), (43, 57167), (46, 57107), (48, 57086), (56, 57047), (59, 57041), (65, 56972), (66, 56969), (71, 56939), (74, 56924), (96, 56849), (102, 56831), (119, 56771), (120, 56765), (140, 56660), (153, 56594), (154, 56579),

Gene: Gadget_63 Start: 55340, Stop: 54861, Start Num: 39

Candidate Starts for Gadget_63:

(Start: 38 @55343 has 12 MA's), (Start: 39 @55340 has 330 MA's), (46, 55244), (59, 55178), (60, 55148), (71, 55076), (72, 55073), (73, 55064), (93, 54989),

Gene: Gareth_61 Start: 54991, Stop: 54533, Start Num: 39

Candidate Starts for Gareth_61:

(Start: 39 @54991 has 330 MA's), (46, 54895), (47, 54886), (59, 54811), (66, 54739), (86, 54673), (89, 54667), (90, 54661), (96, 54634),

Gene: GeneCoco_62 Start: 55034, Stop: 54576, Start Num: 39

Candidate Starts for GeneCoco_62:

(Start: 39 @55034 has 330 MA's), (46, 54938), (47, 54929), (59, 54854), (66, 54782), (86, 54716), (89, 54710), (90, 54704), (96, 54677),

Gene: Gervas_63 Start: 55426, Stop: 54950, Start Num: 39

Candidate Starts for Gervas_63:

(Start: 20 @55561 has 2 MA's), (23, 55540), (Start: 38 @55429 has 12 MA's), (Start: 39 @55426 has 330 MA's), (46, 55330), (59, 55264), (60, 55234), (71, 55162), (72, 55159), (73, 55150), (78, 55135), (84, 55117), (93, 55078),

Gene: Giraffe_62 Start: 54986, Stop: 54528, Start Num: 39

Candidate Starts for Giraffe_62:

(Start: 39 @54986 has 330 MA's), (46, 54890), (47, 54881), (59, 54806), (66, 54734), (86, 54668), (89, 54662), (90, 54656), (96, 54629),

Gene: Glass_59 Start: 53466, Stop: 52975, Start Num: 39

Candidate Starts for Glass_59:

(1, 54246), (2, 54156), (4, 54030), (5, 54006), (27, 53568), (Start: 39 @53466 has 330 MA's), (43, 53433), (46, 53373), (58, 53331), (59, 53328), (60, 53298), (65, 53259), (66, 53256), (67, 53253), (84, 53178), (93, 53139), (95, 53133), (97, 53115), (109, 53082), (116, 53064), (124, 53019),

Gene: GlenHope_63 Start: 55000, Stop: 54524, Start Num: 39

Candidate Starts for GlenHope_63:

(Start: 20 @55135 has 2 MA's), (23, 55114), (Start: 38 @55003 has 12 MA's), (Start: 39 @55000 has 330 MA's), (46, 54904), (59, 54838), (60, 54808), (71, 54736), (72, 54733), (73, 54724), (78, 54709), (93, 54652),

Gene: Glubnar_62 Start: 54906, Stop: 54430, Start Num: 39

Candidate Starts for Glubnar_62:

(Start: 20 @55041 has 2 MA's), (23, 55020), (Start: 38 @54909 has 12 MA's), (Start: 39 @54906 has 330 MA's), (46, 54810), (59, 54744), (60, 54714), (71, 54642), (72, 54639), (73, 54630), (78, 54615), (93, 54558),

Gene: Godines_60 Start: 53749, Stop: 53258, Start Num: 39

Candidate Starts for Godines_60:

(17, 53956), (Start: 39 @53749 has 330 MA's), (43, 53716), (46, 53656), (58, 53614), (59, 53611), (60, 53581), (65, 53542), (66, 53539), (67, 53536), (69, 53524), (84, 53461), (93, 53422), (95, 53416), (97, 53398), (109, 53365), (124, 53302),

Gene: Gophee_63 Start: 54977, Stop: 54519, Start Num: 39

Candidate Starts for Gophee_63:

(Start: 39 @54977 has 330 MA's), (46, 54881), (47, 54872), (59, 54797), (66, 54725), (86, 54659), (89, 54653), (90, 54647), (96, 54620),

Gene: Grand2040_61 Start: 54980, Stop: 54522, Start Num: 39

Candidate Starts for Grand2040_61:

(Start: 39 @54980 has 330 MA's), (46, 54884), (47, 54875), (59, 54800), (66, 54728), (86, 54662), (89, 54656), (90, 54650), (96, 54623),

Gene: Gwennie1_61 Start: 54779, Stop: 54321, Start Num: 39

Candidate Starts for Gwennie1_61:

(Start: 39 @54779 has 330 MA's), (46, 54683), (47, 54674), (59, 54599), (66, 54527), (86, 54461), (89, 54455), (90, 54449), (96, 54422),

Gene: Gwilliam_63 Start: 55385, Stop: 54927, Start Num: 39

Candidate Starts for Gwilliam_63:

(Start: 39 @55385 has 330 MA's), (46, 55289), (47, 55280), (59, 55205), (66, 55133), (86, 55067), (89, 55061), (90, 55055), (96, 55028),

Gene: Gyarad_0060 Start: 54067, Stop: 53609, Start Num: 39

Candidate Starts for Gyarad_0060:

(Start: 39 @54067 has 330 MA's), (46, 53971), (47, 53962), (59, 53887), (66, 53815), (86, 53749), (89, 53743), (90, 53737), (96, 53710),

Gene: HSavage_60 Start: 54511, Stop: 54053, Start Num: 39

Candidate Starts for HSavage_60:

(Start: 39 @54511 has 330 MA's), (46, 54415), (47, 54406), (59, 54331), (66, 54259), (86, 54193), (89, 54187), (90, 54181), (96, 54154),

Gene: Haimas_60 Start: 54428, Stop: 53970, Start Num: 39

Candidate Starts for Haimas_60:

(Start: 39 @54428 has 330 MA's), (46, 54332), (47, 54323), (59, 54248), (66, 54176), (86, 54110), (89, 54104), (90, 54098), (96, 54071),

Gene: Haleema_60 Start: 54532, Stop: 54068, Start Num: 39

Candidate Starts for Haleema_60:

(Start: 39 @54532 has 330 MA's), (46, 54436), (47, 54427), (59, 54352), (66, 54280), (86, 54214), (89, 54208), (90, 54202), (96, 54175),

Gene: Halfpint_61 Start: 54743, Stop: 54264, Start Num: 39

Candidate Starts for Halfpint_61:

(Start: 38 @54746 has 12 MA's), (Start: 39 @54743 has 330 MA's), (46, 54647), (59, 54581), (60, 54551), (71, 54479), (72, 54476), (73, 54467), (78, 54452), (93, 54395),

Gene: Hamish_60 Start: 54422, Stop: 53964, Start Num: 39

Candidate Starts for Hamish_60:

(Start: 39 @54422 has 330 MA's), (46, 54326), (47, 54317), (59, 54242), (66, 54170), (86, 54104), (89, 54098), (90, 54092), (96, 54065),

Gene: Hartsy_62 Start: 54860, Stop: 54402, Start Num: 39

Candidate Starts for Hartsy_62:

(Start: 39 @54860 has 330 MA's), (46, 54764), (47, 54755), (59, 54680), (66, 54608), (86, 54542), (89, 54536), (90, 54530), (96, 54503),

Gene: Harvey_60 Start: 54515, Stop: 54057, Start Num: 39

Candidate Starts for Harvey_60:

(Start: 39 @54515 has 330 MA's), (46, 54419), (47, 54410), (59, 54335), (66, 54263), (86, 54197), (89, 54191), (90, 54185), (96, 54158),

Gene: HarveySr_61 Start: 54590, Stop: 54114, Start Num: 39

Candidate Starts for HarveySr_61:

(Start: 20 @54725 has 2 MA's), (23, 54704), (Start: 38 @54593 has 12 MA's), (Start: 39 @54590 has 330 MA's), (46, 54494), (59, 54428), (60, 54398), (71, 54326), (72, 54323), (73, 54314), (78, 54299), (93, 54242),

Gene: Hashim76_63 Start: 55261, Stop: 54758, Start Num: 39

Candidate Starts for Hashim76_63:

(Start: 39 @55261 has 330 MA's), (60, 55063), (65, 55024), (73, 54982), (102, 54889),

Gene: Heathcliff_62 Start: 54970, Stop: 54491, Start Num: 38

Candidate Starts for Heathcliff_62:

(Start: 20 @55102 has 2 MA's), (23, 55081), (Start: 38 @54970 has 12 MA's), (Start: 39 @54967 has 330 MA's), (46, 54871), (59, 54805), (60, 54775), (71, 54703), (72, 54700), (73, 54691), (78, 54676), (93, 54619),

Gene: Hedgerow_59 Start: 53478, Stop: 52990, Start Num: 39

Candidate Starts for Hedgerow_59:

(Start: 39 @53478 has 330 MA's), (43, 53445), (46, 53385), (58, 53343), (59, 53340), (60, 53310), (65, 53271), (66, 53268), (67, 53265), (84, 53190), (93, 53151), (95, 53145), (97, 53127), (109, 53094), (116, 53076), (124, 53031),

Gene: Held_61 Start: 54489, Stop: 54031, Start Num: 39

Candidate Starts for Held_61:

(Start: 39 @54489 has 330 MA's), (46, 54393), (47, 54384), (59, 54309), (66, 54237), (86, 54171), (89, 54165), (90, 54159), (96, 54132),

Gene: HenryJackson_61 Start: 55015, Stop: 54557, Start Num: 39

Candidate Starts for HenryJackson_61:

(Start: 39 @55015 has 330 MA's), (46, 54919), (47, 54910), (59, 54835), (66, 54763), (86, 54697), (89, 54691), (90, 54685), (96, 54658),

Gene: Hertubise_61 Start: 54781, Stop: 54323, Start Num: 39

Candidate Starts for Hertubise_61:

(Start: 39 @54781 has 330 MA's), (46, 54685), (47, 54676), (59, 54601), (66, 54529), (86, 54463), (89, 54457), (90, 54451), (96, 54424),

Gene: Hetaeria_61 Start: 54720, Stop: 54262, Start Num: 39

Candidate Starts for Hetaeria_61:

(Start: 39 @54720 has 330 MA's), (46, 54624), (47, 54615), (59, 54540), (66, 54468), (86, 54402), (89, 54396), (90, 54390), (96, 54363),

Gene: HighStump_63 Start: 54992, Stop: 54534, Start Num: 39

Candidate Starts for HighStump_63:

(Start: 39 @54992 has 330 MA's), (46, 54896), (47, 54887), (59, 54812), (66, 54740), (86, 54674), (89, 54668), (90, 54662), (96, 54635),

Gene: Hocus_61 Start: 54476, Stop: 54018, Start Num: 39

Candidate Starts for Hocus_61:

(Start: 39 @54476 has 330 MA's), (46, 54380), (47, 54371), (59, 54296), (66, 54224), (86, 54158), (89, 54152), (90, 54146), (96, 54119),

Gene: Holeinone_59 Start: 53320, Stop: 52829, Start Num: 39

Candidate Starts for Holeinone_59:

(1, 54100), (2, 54010), (4, 53884), (5, 53860), (27, 53422), (Start: 39 @53320 has 330 MA's), (43, 53287), (46, 53227), (58, 53185), (59, 53182), (60, 53152), (65, 53113), (66, 53110), (67, 53107), (84, 53032), (93, 52993), (95, 52987), (97, 52969), (109, 52936), (116, 52918), (124, 52873),

Gene: Horchata_60 Start: 54511, Stop: 54053, Start Num: 39

Candidate Starts for Horchata_60:

(Start: 39 @54511 has 330 MA's), (46, 54415), (47, 54406), (59, 54331), (66, 54259), (86, 54193), (89, 54187), (90, 54181), (96, 54154),

Gene: Hosp_052 Start: 51513, Stop: 51040, Start Num: 40

Candidate Starts for Hosp_052:

(Start: 40 @51513 has 1 MA's), (46, 51420), (49, 51390), (52, 51378), (64, 51291), (74, 51246), (82, 51231), (98, 51159), (104, 51147), (111, 51123), (118, 51099),

Gene: ImtiyazSitla_63 Start: 54718, Stop: 54254, Start Num: 39

Candidate Starts for ImtiyazSitla_63:

(Start: 39 @54718 has 330 MA's), (46, 54622), (47, 54613), (59, 54538), (66, 54466), (86, 54400), (89, 54394), (90, 54388), (96, 54361),

Gene: Inchworm_63 Start: 54869, Stop: 54405, Start Num: 39

Candidate Starts for Inchworm_63:

(Start: 39 @54869 has 330 MA's), (46, 54773), (47, 54764), (59, 54689), (66, 54617), (86, 54551), (89, 54545), (90, 54539), (96, 54512),

Gene: Indlovu_57 Start: 55077, Stop: 54580, Start Num: 34

Candidate Starts for Indlovu_57:

(Start: 34 @55077 has 3 MA's), (41, 55059), (47, 54960), (57, 54930), (59, 54924), (65, 54855), (80, 54798), (109, 54702), (114, 54690), (118, 54672), (123, 54663), (132, 54624), (135, 54609), (139, 54594),

Gene: Inverness_60 Start: 54519, Stop: 54061, Start Num: 39

Candidate Starts for Inverness_60:

(Start: 39 @54519 has 330 MA's), (46, 54423), (47, 54414), (59, 54339), (66, 54267), (86, 54201), (89, 54195), (90, 54189), (96, 54162),

Gene: Iridessa_63 Start: 54436, Stop: 53978, Start Num: 39

Candidate Starts for Iridessa_63:

(Start: 39 @54436 has 330 MA's), (46, 54340), (47, 54331), (59, 54256), (66, 54184), (86, 54118), (89, 54112), (90, 54106), (96, 54079),

Gene: Iridoclysis_62 Start: 54803, Stop: 54345, Start Num: 39

Candidate Starts for Iridoclysis_62:

(Start: 39 @54803 has 330 MA's), (46, 54707), (47, 54698), (59, 54623), (66, 54551), (86, 54485), (89, 54479), (90, 54473), (96, 54446),

Gene: IsaacEli_63 Start: 55002, Stop: 54544, Start Num: 39

Candidate Starts for IsaacEli_63:

(Start: 39 @55002 has 330 MA's), (46, 54906), (47, 54897), (59, 54822), (66, 54750), (86, 54684), (89, 54678), (90, 54672), (96, 54645),

Gene: JDog_60 Start: 55024, Stop: 54560, Start Num: 39

Candidate Starts for JDog_60:

(Start: 39 @55024 has 330 MA's), (46, 54928), (47, 54919), (59, 54844), (66, 54772), (86, 54706), (89, 54700), (90, 54694), (96, 54667),

Gene: JacAttac_63 Start: 54465, Stop: 54007, Start Num: 39

Candidate Starts for JacAttac_63:

(Start: 39 @54465 has 330 MA's), (46, 54369), (47, 54360), (59, 54285), (66, 54213), (86, 54147), (89, 54141), (90, 54135), (96, 54108),

Gene: Jackstina_58 Start: 54892, Stop: 54416, Start Num: 39

Candidate Starts for Jackstina_58:

(Start: 20 @55027 has 2 MA's), (23, 55006), (Start: 38 @54895 has 12 MA's), (Start: 39 @54892 has 330 MA's), (46, 54796), (60, 54700), (71, 54628), (72, 54625), (73, 54616), (78, 54601), (93, 54544),

Gene: JakeO_62 Start: 54747, Stop: 54283, Start Num: 39

Candidate Starts for JakeO_62:

(Start: 39 @54747 has 330 MA's), (46, 54651), (47, 54642), (59, 54567), (66, 54495), (86, 54429), (89, 54423), (90, 54417), (96, 54390),

Gene: JangoPhett_61 Start: 54806, Stop: 54348, Start Num: 39

Candidate Starts for JangoPhett_61:

(Start: 39 @54806 has 330 MA's), (46, 54710), (47, 54701), (59, 54626), (66, 54554), (86, 54488), (89, 54482), (90, 54476), (96, 54449),

Gene: Jesabah_62 Start: 55603, Stop: 55145, Start Num: 39

Candidate Starts for Jesabah_62:

(Start: 39 @55603 has 330 MA's), (46, 55507), (47, 55498), (59, 55423), (66, 55351), (86, 55285), (89, 55279), (90, 55273), (96, 55246),

Gene: Jillium_61 Start: 55010, Stop: 54552, Start Num: 39

Candidate Starts for Jillium_61:

(Start: 39 @55010 has 330 MA's), (46, 54914), (47, 54905), (59, 54830), (66, 54758), (86, 54692), (89, 54686), (90, 54680), (96, 54653),

Gene: Jiminy_62 Start: 54583, Stop: 54119, Start Num: 39

Candidate Starts for Jiminy_62:

(Start: 39 @54583 has 330 MA's), (46, 54487), (47, 54478), (59, 54403), (66, 54331), (86, 54265), (89, 54259), (90, 54253), (96, 54226),

Gene: Jiraiya_65 Start: 54781, Stop: 54317, Start Num: 39

Candidate Starts for Jiraiya_65:

(Start: 39 @54781 has 330 MA's), (46, 54685), (47, 54676), (59, 54601), (66, 54529), (86, 54463), (89, 54457), (90, 54451), (96, 54424),

Gene: Jolie1_054 Start: 53413, Stop: 52940, Start Num: 40

Candidate Starts for Jolie1_054:

(Start: 40 @53413 has 1 MA's), (46, 53320), (49, 53290), (52, 53278), (64, 53191), (82, 53131), (98, 53059), (104, 53047),

Gene: KLucky39_60 Start: 54066, Stop: 53608, Start Num: 39

Candidate Starts for KLucky39_60:

(Start: 39 @54066 has 330 MA's), (46, 53970), (47, 53961), (59, 53886), (66, 53814), (86, 53748), (89, 53742), (90, 53736), (96, 53709),

Gene: Kahve_61 Start: 55012, Stop: 54554, Start Num: 39

Candidate Starts for Kahve_61:

(Start: 39 @55012 has 330 MA's), (46, 54916), (47, 54907), (59, 54832), (66, 54760), (86, 54694), (89, 54688), (90, 54682), (96, 54655),

Gene: Kailash_62 Start: 55098, Stop: 54634, Start Num: 39

Candidate Starts for Kailash_62:

(Start: 39 @55098 has 330 MA's), (46, 55002), (47, 54993), (59, 54918), (66, 54846), (86, 54780), (89, 54774), (90, 54768), (96, 54741),

Gene: Kaleb_59 Start: 53502, Stop: 53011, Start Num: 39

Candidate Starts for Kaleb_59:

(Start: 39 @53502 has 330 MA's), (43, 53469), (46, 53409), (58, 53367), (59, 53364), (60, 53334), (65, 53295), (66, 53292), (67, 53289), (84, 53214), (93, 53175), (95, 53169), (97, 53151), (109, 53118), (116, 53100), (124, 53055),

Gene: Kamiyu_62 Start: 54969, Stop: 54493, Start Num: 39

Candidate Starts for Kamiyu_62:

(Start: 20 @55104 has 2 MA's), (23, 55083), (Start: 38 @54972 has 12 MA's), (Start: 39 @54969 has 330 MA's), (46, 54873), (59, 54807), (60, 54777), (71, 54705), (72, 54702), (73, 54693), (78, 54678), (93, 54621),

Gene: KarasumaRum_59 Start: 55230, Stop: 54595, Start Num: 37

Candidate Starts for KarasumaRum_59:

(Start: 37 @55230 has 10 MA's), (43, 55188), (58, 55041), (60, 55008), (61, 55002), (62, 54987), (65, 54969), (69, 54951), (79, 54912), (80, 54903), (83, 54894), (91, 54849), (99, 54819), (101, 54813),

Gene: Katniss_62 Start: 54450, Stop: 53992, Start Num: 39

Candidate Starts for Katniss_62:

(Start: 39 @54450 has 330 MA's), (46, 54354), (47, 54345), (59, 54270), (66, 54198), (86, 54132), (89, 54126), (90, 54120), (96, 54093),

Gene: KayaCho_53 Start: 53359, Stop: 52745, Start Num: 40

Candidate Starts for KayaCho_53:

(Start: 40 @53359 has 1 MA's), (46, 53266), (49, 53236), (52, 53224), (55, 53215), (64, 53137), (94, 53023), (105, 52972), (113, 52954), (131, 52867), (133, 52861), (142, 52828),

Gene: Keitherie_63 Start: 55073, Stop: 54615, Start Num: 39

Candidate Starts for Keitherie_63:

(Start: 39 @55073 has 330 MA's), (46, 54977), (47, 54968), (59, 54893), (66, 54821), (86, 54755), (89, 54749), (90, 54743), (96, 54716),

Gene: Khan1_62 Start: 54968, Stop: 54510, Start Num: 39

Candidate Starts for Khan1_62:

(Start: 39 @54968 has 330 MA's), (46, 54872), (47, 54863), (59, 54788), (66, 54716), (86, 54650), (89, 54644), (90, 54638), (96, 54611),

Gene: Kheth_59 Start: 53385, Stop: 52894, Start Num: 39

Candidate Starts for Kheth_59:

(2, 54075), (4, 53949), (5, 53925), (27, 53487), (Start: 39 @53385 has 330 MA's), (43, 53352), (46, 53292), (58, 53250), (59, 53247), (60, 53217), (65, 53178), (66, 53175), (67, 53172), (84, 53097), (93, 53058), (95, 53052), (97, 53034), (109, 53001), (110, 52998), (116, 52983), (124, 52938),

Gene: Kikipoo_63 Start: 55002, Stop: 54544, Start Num: 39

Candidate Starts for Kikipoo_63:

(Start: 39 @55002 has 330 MA's), (46, 54906), (47, 54897), (59, 54822), (66, 54750), (86, 54684), (89, 54678), (90, 54672), (96, 54645),

Gene: Kimbrough_62 Start: 55053, Stop: 54595, Start Num: 39

Candidate Starts for Kimbrough_62:

(Start: 39 @55053 has 330 MA's), (46, 54957), (47, 54948), (59, 54873), (66, 54801), (86, 54735), (89, 54729), (90, 54723), (96, 54696),

Gene: KingTut_54 Start: 51217, Stop: 50759, Start Num: 39

Candidate Starts for KingTut_54:

(Start: 39 @51217 has 330 MA's), (46, 51121), (47, 51112), (59, 51037), (66, 50965), (86, 50899), (89, 50893), (90, 50887), (96, 50860),

Gene: KingVeVeVe_60 Start: 54020, Stop: 53562, Start Num: 39

Candidate Starts for KingVeVeVe_60:

(Start: 39 @54020 has 330 MA's), (46, 53924), (47, 53915), (59, 53840), (66, 53768), (86, 53702), (89, 53696), (90, 53690), (96, 53663),

Gene: KlimbOn_61 Start: 54511, Stop: 54053, Start Num: 39

Candidate Starts for KlimbOn_61:

(Start: 39 @54511 has 330 MA's), (46, 54415), (47, 54406), (59, 54331), (66, 54259), (86, 54193), (89, 54187), (90, 54181), (96, 54154),

Gene: Kloppinator_62 Start: 54662, Stop: 54204, Start Num: 39

Candidate Starts for Kloppinator_62:

(Start: 39 @54662 has 330 MA's), (46, 54566), (47, 54557), (59, 54482), (66, 54410), (86, 54344), (89, 54338), (90, 54332), (96, 54305),

Gene: Knocker_60 Start: 56622, Stop: 55990, Start Num: 38

Candidate Starts for Knocker_60:

(28, 56706), (Start: 38 @56622 has 12 MA's), (42, 56598), (48, 56502), (59, 56475), (75, 56358), (92, 56301), (96, 56283), (112, 56232), (115, 56223), (127, 56163), (130, 56148), (152, 56040),

Gene: Kolhan_59 Start: 53352, Stop: 52861, Start Num: 39

Candidate Starts for Kolhan_59:

(2, 54042), (4, 53916), (5, 53892), (27, 53454), (Start: 39 @53352 has 330 MA's), (43, 53319), (46, 53259), (58, 53217), (59, 53214), (60, 53184), (65, 53145), (66, 53142), (67, 53139), (84, 53064), (93, 53025), (95, 53019), (97, 53001), (109, 52968), (116, 52950), (124, 52905),

Gene: Kronus_62 Start: 56054, Stop: 55578, Start Num: 39

Candidate Starts for Kronus_62:

(Start: 20 @56192 has 2 MA's), (23, 56171), (Start: 38 @56057 has 12 MA's), (Start: 39 @56054 has 330 MA's), (46, 55958), (59, 55892), (60, 55862), (71, 55790), (72, 55787), (73, 55778), (78, 55763), (93, 55706),

Gene: Kwadwo_60 Start: 54463, Stop: 54005, Start Num: 39

Candidate Starts for Kwadwo_60:

(Start: 39 @54463 has 330 MA's), (46, 54367), (47, 54358), (59, 54283), (66, 54211), (86, 54145), (89, 54139), (90, 54133), (96, 54106),

Gene: Kwksand96_62 Start: 54598, Stop: 54134, Start Num: 39

Candidate Starts for Kwksand96_62:

(Start: 39 @54598 has 330 MA's), (46, 54502), (47, 54493), (59, 54418), (66, 54346), (86, 54280), (89, 54274), (90, 54268), (96, 54241),

Gene: Labeouficaum_62 Start: 54586, Stop: 54128, Start Num: 39

Candidate Starts for Labeouficaum_62:

(Start: 39 @54586 has 330 MA's), (46, 54490), (47, 54481), (59, 54406), (66, 54334), (86, 54268), (89, 54262), (90, 54256), (96, 54229),

Gene: Lars_59 Start: 53450, Stop: 52959, Start Num: 39

Candidate Starts for Lars_59:

(1, 54230), (2, 54140), (4, 54014), (5, 53990), (27, 53552), (Start: 39 @53450 has 330 MA's), (43, 53417), (46, 53357), (58, 53315), (59, 53312), (60, 53282), (65, 53243), (66, 53240), (67, 53237), (84, 53162), (93, 53123), (95, 53117), (97, 53099), (109, 53066), (116, 53048), (124, 53003),

Gene: LasagnaCat_63 Start: 54881, Stop: 54417, Start Num: 39

Candidate Starts for LasagnaCat_63:

(Start: 39 @54881 has 330 MA's), (46, 54785), (47, 54776), (59, 54701), (66, 54629), (86, 54563), (89, 54557), (90, 54551), (96, 54524),

Gene: Lasso_62 Start: 54738, Stop: 54280, Start Num: 39

Candidate Starts for Lasso_62:

(Start: 39 @54738 has 330 MA's), (46, 54642), (47, 54633), (59, 54558), (66, 54486), (86, 54420), (89, 54414), (90, 54408), (96, 54381),

Gene: Laurie_59 Start: 53177, Stop: 52686, Start Num: 39

Candidate Starts for Laurie_59:

(Start: 39 @53177 has 330 MA's), (43, 53144), (46, 53084), (58, 53042), (59, 53039), (60, 53009), (65, 52970), (66, 52967), (67, 52964), (84, 52889), (93, 52850), (95, 52844), (97, 52826), (109, 52793), (116, 52775), (124, 52730),

Gene: LeeLot_62 Start: 55093, Stop: 54635, Start Num: 39

Candidate Starts for LeeLot_62:

(Start: 39 @55093 has 330 MA's), (46, 54997), (47, 54988), (59, 54913), (66, 54841), (86, 54775), (89, 54769), (90, 54763), (96, 54736),

Gene: Lego3393_60 Start: 55044, Stop: 54586, Start Num: 39

Candidate Starts for Lego3393_60:

(Start: 39 @55044 has 330 MA's), (46, 54948), (47, 54939), (59, 54864), (66, 54792), (86, 54726), (89, 54720), (90, 54714), (96, 54687),

Gene: Legolas_63 Start: 54832, Stop: 54374, Start Num: 39

Candidate Starts for Legolas_63:

(Start: 39 @54832 has 330 MA's), (46, 54736), (47, 54727), (59, 54652), (66, 54580), (86, 54514), (89, 54508), (90, 54502), (96, 54475),

Gene: LeiMonet_64 Start: 54955, Stop: 54491, Start Num: 39

Candidate Starts for LeiMonet_64:

(Start: 39 @54955 has 330 MA's), (46, 54859), (47, 54850), (59, 54775), (66, 54703), (86, 54637), (89, 54631), (90, 54625), (96, 54598),

Gene: LemonSlice_62 Start: 54423, Stop: 53965, Start Num: 39

Candidate Starts for LemonSlice_62:

(Start: 39 @54423 has 330 MA's), (46, 54327), (47, 54318), (59, 54243), (66, 54171), (86, 54105), (89, 54099), (90, 54093), (96, 54066),

Gene: Lephleur_59 Start: 53359, Stop: 52871, Start Num: 39

Candidate Starts for Lephleur_59:

(1, 54094), (2, 54004), (27, 53461), (Start: 39 @53359 has 330 MA's), (43, 53326), (46, 53266), (58, 53224), (59, 53221), (60, 53191), (65, 53152), (66, 53149), (67, 53146), (84, 53071), (93, 53032), (95, 53026), (97, 53008), (109, 52975), (116, 52957), (124, 52912),

Gene: LestyG_60 Start: 54490, Stop: 54038, Start Num: 38

Candidate Starts for LestyG_60:

(Start: 20 @54622 has 2 MA's), (23, 54601), (Start: 38 @54490 has 12 MA's), (Start: 39 @54487 has 330 MA's), (46, 54391), (59, 54325), (60, 54295), (66, 54253), (71, 54223), (72, 54220), (73, 54211), (78, 54196), (93, 54163),

Gene: LilMcDreamy_56 Start: 54463, Stop: 53825, Start Num: 37

Candidate Starts for LilMcDreamy_56:

(14, 54697), (15, 54682), (Start: 37 @54463 has 10 MA's), (43, 54421), (47, 54352), (51, 54325), (54, 54316), (60, 54253), (65, 54214), (74, 54175), (75, 54169), (87, 54139), (91, 54112), (101, 54076), (125, 53977), (128, 53968), (129, 53965), (145, 53881), (150, 53851),

Gene: LilSmirk_59 Start: 53353, Stop: 52862, Start Num: 39

Candidate Starts for LilSmirk_59:

(27, 53455), (Start: 39 @53353 has 330 MA's), (43, 53320), (46, 53260), (58, 53218), (59, 53215), (60, 53185), (65, 53146), (66, 53143), (67, 53140), (84, 53065), (93, 53026), (95, 53020), (97, 53002), (109, 52969), (116, 52951), (124, 52906),

Gene: LizLemon_59 Start: 53475, Stop: 52984, Start Num: 39

Candidate Starts for LizLemon_59:

(1, 54255), (2, 54165), (4, 54039), (5, 54015), (27, 53577), (Start: 39 @53475 has 330 MA's), (43, 53442), (46, 53382), (58, 53340), (59, 53337), (60, 53307), (65, 53268), (66, 53265), (67, 53262), (84, 53187), (93, 53148), (95, 53142), (97, 53124), (109, 53091), (116, 53073), (124, 53028),

Gene: Longacauda_62 Start: 54858, Stop: 54394, Start Num: 39

Candidate Starts for Longacauda_62:

(Start: 39 @54858 has 330 MA's), (46, 54762), (47, 54753), (59, 54678), (66, 54606), (86, 54540), (89, 54534), (90, 54528), (96, 54501),

Gene: Lopsy_60 Start: 54151, Stop: 53693, Start Num: 39

Candidate Starts for Lopsy_60:

(Start: 39 @54151 has 330 MA's), (46, 54055), (47, 54046), (59, 53971), (66, 53899), (86, 53833), (89, 53827), (90, 53821), (96, 53794),

Gene: LostAndPhound_62 Start: 55037, Stop: 54579, Start Num: 39

Candidate Starts for LostAndPhound_62:

(Start: 39 @55037 has 330 MA's), (46, 54941), (47, 54932), (59, 54857), (66, 54785), (86, 54719), (89, 54713), (90, 54707), (96, 54680),

Gene: LuckyMarjie_59 Start: 54213, Stop: 53755, Start Num: 39

Candidate Starts for LuckyMarjie_59:

(Start: 39 @54213 has 330 MA's), (46, 54117), (47, 54108), (59, 54033), (66, 53961), (86, 53895), (89, 53889), (90, 53883), (96, 53856),

Gene: Lulumae_59 Start: 54198, Stop: 53740, Start Num: 39

Candidate Starts for Lulumae_59:

(Start: 39 @54198 has 330 MA's), (46, 54102), (47, 54093), (59, 54018), (66, 53946), (86, 53880), (89, 53874), (90, 53868), (96, 53841),

Gene: Lulwa_59 Start: 53795, Stop: 53337, Start Num: 39

Candidate Starts for Lulwa_59:

(Start: 39 @53795 has 330 MA's), (46, 53699), (47, 53690), (59, 53615), (66, 53543), (86, 53477), (89, 53471), (90, 53465), (96, 53438),

Gene: Lumine_62 Start: 54682, Stop: 54224, Start Num: 39

Candidate Starts for Lumine_62:

(Start: 39 @54682 has 330 MA's), (46, 54586), (47, 54577), (59, 54502), (66, 54430), (86, 54364), (89, 54358), (90, 54352), (96, 54325),

Gene: MRabcd_61 Start: 54806, Stop: 54348, Start Num: 39

Candidate Starts for MRabcd_61:

(Start: 39 @54806 has 330 MA's), (46, 54710), (47, 54701), (59, 54626), (66, 54554), (86, 54488), (89, 54482), (90, 54476), (96, 54449),

Gene: Mag7_62 Start: 54642, Stop: 54184, Start Num: 39

Candidate Starts for Mag7_62:

(Start: 39 @54642 has 330 MA's), (46, 54546), (47, 54537), (59, 54462), (66, 54390), (86, 54324), (89, 54318), (90, 54312), (96, 54285),

Gene: Magic8_62 Start: 54800, Stop: 54336, Start Num: 39

Candidate Starts for Magic8_62:

(Start: 39 @54800 has 330 MA's), (46, 54704), (47, 54695), (59, 54620), (66, 54548), (86, 54482), (89, 54476), (90, 54470), (96, 54443),

Gene: Mana_60 Start: 54478, Stop: 54020, Start Num: 39

Candidate Starts for Mana_60:

(Start: 39 @54478 has 330 MA's), (46, 54382), (47, 54373), (59, 54298), (66, 54226), (86, 54160), (89, 54154), (90, 54148), (96, 54121),

Gene: Manad_61 Start: 54762, Stop: 54304, Start Num: 39

Candidate Starts for Manad_61:

(Start: 39 @54762 has 330 MA's), (46, 54666), (47, 54657), (59, 54582), (66, 54510), (86, 54444), (89, 54438), (90, 54432), (96, 54405),

Gene: Marley1013_62 Start: 55685, Stop: 55236, Start Num: 39

Candidate Starts for Marley1013_62:

(Start: 20 @55820 has 2 MA's), (23, 55799), (Start: 38 @55688 has 12 MA's), (Start: 39 @55685 has 330 MA's), (46, 55589), (59, 55523), (60, 55493), (71, 55421), (72, 55418), (73, 55409), (78, 55394), (93, 55361),

Gene: Maru_61 Start: 54917, Stop: 54459, Start Num: 39

Candidate Starts for Maru_61:

(Start: 39 @54917 has 330 MA's), (46, 54821), (47, 54812), (59, 54737), (66, 54665), (86, 54599), (89, 54593), (90, 54587), (96, 54560),

Gene: Maskar_63 Start: 54718, Stop: 54254, Start Num: 39

Candidate Starts for Maskar_63:

(Start: 39 @54718 has 330 MA's), (46, 54622), (47, 54613), (59, 54538), (66, 54466), (86, 54400), (89, 54394), (90, 54388), (96, 54361),

Gene: MasterPo_59 Start: 53371, Stop: 52880, Start Num: 39

Candidate Starts for MasterPo_59:

(Start: 39 @53371 has 330 MA's), (43, 53338), (46, 53278), (58, 53236), (59, 53233), (60, 53203), (65, 53164), (66, 53161), (67, 53158), (84, 53083), (93, 53044), (95, 53038), (97, 53020), (109, 52987), (116, 52969), (124, 52924),

Gene: Matalotodo_61 Start: 55030, Stop: 54572, Start Num: 39

Candidate Starts for Matalotodo_61:

(Start: 39 @55030 has 330 MA's), (46, 54934), (47, 54925), (59, 54850), (66, 54778), (86, 54712), (89, 54706), (90, 54700), (96, 54673),

Gene: Mcshane_60 Start: 54476, Stop: 54018, Start Num: 39

Candidate Starts for Mcshane_60:

(Start: 39 @54476 has 330 MA's), (46, 54380), (47, 54371), (59, 54296), (66, 54224), (86, 54158), (89, 54152), (90, 54146), (96, 54119),

Gene: Mecca_61 Start: 55041, Stop: 54583, Start Num: 39

Candidate Starts for Mecca_61:

(Start: 39 @55041 has 330 MA's), (46, 54945), (47, 54936), (59, 54861), (66, 54789), (86, 54723), (89, 54717), (90, 54711), (96, 54684),

Gene: Megamind20_62 Start: 54464, Stop: 54006, Start Num: 39

Candidate Starts for Megamind20_62:

(Start: 39 @54464 has 330 MA's), (46, 54368), (47, 54359), (59, 54284), (66, 54212), (86, 54146), (89, 54140), (90, 54134), (96, 54107),

Gene: Megatron_62 Start: 54990, Stop: 54532, Start Num: 39

Candidate Starts for Megatron_62:

(Start: 39 @54990 has 330 MA's), (46, 54894), (47, 54885), (59, 54810), (66, 54738), (86, 54672), (89, 54666), (90, 54660), (96, 54633),

Gene: Melc17_61 Start: 55307, Stop: 54849, Start Num: 39

Candidate Starts for Melc17_61:

(Start: 39 @55307 has 330 MA's), (46, 55211), (47, 55202), (59, 55127), (66, 55055), (86, 54989), (89, 54983), (90, 54977), (96, 54950),

Gene: MelsMeow_62 Start: 54771, Stop: 54307, Start Num: 39

Candidate Starts for MelsMeow_62:

(Start: 39 @54771 has 330 MA's), (46, 54675), (47, 54666), (59, 54591), (66, 54519), (86, 54453), (89, 54447), (90, 54441), (96, 54414),

Gene: Mesh1_63 Start: 55054, Stop: 54596, Start Num: 39

Candidate Starts for Mesh1_63:

(Start: 39 @55054 has 330 MA's), (46, 54958), (47, 54949), (59, 54874), (66, 54802), (86, 54736), (89, 54730), (90, 54724), (96, 54697),

Gene: Mesmerelda_63 Start: 55034, Stop: 54576, Start Num: 39

Candidate Starts for Mesmerelda_63:

(Start: 39 @55034 has 330 MA's), (46, 54938), (47, 54929), (59, 54854), (66, 54782), (86, 54716), (89, 54710), (90, 54704), (96, 54677),

Gene: MichaelPhcott_62 Start: 54639, Stop: 54181, Start Num: 39

Candidate Starts for MichaelPhcott_62:

(Start: 39 @54639 has 330 MA's), (46, 54543), (47, 54534), (59, 54459), (66, 54387), (86, 54321), (89, 54315), (90, 54309), (96, 54282),

Gene: Mikota_60 Start: 54017, Stop: 53559, Start Num: 39

Candidate Starts for Mikota_60:

(Start: 39 @54017 has 330 MA's), (46, 53921), (47, 53912), (59, 53837), (66, 53765), (86, 53699), (89, 53693), (90, 53687), (96, 53660),

Gene: MiniBoss_59 Start: 53823, Stop: 53365, Start Num: 39

Candidate Starts for MiniBoss_59:

(Start: 39 @53823 has 330 MA's), (46, 53727), (47, 53718), (59, 53643), (66, 53571), (86, 53505), (89, 53499), (90, 53493), (96, 53466),

Gene: MitKao_61 Start: 54488, Stop: 54030, Start Num: 39

Candidate Starts for MitKao_61:

(Start: 39 @54488 has 330 MA's), (46, 54392), (47, 54383), (59, 54308), (66, 54236), (86, 54170), (89, 54164), (90, 54158), (96, 54131),

Gene: MmasiCarm_63 Start: 55414, Stop: 54938, Start Num: 39

Candidate Starts for MmasiCarm_63:

(Start: 20 @55549 has 2 MA's), (23, 55528), (Start: 38 @55417 has 12 MA's), (Start: 39 @55414 has 330 MA's), (46, 55318), (59, 55252), (60, 55222), (71, 55150), (72, 55147), (73, 55138), (78, 55123), (93, 55066),

Gene: Morgushi_61 Start: 54477, Stop: 54019, Start Num: 39

Candidate Starts for Morgushi_61:

(Start: 39 @54477 has 330 MA's), (46, 54381), (47, 54372), (59, 54297), (66, 54225), (86, 54159), (89, 54153), (90, 54147), (96, 54120),

Gene: Mortcellus_62 Start: 56075, Stop: 55593, Start Num: 38

Candidate Starts for Mortcellus_62:

(Start: 20 @56207 has 2 MA's), (23, 56186), (Start: 38 @56075 has 12 MA's), (Start: 39 @56072 has 330 MA's), (46, 55976), (59, 55910), (60, 55880), (71, 55808), (72, 55805), (73, 55796), (78, 55781), (93, 55724),

Gene: Morty_62 Start: 55005, Stop: 54541, Start Num: 39

Candidate Starts for Morty_62:

(Start: 39 @55005 has 330 MA's), (46, 54909), (47, 54900), (59, 54825), (66, 54753), (86, 54687), (89, 54681), (90, 54675), (96, 54648),

Gene: Morty007_61 Start: 55820, Stop: 55236, Start Num: 20

Candidate Starts for Morty007_61:

(Start: 20 @55820 has 2 MA's), (23, 55799), (Start: 38 @55688 has 12 MA's), (Start: 39 @55685 has 330 MA's), (46, 55589), (59, 55523), (60, 55493), (71, 55421), (72, 55418), (73, 55409), (78, 55394), (93, 55361),

Gene: Mosaic_60 Start: 54482, Stop: 54024, Start Num: 39

Candidate Starts for Mosaic_60:

(Start: 39 @54482 has 330 MA's), (46, 54386), (47, 54377), (59, 54302), (66, 54230), (86, 54164), (89, 54158), (90, 54152), (96, 54125),

Gene: MrPhizzler_62 Start: 54945, Stop: 54487, Start Num: 39

Candidate Starts for MrPhizzler_62:

(Start: 39 @54945 has 330 MA's), (46, 54849), (47, 54840), (59, 54765), (66, 54693), (86, 54627), (89, 54621), (90, 54615), (96, 54588),

Gene: Mulan_61 Start: 54716, Stop: 54258, Start Num: 39

Candidate Starts for Mulan_61:

(Start: 39 @54716 has 330 MA's), (46, 54620), (47, 54611), (59, 54536), (66, 54464), (86, 54398), (89, 54392), (90, 54386), (96, 54359),

Gene: Murdoc_60 Start: 54478, Stop: 54020, Start Num: 39

Candidate Starts for Murdoc_60:

(Start: 39 @54478 has 330 MA's), (46, 54382), (47, 54373), (59, 54298), (66, 54226), (86, 54160), (89, 54154), (90, 54148), (96, 54121),

Gene: Mutante_61 Start: 54488, Stop: 54030, Start Num: 39

Candidate Starts for Mutante_61:

(Start: 39 @54488 has 330 MA's), (46, 54392), (47, 54383), (59, 54308), (66, 54236), (86, 54170), (89, 54164), (90, 54158), (96, 54131),

Gene: Mysterious_59 Start: 55230, Stop: 54571, Start Num: 37

Candidate Starts for Mysterious_59:

(Start: 37 @55230 has 10 MA's), (43, 55188), (44, 55173), (58, 55041), (60, 55008), (62, 54987), (65, 54969), (69, 54951), (80, 54903), (83, 54894), (99, 54819), (101, 54813), (120, 54741), (122, 54729),

Gene: Nacho_0063 Start: 55236, Stop: 54778, Start Num: 39

Candidate Starts for Nacho_0063:

(Start: 39 @55236 has 330 MA's), (46, 55140), (47, 55131), (59, 55056), (66, 54984), (86, 54918), (89, 54912), (90, 54906), (96, 54879),

Gene: Nangang_59 Start: 55409, Stop: 54777, Start Num: 37

Candidate Starts for Nangang_59:

(Start: 37 @55409 has 10 MA's), (43, 55367), (58, 55220), (60, 55187), (62, 55166), (65, 55148), (79, 55094), (81, 55082), (91, 55031), (99, 55001), (101, 54995), (106, 54968), (108, 54965),

Gene: Nathan_62 Start: 54569, Stop: 54111, Start Num: 39

Candidate Starts for Nathan_62:

(Start: 39 @54569 has 330 MA's), (46, 54473), (47, 54464), (59, 54389), (66, 54317), (86, 54251), (89, 54245), (90, 54239), (96, 54212),

Gene: Nehemiah_58 Start: 55230, Stop: 54571, Start Num: 37

Candidate Starts for Nehemiah_58:

(Start: 37 @55230 has 10 MA's), (43, 55188), (44, 55173), (58, 55041), (60, 55008), (62, 54987), (65, 54969), (69, 54951), (80, 54903), (83, 54894), (99, 54819), (101, 54813), (120, 54741), (122, 54729),

Gene: Neos5_61 Start: 55147, Stop: 54698, Start Num: 39

Candidate Starts for Neos5_61:

(Start: 20 @55282 has 2 MA's), (23, 55261), (Start: 38 @55150 has 12 MA's), (Start: 39 @55147 has 330 MA's), (46, 55051), (59, 54985), (60, 54955), (71, 54883), (72, 54880), (73, 54871), (78, 54856), (93, 54823),

Gene: Newman_60 Start: 54514, Stop: 54056, Start Num: 39

Candidate Starts for Newman_60:

(Start: 39 @54514 has 330 MA's), (46, 54418), (47, 54409), (59, 54334), (66, 54262), (86, 54196), (89, 54190), (90, 54184), (96, 54157),

Gene: Nicole21_62 Start: 54767, Stop: 54309, Start Num: 39

Candidate Starts for Nicole21_62:

(Start: 39 @54767 has 330 MA's), (46, 54671), (47, 54662), (59, 54587), (66, 54515), (86, 54449), (89, 54443), (90, 54437), (96, 54410),

Gene: Nigel_56 Start: 54670, Stop: 54173, Start Num: 33

Candidate Starts for Nigel_56:

(Start: 33 @54670 has 1 MA's), (46, 54559), (47, 54550), (57, 54511), (59, 54505), (62, 54454), (65, 54436), (66, 54433), (68, 54427), (88, 54355), (107, 54286),

Gene: Nozo_62 Start: 55768, Stop: 55292, Start Num: 39

Candidate Starts for Nozo_62:

(Start: 20 @55903 has 2 MA's), (23, 55882), (Start: 38 @55771 has 12 MA's), (Start: 39 @55768 has 330 MA's), (46, 55672), (59, 55606), (60, 55576), (71, 55504), (72, 55501), (73, 55492), (78, 55477), (93, 55420),

Gene: Numberten_61 Start: 54711, Stop: 54253, Start Num: 39

Candidate Starts for Numberten_61:

(Start: 39 @54711 has 330 MA's), (46, 54615), (47, 54606), (59, 54531), (66, 54459), (86, 54393), (89, 54387), (90, 54381), (96, 54354),

Gene: Nyala_60 Start: 54486, Stop: 54028, Start Num: 39

Candidate Starts for Nyala_60:

(Start: 39 @54486 has 330 MA's), (46, 54390), (47, 54381), (59, 54306), (66, 54234), (86, 54168), (89, 54162), (90, 54156), (96, 54129),

Gene: OSmaximus_63 Start: 55232, Stop: 54774, Start Num: 39

Candidate Starts for OSmaximus_63:

(Start: 39 @55232 has 330 MA's), (46, 55136), (47, 55127), (59, 55052), (66, 54980), (86, 54914), (89, 54908), (90, 54902), (96, 54875),

Gene: Obutu_63 Start: 55367, Stop: 54891, Start Num: 39

Candidate Starts for Obutu_63:

(9, 55760), (10, 55634), (11, 55616), (Start: 20 @55502 has 2 MA's), (23, 55481), (Start: 38 @55370 has 12 MA's), (Start: 39 @55367 has 330 MA's), (46, 55271), (59, 55205), (60, 55175), (71, 55103), (72, 55100), (73, 55091), (78, 55076), (93, 55019),

Gene: Olak_60 Start: 54489, Stop: 54031, Start Num: 39

Candidate Starts for Olak_60:

(Start: 39 @54489 has 330 MA's), (46, 54393), (47, 54384), (59, 54309), (66, 54237), (86, 54171), (89, 54165), (90, 54159), (96, 54132),

Gene: Oline_62 Start: 54590, Stop: 54132, Start Num: 39

Candidate Starts for Oline_62:

(Start: 39 @54590 has 330 MA's), (46, 54494), (47, 54485), (59, 54410), (66, 54338), (86, 54272), (89, 54266), (90, 54260), (96, 54233),

Gene: Olive_61 Start: 54702, Stop: 54244, Start Num: 39

Candidate Starts for Olive_61:

(Start: 39 @54702 has 330 MA's), (46, 54606), (47, 54597), (59, 54522), (66, 54450), (86, 54384), (89, 54378), (90, 54372), (96, 54345),

Gene: OliverWalter_60 Start: 54521, Stop: 54063, Start Num: 39

Candidate Starts for OliverWalter_60:

(Start: 39 @54521 has 330 MA's), (46, 54425), (47, 54416), (59, 54341), (66, 54269), (86, 54203), (89, 54197), (90, 54191), (96, 54164),

Gene: Omniscient_62 Start: 55349, Stop: 54891, Start Num: 39

Candidate Starts for Omniscient_62:

(Start: 39 @55349 has 330 MA's), (46, 55253), (47, 55244), (59, 55169), (66, 55097), (86, 55031), (89, 55025), (90, 55019), (96, 54992),

Gene: Oosterbaan_61 Start: 54768, Stop: 54310, Start Num: 39

Candidate Starts for Oosterbaan_61:

(Start: 39 @54768 has 330 MA's), (46, 54672), (47, 54663), (59, 54588), (66, 54516), (86, 54450), (89, 54444), (90, 54438), (96, 54411),

Gene: Opia_59 Start: 53365, Stop: 52874, Start Num: 39

Candidate Starts for Opia_59:

(1, 54145), (2, 54055), (4, 53929), (5, 53905), (27, 53467), (Start: 39 @53365 has 330 MA's), (43, 53332), (46, 53272), (58, 53230), (59, 53227), (60, 53197), (65, 53158), (66, 53155), (67, 53152), (84, 53077), (93, 53038), (95, 53032), (97, 53014), (109, 52981), (116, 52963), (124, 52918),

Gene: OrangeOswald_62 Start: 55009, Stop: 54533, Start Num: 39

Candidate Starts for OrangeOswald_62:

(Start: 20 @55144 has 2 MA's), (23, 55123), (Start: 38 @55012 has 12 MA's), (Start: 39 @55009 has 330 MA's), (46, 54913), (59, 54847), (60, 54817), (71, 54745), (72, 54742), (73, 54733), (78, 54718), (93, 54661),

Gene: Orfeu_60 Start: 55025, Stop: 54567, Start Num: 39

Candidate Starts for Orfeu_60:

(Start: 39 @55025 has 330 MA's), (46, 54929), (47, 54920), (59, 54845), (66, 54773), (86, 54707), (89, 54701), (90, 54695), (96, 54668),

Gene: Orion_63 Start: 54430, Stop: 53972, Start Num: 39

Candidate Starts for Orion_63:

(Start: 39 @54430 has 330 MA's), (46, 54334), (47, 54325), (59, 54250), (66, 54178), (86, 54112), (89, 54106), (90, 54100), (96, 54073),

Gene: Orwigg_62 Start: 54410, Stop: 53952, Start Num: 39

Candidate Starts for Orwigg_62:

(Start: 39 @54410 has 330 MA's), (46, 54314), (47, 54305), (59, 54230), (66, 54158), (86, 54092), (89, 54086), (90, 54080), (96, 54053),

Gene: PG1_62 Start: 55001, Stop: 54543, Start Num: 39

Candidate Starts for PG1_62:

(Start: 39 @55001 has 330 MA's), (46, 54905), (47, 54896), (59, 54821), (66, 54749), (86, 54683), (89, 54677), (90, 54671), (96, 54644),

Gene: Pacifista_60 Start: 54485, Stop: 54027, Start Num: 39

Candidate Starts for Pacifista_60:

(Start: 39 @54485 has 330 MA's), (46, 54389), (47, 54380), (59, 54305), (66, 54233), (86, 54167), (89, 54161), (90, 54155), (96, 54128),

Gene: PenguinLover67_57 Start: 55284, Stop: 54688, Start Num: 34

Candidate Starts for PenguinLover67_57:

(26, 55380), (Start: 34 @55284 has 3 MA's), (46, 55176), (58, 55137), (62, 55083), (65, 55065), (80, 55011), (110, 54915), (118, 54888), (120, 54885), (130, 54840), (155, 54708),

Gene: Phaedrus_58 Start: 54577, Stop: 53966, Start Num: 20

Candidate Starts for Phaedrus_58:

(Start: 20 @54577 has 2 MA's), (23, 54556), (Start: 38 @54445 has 12 MA's), (Start: 39 @54442 has 330 MA's), (46, 54346), (59, 54280), (60, 54250), (71, 54178), (72, 54175), (73, 54166), (78, 54151), (93, 54094),

Gene: Phamished_63 Start: 54698, Stop: 54234, Start Num: 39

Candidate Starts for Phamished_63:

(Start: 39 @54698 has 330 MA's), (46, 54602), (47, 54593), (59, 54518), (66, 54446), (86, 54380), (89, 54374), (90, 54368), (96, 54341),

Gene: Phantasmagoria_59 Start: 53363, Stop: 52872, Start Num: 39

Candidate Starts for Phantasmagoria_59:

(27, 53465), (Start: 39 @53363 has 330 MA's), (43, 53330), (46, 53270), (58, 53228), (59, 53225), (60, 53195), (65, 53156), (66, 53153), (67, 53150), (84, 53075), (93, 53036), (95, 53030), (97, 53012), (109, 52979), (116, 52961), (124, 52916),

Gene: Phareon_60 Start: 54207, Stop: 53749, Start Num: 39

Candidate Starts for Phareon_60:

(Start: 39 @54207 has 330 MA's), (46, 54111), (47, 54102), (59, 54027), (66, 53955), (86, 53889), (89, 53883), (90, 53877), (96, 53850),

Gene: PhatCats2014_62 Start: 55006, Stop: 54548, Start Num: 39

Candidate Starts for PhatCats2014_62:

(Start: 39 @55006 has 330 MA's), (46, 54910), (47, 54901), (59, 54826), (66, 54754), (86, 54688), (89, 54682), (90, 54676), (96, 54649),

Gene: PhatLouie_63 Start: 55024, Stop: 54566, Start Num: 39

Candidate Starts for PhatLouie_63:

(Start: 39 @55024 has 330 MA's), (46, 54928), (47, 54919), (59, 54844), (66, 54772), (86, 54706), (89, 54700), (90, 54694), (96, 54667),

Gene: Phayeta_64 Start: 55269, Stop: 54793, Start Num: 39

Candidate Starts for Phayeta_64:

(Start: 38 @55272 has 12 MA's), (Start: 39 @55269 has 330 MA's), (46, 55173), (59, 55107), (60, 55077), (71, 55005), (72, 55002), (73, 54993), (78, 54978), (93, 54921),

Gene: Phelemich_57 Start: 55226, Stop: 54567, Start Num: 37

Candidate Starts for Phelemich_57:

(Start: 37 @55226 has 10 MA's), (43, 55184), (44, 55169), (58, 55037), (60, 55004), (62, 54983), (65, 54965), (77, 54908), (80, 54896), (99, 54815), (101, 54809), (103, 54806), (120, 54737), (122, 54725),

Gene: PhenghisKhan_62 Start: 54655, Stop: 54191, Start Num: 39

Candidate Starts for PhenghisKhan_62:

(Start: 39 @54655 has 330 MA's), (46, 54559), (47, 54550), (59, 54475), (66, 54403), (86, 54337), (89, 54331), (90, 54325), (96, 54298),

Gene: Pherdinand_63 Start: 54769, Stop: 54311, Start Num: 39

Candidate Starts for Pherdinand_63:

(Start: 39 @54769 has 330 MA's), (46, 54673), (47, 54664), (59, 54589), (66, 54517), (86, 54451), (89, 54445), (90, 54439), (96, 54412),

Gene: Phergie_63 Start: 54647, Stop: 54183, Start Num: 39

Candidate Starts for Phergie_63:

(Start: 39 @54647 has 330 MA's), (46, 54551), (47, 54542), (59, 54467), (66, 54395), (86, 54329), (89, 54323), (90, 54317), (96, 54290),

Gene: Philly_61 Start: 54829, Stop: 54353, Start Num: 39

Candidate Starts for Philly_61:

(9, 55222), (10, 55096), (11, 55078), (Start: 20 @54964 has 2 MA's), (23, 54943), (Start: 38 @54832 has 12 MA's), (Start: 39 @54829 has 330 MA's), (46, 54733), (59, 54667), (60, 54637), (71, 54565), (72, 54562), (73, 54553), (78, 54538), (93, 54481),

Gene: Phipps_61 Start: 54278, Stop: 53820, Start Num: 39

Candidate Starts for Phipps_61:

(Start: 39 @54278 has 330 MA's), (46, 54182), (47, 54173), (59, 54098), (66, 54026), (86, 53960), (89, 53954), (90, 53948), (96, 53921),

Gene: Phleuron_62 Start: 54642, Stop: 54184, Start Num: 39

Candidate Starts for Phleuron_62:

(Start: 39 @54642 has 330 MA's), (46, 54546), (47, 54537), (59, 54462), (66, 54390), (86, 54324), (89, 54318), (90, 54312), (96, 54285),

Gene: Phlyer_62 Start: 55723, Stop: 55235, Start Num: 39

Candidate Starts for Phlyer_62:

(Start: 20 @55858 has 2 MA's), (23, 55837), (Start: 38 @55726 has 12 MA's), (Start: 39 @55723 has 330 MA's), (46, 55627), (59, 55561), (60, 55531), (66, 55489), (71, 55459), (72, 55456), (73, 55447), (78, 55432), (93, 55369),

Gene: PhrankReynolds_61 Start: 54652, Stop: 54188, Start Num: 39

Candidate Starts for PhrankReynolds_61:

(Start: 39 @54652 has 330 MA's), (46, 54556), (47, 54547), (59, 54472), (66, 54400), (86, 54334), (89, 54328), (90, 54322), (96, 54295),

Gene: PhrodoBaggins_62 Start: 54872, Stop: 54408, Start Num: 39

Candidate Starts for PhrodoBaggins_62:

(Start: 39 @54872 has 330 MA's), (46, 54776), (47, 54767), (59, 54692), (66, 54620), (86, 54554), (89, 54548), (90, 54542), (96, 54515),

Gene: Phunky_60 Start: 54504, Stop: 54046, Start Num: 39

Candidate Starts for Phunky_60:

(Start: 39 @54504 has 330 MA's), (46, 54408), (47, 54399), (59, 54324), (66, 54252), (86, 54186), (89, 54180), (90, 54174), (96, 54147),

Gene: Piglet_0061 Start: 54978, Stop: 54520, Start Num: 39

Candidate Starts for Piglet_0061:

(Start: 39 @54978 has 330 MA's), (46, 54882), (47, 54873), (59, 54798), (66, 54726), (86, 54660), (89, 54654), (90, 54648), (96, 54621),

Gene: PinheadLarry_62 Start: 55003, Stop: 54545, Start Num: 39

Candidate Starts for PinheadLarry_62:

(Start: 39 @55003 has 330 MA's), (46, 54907), (47, 54898), (59, 54823), (66, 54751), (86, 54685), (89, 54679), (90, 54673), (96, 54646),

Gene: Pinkman_61 Start: 54590, Stop: 54126, Start Num: 39

Candidate Starts for Pinkman_61:

(Start: 39 @54590 has 330 MA's), (46, 54494), (47, 54485), (59, 54410), (66, 54338), (86, 54272), (89, 54266), (90, 54260), (96, 54233),

Gene: Pipefish_63 Start: 55749, Stop: 55264, Start Num: 38

Candidate Starts for Pipefish_63:

(Start: 38 @55749 has 12 MA's), (Start: 39 @55746 has 330 MA's), (46, 55650), (59, 55584), (60, 55554), (66, 55512), (71, 55482), (72, 55479), (73, 55470), (78, 55455), (93, 55395),

Gene: Pipsqueak_60 Start: 54434, Stop: 53976, Start Num: 39

Candidate Starts for Pipsqueak_60:

(Start: 39 @54434 has 330 MA's), (46, 54338), (47, 54329), (59, 54254), (66, 54182), (86, 54116), (89, 54110), (90, 54104), (96, 54077),

Gene: Placalicious_62 Start: 55535, Stop: 55077, Start Num: 39

Candidate Starts for Placalicious_62:

(Start: 39 @55535 has 330 MA's), (46, 55439), (47, 55430), (59, 55355), (66, 55283), (86, 55217), (89, 55211), (90, 55205), (96, 55178),

Gene: Plmatters_60 Start: 54508, Stop: 54050, Start Num: 39

Candidate Starts for Plmatters_60:

(Start: 39 @54508 has 330 MA's), (46, 54412), (47, 54403), (59, 54328), (66, 54256), (86, 54190), (89, 54184), (90, 54178), (96, 54151),

Gene: Podrick_60 Start: 54287, Stop: 53829, Start Num: 39

Candidate Starts for Podrick_60:

(Start: 39 @54287 has 330 MA's), (46, 54191), (47, 54182), (59, 54107), (66, 54035), (86, 53969), (89, 53963), (90, 53957), (96, 53930),

Gene: Pops_61 Start: 54693, Stop: 54235, Start Num: 39

Candidate Starts for Pops_61:

(Start: 39 @54693 has 330 MA's), (46, 54597), (47, 54588), (59, 54513), (66, 54441), (86, 54375), (89, 54369), (90, 54363), (96, 54336),

Gene: Potter_60 Start: 54499, Stop: 54041, Start Num: 39

Candidate Starts for Potter_60:

(Start: 39 @54499 has 330 MA's), (46, 54403), (47, 54394), (59, 54319), (66, 54247), (86, 54181), (89, 54175), (90, 54169), (96, 54142),

Gene: Prickles_63 Start: 54999, Stop: 54541, Start Num: 39

Candidate Starts for Prickles_63:

(Start: 39 @54999 has 330 MA's), (46, 54903), (47, 54894), (59, 54819), (66, 54747), (86, 54681), (89, 54675), (90, 54669), (96, 54642),

Gene: ProfessorX_61 Start: 54498, Stop: 54040, Start Num: 39

Candidate Starts for ProfessorX_61:

(Start: 39 @54498 has 330 MA's), (46, 54402), (47, 54393), (59, 54318), (66, 54246), (86, 54180), (89, 54174), (90, 54168), (96, 54141),

Gene: Puhltonio_61 Start: 54773, Stop: 54315, Start Num: 39

Candidate Starts for Puhltonio_61:

(Start: 39 @54773 has 330 MA's), (46, 54677), (47, 54668), (59, 54593), (66, 54521), (86, 54455), (89, 54449), (90, 54443), (96, 54416),

Gene: QueenBeane_61 Start: 54805, Stop: 54347, Start Num: 39

Candidate Starts for QueenBeane_61:

(Start: 39 @54805 has 330 MA's), (46, 54709), (47, 54700), (59, 54625), (66, 54553), (86, 54487), (89, 54481), (90, 54475), (96, 54448),

Gene: Quesadilla_59 Start: 55551, Stop: 54994, Start Num: 34

Candidate Starts for Quesadilla_59:

(26, 55647), (Start: 34 @55551 has 3 MA's), (41, 55533), (45, 55467), (46, 55443), (58, 55404), (62, 55350), (65, 55332), (88, 55254), (110, 55182), (118, 55155), (130, 55107), (141, 55062), (142, 55059), (146, 55023), (148, 55014), (149, 55008),

Gene: Quisquilliae_62 Start: 54766, Stop: 54308, Start Num: 39

Candidate Starts for Quisquilliae_62:

(Start: 39 @54766 has 330 MA's), (46, 54670), (47, 54661), (59, 54586), (66, 54514), (86, 54448), (89, 54442), (90, 54436), (96, 54409),

Gene: Qyrzula_54 Start: 53476, Stop: 52985, Start Num: 39

Candidate Starts for Qyrzula_54:

(2, 54166), (4, 54040), (5, 54016), (27, 53578), (Start: 39 @53476 has 330 MA's), (43, 53443), (46, 53383), (58, 53341), (59, 53338), (60, 53308), (65, 53269), (66, 53266), (67, 53263), (84, 53188), (93, 53149), (95, 53143), (97, 53125), (109, 53092), (116, 53074), (124, 53029),

Gene: RagingRooster_61 Start: 54660, Stop: 54181, Start Num: 38

Candidate Starts for RagingRooster_61:

(Start: 20 @54792 has 2 MA's), (23, 54771), (Start: 38 @54660 has 12 MA's), (Start: 39 @54657 has 330 MA's), (46, 54561), (59, 54495), (60, 54465), (71, 54393), (72, 54390), (73, 54381), (78, 54366), (93, 54309),

Gene: RedMaple_63 Start: 55241, Stop: 54783, Start Num: 39

Candidate Starts for RedMaple_63:

(Start: 39 @55241 has 330 MA's), (46, 55145), (47, 55136), (53, 55097), (59, 55061), (66, 54989), (86, 54923), (89, 54917), (90, 54911), (96, 54884),

Gene: Reprobate_58 Start: 55231, Stop: 54572, Start Num: 37

Candidate Starts for Reprobate_58:

(Start: 37 @55231 has 10 MA's), (43, 55189), (44, 55174), (58, 55042), (60, 55009), (62, 54988), (65, 54970), (77, 54913), (80, 54901), (99, 54820), (101, 54814), (103, 54811), (120, 54742), (122, 54730),

Gene: Rhinoforte_59 Start: 53472, Stop: 52984, Start Num: 39

Candidate Starts for Rhinoforte_59:

(Start: 39 @53472 has 330 MA's), (43, 53439), (46, 53379), (58, 53337), (59, 53334), (60, 53304), (65, 53265), (66, 53262), (67, 53259), (84, 53184), (93, 53145), (95, 53139), (97, 53121), (109, 53088), (110, 53085), (116, 53070), (124, 53025),

Gene: Rich_59 Start: 56438, Stop: 55833, Start Num: 37

Candidate Starts for Rich_59:

(15, 56660), (24, 56555), (Start: 37 @56438 has 10 MA's), (43, 56396), (47, 56327), (58, 56282), (60, 56252), (62, 56231), (65, 56213), (83, 56138), (94, 56087), (106, 56036), (112, 56024), (115, 56015), (129, 55952),

Gene: Ricotta_61 Start: 54498, Stop: 54040, Start Num: 39

Candidate Starts for Ricotta_61:

(Start: 39 @54498 has 330 MA's), (46, 54402), (47, 54393), (59, 54318), (66, 54246), (86, 54180), (89, 54174), (90, 54168), (96, 54141),

Gene: Riggan_62 Start: 54798, Stop: 54340, Start Num: 39

Candidate Starts for Riggan_62:

(Start: 39 @54798 has 330 MA's), (46, 54702), (47, 54693), (59, 54618), (66, 54546), (86, 54480), (89, 54474), (90, 54468), (96, 54441),

Gene: Rimu_64 Start: 54966, Stop: 54508, Start Num: 39

Candidate Starts for Rimu_64:

(Start: 39 @54966 has 330 MA's), (46, 54870), (47, 54861), (59, 54786), (66, 54714), (86, 54648), (89, 54642), (90, 54636), (96, 54609),

Gene: Rinkes_57 Start: 55106, Stop: 54540, Start Num: 32

Candidate Starts for Rinkes_57:

(13, 55361), (21, 55250), (Start: 32 @55106 has 2 MA's), (36, 55091), (46, 54983), (47, 54974), (59, 54917), (60, 54887), (66, 54845), (70, 54818), (71, 54815), (74, 54800), (90, 54752), (96, 54725), (102, 54707), (115, 54665), (117, 54656), (137, 54554), (138, 54551),

Gene: Rita130_58 Start: 55050, Stop: 54421, Start Num: 37

Candidate Starts for Rita130_58:

(Start: 37 @55050 has 10 MA's), (43, 55008), (58, 54861), (60, 54828), (62, 54807), (65, 54789), (69, 54771), (106, 54624), (112, 54612), (115, 54603), (129, 54540),

Gene: Rita1961_63 Start: 55367, Stop: 54891, Start Num: 39

Candidate Starts for Rita1961_63:

(Start: 20 @55502 has 2 MA's), (23, 55481), (Start: 38 @55370 has 12 MA's), (Start: 39 @55367 has 330 MA's), (46, 55271), (59, 55205), (60, 55175), (71, 55103), (72, 55100), (73, 55091), (78, 55076), (93, 55019),

Gene: Robyn_61 Start: 54645, Stop: 54187, Start Num: 39

Candidate Starts for Robyn_61:

(Start: 39 @54645 has 330 MA's), (46, 54549), (47, 54540), (59, 54465), (66, 54393), (86, 54327), (89, 54321), (90, 54315), (96, 54288), (118, 54219),

Gene: Roliet_59 Start: 53840, Stop: 53382, Start Num: 39

Candidate Starts for Roliet_59:

(Start: 39 @53840 has 330 MA's), (46, 53744), (47, 53735), (59, 53660), (66, 53588), (86, 53522), (89, 53516), (90, 53510), (96, 53483),

Gene: RomaT_62 Start: 55569, Stop: 55090, Start Num: 38

Candidate Starts for RomaT_62:

(Start: 20 @55701 has 2 MA's), (23, 55680), (Start: 38 @55569 has 12 MA's), (Start: 39 @55566 has 330 MA's), (46, 55470), (59, 55404), (60, 55374), (71, 55302), (72, 55299), (73, 55290), (78, 55275),

(93, 55218),

Gene: Roscoe_62 Start: 54944, Stop: 54486, Start Num: 39

Candidate Starts for Roscoe_62:

(Start: 39 @54944 has 330 MA's), (46, 54848), (47, 54839), (59, 54764), (66, 54692), (86, 54626), (89, 54620), (90, 54614), (96, 54587),

Gene: Rosebush_58 Start: 53499, Stop: 53011, Start Num: 39

Candidate Starts for Rosebush_58:

(Start: 39 @53499 has 330 MA's), (43, 53466), (46, 53406), (58, 53364), (59, 53361), (60, 53331), (65, 53292), (66, 53289), (67, 53286), (84, 53211), (93, 53172), (95, 53166), (97, 53148), (109, 53115), (116, 53097), (124, 53052),

Gene: Roy17_60 Start: 54198, Stop: 53740, Start Num: 39

Candidate Starts for Roy17_60:

(Start: 39 @54198 has 330 MA's), (46, 54102), (47, 54093), (59, 54018), (66, 53946), (86, 53880), (89, 53874), (90, 53868), (96, 53841),

Gene: SDcharge11_61 Start: 54012, Stop: 53554, Start Num: 39

Candidate Starts for SDcharge11_61:

(Start: 39 @54012 has 330 MA's), (46, 53916), (47, 53907), (59, 53832), (66, 53760), (86, 53694), (89, 53688), (90, 53682), (96, 53655),

Gene: Sabella_58 Start: 53335, Stop: 52856, Start Num: 39

Candidate Starts for Sabella_58:

(Start: 39 @53335 has 330 MA's), (43, 53302), (46, 53242), (58, 53200), (59, 53197), (60, 53167), (65, 53128), (66, 53125), (67, 53122), (93, 53017), (95, 53011), (97, 52993), (109, 52960), (116, 52942), (124, 52897),

Gene: Saguaro_59 Start: 55451, Stop: 54783, Start Num: 29

Candidate Starts for Saguaro_59:

(18, 55583), (Start: 29 @55451 has 1 MA's), (Start: 34 @55379 has 3 MA's), (46, 55271), (47, 55262), (57, 55223), (59, 55217), (65, 55148), (80, 55094), (103, 55022), (112, 54986), (115, 54977), (141, 54863), (143, 54845), (144, 54839),

Gene: Samaymay_61 Start: 54805, Stop: 54347, Start Num: 39

Candidate Starts for Samaymay_61:

(Start: 39 @54805 has 330 MA's), (46, 54709), (47, 54700), (59, 54625), (66, 54553), (86, 54487), (89, 54481), (90, 54475), (96, 54448),

Gene: SassyCat97_60 Start: 54490, Stop: 54032, Start Num: 39

Candidate Starts for SassyCat97_60:

(Start: 39 @54490 has 330 MA's), (46, 54394), (47, 54385), (59, 54310), (66, 54238), (86, 54172), (89, 54166), (90, 54160), (96, 54133),

Gene: Schadenfreude_61 Start: 54370, Stop: 53912, Start Num: 39

Candidate Starts for Schadenfreude_61:

(Start: 39 @54370 has 330 MA's), (46, 54274), (47, 54265), (59, 54190), (66, 54118), (86, 54052), (89, 54046), (90, 54040), (96, 54013),

Gene: Schueller_63 Start: 54727, Stop: 54269, Start Num: 39

Candidate Starts for Schueller_63:

(Start: 39 @54727 has 330 MA's), (46, 54631), (47, 54622), (59, 54547), (66, 54475), (86, 54409), (89, 54403), (90, 54397), (96, 54370),

Gene: Scoot17C_62 Start: 54432, Stop: 53974, Start Num: 39

Candidate Starts for Scoot17C_62:

(Start: 39 @54432 has 330 MA's), (46, 54336), (47, 54327), (59, 54252), (66, 54180), (86, 54114), (89, 54108), (90, 54102), (96, 54075),

Gene: Scrick_62 Start: 54504, Stop: 54046, Start Num: 39

Candidate Starts for Scrick_62:

(Start: 39 @54504 has 330 MA's), (46, 54408), (47, 54399), (59, 54324), (66, 54252), (86, 54186), (89, 54180), (90, 54174), (96, 54147),

Gene: Selr12_62 Start: 54514, Stop: 54056, Start Num: 39

Candidate Starts for Selr12_62:

(Start: 39 @54514 has 330 MA's), (46, 54418), (47, 54409), (59, 54334), (66, 54262), (86, 54196), (89, 54190), (90, 54184), (96, 54157),

Gene: Serendipitous_58 Start: 54821, Stop: 54153, Start Num: 37

Candidate Starts for Serendipitous_58:

(Start: 37 @54821 has 10 MA's), (43, 54779), (58, 54632), (60, 54599), (62, 54578), (65, 54560), (81, 54494), (106, 54386), (112, 54374),

Gene: Serendipity_61 Start: 54787, Stop: 54329, Start Num: 39

Candidate Starts for Serendipity_61:

(Start: 39 @54787 has 330 MA's), (46, 54691), (47, 54682), (59, 54607), (66, 54535), (86, 54469), (89, 54463), (90, 54457), (96, 54430),

Gene: Serpentine_0061 Start: 54870, Stop: 54412, Start Num: 39

Candidate Starts for Serpentine_0061:

(Start: 39 @54870 has 330 MA's), (46, 54774), (47, 54765), (59, 54690), (66, 54618), (86, 54552), (89, 54546), (90, 54540), (96, 54513),

Gene: Sheila_59 Start: 53872, Stop: 53414, Start Num: 39

Candidate Starts for Sheila_59:

(Start: 39 @53872 has 330 MA's), (46, 53776), (47, 53767), (59, 53692), (66, 53620), (86, 53554), (89, 53548), (90, 53542), (96, 53515),

Gene: Shenyu_59 Start: 55433, Stop: 54810, Start Num: 37

Candidate Starts for Shenyu_59:

(6, 55958), (15, 55652), (Start: 37 @55433 has 10 MA's), (43, 55391), (58, 55244), (60, 55211), (61, 55205), (62, 55190), (65, 55172), (79, 55118), (81, 55106), (106, 54998), (112, 54986),

Gene: ShiVal_59 Start: 54509, Stop: 54051, Start Num: 39

Candidate Starts for ShiVal_59:

(Start: 39 @54509 has 330 MA's), (46, 54413), (47, 54404), (59, 54329), (66, 54257), (86, 54191), (89, 54185), (90, 54179), (96, 54152),

Gene: Sigman_62 Start: 54465, Stop: 54007, Start Num: 39

Candidate Starts for Sigman_62:

(Start: 39 @54465 has 330 MA's), (46, 54369), (47, 54360), (59, 54285), (66, 54213), (86, 54147), (89, 54141), (90, 54135), (96, 54108),

Gene: SilverBell_62 Start: 54750, Stop: 54292, Start Num: 39

Candidate Starts for SilverBell_62:

(Start: 39 @54750 has 330 MA's), (46, 54654), (47, 54645), (59, 54570), (66, 54498), (86, 54432), (89, 54426), (90, 54420), (96, 54393),

Gene: Simielle_61 Start: 54469, Stop: 54011, Start Num: 39

Candidate Starts for Simielle_61:

(Start: 39 @54469 has 330 MA's), (46, 54373), (47, 54364), (59, 54289), (66, 54217), (86, 54151), (89, 54145), (90, 54139), (96, 54112),

Gene: SirJeffery_58 Start: 55185, Stop: 54502, Start Num: 37

Candidate Starts for SirJeffery_58:

(22, 55311), (Start: 37 @55185 has 10 MA's), (43, 55143), (58, 54996), (60, 54963), (62, 54942), (65, 54924), (69, 54906), (106, 54759), (112, 54747), (115, 54738), (129, 54663),

Gene: Skippy_62 Start: 54723, Stop: 54265, Start Num: 39

Candidate Starts for Skippy_62:

(Start: 39 @54723 has 330 MA's), (46, 54627), (47, 54618), (59, 54543), (66, 54471), (86, 54405), (89, 54399), (90, 54393), (96, 54366),

Gene: Slatt_62 Start: 54788, Stop: 54330, Start Num: 39

Candidate Starts for Slatt_62:

(Start: 39 @54788 has 330 MA's), (46, 54692), (47, 54683), (59, 54608), (66, 54536), (86, 54470), (89, 54464), (90, 54458), (96, 54431),

Gene: SlippinJimmy_64 Start: 56167, Stop: 55691, Start Num: 39

Candidate Starts for SlippinJimmy_64:

(Start: 20 @56302 has 2 MA's), (23, 56281), (Start: 38 @56170 has 12 MA's), (Start: 39 @56167 has 330 MA's), (46, 56071), (59, 56005), (60, 55975), (71, 55903), (72, 55900), (73, 55891), (78, 55876), (93, 55819),

Gene: Soile_62 Start: 55018, Stop: 54554, Start Num: 39

Candidate Starts for Soile_62:

(Start: 39 @55018 has 330 MA's), (46, 54922), (47, 54913), (59, 54838), (66, 54766), (86, 54700), (89, 54694), (90, 54688), (96, 54661),

Gene: Solosis_60 Start: 54484, Stop: 54026, Start Num: 39

Candidate Starts for Solosis_60:

(Start: 39 @54484 has 330 MA's), (46, 54388), (47, 54379), (59, 54304), (66, 54232), (86, 54166), (89, 54160), (90, 54154), (96, 54127),

Gene: Sophia_60 Start: 54478, Stop: 54020, Start Num: 39

Candidate Starts for Sophia_60:

(Start: 39 @54478 has 330 MA's), (46, 54382), (47, 54373), (59, 54298), (66, 54226), (86, 54160), (89, 54154), (90, 54148), (96, 54121),

Gene: Soto_60 Start: 54045, Stop: 53587, Start Num: 39

Candidate Starts for Soto_60:

(Start: 39 @54045 has 330 MA's), (46, 53949), (47, 53940), (59, 53865), (66, 53793), (86, 53727), (89, 53721), (90, 53715), (96, 53688),

Gene: Spartan300_61 Start: 54706, Stop: 54248, Start Num: 39

Candidate Starts for Spartan300_61:

(Start: 39 @54706 has 330 MA's), (46, 54610), (47, 54601), (59, 54526), (66, 54454), (86, 54388), (89, 54382), (90, 54376), (96, 54349),

Gene: Squid_61 Start: 54490, Stop: 54032, Start Num: 39

Candidate Starts for Squid_61:

(Start: 39 @54490 has 330 MA's), (46, 54394), (47, 54385), (59, 54310), (66, 54238), (86, 54172), (89, 54166), (90, 54160), (96, 54133),

Gene: Squiggle_62 Start: 54498, Stop: 54040, Start Num: 39

Candidate Starts for Squiggle_62:

(Start: 39 @54498 has 330 MA's), (46, 54402), (47, 54393), (59, 54318), (66, 54246), (86, 54180), (89, 54174), (90, 54168), (96, 54141),

Gene: StinkyVeggy_59 Start: 55230, Stop: 54595, Start Num: 37

Candidate Starts for StinkyVeggy_59:

(Start: 37 @55230 has 10 MA's), (43, 55188), (58, 55041), (60, 55008), (61, 55002), (62, 54987), (65, 54969), (69, 54951), (79, 54912), (80, 54903), (83, 54894), (91, 54849), (99, 54819), (101, 54813),

Gene: Struggle_62 Start: 54581, Stop: 54117, Start Num: 39

Candidate Starts for Struggle_62:

(Start: 39 @54581 has 330 MA's), (46, 54485), (47, 54476), (59, 54401), (66, 54329), (86, 54263), (89, 54257), (90, 54251), (96, 54224),

Gene: Suffolk_60 Start: 53993, Stop: 53535, Start Num: 39

Candidate Starts for Suffolk_60:

(Start: 39 @53993 has 330 MA's), (46, 53897), (47, 53888), (59, 53813), (66, 53741), (86, 53675), (89, 53669), (90, 53663), (96, 53636),

Gene: Suigeneris_60 Start: 55306, Stop: 54665, Start Num: 37

Candidate Starts for Suigeneris_60:

(22, 55432), (Start: 37 @55306 has 10 MA's), (43, 55264), (58, 55117), (60, 55084), (62, 55063), (65, 55045), (69, 55027), (106, 54880), (112, 54868), (115, 54859), (129, 54796),

Gene: Surely_61 Start: 54780, Stop: 54322, Start Num: 39

Candidate Starts for Surely_61:

(Start: 39 @54780 has 330 MA's), (46, 54684), (47, 54675), (59, 54600), (66, 54528), (86, 54462), (89, 54456), (90, 54450), (96, 54423),

Gene: SwainyDoc_63 Start: 55396, Stop: 54920, Start Num: 39

Candidate Starts for SwainyDoc_63:

(Start: 38 @55399 has 12 MA's), (Start: 39 @55396 has 330 MA's), (46, 55300), (59, 55234), (60, 55204), (71, 55132), (72, 55129), (73, 55120), (78, 55105), (93, 55048),

Gene: Swiphy_65 Start: 55024, Stop: 54566, Start Num: 39

Candidate Starts for Swiphy_65:

(Start: 39 @55024 has 330 MA's), (46, 54928), (47, 54919), (59, 54844), (66, 54772), (86, 54706), (89, 54700), (90, 54694), (96, 54667),

Gene: Swish_63 Start: 54754, Stop: 54296, Start Num: 39

Candidate Starts for Swish_63:

(Start: 39 @54754 has 330 MA's), (46, 54658), (47, 54649), (59, 54574), (66, 54502), (86, 54436), (89, 54430), (90, 54424), (96, 54397),

Gene: SynergyX_62 Start: 55006, Stop: 54530, Start Num: 39

Candidate Starts for SynergyX_62:

(Start: 20 @55141 has 2 MA's), (23, 55120), (Start: 38 @55009 has 12 MA's), (Start: 39 @55006 has 330 MA's), (46, 54910), (59, 54844), (60, 54814), (71, 54742), (72, 54739), (73, 54730), (78, 54715), (93, 54658),

Gene: TA17A_59 Start: 53340, Stop: 52858, Start Num: 39

Candidate Starts for TA17A_59:

(2, 53991), (4, 53865), (5, 53850), (Start: 39 @53340 has 330 MA's), (43, 53307), (46, 53247), (58, 53205), (59, 53202), (60, 53172), (65, 53133), (66, 53130), (67, 53127), (93, 53022), (95, 53016), (97, 52998), (109, 52965), (116, 52947), (124, 52902),

Gene: TallGrassMM_61 Start: 54394, Stop: 53936, Start Num: 39

Candidate Starts for TallGrassMM_61:

(Start: 39 @54394 has 330 MA's), (46, 54298), (47, 54289), (59, 54214), (66, 54142), (86, 54076), (89, 54070), (90, 54064), (96, 54037),

Gene: Telesworld_59 Start: 54599, Stop: 54141, Start Num: 39

Candidate Starts for Telesworld_59:

(Start: 39 @54599 has 330 MA's), (46, 54503), (47, 54494), (59, 54419), (66, 54347), (86, 54281), (89, 54275), (90, 54269), (96, 54242),

Gene: Thora_61 Start: 54776, Stop: 54318, Start Num: 39

Candidate Starts for Thora_61:

(Start: 39 @54776 has 330 MA's), (46, 54680), (47, 54671), (59, 54596), (66, 54524), (86, 54458), (89, 54452), (90, 54446), (96, 54419),

Gene: ThreeOh3D2_63 Start: 54997, Stop: 54539, Start Num: 39

Candidate Starts for ThreeOh3D2_63:

(Start: 39 @54997 has 330 MA's), (46, 54901), (47, 54892), (59, 54817), (66, 54745), (86, 54679), (89, 54673), (90, 54667), (96, 54640),

Gene: Thunderbird_61 Start: 54736, Stop: 54272, Start Num: 39

Candidate Starts for Thunderbird_61:

(Start: 39 @54736 has 330 MA's), (46, 54640), (47, 54631), (59, 54556), (66, 54484), (86, 54418), (89, 54412), (90, 54406), (96, 54379),

Gene: Timmi_60 Start: 54479, Stop: 54021, Start Num: 39

Candidate Starts for Timmi_60:

(Start: 39 @54479 has 330 MA's), (46, 54383), (47, 54374), (59, 54299), (66, 54227), (86, 54161), (89, 54155), (90, 54149), (96, 54122),

Gene: Tinciduntolum_60 Start: 53502, Stop: 53014, Start Num: 39

Candidate Starts for Tinciduntolum_60:

(Start: 39 @53502 has 330 MA's), (43, 53469), (46, 53409), (58, 53367), (59, 53364), (60, 53334), (65, 53295), (66, 53292), (67, 53289), (84, 53214), (93, 53175), (95, 53169), (97, 53151), (109, 53118), (116, 53100), (124, 53055),

Gene: TinyTerror_63 Start: 55430, Stop: 54951, Start Num: 38

Candidate Starts for TinyTerror_63:

(9, 55823), (10, 55697), (11, 55679), (Start: 20 @55565 has 2 MA's), (23, 55544), (Start: 38 @55430 has 12 MA's), (Start: 39 @55427 has 330 MA's), (46, 55331), (59, 55265), (60, 55235), (71, 55163), (72, 55160), (73, 55151), (78, 55136), (93, 55079),

Gene: TomBombadil_61 Start: 54764, Stop: 54306, Start Num: 39

Candidate Starts for TomBombadil_61:

(Start: 39 @54764 has 330 MA's), (46, 54668), (47, 54659), (59, 54584), (66, 54512), (86, 54446), (89, 54440), (90, 54434), (96, 54407),

Gene: Tomlarah_62 Start: 55333, Stop: 54875, Start Num: 39

Candidate Starts for Tomlarah_62:

(Start: 39 @55333 has 330 MA's), (46, 55237), (47, 55228), (59, 55153), (66, 55081), (86, 55015), (89, 55009), (90, 55003), (96, 54976),

Gene: Toni_61 Start: 54926, Stop: 54468, Start Num: 39

Candidate Starts for Toni_61:

(Start: 39 @54926 has 330 MA's), (46, 54830), (47, 54821), (59, 54746), (66, 54674), (86, 54608), (89, 54602), (90, 54596), (96, 54569),

Gene: Tooj_60 Start: 54149, Stop: 53691, Start Num: 39

Candidate Starts for Tooj_60:

(Start: 39 @54149 has 330 MA's), (46, 54053), (47, 54044), (59, 53969), (66, 53897), (86, 53831), (89, 53825), (90, 53819), (96, 53792),

Gene: Tres_59 Start: 53356, Stop: 52868, Start Num: 39

Candidate Starts for Tres_59:

(Start: 39 @53356 has 330 MA's), (43, 53323), (46, 53263), (58, 53221), (59, 53218), (60, 53188), (65, 53149), (66, 53146), (67, 53143), (84, 53068), (93, 53029), (95, 53023), (97, 53005), (109, 52972), (116, 52954), (124, 52909),

Gene: True_60 Start: 54489, Stop: 54031, Start Num: 39

Candidate Starts for True_60:

(Start: 39 @54489 has 330 MA's), (46, 54393), (47, 54384), (59, 54309), (66, 54237), (86, 54171), (89, 54165), (90, 54159), (96, 54132),

Gene: Trypo_64 Start: 55161, Stop: 54703, Start Num: 39

Candidate Starts for Trypo_64:

(Start: 39 @55161 has 330 MA's), (46, 55065), (47, 55056), (59, 54981), (66, 54909), (86, 54843), (89, 54837), (90, 54831), (96, 54804),

Gene: Tydolla_59 Start: 55039, Stop: 54590, Start Num: 39

Candidate Starts for Tydolla_59:

(Start: 20 @55174 has 2 MA's), (23, 55153), (Start: 38 @55042 has 12 MA's), (Start: 39 @55039 has 330 MA's), (46, 54943), (59, 54877), (60, 54847), (71, 54775), (72, 54772), (73, 54763), (78, 54748), (93, 54715),

Gene: TyrionL_62 Start: 54586, Stop: 54128, Start Num: 39

Candidate Starts for TyrionL_62:

(Start: 39 @54586 has 330 MA's), (46, 54490), (47, 54481), (59, 54406), (66, 54334), (86, 54268), (89, 54262), (90, 54256), (96, 54229),

Gene: UAch1_61 Start: 54720, Stop: 54262, Start Num: 39

Candidate Starts for UAch1_61:

(Start: 39 @54720 has 330 MA's), (46, 54624), (47, 54615), (59, 54540), (66, 54468), (86, 54402), (89, 54396), (90, 54390), (96, 54363),

Gene: UncleHowie_60 Start: 54191, Stop: 53733, Start Num: 39

Candidate Starts for UncleHowie_60:

(Start: 39 @54191 has 330 MA's), (46, 54095), (47, 54086), (59, 54011), (66, 53939), (86, 53873), (89, 53867), (90, 53861), (96, 53834),

Gene: Usavi_61 Start: 54859, Stop: 54401, Start Num: 39

Candidate Starts for Usavi_61:

(Start: 39 @54859 has 330 MA's), (46, 54763), (47, 54754), (59, 54679), (66, 54607), (86, 54541), (89, 54535), (90, 54529), (96, 54502),

Gene: Vaishali24_60 Start: 54394, Stop: 53936, Start Num: 39

Candidate Starts for Vaishali24_60:

(Start: 39 @54394 has 330 MA's), (46, 54298), (47, 54289), (59, 54214), (66, 54142), (86, 54076), (89, 54070), (90, 54064), (96, 54037), (118, 53968),

Gene: Valjean_61 Start: 54716, Stop: 54258, Start Num: 39

Candidate Starts for Valjean_61:

(Start: 39 @54716 has 330 MA's), (46, 54620), (47, 54611), (59, 54536), (66, 54464), (86, 54398), (89, 54392), (90, 54386), (96, 54359),

Gene: Vaticameos_58 Start: 53024, Stop: 52566, Start Num: 39

Candidate Starts for Vaticameos_58:

(Start: 39 @53024 has 330 MA's), (46, 52928), (47, 52919), (59, 52844), (66, 52772), (86, 52706), (89, 52700), (90, 52694), (96, 52667),

Gene: Veritas_63 Start: 54854, Stop: 54396, Start Num: 39

Candidate Starts for Veritas_63:

(Start: 39 @54854 has 330 MA's), (46, 54758), (47, 54749), (59, 54674), (66, 54602), (86, 54536), (89, 54530), (90, 54524), (96, 54497),

Gene: Vic9_60 Start: 54201, Stop: 53710, Start Num: 39

Candidate Starts for Vic9_60:

(Start: 39 @54201 has 330 MA's), (43, 54168), (46, 54108), (58, 54066), (59, 54063), (60, 54033), (65, 53994), (66, 53991), (67, 53988), (84, 53913), (93, 53874), (95, 53868), (97, 53850), (109, 53817), (116, 53799), (124, 53754),

Gene: Virapocalypse_62 Start: 54815, Stop: 54357, Start Num: 39

Candidate Starts for Virapocalypse_62:

(Start: 39 @54815 has 330 MA's), (46, 54719), (47, 54710), (59, 54635), (66, 54563), (86, 54497), (89, 54491), (90, 54485), (96, 54458),

Gene: Virgeve_61 Start: 54452, Stop: 53994, Start Num: 39

Candidate Starts for Virgeve_61:

(Start: 39 @54452 has 330 MA's), (46, 54356), (47, 54347), (59, 54272), (66, 54200), (86, 54134), (89, 54128), (90, 54122), (96, 54095),

Gene: Vista_61 Start: 54492, Stop: 54034, Start Num: 39

Candidate Starts for Vista_61:

(Start: 39 @54492 has 330 MA's), (46, 54396), (47, 54387), (59, 54312), (66, 54240), (86, 54174), (89, 54168), (90, 54162), (96, 54135),

Gene: Vivaldi_63 Start: 54950, Stop: 54492, Start Num: 39

Candidate Starts for Vivaldi_63:

(Start: 39 @54950 has 330 MA's), (46, 54854), (47, 54845), (59, 54770), (66, 54698), (86, 54632), (89, 54626), (90, 54620), (96, 54593),

Gene: Vortex_61 Start: 54474, Stop: 54016, Start Num: 39

Candidate Starts for Vortex_61:

(Start: 39 @54474 has 330 MA's), (46, 54378), (47, 54369), (59, 54294), (66, 54222), (86, 54156), (89, 54150), (90, 54144), (96, 54117),

Gene: Wallhey_62 Start: 54596, Stop: 54132, Start Num: 39

Candidate Starts for Wallhey_62:

(Start: 39 @54596 has 330 MA's), (46, 54500), (47, 54491), (59, 54416), (66, 54344), (86, 54278), (89, 54272), (90, 54266), (96, 54239),

Gene: Waterdiva_61 Start: 54853, Stop: 54395, Start Num: 39

Candidate Starts for Waterdiva_61:

(Start: 39 @54853 has 330 MA's), (46, 54757), (47, 54748), (59, 54673), (66, 54601), (86, 54535), (89, 54529), (90, 54523), (96, 54496),

Gene: Weher20_61 Start: 55296, Stop: 54838, Start Num: 39

Candidate Starts for Weher20_61:

(Start: 39 @55296 has 330 MA's), (46, 55200), (47, 55191), (59, 55116), (66, 55044), (86, 54978), (89, 54972), (90, 54966), (96, 54939),

Gene: West99_59 Start: 53499, Stop: 53011, Start Num: 39

Candidate Starts for West99_59:

(27, 53601), (Start: 39 @53499 has 330 MA's), (43, 53466), (46, 53406), (58, 53364), (59, 53361), (60, 53331), (65, 53292), (66, 53289), (67, 53286), (84, 53211), (93, 53172), (95, 53166), (97, 53148), (109, 53115), (116, 53097), (124, 53052),

Gene: Windsor_61 Start: 55039, Stop: 54581, Start Num: 39

Candidate Starts for Windsor_61:

(Start: 39 @55039 has 330 MA's), (46, 54943), (47, 54934), (59, 54859), (66, 54787), (86, 54721), (89, 54715), (90, 54709), (96, 54682),

Gene: Xavier_60 Start: 54481, Stop: 54023, Start Num: 39

Candidate Starts for Xavier_60:

(Start: 39 @54481 has 330 MA's), (46, 54385), (47, 54376), (59, 54301), (66, 54229), (86, 54163), (89, 54157), (90, 54151), (96, 54124),

Gene: Yahalom_60 Start: 54813, Stop: 54364, Start Num: 39

Candidate Starts for Yahalom_60:

(9, 55206), (10, 55080), (11, 55062), (Start: 20 @54948 has 2 MA's), (23, 54927), (Start: 38 @54816 has 12 MA's), (Start: 39 @54813 has 330 MA's), (46, 54717), (59, 54651), (60, 54621), (66, 54579), (71, 54549), (72, 54546), (73, 54537), (78, 54522), (93, 54489),

Gene: Yinz_62 Start: 54877, Stop: 54386, Start Num: 38

Candidate Starts for Yinz_62:

(Start: 38 @54877 has 12 MA's), (Start: 39 @54874 has 330 MA's), (46, 54778), (59, 54712), (60, 54682), (71, 54610), (72, 54607), (73, 54598), (78, 54583), (93, 54526),

Gene: Yoshand_63 Start: 54767, Stop: 54309, Start Num: 39

Candidate Starts for Yoshand_63:

(Start: 39 @54767 has 330 MA's), (46, 54671), (47, 54662), (59, 54587), (66, 54515), (86, 54449), (89, 54443), (90, 54437), (96, 54410),

Gene: YouGoGlencoco_62 Start: 54719, Stop: 54261, Start Num: 39

Candidate Starts for YouGoGlencoco_62:

(Start: 39 @54719 has 330 MA's), (46, 54623), (47, 54614), (59, 54539), (66, 54467), (86, 54401), (89, 54395), (90, 54389), (96, 54362),

Gene: Zaider_62 Start: 54960, Stop: 54502, Start Num: 39

Candidate Starts for Zaider_62:

(Start: 39 @54960 has 330 MA's), (46, 54864), (47, 54855), (59, 54780), (66, 54708), (86, 54642), (89, 54636), (90, 54630), (96, 54603),

Gene: Zelda_62 Start: 55121, Stop: 54663, Start Num: 39

Candidate Starts for Zelda_62:

(Start: 39 @55121 has 330 MA's), (46, 55025), (47, 55016), (59, 54941), (66, 54869), (86, 54803), (89, 54797), (90, 54791), (96, 54764),

Gene: Zenteno07_64 Start: 54876, Stop: 54409, Start Num: 39

Candidate Starts for Zenteno07_64:

(3, 55491), (8, 55386), (21, 55005), (Start: 39 @54876 has 330 MA's), (60, 54678), (63, 54645), (66, 54636), (102, 54504),

Gene: Zonia_63 Start: 55047, Stop: 54583, Start Num: 39

Candidate Starts for Zonia_63:

(Start: 39 @55047 has 330 MA's), (46, 54951), (47, 54942), (59, 54867), (66, 54795), (86, 54729), (89, 54723), (90, 54717), (96, 54690),