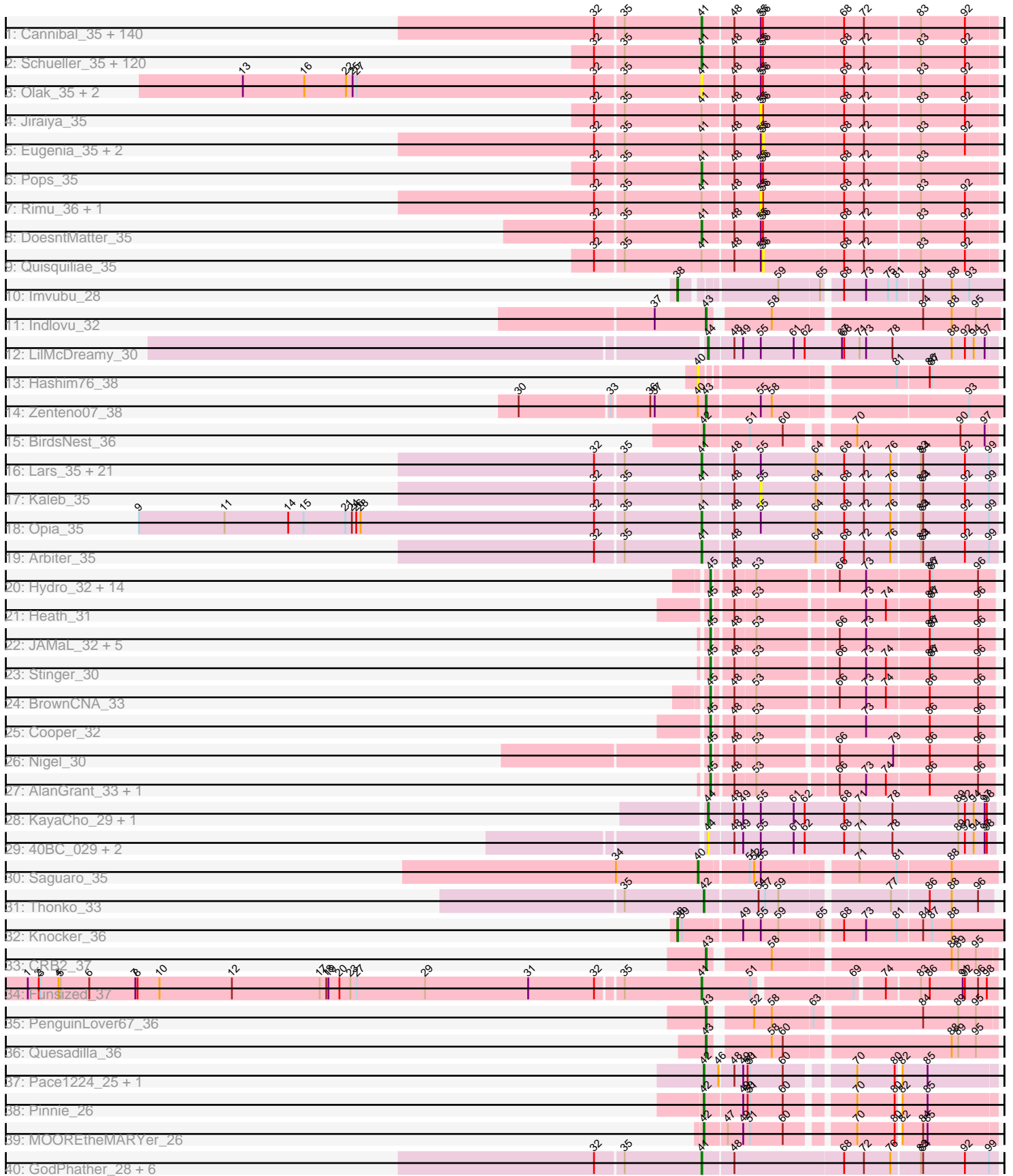


Pham 163279



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 163279 Report

This analysis was run 04/28/24 on database version 559.

Pham number 163279 has 356 members, 41 are drafts.

Phages represented in each track:

- Track 1 : Cannibal_35, Gophee_35, Mana_34, Kwksand96_34, Murdoc_35, Riggan_35, Durga_35, Puhltonio_35, MelsMeow_34, Lasso_35, LostAndPhound_34, Sheila_35, Mecca_34, Samaymay_35, Ashraf_34, Scrick_35, Haleema_34, Timmi_34, Andre_35, TomBombadil_35, Craff_35, Phipps_35, Lulwa_35, Potter_34, Emiris_35, PhrodoBaggins_34, Kwadwo_34, Cobra_35, Megatron_35, Dingo_35, LeeLot_35, Vaticameos_35, Podrick_35, Bluephacebaby_34, Harvey_35, Charles1_35, GeneCoco_35, Chah_36, Telesworld_34, QueenBeane_35, Fozzie_34, Banjo_34, Iridoclysis_35, Held_35, Lego3393_35, Lumine_34, Oosterbaan_35, Longacauda_34, Chunky_35, Matalotodo_34, Phareon_35, KingVeVeVe_35, LeiMonet_35, Pacifista_36, Inverness_35, Gyarad_0035, Zelda_35, LemonSlice_35, Magic8_35, Roliet_35, Legolas_34, LuckyMarjie_34, Thora_35, MRabcd_34, HighStump_34, Basato_36, Frankicide_35, Apizium_34, Anderson_35, Dice_36, Piglet_0034, Cher_34, Altwerkus_34, Beaglebox_34, Hocus_34, OSmaximus_35, Dione_34, Brilliant_35, Skippy_35, CamL_35, Etaye_35, Squiggle_35, Plmatters_35, True_34, Megamind20_35, Newman_35, Trypo_35, Soto_35, Simielle_34, Zaider_36, Morty_35, Phunky_35, Weher20_35, Fringe_35, Numberten_35, BlueHusk_35, Hamish_35, Pinkman_34, Vista_35, ImtiyazSitla_34, Toni_34, Bishoperium_34, Mutante_34, Melc17_35, CheetO_35, Labeouficaum_34, Nacho_0035, CharlieGBrown_34, DelRivs_34, Serpentine_0035, Haimas_35, KlimbOn_35, MitKao_35, Mikota_35, Xavier_34, Nicole21_35, Slatt_35, Mosaic_34, OliverWalter_35, Virapocalypse_35, Maru_34, Burr_34, Inchworm_35, UncleHowie_35, Dati_35, Childish_34, MiniBoss_35, Soile_35, Mulan_34, Oline_34, Maskar_34, Orwigg_35, JangoPhett_35, DirtJuice_35, Derpp_34, TyrionL_34, Zonia_35, Pipsqueak_35, SDcharge11_35, Gareth_34, Wallhey_34
- Track 2 : Schueller_35, Kailash_35, KingTut_26, Manad_34, Morgushi_35, Freya_34, IsaacEli_35, Scoot17C_35, Sigman_35, BlackStallion_35, Mesh1_35, UAch1_35, Schadenfreude_34, Lulumae_34, AltPhacts_35, Orion_35, Coletti_34, FriarPreacher_35, JDog_35, Robyn_34, PinheadLarry_35, Lopsy_34, CampRoach_34, Chute_34, ProfessorX_35, Chaelin_35, Pherdinand_35, Tooj_35, Tomlarah_35, SassyCat97_34, Vortex_35, Hertubise_35, RedMaple_34, Omniscient_35, Jiminy_34, Kloppinator_35, Badfish_35, Adriana_35, Kimbrough_35, Giraffe_35, Mag7_34, Nyala_34, Colbert_35, Kahve_34, Usavi_35, YouGoGlencoco_35, EmpTee_35, Cosmolli16_34, DonSanchon_34, Mcshane_34, HSavage_35, TallGrassMM_35, Phergie_34, Eremos_35, Daka_35, LasagnaCat_35, Carthage_33, JacAttac_35, Boehler_35, ShiVal_35, Veritas_34, Swiphy_36, Katniss_35, Doddsville_35, Antonia_34, HenryJackson_34, PhatCats2014_35, Hartsy_34, JakeO_34, Squid_35, Daffy_35, Roscoe_36, PG1_35, Struggle_34,

Phamished_35, Cornobble_34, ABU_35, FugateOSU_34, Vaishali24_34, ThreeOh3D2_35, Windsor_34, FluffyNinja_35, Yoshand_35, Virgeve_34, PhatLouie_35, Swish_35, Vivaldi_35, PhrankReynolds_34, Waterdiva_35, Serendipity_35, Aelin_34, Roy17_35, Placalicious_34, Spartan300_35, Suffolk_35, Phenghiskhan_34, Jillium_34, Grand2040_34, Surely_35, Chorkpop_35, Hetaeria_35, DuchessDung_33, Phleuron_34, Solosis_34, Crownjwl_35, Kikipoo_35, Valjean_35, Keitherie_35, DaddyDaniels_35, BatteryCK_34, Olive_35, Prickles_35, Sophia_34, Horchata_35, Thunderbird_35, KLucky39_35, AbsoluteMadLad_34, Fang_35, Buckeye_35, Duggie_34, MichaelPhcott_34

- Track 3 : Olak_35, Selr12_35, Ricotta_35
- Track 4 : Jiraiya_35
- Track 5 : Eugenia_35, Gwilliam_35, Orfeu_34
- Track 6 : Pops_35
- Track 7 : Rimu_36, MrPhizzler_34
- Track 8 : DoesntMatter_35
- Track 9 : Quisquiliae_35
- Track 10 : Imvubu_28
- Track 11 : Indlovu_32
- Track 12 : LilMcDreamy_30
- Track 13 : Hashim76_38
- Track 14 : Zenteno07_38
- Track 15 : BirdsNest_36
- Track 16 : Lars_35, Rosebush_35, West99_35, Coffee_35, Glass_35, Allegro_35, Sabella_35, MasterPo_35, Eaglehorse_35, Boyle_35, Kheth_35, Holeinone_35, Hedgerow_35, Blocker23_35, ItsyBitsy1_35, Rhinoforte_35, Lephleur_35, FrenchFry_35, Calamitous_35, Tinciduntolum_36, Tres_35, Brownie5_35
- Track 17 : Kaleb_35
- Track 18 : Opia_35
- Track 19 : Arbiter_35
- Track 20 : Hydro_32, JaguarMi_32, RawrgerThat_32, Mithril_32, Lolalove_32, Waleliano_32, Hangman_32, BobbyK_32, Zemanar_33, Austelle_33, VioletZ_32, Fortunato_32, Apex_32, Mudslide_32, Frederick_32
- Track 21 : Heath_31
- Track 22 : JAMaL_32, Prince_33, ChrisnMich_31, Nanao_31, Magpie_31, Poster_31
- Track 23 : Stinger_30
- Track 24 : BrownCNA_33
- Track 25 : Cooper_32
- Track 26 : Nigel_30
- Track 27 : AlanGrant_33, Vincenzo_33
- Track 28 : KayaCho_29, Jolie1_029
- Track 29 : 40BC_029, Hosp_027, 39HC_029
- Track 30 : Saguaro_35
- Track 31 : Thonko_33
- Track 32 : Knocker_36
- Track 33 : CRB2_37
- Track 34 : Funsized_37
- Track 35 : PenguinLover67_36
- Track 36 : Quesadilla_36
- Track 37 : Pace1224_25, FlagStaff_25
- Track 38 : Pinnie_26
- Track 39 : MOOREtheMARYer_26

- Track 40 : GodPhather_28, Bananafish_35, LizLemon_35, TA17A_35, Phantasmagoria_35, Jeon_27, Faze9_35

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

The start number called the most often in the published annotations is 41, it was called in 278 of the 315 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_35, AbsoluteMadLad_34, Adriana_35, Aelin_34, Allegro_35, AltPhacts_35, Altwerkus_34, Anderson_35, Andre_35, Antonia_34, Apizium_34, Arbiter_35, Ashraf_34, Badfish_35, Bananafish_35, Banjo_34, Basato_36, BatteryCK_34, Beaglebox_34, Bishoperium_34, BlackStallion_35, Blocker23_35, BlueHusk_35, Bluephacebaby_34, Boehler_35, Boyle_35, Brilliant_35, Brownie5_35, Buckeye_35, Burr_34, Calamitous_35, CamL_35, CampRoach_34, Cannibal_35, Carthage_33, Chaelin_35, Chah_36, Charles1_35, CharlieGBrown_34, CheetO_35, Cher_34, Childish_34, Chorkpop_35, Chunky_35, Chute_34, Cobra_35, Coffee_35, Colbert_35, Coletti_34, Cornobble_34, Cosmolli16_34, Craff_35, Crownjwl_35, DaddyDaniels_35, Daffy_35, Daka_35, Dati_35, DelRivs_34, Derpp_34, Dice_36, Dingo_35, Dione_34, DirtJuice_35, Doddsville_35, DoesntMatter_35, DonSanchon_34, DuchessDung_33, Duggie_34, Durga_35, Eaglehorse_35, Emiris_35, EmpTee_35, Eremos_35, Etaye_35, Fang_35, Faze9_35, FluffyNinja_35, Fozzie_34, Frankicide_35, FrenchFry_35, Freya_34, FriarPreacher_35, Fringe_35, FugateOSU_34, Funsized_37, Gareth_34, GeneCoco_35, Giraffe_35, Glass_35, GodPhather_28, Gophee_35, Grand2040_34, Gyarad_0035, HSavage_35, Haimas_35, Haleema_34, Hamish_35, Hartsy_34, Harvey_35, Hedgerow_35, Held_35, HenryJackson_34, Hertubise_35, Hetaeria_35, HighStump_34, Hocus_34, Holeinone_35, Horchata_35, ImtiyazSitla_34, Inchworm_35, Inverness_35, Iridoclysis_35, IsaacEli_35, ItsyBitsy1_35, JDog_35, JacAttac_35, JakeO_34, JangoPhett_35, Jeon_27, Jillium_34, Jiminy_34, KLucky39_35, Kahve_34, Kailash_35, Katniss_35, Keitherie_35, Kheth_35, Kikipoo_35, Kimbrough_35, KingTut_26, KingVeVeVe_35, KlimbOn_35, Kloppinator_35, Kwadwo_34, Kwksand96_34, Labeouficaum_34, Lars_35, LasagnaCat_35, Lasso_35, LeeLot_35, Lego3393_35, Legolas_34, LeiMonet_35, LemonSlice_35, Lephleur_35, LizLemon_35, Longacauda_34, Lopsy_34, LostAndPhound_34, LuckyMarjie_34, Lulumae_34, Lulwa_35, Lumine_34, MRabcd_34, Mag7_34, Magic8_35, Mana_34, Manad_34, Maru_34, Maskar_34, MasterPo_35, Matalotodo_34, Mcshane_34, Mecca_34, Megamind20_35, Megatron_35, Melc17_35, MelsMeow_34, Mesh1_35, MichaelPhcott_34, Mikota_35, MiniBoss_35, MitKao_35, Morgushi_35, Morty_35, Mosaic_34, Mulan_34, Murdoc_35, Mutante_34, Nacho_0035, Newman_35, Nicole21_35, Numberten_35, Nyala_34, OSmaximus_35, Olak_35, Oline_34, Olive_35, OliverWalter_35, Omniscient_35, Oosterbaan_35, Opia_35, Orion_35, Orwigg_35, PG1_35, Pacifista_36, Phamished_35, Phantasmagoria_35, Phareon_35, PhatCats2014_35, PhatLouie_35, PhenghisKhan_34, Pherdinand_35, Phergie_34, Phipps_35, Phleuron_34, PhrankReynolds_34, PhrodoBaggins_34, Phunky_35, Piglet_0034, PinheadLarry_35, Pinkman_34, Pipsqueak_35, Placalicious_34, Plmatters_35, Podrick_35, Pops_35, Potter_34, Prickles_35, ProfessorX_35, Puhltonio_35, QueenBeane_35, RedMaple_34, Rhinoforte_35, Ricotta_35, Riggan_35, Robyn_34, Roliet_35, Roscoe_36, Rosebush_35, Roy17_35, SDcharge11_35, Sabella_35, Samaymay_35, SassyCat97_34, Schadenfreude_34,

Schueller_35, Scoot17C_35, Scrick_35, Selr12_35, Serendipity_35, Serpentine_0035, Sheila_35, ShiVal_35, Sigman_35, Simielle_34, Skippy_35, Slatt_35, Soile_35, Solosis_34, Sophia_34, Soto_35, Spartan300_35, Squid_35, Squiggle_35, Struggle_34, Suffolk_35, Surely_35, Swiphy_36, Swish_35, TA17A_35, TallGrassMM_35, Telesworld_34, Thora_35, ThreeOh3D2_35, Thunderbird_35, Timmi_34, Tinciduntolum_36, TomBombadil_35, Tomlarah_35, Toni_34, Tooj_35, Tres_35, True_34, Trypo_35, TyrionL_34, UAch1_35, UncleHowie_35, Usavi_35, Vaishali24_34, Valjean_35, Vaticameos_35, Veritas_34, Virapocalypse_35, Virgeve_34, Vista_35, Vivaldi_35, Vortex_35, Wallhey_34, Waterdiva_35, Weher20_35, West99_35, Windsor_34, Xavier_34, Yoshand_35, YouGoGlencoco_35, Zaidar_36, Zelda_35, Zonia_35,

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

- Eugenia_35, Gwilliam_35, Jiraiya_35, Kaleb_35, MrPhizzler_34, Orfeu_34, Quisquiliae_35, Rimu_36,

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

- 39HC_029, 40BC_029, AlanGrant_33, Apex_32, Austelle_33, BirdsNest_36, BobbyK_32, BrownCNA_33, CRB2_37, ChrisnMich_31, Cooper_32, FlagStaff_25, Fortunato_32, Frederick_32, Hangman_32, Hashim76_38, Heath_31, Hosp_027, Hydro_32, Imvubu_28, Indlovu_32, JAMaL_32, JaguarMi_32, Jolie1_029, KayaCho_29, Knocker_36, LilMcDreamy_30, Lolalove_32, MOOREtheMARYer_26, Magpie_31, Mithril_32, Mudslide_32, Nanao_31, Nigel_30, Pace1224_25, PenguinLover67_36, Pinnie_26, Poster_31, Prince_33, Quesadilla_36, RawrgerThat_32, Saguaro_35, Stinger_30, Thonko_33, Vincenzo_33, VioletZ_32, Waleliano_32, Zemanar_33, Zenteno07_38,

Summary by start number:

Start 38:

- Found in 2 of 356 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 315
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu_28 (B10), Knocker_36 (B9),

Start 40:

- Found in 3 of 356 (0.8%) of genes in pham
- Manual Annotations of this start: 1 of 315
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Hashim76_38 (B13), Saguaro_35 (B7),

Start 41:

- Found in 307 of 356 (86.2%) of genes in pham
- Manual Annotations of this start: 278 of 315
- Called 97.4% of time when present
- Phage (with cluster) where this start called: ABU_35 (B1), AbsoluteMadLad_34 (B1), Adriana_35 (B1), Aelin_34 (B1), Allegro_35 (B2), AltPhacts_35 (B1), Altwerkus_34 (B1), Anderson_35 (B1), Andre_35 (B1), Antonia_34 (B1), Apizium_34 (B1), Arbiter_35 (B2), Ashraf_34 (B1), Badfish_35 (B1), Bananafish_35 (B2), Banjo_34 (B1), Basato_36 (B1), BatteryCK_34 (B1), Beaglebox_34 (B1), Bishoperium_34 (B1), BlackStallion_35 (B1), Blocker23_35 (B2), BlueHusk_35 (B1), Bluephacebaby_34 (B1), Bohler_35 (B1), Boyle_35 (B2), Brilliant_35 (B1), Brownie5_35 (B2), Buckeye_35 (B1), Burr_34 (B1), Calamitous_35 (B2), CamL_35

(B1), CampRoach_34 (B1), Cannibal_35 (B1), Carthage_33 (B1), Chaelin_35 (B1), Chah_36 (B1), Charles1_35 (B1), CharlieGBrown_34 (B1), CheetO_35 (B1), Cher_34 (B1), Childish_34 (B1), Chorkpop_35 (B1), Chunky_35 (B1), Chute_34 (B1), Cobra_35 (B1), Coffee_35 (B2), Colbert_35 (B1), Coletti_34 (B1), Cornobble_34 (B1), Cosmolli16_34 (B1), Craff_35 (B1), Crownjwl_35 (B1), DaddyDaniels_35 (B1), Daffy_35 (B1), Daka_35 (B1), Dati_35 (B1), DelRivs_34 (B1), Derpp_34 (B1), Dice_36 (B1), Dingo_35 (B1), Dione_34 (B1), DirtJuice_35 (B1), Doddsville_35 (B1), DoesntMatter_35 (B1), DonSanchon_34 (B1), DuchessDung_33 (B1), Duggie_34 (B1), Durga_35 (B1), Eaglehorse_35 (B2), Emiris_35 (B1), EmpTee_35 (B1), Eremos_35 (B1), Etaye_35 (B1), Fang_35 (B1), Faze9_35 (B2), FluffyNinja_35 (B1), Fozzie_34 (B1), Frankicide_35 (B1), FrenchFry_35 (B2), Freya_34 (B1), FriarPreacher_35 (B1), Fringe_35 (B1), FugateOSU_34 (B1), Funsized_37 (B9), Gareth_34 (B1), GeneCoco_35 (B1), Giraffe_35 (B1), Glass_35 (B2), GodPhather_28 (W), Gophee_35 (B1), Grand2040_34 (B1), Gyarad_0035 (B1), HSavage_35 (B1), Haimas_35 (B1), Haleema_34 (B1), Hamish_35 (B1), Hartsy_34 (B1), Harvey_35 (B1), Hedgerow_35 (B2), Held_35 (B1), HenryJackson_34 (B1), Hertubise_35 (B1), Hetaeria_35 (B1), HighStump_34 (B1), Hocus_34 (B1), Holeinone_35 (B2), Horchata_35 (B1), ImtiyazSitla_34 (B1), Inchworm_35 (B1), Inverness_35 (B1), Iridoclysis_35 (B1), IsaacEli_35 (B1), ItsyBitsy1_35 (B2), JDog_35 (B1), JacAttac_35 (B1), JakeO_34 (B1), JangoPhett_35 (B1), Jeon_27 (W), Jillium_34 (B1), Jiminy_34 (B1), KLucky39_35 (B1), Kahve_34 (B1), Kailash_35 (B1), Katniss_35 (B1), Keitherie_35 (B1), Kheth_35 (B2), Kikipoo_35 (B1), Kimbrough_35 (B1), KingTut_26 (B1), KingVeVeVe_35 (B1), KlimbOn_35 (B1), Kloppinator_35 (B1), Kwadwo_34 (B1), Kwksand96_34 (B1), Labeouficaum_34 (B1), Lars_35 (B2), LasagnaCat_35 (B1), Lasso_35 (B1), LeeLot_35 (B1), Lego3393_35 (B1), Legolas_34 (B1), LeiMonet_35 (B1), LemonSlice_35 (B1), Lephleur_35 (B2), LizLemon_35 (B2), Longacauda_34 (B1), Lopsy_34 (B1), LostAndPhound_34 (B1), LuckyMarjie_34 (B1), Lulumae_34 (B1), Lulwa_35 (B1), Lumine_34 (B1), MRabcd_34 (B1), Mag7_34 (B1), Magic8_35 (B1), Mana_34 (B1), Manad_34 (B1), Maru_34 (B1), Maskar_34 (B1), MasterPo_35 (B2), Matalotodo_34 (B1), Mcshane_34 (B1), Mecca_34 (B1), Megamind20_35 (B1), Megatron_35 (B1), Melc17_35 (B1), MelsMeow_34 (B1), Mesh1_35 (B1), MichaelPhcott_34 (B1), Mikota_35 (B1), MiniBoss_35 (B1), MitKao_35 (B1), Morgushi_35 (B1), Morty_35 (B1), Mosaic_34 (B1), Mulan_34 (B1), Murdoc_35 (B1), Mutante_34 (B1), Nacho_0035 (B1), Newman_35 (B1), Nicole21_35 (B1), Numberten_35 (B1), Nyala_34 (B1), OSmaximus_35 (B1), Olak_35 (B1), Oline_34 (B1), Olive_35 (B1), OliverWalter_35 (B1), Omniscient_35 (B1), Oosterbaan_35 (B1), Opia_35 (B2), Orion_35 (B1), Orwigg_35 (B1), PG1_35 (B1), Pacifista_36 (B1), Phamished_35 (B1), Phantasmagoria_35 (B2), Phareon_35 (B1), PhatCats2014_35 (B1), PhatLouie_35 (B1), PhenghisKhan_34 (B1), Pherdinand_35 (B1), Phergie_34 (B1), Phipps_35 (B1), Phleuron_34 (B1), PhrankReynolds_34 (B1), PhrodoBaggins_34 (B1), Phunky_35 (B1), Piglet_0034 (B1), PinheadLarry_35 (B1), Pinkman_34 (B1), Pipsqueak_35 (B1), Placalicious_34 (B1), Plmatters_35 (B1), Podrick_35 (B1), Pops_35 (B1), Potter_34 (B1), Prickles_35 (B1), ProfessorX_35 (B1), Puhltonio_35 (B1), QueenBeane_35 (B1), RedMaple_34 (B1), Rhinoforte_35 (B2), Ricotta_35 (B1), Riggan_35 (B1), Robyn_34 (B1), Roliet_35 (B1), Roscoe_36 (B1), Rosebush_35 (B2), Roy17_35 (B1), SDcharge11_35 (B1), Sabella_35 (B2), Samaymay_35 (B1), SassyCat97_34 (B1), Schadenfreude_34 (B1), Schueller_35 (B1), Scoot17C_35 (B1), Scrick_35 (B1), Selr12_35 (B1), Serendipity_35 (B1), Serpentine_0035 (B1), Sheila_35 (B1), ShiVal_35 (B1), Sigman_35 (B1), Simielle_34 (B1), Skippy_35 (B1), Slatt_35 (B1), Soile_35 (B1), Solosis_34 (B1), Sophia_34 (B1), Soto_35 (B1), Spartan300_35 (B1), Squid_35 (B1), Squiggle_35 (B1), Struggle_34 (B1), Suffolk_35 (B1), Surely_35 (B1), Swiphy_36 (B1), Swish_35 (B1), TA17A_35 (B2),

TallGrassMM_35 (B1), Telesworld_34 (B1), Thora_35 (B1), ThreeOh3D2_35 (B1), Thunderbird_35 (B1), Timmi_34 (B1), Tinciduntolum_36 (B2), TomBombadil_35 (B1), Tomlarah_35 (B1), Toni_34 (B1), Tooj_35 (B1), Tres_35 (B2), True_34 (B1), Trypo_35 (B1), TyrionL_34 (B1), UAch1_35 (B1), UncleHowie_35 (B1), Usavi_35 (B1), Vaishali24_34 (B1), Valjean_35 (B1), Vaticameos_35 (B1), Veritas_34 (B1), Virapocalypse_35 (B1), Virgeve_34 (B1), Vista_35 (B1), Vivaldi_35 (B1), Vortex_35 (B1), Wallhey_34 (B1), Waterdiva_35 (B1), Weher20_35 (B1), West99_35 (B2), Windsor_34 (B1), Xavier_34 (B1), Yoshand_35 (B1), YouGoGlencoco_35 (B1), Zaider_36 (B1), Zelda_35 (B1), Zonia_35 (B1),

Start 42:

- Found in 6 of 356 (1.7%) of genes in pham
- Manual Annotations of this start: 5 of 315
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BirdsNest_36 (B13), FlagStaff_25 (G2), MOOREtheMARYer_26 (G3), Pace1224_25 (G2), Pinnie_26 (G3), Thonko_33 (B8),

Start 43:

- Found in 5 of 356 (1.4%) of genes in pham
- Manual Annotations of this start: 5 of 315
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CRB2_37 (B9), Indlovu_32 (B11), PenguinLover67_36 (B9), Quesadilla_36 (B9), Zenteno07_38 (B13),

Start 44:

- Found in 6 of 356 (1.7%) of genes in pham
- Manual Annotations of this start: 2 of 315
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_029 (B6), 40BC_029 (B6), Hosp_027 (B6), Jolie1_029 (B6), KayaCho_29 (B6), LilMcDreamy_30 (B12),

Start 45:

- Found in 28 of 356 (7.9%) of genes in pham
- Manual Annotations of this start: 22 of 315
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_33 (B4), Apex_32 (B4), Austelle_33 (B4), BobbyK_32 (B4), BrownCNA_33 (B4), ChrisnMich_31 (B4), Cooper_32 (B4), Fortunato_32 (B4), Frederick_32 (B4), Hangman_32 (B4), Heath_31 (B4), Hydro_32 (B4), JAMaL_32 (B4), JaguarMi_32 (B4), Lolalove_32 (B4), Magpie_31 (B4), Mithril_32 (B4), Mudslide_32 (B4), Nanao_31 (B4), Nigel_30 (B4), Poster_31 (B4), Prince_33 (B4), RawrgerThat_32 (B4), Stinger_30 (B4), Vincenzo_33 (B4), VioletZ_32 (B4), Waleliano_32 (B4), Zemanar_33 (B4),

Start 55:

- Found in 307 of 356 (86.2%) of genes in pham
- No Manual Annotations of this start.
- Called 1.3% of time when present
- Phage (with cluster) where this start called: Jiraiya_35 (B1), Kaleb_35 (B2), MrPhizzler_34 (B1), Rimu_36 (B1),

Start 56:

- Found in 274 of 356 (77.0%) of genes in pham
- No Manual Annotations of this start.

- Called 1.5% of time when present
- Phage (with cluster) where this start called: Eugenia_35 (B1), Gwilliam_35 (B1), Orfeu_34 (B1), Quisquilliae_35 (B1),

Summary by clusters:

There are 14 clusters represented in this pham: G3, W, B10, G2, B4, B6, B7, B12, B1, B2, B11, B8, B9, B13,

Info for manual annotations of cluster B1:

- Start number 41 was manually annotated 247 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 38 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B11:

- Start number 43 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 44 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 42 was manually annotated 1 time for cluster B13.
- Start number 43 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B2:

- Start number 41 was manually annotated 28 times for cluster B2.

Info for manual annotations of cluster B4:

- Start number 45 was manually annotated 22 times for cluster B4.

Info for manual annotations of cluster B6:

- Start number 44 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 40 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 42 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 38 was manually annotated 1 time for cluster B9.
- Start number 41 was manually annotated 1 time for cluster B9.
- Start number 43 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster G2:

- Start number 42 was manually annotated 1 time for cluster G2.

Info for manual annotations of cluster G3:

- Start number 42 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster W:

- Start number 41 was manually annotated 2 times for cluster W.

Gene Information:

Gene: 39HC_029 Start: 31698, Stop: 32078, Start Num: 44

Candidate Starts for 39HC_029:

(Start: 44 @31698 has 2 MA's), (48, 31728), (49, 31740), (55, 31764), (61, 31809), (62, 31824), (68, 31878), (71, 31899), (78, 31944), (89, 32031), (92, 32040), (94, 32052), (97, 32067), (98, 32070),

Gene: 40BC_029 Start: 31698, Stop: 32078, Start Num: 44

Candidate Starts for 40BC_029:

(Start: 44 @31698 has 2 MA's), (48, 31728), (49, 31740), (55, 31764), (61, 31809), (62, 31824), (68, 31878), (71, 31899), (78, 31944), (89, 32031), (92, 32040), (94, 32052), (97, 32067), (98, 32070),

Gene: ABU_35 Start: 33953, Stop: 34339, Start Num: 41

Candidate Starts for ABU_35:

(32, 33812), (35, 33848), (Start: 41 @33953 has 278 MA's), (48, 33992), (55, 34028), (56, 34031), (68, 34139), (72, 34166), (83, 34238), (92, 34298),

Gene: AbsoluteMadLad_34 Start: 33962, Stop: 34348, Start Num: 41

Candidate Starts for AbsoluteMadLad_34:

(32, 33821), (35, 33857), (Start: 41 @33962 has 278 MA's), (48, 34001), (55, 34037), (56, 34040), (68, 34148), (72, 34175), (83, 34247), (92, 34307),

Gene: Adriana_35 Start: 33951, Stop: 34337, Start Num: 41

Candidate Starts for Adriana_35:

(32, 33810), (35, 33846), (Start: 41 @33951 has 278 MA's), (48, 33990), (55, 34026), (56, 34029), (68, 34137), (72, 34164), (83, 34236), (92, 34296),

Gene: Aelin_34 Start: 33517, Stop: 33903, Start Num: 41

Candidate Starts for Aelin_34:

(32, 33376), (35, 33412), (Start: 41 @33517 has 278 MA's), (48, 33556), (55, 33592), (56, 33595), (68, 33703), (72, 33730), (83, 33802), (92, 33862),

Gene: AlanGrant_33 Start: 34896, Stop: 35249, Start Num: 45

Candidate Starts for AlanGrant_33:

(Start: 45 @34896 has 22 MA's), (48, 34917), (53, 34944), (66, 35046), (73, 35082), (74, 35109), (86, 35163), (96, 35229),

Gene: Allegro_35 Start: 34275, Stop: 34664, Start Num: 41

Candidate Starts for Allegro_35:

(32, 34134), (35, 34170), (Start: 41 @34275 has 278 MA's), (48, 34314), (55, 34350), (64, 34425), (68, 34461), (72, 34488), (76, 34524), (83, 34560), (84, 34563), (92, 34620), (99, 34653),

Gene: AltPhacts_35 Start: 33940, Stop: 34326, Start Num: 41

Candidate Starts for AltPhacts_35:

(32, 33799), (35, 33835), (Start: 41 @33940 has 278 MA's), (48, 33979), (55, 34015), (56, 34018), (68, 34126), (72, 34153), (83, 34225), (92, 34285),

Gene: Altwerkus_34 Start: 33641, Stop: 34027, Start Num: 41

Candidate Starts for Altwerkus_34:

(32, 33500), (35, 33536), (Start: 41 @33641 has 278 MA's), (48, 33680), (55, 33716), (56, 33719), (68, 33827), (72, 33854), (83, 33926), (92, 33986),

Gene: Anderson_35 Start: 33946, Stop: 34332, Start Num: 41

Candidate Starts for Anderson_35:

(32, 33805), (35, 33841), (Start: 41 @33946 has 278 MA's), (48, 33985), (55, 34021), (56, 34024), (68, 34132), (72, 34159), (83, 34231), (92, 34291),

Gene: Andre_35 Start: 33945, Stop: 34331, Start Num: 41

Candidate Starts for Andre_35:

(32, 33804), (35, 33840), (Start: 41 @33945 has 278 MA's), (48, 33984), (55, 34020), (56, 34023), (68, 34131), (72, 34158), (83, 34230), (92, 34290),

Gene: Antonia_34 Start: 33517, Stop: 33903, Start Num: 41

Candidate Starts for Antonia_34:

(32, 33376), (35, 33412), (Start: 41 @33517 has 278 MA's), (48, 33556), (55, 33592), (56, 33595), (68, 33703), (72, 33730), (83, 33802), (92, 33862),

Gene: Apex_32 Start: 34354, Stop: 34707, Start Num: 45

Candidate Starts for Apex_32:

(Start: 45 @34354 has 22 MA's), (48, 34375), (53, 34402), (66, 34504), (73, 34540), (86, 34621), (87, 34624), (96, 34687),

Gene: Apizium_34 Start: 33709, Stop: 34095, Start Num: 41

Candidate Starts for Apizium_34:

(32, 33568), (35, 33604), (Start: 41 @33709 has 278 MA's), (48, 33748), (55, 33784), (56, 33787), (68, 33895), (72, 33922), (83, 33994), (92, 34054),

Gene: Arbiter_35 Start: 34364, Stop: 34753, Start Num: 41

Candidate Starts for Arbiter_35:

(32, 34223), (35, 34259), (Start: 41 @34364 has 278 MA's), (48, 34403), (64, 34514), (68, 34550), (72, 34577), (76, 34613), (83, 34649), (84, 34652), (92, 34709), (99, 34742),

Gene: Ashraf_34 Start: 33513, Stop: 33899, Start Num: 41

Candidate Starts for Ashraf_34:

(32, 33372), (35, 33408), (Start: 41 @33513 has 278 MA's), (48, 33552), (55, 33588), (56, 33591), (68, 33699), (72, 33726), (83, 33798), (92, 33858),

Gene: Austelle_33 Start: 34810, Stop: 35163, Start Num: 45

Candidate Starts for Austelle_33:

(Start: 45 @34810 has 22 MA's), (48, 34831), (53, 34858), (66, 34960), (73, 34996), (86, 35077), (87, 35080), (96, 35143),

Gene: Badfish_35 Start: 33975, Stop: 34361, Start Num: 41

Candidate Starts for Badfish_35:

(32, 33834), (35, 33870), (Start: 41 @33975 has 278 MA's), (48, 34014), (55, 34050), (56, 34053), (68, 34161), (72, 34188), (83, 34260), (92, 34320),

Gene: Bananafish_35 Start: 34284, Stop: 34673, Start Num: 41

Candidate Starts for Bananafish_35:

(32, 34143), (35, 34179), (Start: 41 @34284 has 278 MA's), (48, 34323), (68, 34470), (72, 34497), (76, 34533), (83, 34569), (84, 34572), (92, 34629), (99, 34662),

Gene: Banjo_34 Start: 33651, Stop: 34037, Start Num: 41

Candidate Starts for Banjo_34:

(32, 33510), (35, 33546), (Start: 41 @33651 has 278 MA's), (48, 33690), (55, 33726), (56, 33729), (68, 33837), (72, 33864), (83, 33936), (92, 33996),

Gene: Basato_36 Start: 34230, Stop: 34616, Start Num: 41

Candidate Starts for Basato_36:

(32, 34089), (35, 34125), (Start: 41 @34230 has 278 MA's), (48, 34269), (55, 34305), (56, 34308), (68, 34416), (72, 34443), (83, 34515), (92, 34575),

Gene: BatteryCK_34 Start: 33570, Stop: 33956, Start Num: 41

Candidate Starts for BatteryCK_34:

(32, 33429), (35, 33465), (Start: 41 @33570 has 278 MA's), (48, 33609), (55, 33645), (56, 33648), (68, 33756), (72, 33783), (83, 33855), (92, 33915),

Gene: Beaglebox_34 Start: 33672, Stop: 34058, Start Num: 41

Candidate Starts for Beaglebox_34:

(32, 33531), (35, 33567), (Start: 41 @33672 has 278 MA's), (48, 33711), (55, 33747), (56, 33750), (68, 33858), (72, 33885), (83, 33957), (92, 34017),

Gene: BirdsNest_36 Start: 32603, Stop: 32965, Start Num: 42

Candidate Starts for BirdsNest_36:

(Start: 42 @32603 has 5 MA's), (51, 32660), (60, 32705), (70, 32783), (90, 32918), (97, 32951),

Gene: Bishoperium_34 Start: 33660, Stop: 34046, Start Num: 41

Candidate Starts for Bishoperium_34:

(32, 33519), (35, 33555), (Start: 41 @33660 has 278 MA's), (48, 33699), (55, 33735), (56, 33738), (68, 33846), (72, 33873), (83, 33945), (92, 34005),

Gene: BlackStallion_35 Start: 33962, Stop: 34348, Start Num: 41

Candidate Starts for BlackStallion_35:

(32, 33821), (35, 33857), (Start: 41 @33962 has 278 MA's), (48, 34001), (55, 34037), (56, 34040), (68, 34148), (72, 34175), (83, 34247), (92, 34307),

Gene: Blocker23_35 Start: 34402, Stop: 34791, Start Num: 41

Candidate Starts for Blocker23_35:

(32, 34261), (35, 34297), (Start: 41 @34402 has 278 MA's), (48, 34441), (55, 34477), (64, 34552), (68, 34588), (72, 34615), (76, 34651), (83, 34687), (84, 34690), (92, 34747), (99, 34780),

Gene: BlueHusk_35 Start: 33459, Stop: 33845, Start Num: 41

Candidate Starts for BlueHusk_35:

(32, 33318), (35, 33354), (Start: 41 @33459 has 278 MA's), (48, 33498), (55, 33534), (56, 33537), (68, 33645), (72, 33672), (83, 33744), (92, 33804),

Gene: Bluephacebaby_34 Start: 33657, Stop: 34043, Start Num: 41

Candidate Starts for Bluephacebaby_34:

(32, 33516), (35, 33552), (Start: 41 @33657 has 278 MA's), (48, 33696), (55, 33732), (56, 33735), (68, 33843), (72, 33870), (83, 33942), (92, 34002),

Gene: BobbyK_32 Start: 34179, Stop: 34532, Start Num: 45

Candidate Starts for BobbyK_32:

(Start: 45 @34179 has 22 MA's), (48, 34200), (53, 34227), (66, 34329), (73, 34365), (86, 34446), (87, 34449), (96, 34512),

Gene: Boehler_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Boehler_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Boyle_35 Start: 34403, Stop: 34792, Start Num: 41

Candidate Starts for Boyle_35:

(32, 34262), (35, 34298), (Start: 41 @34403 has 278 MA's), (48, 34442), (55, 34478), (64, 34553), (68, 34589), (72, 34616), (76, 34652), (83, 34688), (84, 34691), (92, 34748), (99, 34781),

Gene: Brilliant_35 Start: 33668, Stop: 34054, Start Num: 41

Candidate Starts for Brilliant_35:

(32, 33527), (35, 33563), (Start: 41 @33668 has 278 MA's), (48, 33707), (55, 33743), (56, 33746), (68, 33854), (72, 33881), (83, 33953), (92, 34013),

Gene: BrownCNA_33 Start: 34440, Stop: 34793, Start Num: 45

Candidate Starts for BrownCNA_33:

(Start: 45 @34440 has 22 MA's), (48, 34461), (53, 34488), (66, 34590), (73, 34626), (74, 34653), (86, 34707), (96, 34773),

Gene: Brownie5_35 Start: 34409, Stop: 34798, Start Num: 41

Candidate Starts for Brownie5_35:

(32, 34268), (35, 34304), (Start: 41 @34409 has 278 MA's), (48, 34448), (55, 34484), (64, 34559), (68, 34595), (72, 34622), (76, 34658), (83, 34694), (84, 34697), (92, 34754), (99, 34787),

Gene: Buckeye_35 Start: 33980, Stop: 34366, Start Num: 41

Candidate Starts for Buckeye_35:

(32, 33839), (35, 33875), (Start: 41 @33980 has 278 MA's), (48, 34019), (55, 34055), (56, 34058), (68, 34166), (72, 34193), (83, 34265), (92, 34325),

Gene: Burr_34 Start: 33657, Stop: 34043, Start Num: 41

Candidate Starts for Burr_34:

(32, 33516), (35, 33552), (Start: 41 @33657 has 278 MA's), (48, 33696), (55, 33732), (56, 33735), (68, 33843), (72, 33870), (83, 33942), (92, 34002),

Gene: CRB2_37 Start: 36313, Stop: 36672, Start Num: 43

Candidate Starts for CRB2_37:

(Start: 43 @36313 has 5 MA's), (58, 36385), (88, 36613), (89, 36622), (95, 36646),

Gene: Calamitous_35 Start: 34289, Stop: 34678, Start Num: 41

Candidate Starts for Calamitous_35:

(32, 34148), (35, 34184), (Start: 41 @34289 has 278 MA's), (48, 34328), (55, 34364), (64, 34439), (68, 34475), (72, 34502), (76, 34538), (83, 34574), (84, 34577), (92, 34634), (99, 34667),

Gene: CamL_35 Start: 33958, Stop: 34344, Start Num: 41

Candidate Starts for CamL_35:

(32, 33817), (35, 33853), (Start: 41 @33958 has 278 MA's), (48, 33997), (55, 34033), (56, 34036), (68, 34144), (72, 34171), (83, 34243), (92, 34303),

Gene: CampRoach_34 Start: 33948, Stop: 34334, Start Num: 41

Candidate Starts for CampRoach_34:

(32, 33807), (35, 33843), (Start: 41 @33948 has 278 MA's), (48, 33987), (55, 34023), (56, 34026), (68, 34134), (72, 34161), (83, 34233), (92, 34293),

Gene: Cannibal_35 Start: 33941, Stop: 34327, Start Num: 41

Candidate Starts for Cannibal_35:

(32, 33800), (35, 33836), (Start: 41 @33941 has 278 MA's), (48, 33980), (55, 34016), (56, 34019), (68, 34127), (72, 34154), (83, 34226), (92, 34286),

Gene: Carthage_33 Start: 32870, Stop: 33256, Start Num: 41

Candidate Starts for Carthage_33:

(32, 32729), (35, 32765), (Start: 41 @32870 has 278 MA's), (48, 32909), (55, 32945), (56, 32948), (68, 33056), (72, 33083), (83, 33155), (92, 33215),

Gene: Chaelin_35 Start: 33655, Stop: 34041, Start Num: 41

Candidate Starts for Chaelin_35:

(32, 33514), (35, 33550), (Start: 41 @33655 has 278 MA's), (48, 33694), (55, 33730), (56, 33733), (68, 33841), (72, 33868), (83, 33940), (92, 34000),

Gene: Chah_36 Start: 33975, Stop: 34361, Start Num: 41

Candidate Starts for Chah_36:

(32, 33834), (35, 33870), (Start: 41 @33975 has 278 MA's), (48, 34014), (55, 34050), (56, 34053), (68, 34161), (72, 34188), (83, 34260), (92, 34320),

Gene: Charles1_35 Start: 33943, Stop: 34329, Start Num: 41

Candidate Starts for Charles1_35:

(32, 33802), (35, 33838), (Start: 41 @33943 has 278 MA's), (48, 33982), (55, 34018), (56, 34021), (68, 34129), (72, 34156), (83, 34228), (92, 34288),

Gene: CharlieGBrown_34 Start: 33533, Stop: 33919, Start Num: 41

Candidate Starts for CharlieGBrown_34:

(32, 33392), (35, 33428), (Start: 41 @33533 has 278 MA's), (48, 33572), (55, 33608), (56, 33611), (68, 33719), (72, 33746), (83, 33818), (92, 33878),

Gene: CheetO_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for CheetO_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Cher_34 Start: 33680, Stop: 34066, Start Num: 41

Candidate Starts for Cher_34:

(32, 33539), (35, 33575), (Start: 41 @33680 has 278 MA's), (48, 33719), (55, 33755), (56, 33758), (68, 33866), (72, 33893), (83, 33965), (92, 34025),

Gene: Childish_34 Start: 33683, Stop: 34069, Start Num: 41

Candidate Starts for Childish_34:

(32, 33542), (35, 33578), (Start: 41 @33683 has 278 MA's), (48, 33722), (55, 33758), (56, 33761), (68, 33869), (72, 33896), (83, 33968), (92, 34028),

Gene: Chorkpop_35 Start: 33679, Stop: 34065, Start Num: 41

Candidate Starts for Chorkpop_35:

(32, 33538), (35, 33574), (Start: 41 @33679 has 278 MA's), (48, 33718), (55, 33754), (56, 33757), (68, 33865), (72, 33892), (83, 33964), (92, 34024),

Gene: ChrisnMich_31 Start: 33140, Stop: 33493, Start Num: 45

Candidate Starts for ChrisnMich_31:

(Start: 45 @33140 has 22 MA's), (48, 33161), (53, 33188), (66, 33290), (73, 33326), (86, 33407), (87, 33410), (96, 33473),

Gene: Chunky_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for Chunky_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: Chute_34 Start: 34004, Stop: 34390, Start Num: 41

Candidate Starts for Chute_34:

(32, 33863), (35, 33899), (Start: 41 @34004 has 278 MA's), (48, 34043), (55, 34079), (56, 34082), (68, 34190), (72, 34217), (83, 34289), (92, 34349),

Gene: Cobra_35 Start: 33964, Stop: 34350, Start Num: 41

Candidate Starts for Cobra_35:

(32, 33823), (35, 33859), (Start: 41 @33964 has 278 MA's), (48, 34003), (55, 34039), (56, 34042), (68, 34150), (72, 34177), (83, 34249), (92, 34309),

Gene: Coffee_35 Start: 34392, Stop: 34781, Start Num: 41

Candidate Starts for Coffee_35:

(32, 34251), (35, 34287), (Start: 41 @34392 has 278 MA's), (48, 34431), (55, 34467), (64, 34542), (68, 34578), (72, 34605), (76, 34641), (83, 34677), (84, 34680), (92, 34737), (99, 34770),

Gene: Colbert_35 Start: 34019, Stop: 34405, Start Num: 41

Candidate Starts for Colbert_35:

(32, 33878), (35, 33914), (Start: 41 @34019 has 278 MA's), (48, 34058), (55, 34094), (56, 34097), (68, 34205), (72, 34232), (83, 34304), (92, 34364),

Gene: Coletti_34 Start: 34004, Stop: 34390, Start Num: 41

Candidate Starts for Coletti_34:

(32, 33863), (35, 33899), (Start: 41 @34004 has 278 MA's), (48, 34043), (55, 34079), (56, 34082), (68, 34190), (72, 34217), (83, 34289), (92, 34349),

Gene: Cooper_32 Start: 33361, Stop: 33711, Start Num: 45

Candidate Starts for Cooper_32:

(Start: 45 @33361 has 22 MA's), (48, 33382), (53, 33409), (73, 33544), (86, 33625), (96, 33691),

Gene: Cornobble_34 Start: 33518, Stop: 33904, Start Num: 41

Candidate Starts for Cornobble_34:

(32, 33377), (35, 33413), (Start: 41 @33518 has 278 MA's), (48, 33557), (55, 33593), (56, 33596), (68, 33704), (72, 33731), (83, 33803), (92, 33863),

Gene: Cosmolli16_34 Start: 33668, Stop: 34054, Start Num: 41

Candidate Starts for Cosmolli16_34:

(32, 33527), (35, 33563), (Start: 41 @33668 has 278 MA's), (48, 33707), (55, 33743), (56, 33746), (68, 33854), (72, 33881), (83, 33953), (92, 34013),

Gene: Craff_35 Start: 33961, Stop: 34347, Start Num: 41

Candidate Starts for Craff_35:

(32, 33820), (35, 33856), (Start: 41 @33961 has 278 MA's), (48, 34000), (55, 34036), (56, 34039), (68, 34147), (72, 34174), (83, 34246), (92, 34306),

Gene: Crownjwl_35 Start: 33734, Stop: 34120, Start Num: 41

Candidate Starts for Crownjwl_35:

(32, 33593), (35, 33629), (Start: 41 @33734 has 278 MA's), (48, 33773), (55, 33809), (56, 33812), (68, 33920), (72, 33947), (83, 34019), (92, 34079),

Gene: DaddyDaniels_35 Start: 33652, Stop: 34038, Start Num: 41

Candidate Starts for DaddyDaniels_35:

(32, 33511), (35, 33547), (Start: 41 @33652 has 278 MA's), (48, 33691), (55, 33727), (56, 33730), (68, 33838), (72, 33865), (83, 33937), (92, 33997),

Gene: Daffy_35 Start: 33683, Stop: 34069, Start Num: 41

Candidate Starts for Daffy_35:

(32, 33542), (35, 33578), (Start: 41 @33683 has 278 MA's), (48, 33722), (55, 33758), (56, 33761), (68, 33869), (72, 33896), (83, 33968), (92, 34028),

Gene: Daka_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for Daka_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Dati_35 Start: 33677, Stop: 34063, Start Num: 41

Candidate Starts for Dati_35:

(32, 33536), (35, 33572), (Start: 41 @33677 has 278 MA's), (48, 33716), (55, 33752), (56, 33755), (68, 33863), (72, 33890), (83, 33962), (92, 34022),

Gene: DelRivs_34 Start: 33678, Stop: 34064, Start Num: 41

Candidate Starts for DelRivs_34:

(32, 33537), (35, 33573), (Start: 41 @33678 has 278 MA's), (48, 33717), (55, 33753), (56, 33756), (68, 33864), (72, 33891), (83, 33963), (92, 34023),

Gene: Derpp_34 Start: 33522, Stop: 33908, Start Num: 41

Candidate Starts for Derpp_34:

(32, 33381), (35, 33417), (Start: 41 @33522 has 278 MA's), (48, 33561), (55, 33597), (56, 33600), (68, 33708), (72, 33735), (83, 33807), (92, 33867),

Gene: Dice_36 Start: 33657, Stop: 34043, Start Num: 41

Candidate Starts for Dice_36:

(32, 33516), (35, 33552), (Start: 41 @33657 has 278 MA's), (48, 33696), (55, 33732), (56, 33735), (68, 33843), (72, 33870), (83, 33942), (92, 34002),

Gene: Dingo_35 Start: 33940, Stop: 34326, Start Num: 41

Candidate Starts for Dingo_35:

(32, 33799), (35, 33835), (Start: 41 @33940 has 278 MA's), (48, 33979), (55, 34015), (56, 34018), (68, 34126), (72, 34153), (83, 34225), (92, 34285),

Gene: Dione_34 Start: 33662, Stop: 34048, Start Num: 41

Candidate Starts for Dione_34:

(32, 33521), (35, 33557), (Start: 41 @33662 has 278 MA's), (48, 33701), (55, 33737), (56, 33740), (68, 33848), (72, 33875), (83, 33947), (92, 34007),

Gene: DirtJuice_35 Start: 33946, Stop: 34332, Start Num: 41

Candidate Starts for DirtJuice_35:

(32, 33805), (35, 33841), (Start: 41 @33946 has 278 MA's), (48, 33985), (55, 34021), (56, 34024), (68, 34132), (72, 34159), (83, 34231), (92, 34291),

Gene: Doddsville_35 Start: 33676, Stop: 34062, Start Num: 41

Candidate Starts for Doddsville_35:

(32, 33535), (35, 33571), (Start: 41 @33676 has 278 MA's), (48, 33715), (55, 33751), (56, 33754), (68, 33862), (72, 33889), (83, 33961), (92, 34021),

Gene: DoesntMatter_35 Start: 33949, Stop: 34335, Start Num: 41

Candidate Starts for DoesntMatter_35:

(32, 33808), (35, 33844), (Start: 41 @33949 has 278 MA's), (48, 33988), (55, 34024), (56, 34027), (68, 34135), (72, 34162), (83, 34234), (92, 34294),

Gene: DonSanchon_34 Start: 33656, Stop: 34042, Start Num: 41

Candidate Starts for DonSanchon_34:

(32, 33515), (35, 33551), (Start: 41 @33656 has 278 MA's), (48, 33695), (55, 33731), (56, 33734), (68, 33842), (72, 33869), (83, 33941), (92, 34001),

Gene: DuchessDung_33 Start: 32813, Stop: 33199, Start Num: 41

Candidate Starts for DuchessDung_33:

(32, 32672), (35, 32708), (Start: 41 @32813 has 278 MA's), (48, 32852), (55, 32888), (56, 32891), (68, 32999), (72, 33026), (83, 33098), (92, 33158),

Gene: Duggie_34 Start: 33678, Stop: 34064, Start Num: 41

Candidate Starts for Duggie_34:

(32, 33537), (35, 33573), (Start: 41 @33678 has 278 MA's), (48, 33717), (55, 33753), (56, 33756), (68, 33864), (72, 33891), (83, 33963), (92, 34023),

Gene: Durga_35 Start: 33976, Stop: 34362, Start Num: 41

Candidate Starts for Durga_35:

(32, 33835), (35, 33871), (Start: 41 @33976 has 278 MA's), (48, 34015), (55, 34051), (56, 34054), (68, 34162), (72, 34189), (83, 34261), (92, 34321),

Gene: Eaglehorse_35 Start: 34316, Stop: 34705, Start Num: 41

Candidate Starts for Eaglehorse_35:

(32, 34175), (35, 34211), (Start: 41 @34316 has 278 MA's), (48, 34355), (55, 34391), (64, 34466), (68, 34502), (72, 34529), (76, 34565), (83, 34601), (84, 34604), (92, 34661), (99, 34694),

Gene: Emiris_35 Start: 33947, Stop: 34333, Start Num: 41

Candidate Starts for Emiris_35:

(32, 33806), (35, 33842), (Start: 41 @33947 has 278 MA's), (48, 33986), (55, 34022), (56, 34025), (68, 34133), (72, 34160), (83, 34232), (92, 34292),

Gene: EmpTee_35 Start: 33956, Stop: 34342, Start Num: 41

Candidate Starts for EmpTee_35:

(32, 33815), (35, 33851), (Start: 41 @33956 has 278 MA's), (48, 33995), (55, 34031), (56, 34034), (68, 34142), (72, 34169), (83, 34241), (92, 34301),

Gene: Eremos_35 Start: 33955, Stop: 34341, Start Num: 41

Candidate Starts for Eremos_35:

(32, 33814), (35, 33850), (Start: 41 @33955 has 278 MA's), (48, 33994), (55, 34030), (56, 34033), (68, 34141), (72, 34168), (83, 34240), (92, 34300),

Gene: Etaye_35 Start: 33946, Stop: 34332, Start Num: 41

Candidate Starts for Etaye_35:

(32, 33805), (35, 33841), (Start: 41 @33946 has 278 MA's), (48, 33985), (55, 34021), (56, 34024), (68, 34132), (72, 34159), (83, 34231), (92, 34291),

Gene: Eugenia_35 Start: 34043, Stop: 34351, Start Num: 56

Candidate Starts for Eugenia_35:

(32, 33824), (35, 33860), (Start: 41 @33965 has 278 MA's), (48, 34004), (55, 34040), (56, 34043), (68, 34151), (72, 34178), (83, 34250), (92, 34310),

Gene: Fang_35 Start: 33969, Stop: 34355, Start Num: 41

Candidate Starts for Fang_35:

(32, 33828), (35, 33864), (Start: 41 @33969 has 278 MA's), (48, 34008), (55, 34044), (56, 34047), (68, 34155), (72, 34182), (83, 34254), (92, 34314),

Gene: Faze9_35 Start: 34412, Stop: 34801, Start Num: 41

Candidate Starts for Faze9_35:

(32, 34271), (35, 34307), (Start: 41 @34412 has 278 MA's), (48, 34451), (68, 34598), (72, 34625), (76, 34661), (83, 34697), (84, 34700), (92, 34757), (99, 34790),

Gene: FlagStaff_25 Start: 24893, Stop: 25249, Start Num: 42

Candidate Starts for FlagStaff_25:

(Start: 42 @24893 has 5 MA's), (46, 24911), (48, 24929), (49, 24941), (50, 24947), (51, 24950), (60, 24995), (70, 25073), (80, 25121), (82, 25124), (85, 25157),

Gene: FluffyNinja_35 Start: 33962, Stop: 34348, Start Num: 41

Candidate Starts for FluffyNinja_35:

(32, 33821), (35, 33857), (Start: 41 @33962 has 278 MA's), (48, 34001), (55, 34037), (56, 34040), (68, 34148), (72, 34175), (83, 34247), (92, 34307),

Gene: Fortunato_32 Start: 34173, Stop: 34526, Start Num: 45

Candidate Starts for Fortunato_32:

(Start: 45 @34173 has 22 MA's), (48, 34194), (53, 34221), (66, 34323), (73, 34359), (86, 34440), (87, 34443), (96, 34506),

Gene: Fozzie_34 Start: 33978, Stop: 34364, Start Num: 41

Candidate Starts for Fozzie_34:

(32, 33837), (35, 33873), (Start: 41 @33978 has 278 MA's), (48, 34017), (55, 34053), (56, 34056), (68, 34164), (72, 34191), (83, 34263), (92, 34323),

Gene: Frankicide_35 Start: 33974, Stop: 34360, Start Num: 41

Candidate Starts for Frankicide_35:

(32, 33833), (35, 33869), (Start: 41 @33974 has 278 MA's), (48, 34013), (55, 34049), (56, 34052), (68, 34160), (72, 34187), (83, 34259), (92, 34319),

Gene: Frederick_32 Start: 34179, Stop: 34532, Start Num: 45

Candidate Starts for Frederick_32:

(Start: 45 @34179 has 22 MA's), (48, 34200), (53, 34227), (66, 34329), (73, 34365), (86, 34446), (87, 34449), (96, 34512),

Gene: FrenchFry_35 Start: 34406, Stop: 34795, Start Num: 41

Candidate Starts for FrenchFry_35:

(32, 34265), (35, 34301), (Start: 41 @34406 has 278 MA's), (48, 34445), (55, 34481), (64, 34556), (68, 34592), (72, 34619), (76, 34655), (83, 34691), (84, 34694), (92, 34751), (99, 34784),

Gene: Freya_34 Start: 33653, Stop: 34039, Start Num: 41

Candidate Starts for Freya_34:

(32, 33512), (35, 33548), (Start: 41 @33653 has 278 MA's), (48, 33692), (55, 33728), (56, 33731), (68, 33839), (72, 33866), (83, 33938), (92, 33998),

Gene: FriarPreacher_35 Start: 33980, Stop: 34366, Start Num: 41

Candidate Starts for FriarPreacher_35:

(32, 33839), (35, 33875), (Start: 41 @33980 has 278 MA's), (48, 34019), (55, 34055), (56, 34058), (68, 34166), (72, 34193), (83, 34265), (92, 34325),

Gene: Fringe_35 Start: 33945, Stop: 34331, Start Num: 41

Candidate Starts for Fringe_35:

(32, 33804), (35, 33840), (Start: 41 @33945 has 278 MA's), (48, 33984), (55, 34020), (56, 34023), (68, 34131), (72, 34158), (83, 34230), (92, 34290),

Gene: FugateOSU_34 Start: 33658, Stop: 34044, Start Num: 41

Candidate Starts for FugateOSU_34:

(32, 33517), (35, 33553), (Start: 41 @33658 has 278 MA's), (48, 33697), (55, 33733), (56, 33736), (68, 33844), (72, 33871), (83, 33943), (92, 34003),

Gene: Funsized_37 Start: 36735, Stop: 37109, Start Num: 41

Candidate Starts for Funsized_37:

(1, 35826), (2, 35841), (3, 35844), (4, 35868), (5, 35871), (6, 35910), (7, 35973), (8, 35976), (10, 36006), (12, 36105), (17, 36225), (18, 36234), (19, 36237), (20, 36252), (23, 36267), (27, 36276), (29, 36369), (31, 36510), (32, 36600), (35, 36630), (Start: 41 @36735 has 278 MA's), (51, 36801), (69, 36927), (74, 36963), (83, 37005), (86, 37017), (91, 37062), (92, 37065), (96, 37083), (98, 37095),

Gene: Gareth_34 Start: 33661, Stop: 34047, Start Num: 41

Candidate Starts for Gareth_34:

(32, 33520), (35, 33556), (Start: 41 @33661 has 278 MA's), (48, 33700), (55, 33736), (56, 33739), (68, 33847), (72, 33874), (83, 33946), (92, 34006),

Gene: GeneCoco_35 Start: 33970, Stop: 34356, Start Num: 41

Candidate Starts for GeneCoco_35:

(32, 33829), (35, 33865), (Start: 41 @33970 has 278 MA's), (48, 34009), (55, 34045), (56, 34048), (68, 34156), (72, 34183), (83, 34255), (92, 34315),

Gene: Giraffe_35 Start: 33664, Stop: 34050, Start Num: 41

Candidate Starts for Giraffe_35:

(32, 33523), (35, 33559), (Start: 41 @33664 has 278 MA's), (48, 33703), (55, 33739), (56, 33742), (68, 33850), (72, 33877), (83, 33949), (92, 34009),

Gene: Glass_35 Start: 34406, Stop: 34795, Start Num: 41

Candidate Starts for Glass_35:

(32, 34265), (35, 34301), (Start: 41 @34406 has 278 MA's), (48, 34445), (55, 34481), (64, 34556), (68, 34592), (72, 34619), (76, 34655), (83, 34691), (84, 34694), (92, 34751), (99, 34784),

Gene: GodPhather_28 Start: 31802, Stop: 32191, Start Num: 41

Candidate Starts for GodPhather_28:

(32, 31661), (35, 31697), (Start: 41 @31802 has 278 MA's), (48, 31841), (68, 31988), (72, 32015), (76, 32051), (83, 32087), (84, 32090), (92, 32147), (99, 32180),

Gene: Gophee_35 Start: 33947, Stop: 34333, Start Num: 41

Candidate Starts for Gophee_35:

(32, 33806), (35, 33842), (Start: 41 @33947 has 278 MA's), (48, 33986), (55, 34022), (56, 34025), (68, 34133), (72, 34160), (83, 34232), (92, 34292),

Gene: Grand2040_34 Start: 33679, Stop: 34065, Start Num: 41

Candidate Starts for Grand2040_34:

(32, 33538), (35, 33574), (Start: 41 @33679 has 278 MA's), (48, 33718), (55, 33754), (56, 33757), (68, 33865), (72, 33892), (83, 33964), (92, 34024),

Gene: Gwilliam_35 Start: 34037, Stop: 34345, Start Num: 56

Candidate Starts for Gwilliam_35:

(32, 33818), (35, 33854), (Start: 41 @33959 has 278 MA's), (48, 33998), (55, 34034), (56, 34037), (68, 34145), (72, 34172), (83, 34244), (92, 34304),

Gene: Gyarad_0035 Start: 33961, Stop: 34347, Start Num: 41

Candidate Starts for Gyarad_0035:

(32, 33820), (35, 33856), (Start: 41 @33961 has 278 MA's), (48, 34000), (55, 34036), (56, 34039), (68, 34147), (72, 34174), (83, 34246), (92, 34306),

Gene: HSavage_35 Start: 33965, Stop: 34351, Start Num: 41

Candidate Starts for HSavage_35:

(32, 33824), (35, 33860), (Start: 41 @33965 has 278 MA's), (48, 34004), (55, 34040), (56, 34043), (68, 34151), (72, 34178), (83, 34250), (92, 34310),

Gene: Haimas_35 Start: 33956, Stop: 34342, Start Num: 41

Candidate Starts for Haimas_35:

(32, 33815), (35, 33851), (Start: 41 @33956 has 278 MA's), (48, 33995), (55, 34031), (56, 34034), (68, 34142), (72, 34169), (83, 34241), (92, 34301),

Gene: Haleema_34 Start: 33679, Stop: 34065, Start Num: 41

Candidate Starts for Haleema_34:

(32, 33538), (35, 33574), (Start: 41 @33679 has 278 MA's), (48, 33718), (55, 33754), (56, 33757), (68, 33865), (72, 33892), (83, 33964), (92, 34024),

Gene: Hamish_35 Start: 33948, Stop: 34334, Start Num: 41

Candidate Starts for Hamish_35:

(32, 33807), (35, 33843), (Start: 41 @33948 has 278 MA's), (48, 33987), (55, 34023), (56, 34026), (68, 34134), (72, 34161), (83, 34233), (92, 34293),

Gene: Hangman_32 Start: 34171, Stop: 34524, Start Num: 45

Candidate Starts for Hangman_32:

(Start: 45 @34171 has 22 MA's), (48, 34192), (53, 34219), (66, 34321), (73, 34357), (86, 34438), (87, 34441), (96, 34504),

Gene: Hartsy_34 Start: 33999, Stop: 34385, Start Num: 41

Candidate Starts for Hartsy_34:

(32, 33858), (35, 33894), (Start: 41 @33999 has 278 MA's), (48, 34038), (55, 34074), (56, 34077), (68, 34185), (72, 34212), (83, 34284), (92, 34344),

Gene: Harvey_35 Start: 33974, Stop: 34360, Start Num: 41

Candidate Starts for Harvey_35:

(32, 33833), (35, 33869), (Start: 41 @33974 has 278 MA's), (48, 34013), (55, 34049), (56, 34052), (68, 34160), (72, 34187), (83, 34259), (92, 34319),

Gene: Hashim76_38 Start: 33076, Stop: 33447, Start Num: 40

Candidate Starts for Hashim76_38:

(Start: 40 @33076 has 1 MA's), (81, 33316), (86, 33355), (87, 33358),

Gene: Heath_31 Start: 33778, Stop: 34131, Start Num: 45

Candidate Starts for Heath_31:

(Start: 45 @33778 has 22 MA's), (48, 33799), (53, 33826), (73, 33964), (74, 33991), (86, 34045), (87, 34048), (96, 34111),

Gene: Hedgerow_35 Start: 34388, Stop: 34777, Start Num: 41

Candidate Starts for Hedgerow_35:

(32, 34247), (35, 34283), (Start: 41 @34388 has 278 MA's), (48, 34427), (55, 34463), (64, 34538), (68, 34574), (72, 34601), (76, 34637), (83, 34673), (84, 34676), (92, 34733), (99, 34766),

Gene: Held_35 Start: 33663, Stop: 34049, Start Num: 41

Candidate Starts for Held_35:

(32, 33522), (35, 33558), (Start: 41 @33663 has 278 MA's), (48, 33702), (55, 33738), (56, 33741), (68, 33849), (72, 33876), (83, 33948), (92, 34008),

Gene: HenryJackson_34 Start: 33679, Stop: 34065, Start Num: 41

Candidate Starts for HenryJackson_34:

(32, 33538), (35, 33574), (Start: 41 @33679 has 278 MA's), (48, 33718), (55, 33754), (56, 33757), (68, 33865), (72, 33892), (83, 33964), (92, 34024),

Gene: Hertubise_35 Start: 33970, Stop: 34356, Start Num: 41

Candidate Starts for Hertubise_35:

(32, 33829), (35, 33865), (Start: 41 @33970 has 278 MA's), (48, 34009), (55, 34045), (56, 34048), (68, 34156), (72, 34183), (83, 34255), (92, 34315),

Gene: Hetaeria_35 Start: 33972, Stop: 34358, Start Num: 41

Candidate Starts for Hetaeria_35:

(32, 33831), (35, 33867), (Start: 41 @33972 has 278 MA's), (48, 34011), (55, 34047), (56, 34050), (68, 34158), (72, 34185), (83, 34257), (92, 34317),

Gene: HighStump_34 Start: 33662, Stop: 34048, Start Num: 41

Candidate Starts for HighStump_34:

(32, 33521), (35, 33557), (Start: 41 @33662 has 278 MA's), (48, 33701), (55, 33737), (56, 33740), (68, 33848), (72, 33875), (83, 33947), (92, 34007),

Gene: Hocus_34 Start: 33671, Stop: 34057, Start Num: 41

Candidate Starts for Hocus_34:

(32, 33530), (35, 33566), (Start: 41 @33671 has 278 MA's), (48, 33710), (55, 33746), (56, 33749), (68, 33857), (72, 33884), (83, 33956), (92, 34016),

Gene: Holeinone_35 Start: 34268, Stop: 34657, Start Num: 41

Candidate Starts for Holeinone_35:

(32, 34127), (35, 34163), (Start: 41 @34268 has 278 MA's), (48, 34307), (55, 34343), (64, 34418), (68, 34454), (72, 34481), (76, 34517), (83, 34553), (84, 34556), (92, 34613), (99, 34646),

Gene: Horchata_35 Start: 33950, Stop: 34336, Start Num: 41

Candidate Starts for Horchata_35:

(32, 33809), (35, 33845), (Start: 41 @33950 has 278 MA's), (48, 33989), (55, 34025), (56, 34028), (68, 34136), (72, 34163), (83, 34235), (92, 34295),

Gene: Hosp_027 Start: 29891, Stop: 30271, Start Num: 44

Candidate Starts for Hosp_027:

(Start: 44 @29891 has 2 MA's), (48, 29921), (49, 29933), (55, 29957), (61, 30002), (62, 30017), (68, 30071), (71, 30092), (78, 30137), (89, 30224), (92, 30233), (94, 30245), (97, 30260), (98, 30263),

Gene: Hydro_32 Start: 34188, Stop: 34541, Start Num: 45

Candidate Starts for Hydro_32:

(Start: 45 @34188 has 22 MA's), (48, 34209), (53, 34236), (66, 34338), (73, 34374), (86, 34455), (87, 34458), (96, 34521),

Gene: ImtiyazSitla_34 Start: 33513, Stop: 33899, Start Num: 41

Candidate Starts for ImtiyazSitla_34:

(32, 33372), (35, 33408), (Start: 41 @33513 has 278 MA's), (48, 33552), (55, 33588), (56, 33591), (68, 33699), (72, 33726), (83, 33798), (92, 33858),

Gene: Imvubu_28 Start: 30831, Stop: 31232, Start Num: 38

Candidate Starts for Imvubu_28:

(Start: 38 @30831 has 2 MA's), (59, 30945), (65, 30999), (68, 31020), (73, 31050), (75, 31080), (81, 31092), (84, 31122), (88, 31161), (93, 31185),

Gene: Inchworm_35 Start: 33948, Stop: 34334, Start Num: 41

Candidate Starts for Inchworm_35:

(32, 33807), (35, 33843), (Start: 41 @33948 has 278 MA's), (48, 33987), (55, 34023), (56, 34026), (68, 34134), (72, 34161), (83, 34233), (92, 34293),

Gene: Indlovu_32 Start: 33079, Stop: 33447, Start Num: 43

Candidate Starts for Indlovu_32:

(37, 33013), (Start: 43 @33079 has 5 MA's), (58, 33151), (84, 33343), (88, 33382), (95, 33415),

Gene: Inverness_35 Start: 33962, Stop: 34348, Start Num: 41

Candidate Starts for Inverness_35:

(32, 33821), (35, 33857), (Start: 41 @33962 has 278 MA's), (48, 34001), (55, 34037), (56, 34040), (68, 34148), (72, 34175), (83, 34247), (92, 34307),

Gene: Iridoclysis_35 Start: 33942, Stop: 34328, Start Num: 41

Candidate Starts for Iridoclysis_35:

(32, 33801), (35, 33837), (Start: 41 @33942 has 278 MA's), (48, 33981), (55, 34017), (56, 34020), (68, 34128), (72, 34155), (83, 34227), (92, 34287),

Gene: IsaacEli_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for IsaacEli_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: ItsyBitsy1_35 Start: 34270, Stop: 34659, Start Num: 41

Candidate Starts for ItsyBitsy1_35:

(32, 34129), (35, 34165), (Start: 41 @34270 has 278 MA's), (48, 34309), (55, 34345), (64, 34420), (68, 34456), (72, 34483), (76, 34519), (83, 34555), (84, 34558), (92, 34615), (99, 34648),

Gene: JAMaL_32 Start: 34359, Stop: 34712, Start Num: 45

Candidate Starts for JAMaL_32:

(Start: 45 @34359 has 22 MA's), (48, 34380), (53, 34407), (66, 34509), (73, 34545), (86, 34626), (87, 34629), (96, 34692),

Gene: JDog_35 Start: 33679, Stop: 34065, Start Num: 41

Candidate Starts for JDog_35:

(32, 33538), (35, 33574), (Start: 41 @33679 has 278 MA's), (48, 33718), (55, 33754), (56, 33757), (68, 33865), (72, 33892), (83, 33964), (92, 34024),

Gene: JacAttac_35 Start: 33948, Stop: 34334, Start Num: 41

Candidate Starts for JacAttac_35:

(32, 33807), (35, 33843), (Start: 41 @33948 has 278 MA's), (48, 33987), (55, 34023), (56, 34026), (68, 34134), (72, 34161), (83, 34233), (92, 34293),

Gene: JaguarMi_32 Start: 33653, Stop: 34006, Start Num: 45

Candidate Starts for JaguarMi_32:

(Start: 45 @33653 has 22 MA's), (48, 33674), (53, 33701), (66, 33803), (73, 33839), (86, 33920), (87, 33923), (96, 33986),

Gene: JakeO_34 Start: 33681, Stop: 34067, Start Num: 41

Candidate Starts for JakeO_34:

(32, 33540), (35, 33576), (Start: 41 @33681 has 278 MA's), (48, 33720), (55, 33756), (56, 33759), (68, 33867), (72, 33894), (83, 33966), (92, 34026),

Gene: JangoPhett_35 Start: 33950, Stop: 34336, Start Num: 41

Candidate Starts for JangoPhett_35:

(32, 33809), (35, 33845), (Start: 41 @33950 has 278 MA's), (48, 33989), (55, 34025), (56, 34028), (68, 34136), (72, 34163), (83, 34235), (92, 34295),

Gene: Jeon_27 Start: 31544, Stop: 31933, Start Num: 41

Candidate Starts for Jeon_27:

(32, 31403), (35, 31439), (Start: 41 @31544 has 278 MA's), (48, 31583), (68, 31730), (72, 31757), (76, 31793), (83, 31829), (84, 31832), (92, 31889), (99, 31922),

Gene: Jillium_34 Start: 33672, Stop: 34058, Start Num: 41

Candidate Starts for Jillium_34:

(32, 33531), (35, 33567), (Start: 41 @33672 has 278 MA's), (48, 33711), (55, 33747), (56, 33750), (68, 33858), (72, 33885), (83, 33957), (92, 34017),

Gene: Jiminy_34 Start: 33516, Stop: 33902, Start Num: 41

Candidate Starts for Jiminy_34:

(32, 33375), (35, 33411), (Start: 41 @33516 has 278 MA's), (48, 33555), (55, 33591), (56, 33594), (68, 33702), (72, 33729), (83, 33801), (92, 33861),

Gene: Jiraiya_35 Start: 33744, Stop: 34055, Start Num: 55

Candidate Starts for Jiraiya_35:

(32, 33528), (35, 33564), (Start: 41 @33669 has 278 MA's), (48, 33708), (55, 33744), (56, 33747), (68, 33855), (72, 33882), (83, 33954), (92, 34014),

Gene: Jolie1_029 Start: 31678, Stop: 32058, Start Num: 44

Candidate Starts for Jolie1_029:

(Start: 44 @31678 has 2 MA's), (48, 31708), (49, 31720), (55, 31744), (61, 31789), (62, 31804), (68, 31858), (71, 31879), (78, 31924), (89, 32011), (92, 32020), (94, 32032), (97, 32047), (98, 32050),

Gene: KLucky39_35 Start: 33960, Stop: 34346, Start Num: 41

Candidate Starts for KLucky39_35:

(32, 33819), (35, 33855), (Start: 41 @33960 has 278 MA's), (48, 33999), (55, 34035), (56, 34038), (68, 34146), (72, 34173), (83, 34245), (92, 34305),

Gene: Kahve_34 Start: 33676, Stop: 34062, Start Num: 41

Candidate Starts for Kahve_34:

(32, 33535), (35, 33571), (Start: 41 @33676 has 278 MA's), (48, 33715), (55, 33751), (56, 33754), (68, 33862), (72, 33889), (83, 33961), (92, 34021),

Gene: Kailash_35 Start: 34014, Stop: 34400, Start Num: 41

Candidate Starts for Kailash_35:

(32, 33873), (35, 33909), (Start: 41 @34014 has 278 MA's), (48, 34053), (55, 34089), (56, 34092), (68, 34200), (72, 34227), (83, 34299), (92, 34359),

Gene: Kaleb_35 Start: 34478, Stop: 34792, Start Num: 55

Candidate Starts for Kaleb_35:

(32, 34262), (35, 34298), (Start: 41 @34403 has 278 MA's), (48, 34442), (55, 34478), (64, 34553), (68, 34589), (72, 34616), (76, 34652), (83, 34688), (84, 34691), (92, 34748), (99, 34781),

Gene: Katniss_35 Start: 33975, Stop: 34361, Start Num: 41

Candidate Starts for Katniss_35:

(32, 33834), (35, 33870), (Start: 41 @33975 has 278 MA's), (48, 34014), (55, 34050), (56, 34053), (68, 34161), (72, 34188), (83, 34260), (92, 34320),

Gene: KayaCho_29 Start: 31674, Stop: 32054, Start Num: 44

Candidate Starts for KayaCho_29:

(Start: 44 @31674 has 2 MA's), (48, 31704), (49, 31716), (55, 31740), (61, 31785), (62, 31800), (68, 31854), (71, 31875), (78, 31920), (89, 32007), (92, 32016), (94, 32028), (97, 32043), (98, 32046),

Gene: Keitherie_35 Start: 34013, Stop: 34399, Start Num: 41

Candidate Starts for Keitherie_35:

(32, 33872), (35, 33908), (Start: 41 @34013 has 278 MA's), (48, 34052), (55, 34088), (56, 34091), (68, 34199), (72, 34226), (83, 34298), (92, 34358),

Gene: Kheth_35 Start: 34291, Stop: 34680, Start Num: 41

Candidate Starts for Kheth_35:

(32, 34150), (35, 34186), (Start: 41 @34291 has 278 MA's), (48, 34330), (55, 34366), (64, 34441), (68, 34477), (72, 34504), (76, 34540), (83, 34576), (84, 34579), (92, 34636), (99, 34669),

Gene: Kikipoo_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for Kikipoo_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: Kimbrough_35 Start: 33668, Stop: 34054, Start Num: 41

Candidate Starts for Kimbrough_35:

(32, 33527), (35, 33563), (Start: 41 @33668 has 278 MA's), (48, 33707), (55, 33743), (56, 33746), (68, 33854), (72, 33881), (83, 33953), (92, 34013),

Gene: KingTut_26 Start: 29337, Stop: 29723, Start Num: 41

Candidate Starts for KingTut_26:

(32, 29196), (35, 29232), (Start: 41 @29337 has 278 MA's), (48, 29376), (55, 29412), (56, 29415), (68, 29523), (72, 29550), (83, 29622), (92, 29682),

Gene: KingVeVeVe_35 Start: 33941, Stop: 34327, Start Num: 41

Candidate Starts for KingVeVeVe_35:

(32, 33800), (35, 33836), (Start: 41 @33941 has 278 MA's), (48, 33980), (55, 34016), (56, 34019), (68, 34127), (72, 34154), (83, 34226), (92, 34286),

Gene: KlimbOn_35 Start: 33954, Stop: 34340, Start Num: 41

Candidate Starts for KlimbOn_35:

(32, 33813), (35, 33849), (Start: 41 @33954 has 278 MA's), (48, 33993), (55, 34029), (56, 34032), (68, 34140), (72, 34167), (83, 34239), (92, 34299),

Gene: Kloppinator_35 Start: 33977, Stop: 34363, Start Num: 41

Candidate Starts for Kloppinator_35:

(32, 33836), (35, 33872), (Start: 41 @33977 has 278 MA's), (48, 34016), (55, 34052), (56, 34055), (68, 34163), (72, 34190), (83, 34262), (92, 34322),

Gene: Knocker_36 Start: 35775, Stop: 36188, Start Num: 38

Candidate Starts for Knocker_36:

(Start: 38 @35775 has 2 MA's), (39, 35781), (49, 35853), (55, 35877), (59, 35901), (65, 35955), (68, 35976), (73, 36006), (81, 36048), (84, 36078), (87, 36090), (88, 36117),

Gene: Kwadwo_34 Start: 33658, Stop: 34044, Start Num: 41

Candidate Starts for Kwadwo_34:

(32, 33517), (35, 33553), (Start: 41 @33658 has 278 MA's), (48, 33697), (55, 33733), (56, 33736), (68, 33844), (72, 33871), (83, 33943), (92, 34003),

Gene: Kwksand96_34 Start: 33527, Stop: 33913, Start Num: 41

Candidate Starts for Kwksand96_34:

(32, 33386), (35, 33422), (Start: 41 @33527 has 278 MA's), (48, 33566), (55, 33602), (56, 33605), (68, 33713), (72, 33740), (83, 33812), (92, 33872),

Gene: Labeouficaum_34 Start: 33522, Stop: 33908, Start Num: 41

Candidate Starts for Labeouficaum_34:

(32, 33381), (35, 33417), (Start: 41 @33522 has 278 MA's), (48, 33561), (55, 33597), (56, 33600), (68, 33708), (72, 33735), (83, 33807), (92, 33867),

Gene: Lars_35 Start: 34393, Stop: 34782, Start Num: 41

Candidate Starts for Lars_35:

(32, 34252), (35, 34288), (Start: 41 @34393 has 278 MA's), (48, 34432), (55, 34468), (64, 34543), (68, 34579), (72, 34606), (76, 34642), (83, 34678), (84, 34681), (92, 34738), (99, 34771),

Gene: LasagnaCat_35 Start: 33960, Stop: 34346, Start Num: 41

Candidate Starts for LasagnaCat_35:

(32, 33819), (35, 33855), (Start: 41 @33960 has 278 MA's), (48, 33999), (55, 34035), (56, 34038), (68, 34146), (72, 34173), (83, 34245), (92, 34305),

Gene: Lasso_35 Start: 33933, Stop: 34319, Start Num: 41

Candidate Starts for Lasso_35:

(32, 33792), (35, 33828), (Start: 41 @33933 has 278 MA's), (48, 33972), (55, 34008), (56, 34011), (68, 34119), (72, 34146), (83, 34218), (92, 34278),

Gene: LeeLot_35 Start: 33964, Stop: 34350, Start Num: 41

Candidate Starts for LeeLot_35:

(32, 33823), (35, 33859), (Start: 41 @33964 has 278 MA's), (48, 34003), (55, 34039), (56, 34042), (68, 34150), (72, 34177), (83, 34249), (92, 34309),

Gene: Lego3393_35 Start: 33969, Stop: 34355, Start Num: 41

Candidate Starts for Lego3393_35:

(32, 33828), (35, 33864), (Start: 41 @33969 has 278 MA's), (48, 34008), (55, 34044), (56, 34047), (68, 34155), (72, 34182), (83, 34254), (92, 34314),

Gene: Legolas_34 Start: 33674, Stop: 34060, Start Num: 41

Candidate Starts for Legolas_34:

(32, 33533), (35, 33569), (Start: 41 @33674 has 278 MA's), (48, 33713), (55, 33749), (56, 33752), (68, 33860), (72, 33887), (83, 33959), (92, 34019),

Gene: LeiMonet_35 Start: 33665, Stop: 34051, Start Num: 41

Candidate Starts for LeiMonet_35:

(32, 33524), (35, 33560), (Start: 41 @33665 has 278 MA's), (48, 33704), (55, 33740), (56, 33743), (68, 33851), (72, 33878), (83, 33950), (92, 34010),

Gene: LemonSlice_35 Start: 33661, Stop: 34047, Start Num: 41

Candidate Starts for LemonSlice_35:

(32, 33520), (35, 33556), (Start: 41 @33661 has 278 MA's), (48, 33700), (55, 33736), (56, 33739), (68, 33847), (72, 33874), (83, 33946), (92, 34006),

Gene: Lephleur_35 Start: 34286, Stop: 34675, Start Num: 41

Candidate Starts for Lephleur_35:

(32, 34145), (35, 34181), (Start: 41 @34286 has 278 MA's), (48, 34325), (55, 34361), (64, 34436), (68, 34472), (72, 34499), (76, 34535), (83, 34571), (84, 34574), (92, 34631), (99, 34664),

Gene: LilMcDreamy_30 Start: 33312, Stop: 33695, Start Num: 44

Candidate Starts for LilMcDreamy_30:

(Start: 44 @33312 has 2 MA's), (48, 33342), (49, 33354), (55, 33378), (61, 33423), (62, 33438), (67, 33489), (68, 33492), (71, 33513), (73, 33522), (78, 33558), (88, 33636), (92, 33654), (94, 33666), (97, 33681),

Gene: LizLemon_35 Start: 34402, Stop: 34791, Start Num: 41

Candidate Starts for LizLemon_35:

(32, 34261), (35, 34297), (Start: 41 @34402 has 278 MA's), (48, 34441), (68, 34588), (72, 34615), (76, 34651), (83, 34687), (84, 34690), (92, 34747), (99, 34780),

Gene: Lolalove_32 Start: 34185, Stop: 34538, Start Num: 45

Candidate Starts for Lolalove_32:

(Start: 45 @34185 has 22 MA's), (48, 34206), (53, 34233), (66, 34335), (73, 34371), (86, 34452), (87, 34455), (96, 34518),

Gene: Longacauda_34 Start: 33666, Stop: 34052, Start Num: 41

Candidate Starts for Longacauda_34:

(32, 33525), (35, 33561), (Start: 41 @33666 has 278 MA's), (48, 33705), (55, 33741), (56, 33744), (68, 33852), (72, 33879), (83, 33951), (92, 34011),

Gene: Lopsy_34 Start: 33516, Stop: 33902, Start Num: 41

Candidate Starts for Lopsy_34:

(32, 33375), (35, 33411), (Start: 41 @33516 has 278 MA's), (48, 33555), (55, 33591), (56, 33594), (68, 33702), (72, 33729), (83, 33801), (92, 33861),

Gene: LostAndPhound_34 Start: 33667, Stop: 34053, Start Num: 41

Candidate Starts for LostAndPhound_34:

(32, 33526), (35, 33562), (Start: 41 @33667 has 278 MA's), (48, 33706), (55, 33742), (56, 33745), (68, 33853), (72, 33880), (83, 33952), (92, 34012),

Gene: LuckyMarjie_34 Start: 33676, Stop: 34062, Start Num: 41

Candidate Starts for LuckyMarjie_34:

(32, 33535), (35, 33571), (Start: 41 @33676 has 278 MA's), (48, 33715), (55, 33751), (56, 33754), (68, 33862), (72, 33889), (83, 33961), (92, 34021),

Gene: Lulumae_34 Start: 33658, Stop: 34044, Start Num: 41

Candidate Starts for Lulumae_34:

(32, 33517), (35, 33553), (Start: 41 @33658 has 278 MA's), (48, 33697), (55, 33733), (56, 33736), (68, 33844), (72, 33871), (83, 33943), (92, 34003),

Gene: Lulwa_35 Start: 33945, Stop: 34331, Start Num: 41

Candidate Starts for Lulwa_35:

(32, 33804), (35, 33840), (Start: 41 @33945 has 278 MA's), (48, 33984), (55, 34020), (56, 34023), (68, 34131), (72, 34158), (83, 34230), (92, 34290),

Gene: Lumine_34 Start: 33654, Stop: 34040, Start Num: 41

Candidate Starts for Lumine_34:

(32, 33513), (35, 33549), (Start: 41 @33654 has 278 MA's), (48, 33693), (55, 33729), (56, 33732), (68, 33840), (72, 33867), (83, 33939), (92, 33999),

Gene: MOOREtheMARYer_26 Start: 25062, Stop: 25418, Start Num: 42

Candidate Starts for MOOREtheMARYer_26:

(Start: 42 @25062 has 5 MA's), (47, 25089), (49, 25110), (51, 25119), (60, 25164), (70, 25242), (80, 25290), (82, 25293), (84, 25320), (85, 25326),

Gene: MRabcd_34 Start: 33658, Stop: 34044, Start Num: 41

Candidate Starts for MRabcd_34:

(32, 33517), (35, 33553), (Start: 41 @33658 has 278 MA's), (48, 33697), (55, 33733), (56, 33736), (68, 33844), (72, 33871), (83, 33943), (92, 34003),

Gene: Mag7_34 Start: 33564, Stop: 33950, Start Num: 41

Candidate Starts for Mag7_34:

(32, 33423), (35, 33459), (Start: 41 @33564 has 278 MA's), (48, 33603), (55, 33639), (56, 33642), (68, 33750), (72, 33777), (83, 33849), (92, 33909),

Gene: Magic8_35 Start: 33999, Stop: 34385, Start Num: 41

Candidate Starts for Magic8_35:

(32, 33858), (35, 33894), (Start: 41 @33999 has 278 MA's), (48, 34038), (55, 34074), (56, 34077), (68, 34185), (72, 34212), (83, 34284), (92, 34344),

Gene: Magpie_31 Start: 34021, Stop: 34374, Start Num: 45

Candidate Starts for Magpie_31:

(Start: 45 @34021 has 22 MA's), (48, 34042), (53, 34069), (66, 34171), (73, 34207), (86, 34288), (87, 34291), (96, 34354),

Gene: Mana_34 Start: 33673, Stop: 34059, Start Num: 41

Candidate Starts for Mana_34:

(32, 33532), (35, 33568), (Start: 41 @33673 has 278 MA's), (48, 33712), (55, 33748), (56, 33751), (68, 33859), (72, 33886), (83, 33958), (92, 34018),

Gene: Manad_34 Start: 33515, Stop: 33901, Start Num: 41

Candidate Starts for Manad_34:

(32, 33374), (35, 33410), (Start: 41 @33515 has 278 MA's), (48, 33554), (55, 33590), (56, 33593), (68, 33701), (72, 33728), (83, 33800), (92, 33860),

Gene: Maru_34 Start: 33616, Stop: 34002, Start Num: 41

Candidate Starts for Maru_34:

(32, 33475), (35, 33511), (Start: 41 @33616 has 278 MA's), (48, 33655), (55, 33691), (56, 33694), (68, 33802), (72, 33829), (83, 33901), (92, 33961),

Gene: Maskar_34 Start: 33513, Stop: 33899, Start Num: 41

Candidate Starts for Maskar_34:

(32, 33372), (35, 33408), (Start: 41 @33513 has 278 MA's), (48, 33552), (55, 33588), (56, 33591), (68, 33699), (72, 33726), (83, 33798), (92, 33858),

Gene: MasterPo_35 Start: 34289, Stop: 34678, Start Num: 41

Candidate Starts for MasterPo_35:

(32, 34148), (35, 34184), (Start: 41 @34289 has 278 MA's), (48, 34328), (55, 34364), (64, 34439), (68, 34475), (72, 34502), (76, 34538), (83, 34574), (84, 34577), (92, 34634), (99, 34667),

Gene: Matalotodo_34 Start: 33959, Stop: 34345, Start Num: 41

Candidate Starts for Matalotodo_34:

(32, 33818), (35, 33854), (Start: 41 @33959 has 278 MA's), (48, 33998), (55, 34034), (56, 34037), (68, 34145), (72, 34172), (83, 34244), (92, 34304),

Gene: Mcshane_34 Start: 33656, Stop: 34042, Start Num: 41

Candidate Starts for Mcshane_34:

(32, 33515), (35, 33551), (Start: 41 @33656 has 278 MA's), (48, 33695), (55, 33731), (56, 33734), (68, 33842), (72, 33869), (83, 33941), (92, 34001),

Gene: Mecca_34 Start: 33659, Stop: 34045, Start Num: 41

Candidate Starts for Mecca_34:

(32, 33518), (35, 33554), (Start: 41 @33659 has 278 MA's), (48, 33698), (55, 33734), (56, 33737), (68, 33845), (72, 33872), (83, 33944), (92, 34004),

Gene: Megamind20_35 Start: 33681, Stop: 34067, Start Num: 41

Candidate Starts for Megamind20_35:

(32, 33540), (35, 33576), (Start: 41 @33681 has 278 MA's), (48, 33720), (55, 33756), (56, 33759), (68, 33867), (72, 33894), (83, 33966), (92, 34026),

Gene: Megatron_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for Megatron_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Melc17_35 Start: 33954, Stop: 34340, Start Num: 41

Candidate Starts for Melc17_35:

(32, 33813), (35, 33849), (Start: 41 @33954 has 278 MA's), (48, 33993), (55, 34029), (56, 34032), (68, 34140), (72, 34167), (83, 34239), (92, 34299),

Gene: MelsMeow_34 Start: 33562, Stop: 33948, Start Num: 41

Candidate Starts for MelsMeow_34:

(32, 33421), (35, 33457), (Start: 41 @33562 has 278 MA's), (48, 33601), (55, 33637), (56, 33640), (68, 33748), (72, 33775), (83, 33847), (92, 33907),

Gene: Mesh1_35 Start: 33971, Stop: 34357, Start Num: 41

Candidate Starts for Mesh1_35:

(32, 33830), (35, 33866), (Start: 41 @33971 has 278 MA's), (48, 34010), (55, 34046), (56, 34049), (68, 34157), (72, 34184), (83, 34256), (92, 34316),

Gene: MichaelPhcott_34 Start: 33561, Stop: 33947, Start Num: 41

Candidate Starts for MichaelPhcott_34:

(32, 33420), (35, 33456), (Start: 41 @33561 has 278 MA's), (48, 33600), (55, 33636), (56, 33639), (68, 33747), (72, 33774), (83, 33846), (92, 33906),

Gene: Mikota_35 Start: 33944, Stop: 34330, Start Num: 41

Candidate Starts for Mikota_35:

(32, 33803), (35, 33839), (Start: 41 @33944 has 278 MA's), (48, 33983), (55, 34019), (56, 34022), (68, 34130), (72, 34157), (83, 34229), (92, 34289),

Gene: MiniBoss_35 Start: 33950, Stop: 34336, Start Num: 41

Candidate Starts for MiniBoss_35:

(32, 33809), (35, 33845), (Start: 41 @33950 has 278 MA's), (48, 33989), (55, 34025), (56, 34028), (68, 34136), (72, 34163), (83, 34235), (92, 34295),

Gene: MitKao_35 Start: 33665, Stop: 34051, Start Num: 41

Candidate Starts for MitKao_35:

(32, 33524), (35, 33560), (Start: 41 @33665 has 278 MA's), (48, 33704), (55, 33740), (56, 33743), (68, 33851), (72, 33878), (83, 33950), (92, 34010),

Gene: Mithril_32 Start: 34189, Stop: 34542, Start Num: 45

Candidate Starts for Mithril_32:

(Start: 45 @34189 has 22 MA's), (48, 34210), (53, 34237), (66, 34339), (73, 34375), (86, 34456), (87, 34459), (96, 34522),

Gene: Morgushi_35 Start: 33666, Stop: 34052, Start Num: 41

Candidate Starts for Morgushi_35:

(32, 33525), (35, 33561), (Start: 41 @33666 has 278 MA's), (48, 33705), (55, 33741), (56, 33744), (68, 33852), (72, 33879), (83, 33951), (92, 34011),

Gene: Morty_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for Morty_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: Mosaic_34 Start: 33671, Stop: 34057, Start Num: 41

Candidate Starts for Mosaic_34:

(32, 33530), (35, 33566), (Start: 41 @33671 has 278 MA's), (48, 33710), (55, 33746), (56, 33749), (68, 33857), (72, 33884), (83, 33956), (92, 34016),

Gene: MrPhizzler_34 Start: 33749, Stop: 34060, Start Num: 55

Candidate Starts for MrPhizzler_34:

(32, 33533), (35, 33569), (Start: 41 @33674 has 278 MA's), (48, 33713), (55, 33749), (56, 33752), (68, 33860), (72, 33887), (83, 33959), (92, 34019),

Gene: Mudslide_32 Start: 34421, Stop: 34774, Start Num: 45

Candidate Starts for Mudslide_32:

(Start: 45 @34421 has 22 MA's), (48, 34442), (53, 34469), (66, 34571), (73, 34607), (86, 34688), (87, 34691), (96, 34754),

Gene: Mulan_34 Start: 33683, Stop: 34069, Start Num: 41

Candidate Starts for Mulan_34:

(32, 33542), (35, 33578), (Start: 41 @33683 has 278 MA's), (48, 33722), (55, 33758), (56, 33761), (68, 33869), (72, 33896), (83, 33968), (92, 34028),

Gene: Murdoc_35 Start: 33958, Stop: 34344, Start Num: 41

Candidate Starts for Murdoc_35:

(32, 33817), (35, 33853), (Start: 41 @33958 has 278 MA's), (48, 33997), (55, 34033), (56, 34036), (68, 34144), (72, 34171), (83, 34243), (92, 34303),

Gene: Mutante_34 Start: 33665, Stop: 34051, Start Num: 41

Candidate Starts for Mutante_34:

(32, 33524), (35, 33560), (Start: 41 @33665 has 278 MA's), (48, 33704), (55, 33740), (56, 33743), (68, 33851), (72, 33878), (83, 33950), (92, 34010),

Gene: Nacho_0035 Start: 33960, Stop: 34346, Start Num: 41

Candidate Starts for Nacho_0035:

(32, 33819), (35, 33855), (Start: 41 @33960 has 278 MA's), (48, 33999), (55, 34035), (56, 34038), (68, 34146), (72, 34173), (83, 34245), (92, 34305),

Gene: Nanao_31 Start: 33147, Stop: 33500, Start Num: 45

Candidate Starts for Nanao_31:

(Start: 45 @33147 has 22 MA's), (48, 33168), (53, 33195), (66, 33297), (73, 33333), (86, 33414), (87, 33417), (96, 33480),

Gene: Newman_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for Newman_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Nicole21_35 Start: 33955, Stop: 34341, Start Num: 41

Candidate Starts for Nicole21_35:

(32, 33814), (35, 33850), (Start: 41 @33955 has 278 MA's), (48, 33994), (55, 34030), (56, 34033), (68, 34141), (72, 34168), (83, 34240), (92, 34300),

Gene: Nigel_30 Start: 33066, Stop: 33416, Start Num: 45

Candidate Starts for Nigel_30:

(Start: 45 @33066 has 22 MA's), (48, 33087), (53, 33114), (66, 33213), (79, 33285), (86, 33330), (96, 33396),

Gene: Numberten_35 Start: 33964, Stop: 34350, Start Num: 41

Candidate Starts for Numberten_35:

(32, 33823), (35, 33859), (Start: 41 @33964 has 278 MA's), (48, 34003), (55, 34039), (56, 34042), (68, 34150), (72, 34177), (83, 34249), (92, 34309),

Gene: Nyala_34 Start: 33657, Stop: 34043, Start Num: 41

Candidate Starts for Nyala_34:

(32, 33516), (35, 33552), (Start: 41 @33657 has 278 MA's), (48, 33696), (55, 33732), (56, 33735), (68, 33843), (72, 33870), (83, 33942), (92, 34002),

Gene: OSmaximus_35 Start: 33999, Stop: 34385, Start Num: 41

Candidate Starts for OSmaximus_35:

(32, 33858), (35, 33894), (Start: 41 @33999 has 278 MA's), (48, 34038), (55, 34074), (56, 34077), (68, 34185), (72, 34212), (83, 34284), (92, 34344),

Gene: Olak_35 Start: 33660, Stop: 34046, Start Num: 41

Candidate Starts for Olak_35:

(13, 33039), (16, 33123), (22, 33180), (25, 33189), (27, 33195), (32, 33519), (35, 33555), (Start: 41 @33660 has 278 MA's), (48, 33699), (55, 33735), (56, 33738), (68, 33846), (72, 33873), (83, 33945), (92, 34005),

Gene: Oline_34 Start: 33526, Stop: 33912, Start Num: 41

Candidate Starts for Oline_34:

(32, 33385), (35, 33421), (Start: 41 @33526 has 278 MA's), (48, 33565), (55, 33601), (56, 33604), (68, 33712), (72, 33739), (83, 33811), (92, 33871),

Gene: Olive_35 Start: 33947, Stop: 34333, Start Num: 41

Candidate Starts for Olive_35:

(32, 33806), (35, 33842), (Start: 41 @33947 has 278 MA's), (48, 33986), (55, 34022), (56, 34025), (68, 34133), (72, 34160), (83, 34232), (92, 34292),

Gene: OliverWalter_35 Start: 33969, Stop: 34355, Start Num: 41

Candidate Starts for OliverWalter_35:

(32, 33828), (35, 33864), (Start: 41 @33969 has 278 MA's), (48, 34008), (55, 34044), (56, 34047), (68, 34155), (72, 34182), (83, 34254), (92, 34314),

Gene: Omniscient_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for Omniscient_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: Oosterbaan_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for Oosterbaan_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Opia_35 Start: 34275, Stop: 34664, Start Num: 41

Candidate Starts for Opia_35:

(9, 33513), (11, 33630), (14, 33717), (15, 33738), (21, 33795), (24, 33804), (26, 33810), (28, 33816), (32, 34134), (35, 34170), (Start: 41 @34275 has 278 MA's), (48, 34314), (55, 34350), (64, 34425), (68,

34461), (72, 34488), (76, 34524), (83, 34560), (84, 34563), (92, 34620), (99, 34653),

Gene: Orfeu_34 Start: 33743, Stop: 34051, Start Num: 56

Candidate Starts for Orfeu_34:

(32, 33524), (35, 33560), (Start: 41 @33665 has 278 MA's), (48, 33704), (55, 33740), (56, 33743), (68, 33851), (72, 33878), (83, 33950), (92, 34010),

Gene: Orion_35 Start: 33955, Stop: 34341, Start Num: 41

Candidate Starts for Orion_35:

(32, 33814), (35, 33850), (Start: 41 @33955 has 278 MA's), (48, 33994), (55, 34030), (56, 34033), (68, 34141), (72, 34168), (83, 34240), (92, 34300),

Gene: Orwigg_35 Start: 33653, Stop: 34039, Start Num: 41

Candidate Starts for Orwigg_35:

(32, 33512), (35, 33548), (Start: 41 @33653 has 278 MA's), (48, 33692), (55, 33728), (56, 33731), (68, 33839), (72, 33866), (83, 33938), (92, 33998),

Gene: PG1_35 Start: 33968, Stop: 34354, Start Num: 41

Candidate Starts for PG1_35:

(32, 33827), (35, 33863), (Start: 41 @33968 has 278 MA's), (48, 34007), (55, 34043), (56, 34046), (68, 34154), (72, 34181), (83, 34253), (92, 34313),

Gene: Pace1224_25 Start: 24893, Stop: 25249, Start Num: 42

Candidate Starts for Pace1224_25:

(Start: 42 @24893 has 5 MA's), (46, 24911), (48, 24929), (49, 24941), (50, 24947), (51, 24950), (60, 24995), (70, 25073), (80, 25121), (82, 25124), (85, 25157),

Gene: Pacifista_36 Start: 33659, Stop: 34045, Start Num: 41

Candidate Starts for Pacifista_36:

(32, 33518), (35, 33554), (Start: 41 @33659 has 278 MA's), (48, 33698), (55, 33734), (56, 33737), (68, 33845), (72, 33872), (83, 33944), (92, 34004),

Gene: PenguinLover67_36 Start: 35506, Stop: 35865, Start Num: 43

Candidate Starts for PenguinLover67_36:

(Start: 43 @35506 has 5 MA's), (52, 35554), (58, 35578), (63, 35632), (84, 35767), (89, 35815), (95, 35839),

Gene: Phamished_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Phamished_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Phantasmagoria_35 Start: 34287, Stop: 34676, Start Num: 41

Candidate Starts for Phantasmagoria_35:

(32, 34146), (35, 34182), (Start: 41 @34287 has 278 MA's), (48, 34326), (68, 34473), (72, 34500), (76, 34536), (83, 34572), (84, 34575), (92, 34632), (99, 34665),

Gene: Phareon_35 Start: 33667, Stop: 34053, Start Num: 41

Candidate Starts for Phareon_35:

(32, 33526), (35, 33562), (Start: 41 @33667 has 278 MA's), (48, 33706), (55, 33742), (56, 33745), (68, 33853), (72, 33880), (83, 33952), (92, 34012),

Gene: PhatCats2014_35 Start: 33972, Stop: 34358, Start Num: 41

Candidate Starts for PhatCats2014_35:

(32, 33831), (35, 33867), (Start: 41 @33972 has 278 MA's), (48, 34011), (55, 34047), (56, 34050), (68, 34158), (72, 34185), (83, 34257), (92, 34317),

Gene: PhatLouie_35 Start: 33961, Stop: 34347, Start Num: 41

Candidate Starts for PhatLouie_35:

(32, 33820), (35, 33856), (Start: 41 @33961 has 278 MA's), (48, 34000), (55, 34036), (56, 34039), (68, 34147), (72, 34174), (83, 34246), (92, 34306),

Gene: PhenghisKhan_34 Start: 33567, Stop: 33953, Start Num: 41

Candidate Starts for PhenghisKhan_34:

(32, 33426), (35, 33462), (Start: 41 @33567 has 278 MA's), (48, 33606), (55, 33642), (56, 33645), (68, 33753), (72, 33780), (83, 33852), (92, 33912),

Gene: Pherdinand_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Pherdinand_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Phergie_34 Start: 33558, Stop: 33944, Start Num: 41

Candidate Starts for Phergie_34:

(32, 33417), (35, 33453), (Start: 41 @33558 has 278 MA's), (48, 33597), (55, 33633), (56, 33636), (68, 33744), (72, 33771), (83, 33843), (92, 33903),

Gene: Phipps_35 Start: 33934, Stop: 34320, Start Num: 41

Candidate Starts for Phipps_35:

(32, 33793), (35, 33829), (Start: 41 @33934 has 278 MA's), (48, 33973), (55, 34009), (56, 34012), (68, 34120), (72, 34147), (83, 34219), (92, 34279),

Gene: Phleuron_34 Start: 33564, Stop: 33950, Start Num: 41

Candidate Starts for Phleuron_34:

(32, 33423), (35, 33459), (Start: 41 @33564 has 278 MA's), (48, 33603), (55, 33639), (56, 33642), (68, 33750), (72, 33777), (83, 33849), (92, 33909),

Gene: PhrankReynolds_34 Start: 33564, Stop: 33950, Start Num: 41

Candidate Starts for PhrankReynolds_34:

(32, 33423), (35, 33459), (Start: 41 @33564 has 278 MA's), (48, 33603), (55, 33639), (56, 33642), (68, 33750), (72, 33777), (83, 33849), (92, 33909),

Gene: PhrodoBaggins_34 Start: 33951, Stop: 34337, Start Num: 41

Candidate Starts for PhrodoBaggins_34:

(32, 33810), (35, 33846), (Start: 41 @33951 has 278 MA's), (48, 33990), (55, 34026), (56, 34029), (68, 34137), (72, 34164), (83, 34236), (92, 34296),

Gene: Phunky_35 Start: 33964, Stop: 34350, Start Num: 41

Candidate Starts for Phunky_35:

(32, 33823), (35, 33859), (Start: 41 @33964 has 278 MA's), (48, 34003), (55, 34039), (56, 34042), (68, 34150), (72, 34177), (83, 34249), (92, 34309),

Gene: Piglet_0034 Start: 34071, Stop: 34457, Start Num: 41

Candidate Starts for Piglet_0034:

(32, 33930), (35, 33966), (Start: 41 @34071 has 278 MA's), (48, 34110), (55, 34146), (56, 34149), (68, 34257), (72, 34284), (83, 34356), (92, 34416),

Gene: PinheadLarry_35 Start: 33677, Stop: 34063, Start Num: 41

Candidate Starts for PinheadLarry_35:

(32, 33536), (35, 33572), (Start: 41 @33677 has 278 MA's), (48, 33716), (55, 33752), (56, 33755), (68, 33863), (72, 33890), (83, 33962), (92, 34022),

Gene: Pinkman_34 Start: 33520, Stop: 33906, Start Num: 41

Candidate Starts for Pinkman_34:

(32, 33379), (35, 33415), (Start: 41 @33520 has 278 MA's), (48, 33559), (55, 33595), (56, 33598), (68, 33706), (72, 33733), (83, 33805), (92, 33865),

Gene: Pinnie_26 Start: 25436, Stop: 25792, Start Num: 42

Candidate Starts for Pinnie_26:

(Start: 42 @25436 has 5 MA's), (49, 25484), (50, 25490), (51, 25493), (60, 25538), (70, 25616), (80, 25664), (82, 25667), (85, 25700),

Gene: Pipsqueak_35 Start: 33962, Stop: 34348, Start Num: 41

Candidate Starts for Pipsqueak_35:

(32, 33821), (35, 33857), (Start: 41 @33962 has 278 MA's), (48, 34001), (55, 34037), (56, 34040), (68, 34148), (72, 34175), (83, 34247), (92, 34307),

Gene: Placalicious_34 Start: 33655, Stop: 34041, Start Num: 41

Candidate Starts for Placalicious_34:

(32, 33514), (35, 33550), (Start: 41 @33655 has 278 MA's), (48, 33694), (55, 33730), (56, 33733), (68, 33841), (72, 33868), (83, 33940), (92, 34000),

Gene: Plmatters_35 Start: 33961, Stop: 34347, Start Num: 41

Candidate Starts for Plmatters_35:

(32, 33820), (35, 33856), (Start: 41 @33961 has 278 MA's), (48, 34000), (55, 34036), (56, 34039), (68, 34147), (72, 34174), (83, 34246), (92, 34306),

Gene: Podrick_35 Start: 33952, Stop: 34338, Start Num: 41

Candidate Starts for Podrick_35:

(32, 33811), (35, 33847), (Start: 41 @33952 has 278 MA's), (48, 33991), (55, 34027), (56, 34030), (68, 34138), (72, 34165), (83, 34237), (92, 34297),

Gene: Pops_35 Start: 33976, Stop: 34362, Start Num: 41

Candidate Starts for Pops_35:

(32, 33835), (35, 33871), (Start: 41 @33976 has 278 MA's), (48, 34015), (55, 34051), (56, 34054), (68, 34162), (72, 34189), (83, 34261),

Gene: Poster_31 Start: 33148, Stop: 33501, Start Num: 45

Candidate Starts for Poster_31:

(Start: 45 @33148 has 22 MA's), (48, 33169), (53, 33196), (66, 33298), (73, 33334), (86, 33415), (87, 33418), (96, 33481),

Gene: Potter_34 Start: 33676, Stop: 34062, Start Num: 41

Candidate Starts for Potter_34:

(32, 33535), (35, 33571), (Start: 41 @33676 has 278 MA's), (48, 33715), (55, 33751), (56, 33754), (68, 33862), (72, 33889), (83, 33961), (92, 34021),

Gene: Prickles_35 Start: 33952, Stop: 34338, Start Num: 41

Candidate Starts for Prickles_35:

(32, 33811), (35, 33847), (Start: 41 @33952 has 278 MA's), (48, 33991), (55, 34027), (56, 34030), (68, 34138), (72, 34165), (83, 34237), (92, 34297),

Gene: Prince_33 Start: 34331, Stop: 34684, Start Num: 45

Candidate Starts for Prince_33:

(Start: 45 @34331 has 22 MA's), (48, 34352), (53, 34379), (66, 34481), (73, 34517), (86, 34598), (87, 34601), (96, 34664),

Gene: ProfessorX_35 Start: 33947, Stop: 34333, Start Num: 41

Candidate Starts for ProfessorX_35:

(32, 33806), (35, 33842), (Start: 41 @33947 has 278 MA's), (48, 33986), (55, 34022), (56, 34025), (68, 34133), (72, 34160), (83, 34232), (92, 34292),

Gene: Puhltonio_35 Start: 33968, Stop: 34354, Start Num: 41

Candidate Starts for Puhltonio_35:

(32, 33827), (35, 33863), (Start: 41 @33968 has 278 MA's), (48, 34007), (55, 34043), (56, 34046), (68, 34154), (72, 34181), (83, 34253), (92, 34313),

Gene: QueenBeane_35 Start: 33958, Stop: 34344, Start Num: 41

Candidate Starts for QueenBeane_35:

(32, 33817), (35, 33853), (Start: 41 @33958 has 278 MA's), (48, 33997), (55, 34033), (56, 34036), (68, 34144), (72, 34171), (83, 34243), (92, 34303),

Gene: Quesadilla_36 Start: 35514, Stop: 35876, Start Num: 43

Candidate Starts for Quesadilla_36:

(Start: 43 @35514 has 5 MA's), (58, 35586), (60, 35601), (88, 35814), (89, 35823), (95, 35847),

Gene: Quisquilliae_35 Start: 34064, Stop: 34372, Start Num: 56

Candidate Starts for Quisquilliae_35:

(32, 33845), (35, 33881), (Start: 41 @33986 has 278 MA's), (48, 34025), (55, 34061), (56, 34064), (68, 34172), (72, 34199), (83, 34271), (92, 34331),

Gene: RawrgerThat_32 Start: 34176, Stop: 34529, Start Num: 45

Candidate Starts for RawrgerThat_32:

(Start: 45 @34176 has 22 MA's), (48, 34197), (53, 34224), (66, 34326), (73, 34362), (86, 34443), (87, 34446), (96, 34509),

Gene: RedMaple_34 Start: 33965, Stop: 34351, Start Num: 41

Candidate Starts for RedMaple_34:

(32, 33824), (35, 33860), (Start: 41 @33965 has 278 MA's), (48, 34004), (55, 34040), (56, 34043), (68, 34151), (72, 34178), (83, 34250), (92, 34310),

Gene: Rhinoforte_35 Start: 34396, Stop: 34785, Start Num: 41

Candidate Starts for Rhinoforte_35:

(32, 34255), (35, 34291), (Start: 41 @34396 has 278 MA's), (48, 34435), (55, 34471), (64, 34546), (68, 34582), (72, 34609), (76, 34645), (83, 34681), (84, 34684), (92, 34741), (99, 34774),

Gene: Ricotta_35 Start: 33684, Stop: 34070, Start Num: 41

Candidate Starts for Ricotta_35:

(13, 33063), (16, 33147), (22, 33204), (25, 33213), (27, 33219), (32, 33543), (35, 33579), (Start: 41 @33684 has 278 MA's), (48, 33723), (55, 33759), (56, 33762), (68, 33870), (72, 33897), (83, 33969), (92, 34029),

Gene: Riggan_35 Start: 33945, Stop: 34331, Start Num: 41

Candidate Starts for Riggan_35:

(32, 33804), (35, 33840), (Start: 41 @33945 has 278 MA's), (48, 33984), (55, 34020), (56, 34023), (68, 34131), (72, 34158), (83, 34230), (92, 34290),

Gene: Rimu_36 Start: 33769, Stop: 34080, Start Num: 55

Candidate Starts for Rimu_36:

(32, 33553), (35, 33589), (Start: 41 @33694 has 278 MA's), (48, 33733), (55, 33769), (56, 33772), (68, 33880), (72, 33907), (83, 33979), (92, 34039),

Gene: Robyn_34 Start: 33529, Stop: 33915, Start Num: 41

Candidate Starts for Robyn_34:

(32, 33388), (35, 33424), (Start: 41 @33529 has 278 MA's), (48, 33568), (55, 33604), (56, 33607), (68, 33715), (72, 33742), (83, 33814), (92, 33874),

Gene: Roliet_35 Start: 33954, Stop: 34340, Start Num: 41

Candidate Starts for Roliet_35:

(32, 33813), (35, 33849), (Start: 41 @33954 has 278 MA's), (48, 33993), (55, 34029), (56, 34032), (68, 34140), (72, 34167), (83, 34239), (92, 34299),

Gene: Roscoe_36 Start: 34192, Stop: 34578, Start Num: 41

Candidate Starts for Roscoe_36:

(32, 34051), (35, 34087), (Start: 41 @34192 has 278 MA's), (48, 34231), (55, 34267), (56, 34270), (68, 34378), (72, 34405), (83, 34477), (92, 34537),

Gene: Rosebush_35 Start: 34403, Stop: 34792, Start Num: 41

Candidate Starts for Rosebush_35:

(32, 34262), (35, 34298), (Start: 41 @34403 has 278 MA's), (48, 34442), (55, 34478), (64, 34553), (68, 34589), (72, 34616), (76, 34652), (83, 34688), (84, 34691), (92, 34748), (99, 34781),

Gene: Roy17_35 Start: 33658, Stop: 34044, Start Num: 41

Candidate Starts for Roy17_35:

(32, 33517), (35, 33553), (Start: 41 @33658 has 278 MA's), (48, 33697), (55, 33733), (56, 33736), (68, 33844), (72, 33871), (83, 33943), (92, 34003),

Gene: SDcharge11_35 Start: 33932, Stop: 34318, Start Num: 41

Candidate Starts for SDcharge11_35:

(32, 33791), (35, 33827), (Start: 41 @33932 has 278 MA's), (48, 33971), (55, 34007), (56, 34010), (68, 34118), (72, 34145), (83, 34217), (92, 34277),

Gene: Sabella_35 Start: 34280, Stop: 34669, Start Num: 41

Candidate Starts for Sabella_35:

(32, 34139), (35, 34175), (Start: 41 @34280 has 278 MA's), (48, 34319), (55, 34355), (64, 34430), (68, 34466), (72, 34493), (76, 34529), (83, 34565), (84, 34568), (92, 34625), (99, 34658),

Gene: Saguaro_35 Start: 35199, Stop: 35576, Start Num: 40

Candidate Starts for Saguaro_35:

(34, 35088), (Start: 40 @35199 has 1 MA's), (51, 35259), (52, 35265), (55, 35274), (71, 35394), (81, 35445), (88, 35514),

Gene: Samaymay_35 Start: 33958, Stop: 34344, Start Num: 41

Candidate Starts for Samaymay_35:

(32, 33817), (35, 33853), (Start: 41 @33958 has 278 MA's), (48, 33997), (55, 34033), (56, 34036), (68, 34144), (72, 34171), (83, 34243), (92, 34303),

Gene: SassyCat97_34 Start: 33664, Stop: 34050, Start Num: 41

Candidate Starts for SassyCat97_34:

(32, 33523), (35, 33559), (Start: 41 @33664 has 278 MA's), (48, 33703), (55, 33739), (56, 33742), (68, 33850), (72, 33877), (83, 33949), (92, 34009),

Gene: Schadenfreude_34 Start: 33515, Stop: 33901, Start Num: 41

Candidate Starts for Schadenfreude_34:

(32, 33374), (35, 33410), (Start: 41 @33515 has 278 MA's), (48, 33554), (55, 33590), (56, 33593), (68, 33701), (72, 33728), (83, 33800), (92, 33860),

Gene: Schueller_35 Start: 33680, Stop: 34066, Start Num: 41

Candidate Starts for Schueller_35:

(32, 33539), (35, 33575), (Start: 41 @33680 has 278 MA's), (48, 33719), (55, 33755), (56, 33758), (68, 33866), (72, 33893), (83, 33965), (92, 34025),

Gene: Scoot17C_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for Scoot17C_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Scrick_35 Start: 33682, Stop: 34068, Start Num: 41

Candidate Starts for Scrick_35:

(32, 33541), (35, 33577), (Start: 41 @33682 has 278 MA's), (48, 33721), (55, 33757), (56, 33760), (68, 33868), (72, 33895), (83, 33967), (92, 34027),

Gene: Selr12_35 Start: 33685, Stop: 34071, Start Num: 41

Candidate Starts for Selr12_35:

(13, 33064), (16, 33148), (22, 33205), (25, 33214), (27, 33220), (32, 33544), (35, 33580), (Start: 41 @33685 has 278 MA's), (48, 33724), (55, 33760), (56, 33763), (68, 33871), (72, 33898), (83, 33970), (92, 34030),

Gene: Serendipity_35 Start: 33982, Stop: 34368, Start Num: 41

Candidate Starts for Serendipity_35:

(32, 33841), (35, 33877), (Start: 41 @33982 has 278 MA's), (48, 34021), (55, 34057), (56, 34060), (68, 34168), (72, 34195), (83, 34267), (92, 34327),

Gene: Serpentine_0035 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Serpentine_0035:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Sheila_35 Start: 34000, Stop: 34386, Start Num: 41

Candidate Starts for Sheila_35:

(32, 33859), (35, 33895), (Start: 41 @34000 has 278 MA's), (48, 34039), (55, 34075), (56, 34078), (68, 34186), (72, 34213), (83, 34285), (92, 34345),

Gene: ShiVal_35 Start: 33956, Stop: 34342, Start Num: 41

Candidate Starts for ShiVal_35:

(32, 33815), (35, 33851), (Start: 41 @33956 has 278 MA's), (48, 33995), (55, 34031), (56, 34034), (68, 34142), (72, 34169), (83, 34241), (92, 34301),

Gene: Sigman_35 Start: 33948, Stop: 34334, Start Num: 41

Candidate Starts for Sigman_35:

(32, 33807), (35, 33843), (Start: 41 @33948 has 278 MA's), (48, 33987), (55, 34023), (56, 34026), (68, 34134), (72, 34161), (83, 34233), (92, 34293),

Gene: Simielle_34 Start: 33651, Stop: 34037, Start Num: 41

Candidate Starts for Simielle_34:

(32, 33510), (35, 33546), (Start: 41 @33651 has 278 MA's), (48, 33690), (55, 33726), (56, 33729), (68, 33837), (72, 33864), (83, 33936), (92, 33996),

Gene: Skippy_35 Start: 33946, Stop: 34332, Start Num: 41

Candidate Starts for Skippy_35:

(32, 33805), (35, 33841), (Start: 41 @33946 has 278 MA's), (48, 33985), (55, 34021), (56, 34024), (68, 34132), (72, 34159), (83, 34231), (92, 34291),

Gene: Slatt_35 Start: 33972, Stop: 34358, Start Num: 41

Candidate Starts for Slatt_35:

(32, 33831), (35, 33867), (Start: 41 @33972 has 278 MA's), (48, 34011), (55, 34047), (56, 34050), (68, 34158), (72, 34185), (83, 34257), (92, 34317),

Gene: Soile_35 Start: 33678, Stop: 34064, Start Num: 41

Candidate Starts for Soile_35:

(32, 33537), (35, 33573), (Start: 41 @33678 has 278 MA's), (48, 33717), (55, 33753), (56, 33756), (68, 33864), (72, 33891), (83, 33963), (92, 34023),

Gene: Solosis_34 Start: 33673, Stop: 34059, Start Num: 41

Candidate Starts for Solosis_34:

(32, 33532), (35, 33568), (Start: 41 @33673 has 278 MA's), (48, 33712), (55, 33748), (56, 33751), (68, 33859), (72, 33886), (83, 33958), (92, 34018),

Gene: Sophia_34 Start: 33673, Stop: 34059, Start Num: 41

Candidate Starts for Sophia_34:

(32, 33532), (35, 33568), (Start: 41 @33673 has 278 MA's), (48, 33712), (55, 33748), (56, 33751), (68, 33859), (72, 33886), (83, 33958), (92, 34018),

Gene: Soto_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for Soto_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: Spartan300_35 Start: 33952, Stop: 34338, Start Num: 41

Candidate Starts for Spartan300_35:

(32, 33811), (35, 33847), (Start: 41 @33952 has 278 MA's), (48, 33991), (55, 34027), (56, 34030), (68, 34138), (72, 34165), (83, 34237), (92, 34297),

Gene: Squid_35 Start: 33664, Stop: 34050, Start Num: 41

Candidate Starts for Squid_35:

(32, 33523), (35, 33559), (Start: 41 @33664 has 278 MA's), (48, 33703), (55, 33739), (56, 33742), (68, 33850), (72, 33877), (83, 33949), (92, 34009),

Gene: Squiggle_35 Start: 33676, Stop: 34062, Start Num: 41

Candidate Starts for Squiggle_35:

(32, 33535), (35, 33571), (Start: 41 @33676 has 278 MA's), (48, 33715), (55, 33751), (56, 33754), (68, 33862), (72, 33889), (83, 33961), (92, 34021),

Gene: Stinger_30 Start: 32752, Stop: 33105, Start Num: 45

Candidate Starts for Stinger_30:

(Start: 45 @32752 has 22 MA's), (48, 32773), (53, 32800), (66, 32902), (73, 32938), (74, 32965), (86, 33019), (87, 33022), (96, 33085),

Gene: Struggle_34 Start: 33514, Stop: 33900, Start Num: 41

Candidate Starts for Struggle_34:

(32, 33373), (35, 33409), (Start: 41 @33514 has 278 MA's), (48, 33553), (55, 33589), (56, 33592), (68, 33700), (72, 33727), (83, 33799), (92, 33859),

Gene: Suffolk_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Suffolk_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Surely_35 Start: 33966, Stop: 34352, Start Num: 41

Candidate Starts for Surely_35:

(32, 33825), (35, 33861), (Start: 41 @33966 has 278 MA's), (48, 34005), (55, 34041), (56, 34044), (68, 34152), (72, 34179), (83, 34251), (92, 34311),

Gene: Swiphy_36 Start: 33961, Stop: 34347, Start Num: 41

Candidate Starts for Swiphy_36:

(32, 33820), (35, 33856), (Start: 41 @33961 has 278 MA's), (48, 34000), (55, 34036), (56, 34039), (68, 34147), (72, 34174), (83, 34246), (92, 34306),

Gene: Swish_35 Start: 33949, Stop: 34335, Start Num: 41

Candidate Starts for Swish_35:

(32, 33808), (35, 33844), (Start: 41 @33949 has 278 MA's), (48, 33988), (55, 34024), (56, 34027), (68, 34135), (72, 34162), (83, 34234), (92, 34294),

Gene: TA17A_35 Start: 34270, Stop: 34659, Start Num: 41

Candidate Starts for TA17A_35:

(32, 34129), (35, 34165), (Start: 41 @34270 has 278 MA's), (48, 34309), (68, 34456), (72, 34483), (76, 34519), (83, 34555), (84, 34558), (92, 34615), (99, 34648),

Gene: TallGrassMM_35 Start: 33588, Stop: 33974, Start Num: 41

Candidate Starts for TallGrassMM_35:

(32, 33447), (35, 33483), (Start: 41 @33588 has 278 MA's), (48, 33627), (55, 33663), (56, 33666), (68, 33774), (72, 33801), (83, 33873), (92, 33933),

Gene: Telesworld_34 Start: 33661, Stop: 34047, Start Num: 41

Candidate Starts for Telesworld_34:

(32, 33520), (35, 33556), (Start: 41 @33661 has 278 MA's), (48, 33700), (55, 33736), (56, 33739), (68, 33847), (72, 33874), (83, 33946), (92, 34006),

Gene: Thonko_33 Start: 31502, Stop: 31870, Start Num: 42

Candidate Starts for Thonko_33:

(35, 31394), (Start: 42 @31502 has 5 MA's), (54, 31571), (57, 31580), (59, 31598), (77, 31736), (86, 31784), (88, 31814), (96, 31850),

Gene: Thora_35 Start: 33965, Stop: 34351, Start Num: 41

Candidate Starts for Thora_35:

(32, 33824), (35, 33860), (Start: 41 @33965 has 278 MA's), (48, 34004), (55, 34040), (56, 34043), (68, 34151), (72, 34178), (83, 34250), (92, 34310),

Gene: ThreeOh3D2_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for ThreeOh3D2_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Thunderbird_35 Start: 33669, Stop: 34055, Start Num: 41

Candidate Starts for Thunderbird_35:

(32, 33528), (35, 33564), (Start: 41 @33669 has 278 MA's), (48, 33708), (55, 33744), (56, 33747), (68, 33855), (72, 33882), (83, 33954), (92, 34014),

Gene: Timmi_34 Start: 33674, Stop: 34060, Start Num: 41

Candidate Starts for Timmi_34:

(32, 33533), (35, 33569), (Start: 41 @33674 has 278 MA's), (48, 33713), (55, 33749), (56, 33752), (68, 33860), (72, 33887), (83, 33959), (92, 34019),

Gene: Tinciduntolum_36 Start: 34408, Stop: 34797, Start Num: 41

Candidate Starts for Tinciduntolum_36:

(32, 34267), (35, 34303), (Start: 41 @34408 has 278 MA's), (48, 34447), (55, 34483), (64, 34558), (68, 34594), (72, 34621), (76, 34657), (83, 34693), (84, 34696), (92, 34753), (99, 34786),

Gene: TomBombadil_35 Start: 33959, Stop: 34345, Start Num: 41

Candidate Starts for TomBombadil_35:

(32, 33818), (35, 33854), (Start: 41 @33959 has 278 MA's), (48, 33998), (55, 34034), (56, 34037), (68, 34145), (72, 34172), (83, 34244), (92, 34304),

Gene: Tomlarah_35 Start: 33950, Stop: 34336, Start Num: 41

Candidate Starts for Tomlarah_35:

(32, 33809), (35, 33845), (Start: 41 @33950 has 278 MA's), (48, 33989), (55, 34025), (56, 34028), (68, 34136), (72, 34163), (83, 34235), (92, 34295),

Gene: Toni_34 Start: 33666, Stop: 34052, Start Num: 41

Candidate Starts for Toni_34:

(32, 33525), (35, 33561), (Start: 41 @33666 has 278 MA's), (48, 33705), (55, 33741), (56, 33744), (68, 33852), (72, 33879), (83, 33951), (92, 34011),

Gene: Tooj_35 Start: 34023, Stop: 34409, Start Num: 41

Candidate Starts for Tooj_35:

(32, 33882), (35, 33918), (Start: 41 @34023 has 278 MA's), (48, 34062), (55, 34098), (56, 34101), (68, 34209), (72, 34236), (83, 34308), (92, 34368),

Gene: Tres_35 Start: 34283, Stop: 34672, Start Num: 41

Candidate Starts for Tres_35:

(32, 34142), (35, 34178), (Start: 41 @34283 has 278 MA's), (48, 34322), (55, 34358), (64, 34433), (68, 34469), (72, 34496), (76, 34532), (83, 34568), (84, 34571), (92, 34628), (99, 34661),

Gene: True_34 Start: 33663, Stop: 34049, Start Num: 41

Candidate Starts for True_34:

(32, 33522), (35, 33558), (Start: 41 @33663 has 278 MA's), (48, 33702), (55, 33738), (56, 33741), (68, 33849), (72, 33876), (83, 33948), (92, 34008),

Gene: Trypo_35 Start: 33959, Stop: 34345, Start Num: 41

Candidate Starts for Trypo_35:

(32, 33818), (35, 33854), (Start: 41 @33959 has 278 MA's), (48, 33998), (55, 34034), (56, 34037), (68, 34145), (72, 34172), (83, 34244), (92, 34304),

Gene: TyrionL_34 Start: 33522, Stop: 33908, Start Num: 41

Candidate Starts for TyrionL_34:

(32, 33381), (35, 33417), (Start: 41 @33522 has 278 MA's), (48, 33561), (55, 33597), (56, 33600), (68, 33708), (72, 33735), (83, 33807), (92, 33867),

Gene: UAch1_35 Start: 33972, Stop: 34358, Start Num: 41

Candidate Starts for UAch1_35:

(32, 33831), (35, 33867), (Start: 41 @33972 has 278 MA's), (48, 34011), (55, 34047), (56, 34050), (68, 34158), (72, 34185), (83, 34257), (92, 34317),

Gene: UncleHowie_35 Start: 33662, Stop: 34048, Start Num: 41

Candidate Starts for UncleHowie_35:

(32, 33521), (35, 33557), (Start: 41 @33662 has 278 MA's), (48, 33701), (55, 33737), (56, 33740), (68, 33848), (72, 33875), (83, 33947), (92, 34007),

Gene: Usavi_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Usavi_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Vaishali24_34 Start: 33624, Stop: 34010, Start Num: 41

Candidate Starts for Vaishali24_34:

(32, 33483), (35, 33519), (Start: 41 @33624 has 278 MA's), (48, 33663), (55, 33699), (56, 33702), (68, 33810), (72, 33837), (83, 33909), (92, 33969),

Gene: Valjean_35 Start: 33955, Stop: 34341, Start Num: 41

Candidate Starts for Valjean_35:

(32, 33814), (35, 33850), (Start: 41 @33955 has 278 MA's), (48, 33994), (55, 34030), (56, 34033), (68, 34141), (72, 34168), (83, 34240), (92, 34300),

Gene: Vaticameos_35 Start: 33653, Stop: 34039, Start Num: 41

Candidate Starts for Vaticameos_35:

(32, 33512), (35, 33548), (Start: 41 @33653 has 278 MA's), (48, 33692), (55, 33728), (56, 33731), (68, 33839), (72, 33866), (83, 33938), (92, 33998),

Gene: Veritas_34 Start: 33525, Stop: 33911, Start Num: 41

Candidate Starts for Veritas_34:

(32, 33384), (35, 33420), (Start: 41 @33525 has 278 MA's), (48, 33564), (55, 33600), (56, 33603), (68, 33711), (72, 33738), (83, 33810), (92, 33870),

Gene: Vincenzo_33 Start: 34896, Stop: 35249, Start Num: 45

Candidate Starts for Vincenzo_33:

(Start: 45 @34896 has 22 MA's), (48, 34917), (53, 34944), (66, 35046), (73, 35082), (74, 35109), (86, 35163), (96, 35229),

Gene: VioletZ_32 Start: 34247, Stop: 34600, Start Num: 45

Candidate Starts for VioletZ_32:

(Start: 45 @34247 has 22 MA's), (48, 34268), (53, 34295), (66, 34397), (73, 34433), (86, 34514), (87, 34517), (96, 34580),

Gene: Virapocalypse_35 Start: 33950, Stop: 34336, Start Num: 41

Candidate Starts for Virapocalypse_35:

(32, 33809), (35, 33845), (Start: 41 @33950 has 278 MA's), (48, 33989), (55, 34025), (56, 34028), (68, 34136), (72, 34163), (83, 34235), (92, 34295),

Gene: Virgeve_34 Start: 33730, Stop: 34116, Start Num: 41

Candidate Starts for Virgeve_34:

(32, 33589), (35, 33625), (Start: 41 @33730 has 278 MA's), (48, 33769), (55, 33805), (56, 33808), (68, 33916), (72, 33943), (83, 34015), (92, 34075),

Gene: Vista_35 Start: 33963, Stop: 34349, Start Num: 41

Candidate Starts for Vista_35:

(32, 33822), (35, 33858), (Start: 41 @33963 has 278 MA's), (48, 34002), (55, 34038), (56, 34041), (68, 34149), (72, 34176), (83, 34248), (92, 34308),

Gene: Vivaldi_35 Start: 33992, Stop: 34378, Start Num: 41

Candidate Starts for Vivaldi_35:

(32, 33851), (35, 33887), (Start: 41 @33992 has 278 MA's), (48, 34031), (55, 34067), (56, 34070), (68, 34178), (72, 34205), (83, 34277), (92, 34337),

Gene: Vortex_35 Start: 33669, Stop: 34055, Start Num: 41

Candidate Starts for Vortex_35:

(32, 33528), (35, 33564), (Start: 41 @33669 has 278 MA's), (48, 33708), (55, 33744), (56, 33747), (68, 33855), (72, 33882), (83, 33954), (92, 34014),

Gene: Waleliano_32 Start: 34174, Stop: 34527, Start Num: 45

Candidate Starts for Waleliano_32:

(Start: 45 @34174 has 22 MA's), (48, 34195), (53, 34222), (66, 34324), (73, 34360), (86, 34441), (87, 34444), (96, 34507),

Gene: Wallhey_34 Start: 33526, Stop: 33912, Start Num: 41

Candidate Starts for Wallhey_34:

(32, 33385), (35, 33421), (Start: 41 @33526 has 278 MA's), (48, 33565), (55, 33601), (56, 33604), (68, 33712), (72, 33739), (83, 33811), (92, 33871),

Gene: Waterdiva_35 Start: 33955, Stop: 34341, Start Num: 41

Candidate Starts for Waterdiva_35:

(32, 33814), (35, 33850), (Start: 41 @33955 has 278 MA's), (48, 33994), (55, 34030), (56, 34033), (68, 34141), (72, 34168), (83, 34240), (92, 34300),

Gene: Weher20_35 Start: 33954, Stop: 34340, Start Num: 41

Candidate Starts for Weher20_35:

(32, 33813), (35, 33849), (Start: 41 @33954 has 278 MA's), (48, 33993), (55, 34029), (56, 34032), (68, 34140), (72, 34167), (83, 34239), (92, 34299),

Gene: West99_35 Start: 34403, Stop: 34792, Start Num: 41

Candidate Starts for West99_35:

(32, 34262), (35, 34298), (Start: 41 @34403 has 278 MA's), (48, 34442), (55, 34478), (64, 34553), (68, 34589), (72, 34616), (76, 34652), (83, 34688), (84, 34691), (92, 34748), (99, 34781),

Gene: Windsor_34 Start: 33659, Stop: 34045, Start Num: 41

Candidate Starts for Windsor_34:

(32, 33518), (35, 33554), (Start: 41 @33659 has 278 MA's), (48, 33698), (55, 33734), (56, 33737), (68, 33845), (72, 33872), (83, 33944), (92, 34004),

Gene: Xavier_34 Start: 33676, Stop: 34062, Start Num: 41

Candidate Starts for Xavier_34:

(32, 33535), (35, 33571), (Start: 41 @33676 has 278 MA's), (48, 33715), (55, 33751), (56, 33754), (68, 33862), (72, 33889), (83, 33961), (92, 34021),

Gene: Yoshand_35 Start: 33962, Stop: 34348, Start Num: 41

Candidate Starts for Yoshand_35:

(32, 33821), (35, 33857), (Start: 41 @33962 has 278 MA's), (48, 34001), (55, 34037), (56, 34040), (68, 34148), (72, 34175), (83, 34247), (92, 34307),

Gene: YouGoGlencoco_35 Start: 33957, Stop: 34343, Start Num: 41

Candidate Starts for YouGoGlencoco_35:

(32, 33816), (35, 33852), (Start: 41 @33957 has 278 MA's), (48, 33996), (55, 34032), (56, 34035), (68, 34143), (72, 34170), (83, 34242), (92, 34302),

Gene: Zaider_36 Start: 34187, Stop: 34573, Start Num: 41

Candidate Starts for Zaider_36:

(32, 34046), (35, 34082), (Start: 41 @34187 has 278 MA's), (48, 34226), (55, 34262), (56, 34265), (68, 34373), (72, 34400), (83, 34472), (92, 34532),

Gene: Zelda_35 Start: 34004, Stop: 34390, Start Num: 41

Candidate Starts for Zelda_35:

(32, 33863), (35, 33899), (Start: 41 @34004 has 278 MA's), (48, 34043), (55, 34079), (56, 34082), (68, 34190), (72, 34217), (83, 34289), (92, 34349),

Gene: Zemanar_33 Start: 34177, Stop: 34530, Start Num: 45

Candidate Starts for Zemanar_33:

(Start: 45 @34177 has 22 MA's), (48, 34198), (53, 34225), (66, 34327), (73, 34363), (86, 34444), (87, 34447), (96, 34510),

Gene: Zenteno07_38 Start: 33261, Stop: 33638, Start Num: 43

Candidate Starts for Zenteno07_38:

(30, 33021), (33, 33141), (36, 33189), (37, 33195), (Start: 40 @33252 has 1 MA's), (Start: 43 @33261 has 5 MA's), (55, 33330), (58, 33345), (93, 33594),

Gene: Zonia_35 Start: 33976, Stop: 34362, Start Num: 41

Candidate Starts for Zonia_35:

(32, 33835), (35, 33871), (Start: 41 @33976 has 278 MA's), (48, 34015), (55, 34051), (56, 34054), (68, 34162), (72, 34189), (83, 34261), (92, 34321),