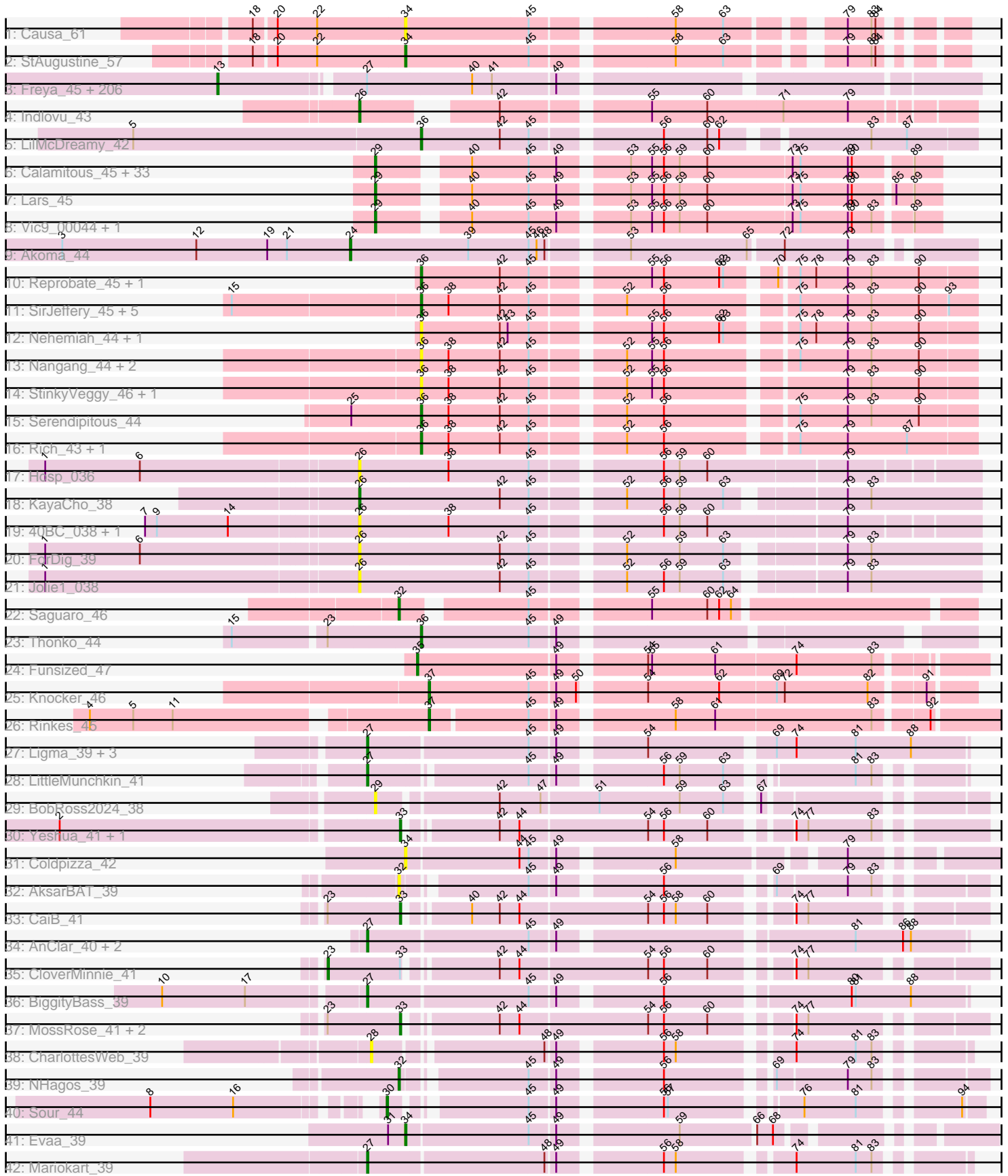


Pham 224225



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 224225 Report

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

Pham number 224225 has 302 members, 41 are drafts.

Phages represented in each track:

- Track 1 : Causa_61
- Track 2 : StAugustine_57
- Track 3 : Freya_45, Morgushi_46, Bluephacebaby_45, Ricotta_45, Longacauda_45, Swiphy_48, Olive_46, Hamish_46, Melc17_46, Grand2040_45, Pops_46, AltPhacts_46, Altwerkus_45, Spartan300_46, KLucky39_46, Phunky_46, Beaglebox_45, Hocus_45, Kwadwo_45, Cher_45, Burr_45, Vortex_46, Cannibal_46, LeeLot_46, Nathan_47, Gophee_46, Podrick_46, Potter_45, JangoPhett_46, Hartsy_46, Veritas_45, JakeO_45, DoesntMatter_45, KingTut_37, Megamind20_46, Piglet_0045, Roscoe_47, Schadenfreude_45, Skippy_46, Horchata_46, Sophia_45, Plata_46, CamL_46, Fozzie_45, MrPhizzler_45, Vaticameos_42, Vivaldi_46, Timmi_45, MiniBoss_46, Jesabah_46, True_45, Solosis_45, Serpentine_0046, Murdoc_46, Etaye_46, Dice_45, Lulumae_45, Pacifista_45, Lasso_46, AbsoluteMadLad_45, Duggie_45, BlueHusk_46, MichaelPhcott_45, KingVeVeVe_46, Serendipity_46, Waterdiva_46, Pipsqueak_46, Iridoclysis_46, Crownjwl_46, PhrankReynolds_44, LostAndPhound_45, ProfessorX_46, MRabcd_45, Telesworld_45, Puhltonio_46, Brilliant_46, Charles1_46, Kailash_46, Schueller_45, GeneCoco_46, Struggle_45, Dingo_46, Mesh1_46, Cobra_46, Kahve_45, Selr12_46, Phergie_45, Mana_45, Simielle_45, QueenBeane_46, LeiMonet_47, Kimbrough_46, Gyarad_0046, Riggan_46, Slatt_46, SDcharge11_46, PhatLouie_46, LemonSlice_46, Magic8_46, Giraffe_46, Weher20_46, Olak_45, Quisquilliae_46, Gwennie1_46, Omniscient_46, MitKao_46, Oosterbaan_46, Squiggle_46, TomBombadil_46, YouGoGlencoco_46, AngelCake_45, FugateOSU_45, Maru_45, Scrick_46, Kloppinator_46, Rimu_48, Xavier_45, Lulwa_46, PinheadLarry_46, Pinkman_45, Wallhey_45, Anderson_46, Soto_46, Banjo_45, HSavage_46, Labeouficaum_45, CharlieGBrown_45, Jillium_45, Held_46, Doddsville_46, Bishoperium_45, Khan1_46, Placalicious_45, Zaider_47, Mecca_45, Thunderbird_45, Mcshane_45, Cosmolli16_45, HenryJackson_45, BatteryCK_45, CheetO_46, Toni_45, SilverBell_46, Surely_46, TyrionL_45, KlimbOn_46, Caspiboi_47, Vista_46, UAch1_46, Lumine_45, Chorkpop_46, Plmatters_46, Mikota_46, Derpp_45, Childish_45, FriarPreacher_45, Numberten_46, Jiraiya_45, Vaishali24_45, Haimas_46, Virapocalypse_46, DirtJuice_46, Kwksand96_45, Roy17_46, Zelda_46, Roliet_46, SassyCat97_45, EmpTee_46, Newman_46, Carthage_44, ShiVal_46, Matalotodo_46, Boehler_46, Oline_45, Orfeu_45, Tomlahar_46, Mag7_45, Buckeye_46, TallGrassMM_46, Cornbread_46, Inverness_46, Dione_45, Nyala_45, Haleema_45, Hertubise_46, DaddyDaniels_46, Riverton_45, Thora_46, Orwigg_45, Nicole21_46, Squid_46, Mesmerelda_47, Samaymay_46, Jiminy_45, Daffy_46, Sheila_46, Phareon_46, Valjean_46, DelRivs_45, Iridessa_47, OliverWalter_46,

Hetaeria_46, Frankicide_46, LuckyMarjie_45, Phipps_46, PhenghisKhan_45, Phleuron_45

- Track 4 : Indlovu_43
- Track 5 : LilMcDreamy_42
- Track 6 : Calamitous_45, Allegro_45, MasterPo_45, Faze9_44, Lephleur_45, ItsyBitsy1_45, Kaleb_45, FrenchFry_45, LilSmirk_45, Bananafish_45, TA17A_46, West99_45, Coffee_45, Phantasmagoria_45, Blocker23_45, Kheth_45, Tres_45, Holeinone_45, Hedgerow_45, LizLemon_45, Kolhan_45, Rhinoforte_45, Godines_45, Ares_45, PrinceCharming_45, Brownie5_45, Boyle_45, Eaglehorse_45, Arbiter_44, Rosebush_44, Sabella_44, Tinciduntolum_46, Opia_45, Glass_45
- Track 7 : Lars_45
- Track 8 : Vic9_00044, Laurie_44
- Track 9 : Akoma_44
- Track 10 : Reprobate_45, Phelemich_44
- Track 11 : SirJeffery_45, EastView9101_43, Suigeneris_45, Donny_45, Rita130_45, Acadian_45
- Track 12 : Nehemiah_44, Mysterious_46
- Track 13 : Nangang_44, Shenyu_44, DigitDog_44
- Track 14 : StinkyVeggy_46, KarasumaRum_46
- Track 15 : Serendipitous_44
- Track 16 : Rich_43, Bae_44
- Track 17 : Hosp_036
- Track 18 : KayaCho_38
- Track 19 : 40BC_038, 39HC_038
- Track 20 : ForDig_39
- Track 21 : Jolie1_038
- Track 22 : Saguaro_46
- Track 23 : Thonko_44
- Track 24 : Funsized_47
- Track 25 : Knocker_46
- Track 26 : Rinkes_45
- Track 27 : Ligma_39, Fresco_39, Axumite_39, Shatter_39
- Track 28 : LittleMunchkin_41
- Track 29 : BobRoss2024_38
- Track 30 : Yeshua_41, Wooper_41
- Track 31 : Coldpizza_42
- Track 32 : AksarBAT_39
- Track 33 : CaiB_41
- Track 34 : AnClar_40, Sisko_39, Yago84_39
- Track 35 : CloverMinnie_41
- Track 36 : BiggityBass_39
- Track 37 : MossRose_41, MakoManhole_41, AnarQue_41
- Track 38 : CharlottesWeb_39
- Track 39 : NHagos_39
- Track 40 : Sour_44
- Track 41 : Evaa_39
- Track 42 : Mariokart_39

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

The start number called the most often in the published annotations is 13, it was called in 190 of the 261 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbsoluteMadLad_45, AltPhacts_46, Altwerkus_45, Anderson_46, AngelCake_45, Banjo_45, BatteryCK_45, Beaglebox_45, Bishoperium_45, BlueHusk_46, Bluephacebaby_45, Boehler_46, Brilliant_46, Buckeye_46, Burr_45, CamL_46, Cannibal_46, Carthage_44, CaspiBoi_47, Charles1_46, CharlieGBrown_45, CheetO_46, Cher_45, Childish_45, Chorkpop_46, Cobra_46, Cornbread_46, Cosmolli16_45, Crownjwl_46, DaddyDaniels_46, Daffy_46, DelRivs_45, Derpp_45, Dice_45, Dingo_46, Dione_45, DirtJuice_46, Doddsville_46, DoesntMatter_45, Duggie_45, EmpTee_46, Etaye_46, Fozzie_45, Frankicide_46, Freya_45, FriarPreacher_45, FugateOSU_45, GeneCoco_46, Giraffe_46, Gophee_46, Grand2040_45, Gwennie1_46, Gyarad_0046, HSavage_46, Haimas_46, Haleema_45, Hamish_46, Hartsy_46, Held_46, HenryJackson_45, Hertubise_46, Hetaeria_46, Hocus_45, Horchata_46, Inverness_46, Iridessa_47, Iridoclysis_46, JakeO_45, JangoPhett_46, Jesabah_46, Jillium_45, Jiminy_45, Jiraiya_45, KLucky39_46, Kahve_45, Kailash_46, Khan1_46, Kimbrough_46, KingTut_37, KingVeVeVe_46, KlimbOn_46, Kloppinator_46, Kwadwo_45, Kwksand96_45, Labeouficaum_45, Lasso_46, LeeLot_46, LeiMonet_47, LemonSlice_46, Longacauda_45, LostAndPhound_45, LuckyMarjie_45, Lulumae_45, Lulwa_46, Lumine_45, MRabcd_45, Mag7_45, Magic8_46, Mana_45, Maru_45, Matalotodo_46, Mcshane_45, Mecca_45, Megamind20_46, Melc17_46, Mesh1_46, Mesmerelda_47, MichaelPhcott_45, Mikota_46, MiniBoss_46, MitKao_46, Morgushi_46, MrPhizzler_45, Murdoc_46, Nathan_47, Newman_46, Nicole21_46, Numberten_46, Nyala_45, Olak_45, Oline_45, Olive_46, OliverWalter_46, Omniscient_46, Oosterbaan_46, Orfeu_45, Orwigg_45, Pacifista_45, Phareon_46, PhatLouie_46, PhenghisKhan_45, Phergie_45, Phipps_46, Phleuron_45, PhrankReynolds_44, Phunky_46, Piglet_0045, PinheadLarry_46, Pinkman_45, Pipsqueak_46, Placalicious_45, Plata_46, Plmatters_46, Podrick_46, Pops_46, Potter_45, ProfessorX_46, Puhltonio_46, QueenBeane_46, Quisquiliae_46, Ricotta_45, Riggan_46, Rimu_48, Riverton_45, Roliet_46, Roscoe_47, Roy17_46, SDcharge11_46, Samaymay_46, SassyCat97_45, Schadenfreude_45, Schueller_45, Scrick_46, Selr12_46, Serendipity_46, Serpentine_0046, Sheila_46, ShiVal_46, SilverBell_46, Simielle_45, Skippy_46, Slatt_46, Solosis_45, Sophia_45, Soto_46, Spartan300_46, Squid_46, Squiggle_46, Struggle_45, Surely_46, Swiphy_48, TallGrassMM_46, Telesworld_45, Thora_46, Thunderbird_45, Timmi_45, TomBombadil_46, Tomlarah_46, Toni_45, True_45, TyrionL_45, UAch1_46, Vaishali24_45, Valjean_46, Vaticameos_42, Veritas_45, Virapocalypse_46, Vista_46, Vivaldi_46, Vortex_46, Wallhey_45, Waterdiva_46, Weher20_46, Xavier_45, YouGoGlencoco_46, Zaider_47, Zelda_46,

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

-

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

- 39HC_038, 40BC_038, Acadian_45, Akoma_44, AksarBAT_39, Allegro_45, AnClar_40, AnarQue_41, Arbiter_44, Ares_45, Axumite_39, Bae_44, Bananafish_45, BiggityBass_39, Blocker23_45, BobRoss2024_38, Boyle_45, Brownie5_45, CaiB_41, Calamitous_45, Causa_61, CharlottesWeb_39, CloverMinnie_41, Coffee_45, Coldpizza_42, DigitDog_44, Donny_45, Eaglehorse_45, EastView9101_43, Evaa_39, Faze9_44, ForDig_39, FrenchFry_45, Fresco_39, Funsized_47, Glass_45, Godines_45, Hedgerow_45, Holeinone_45, Hosp_036,

Indlovu_43, ItsyBitsy1_45, Jolie1_038, Kaleb_45, KarasumaRum_46, KayaCho_38, Kheth_45, Knocker_46, Kolhan_45, Lars_45, Laurie_44, Lephleur_45, Ligma_39, LilMcDreamy_42, LilSmirk_45, LittleMunchkin_41, LizLemon_45, MakoManhole_41, Mariokart_39, MasterPo_45, MossRose_41, Mysterious_46, NHagos_39, Nangang_44, Nehemiah_44, Opia_45, Phantasmagoria_45, Phelemich_44, PrinceCharming_45, Reprobate_45, Rhinoforte_45, Rich_43, Rinkes_45, Rita130_45, Rosebush_44, Sabella_44, Saguaro_46, Serendipitous_44, Shatter_39, Shenyu_44, SirJeffery_45, Sisko_39, Sour_44, StAugustine_57, StinkyVeggy_46, Suigeneris_45, TA17A_46, Thonko_44, Tinciduntolum_46, Tres_45, Vic9_00044, West99_45, Wooper_41, Yago84_39, Yeshua_41,

Summary by start number:

Start 13:

- Found in 207 of 302 (68.5%) of genes in pham
- Manual Annotations of this start: 190 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbsoluteMadLad_45 (B1), AltPhacts_46 (B1), Altwerkus_45 (B1), Anderson_46 (B1), AngelCake_45 (B1), Banjo_45 (B1), BatteryCK_45 (B1), Beaglebox_45 (B1), Bishoperium_45 (B1), BlueHusk_46 (B1), Bluephacebaby_45 (B1), Boehler_46 (B1), Brilliant_46 (B1), Buckeye_46 (B1), Burr_45 (B1), CamL_46 (B1), Cannibal_46 (B1), Carthage_44 (B1), Caspiboi_47 (B1), Charles1_46 (B1), CharlieGBrown_45 (B1), CheetO_46 (B1), Cher_45 (B1), Childish_45 (B1), Chorkpop_46 (B1), Cobra_46 (B1), Cornbread_46 (B1), Cosmolli16_45 (B1), Crownjwl_46 (B1), DaddyDaniels_46 (B1), Daffy_46 (B1), DelRivs_45 (B1), Derpp_45 (B1), Dice_45 (B1), Dingo_46 (B1), Dione_45 (B1), DirtJuice_46 (B1), Doddsville_46 (B1), DoesntMatter_45 (B1), Duggie_45 (B1), EmpTee_46 (B1), Etaye_46 (B1), Fozzie_45 (B1), Frankicide_46 (B1), Freya_45 (B1), FriarPreacher_45 (B1), FugateOSU_45 (B1), GeneCoco_46 (B1), Giraffe_46 (B1), Gophee_46 (B1), Grand2040_45 (B1), Gwennie1_46 (B1), Gyarad_0046 (B1), HSavage_46 (B1), Haimas_46 (B1), Haleema_45 (B1), Hamish_46 (B1), Hartsy_46 (B1), Held_46 (B1), HenryJackson_45 (B1), Hertubise_46 (B1), Hetaeria_46 (B1), Hocus_45 (B1), Horchata_46 (B1), Inverness_46 (B1), Iridessa_47 (B1), Iridoclysis_46 (B1), JakeO_45 (B1), JangoPhett_46 (B1), Jesabah_46 (B1), Jillium_45 (B1), Jiminy_45 (B1), Jiraiya_45 (B1), KLucky39_46 (B1), Kahve_45 (B1), Kailash_46 (B1), Khan1_46 (B1), Kimbrough_46 (B1), KingTut_37 (B1), KingVeVeVe_46 (B1), KlimbOn_46 (B1), Kloppinator_46 (B1), Kwadwo_45 (B1), Kwksand96_45 (B1), Labeouficaum_45 (B1), Lasso_46 (B1), LeeLot_46 (B1), LeiMonet_47 (B1), LemonSlice_46 (B1), Longacauda_45 (B1), LostAndPhound_45 (B1), LuckyMarjie_45 (B1), Lulumae_45 (B1), Lulwa_46 (B1), Lumine_45 (B1), MRabcd_45 (B1), Mag7_45 (B1), Magic8_46 (B1), Mana_45 (B1), Maru_45 (B1), Matalotodo_46 (B1), Mcshane_45 (B1), Mecca_45 (B1), Megamind20_46 (B1), Melc17_46 (B1), Mesh1_46 (B1), Mesmerelda_47 (B1), MichaelPhcott_45 (B1), Mikota_46 (B1), MiniBoss_46 (B1), MitKao_46 (B1), Morgushi_46 (B1), MrPhizzler_45 (B1), Murdoc_46 (B1), Nathan_47 (B1), Newman_46 (B1), Nicole21_46 (B1), Numberten_46 (B1), Nyala_45 (B1), Olak_45 (B1), Oline_45 (B1), Olive_46 (B1), OliverWalter_46 (B1), Omniscient_46 (B1), Oosterbaan_46 (B1), Orfeu_45 (B1), Orwigg_45 (B1), Pacifista_45 (B1), Phareon_46 (B1), PhatLouie_46 (B1), PhenghisKhan_45 (B1), Phergie_45 (B1), Phipps_46 (B1), Phleuron_45 (B1), PhrankReynolds_44 (B1), Phunky_46 (B1), Piglet_0045 (B1), PinheadLarry_46 (B1), Pinkman_45 (B1), Pipsqueak_46 (B1), Placalicious_45 (B1), Plata_46 (B1), Plmatters_46 (B1), Podrick_46 (B1), Pops_46 (B1), Potter_45 (B1), ProfessorX_46 (B1), Puhltonio_46 (B1), QueenBeane_46 (B1), Quisquiliae_46 (B1), Ricotta_45 (B1),

Riggan_46 (B1), Rimu_48 (B1), Riverton_45 (B1), Roliet_46 (B1), Roscoe_47 (B1), Roy17_46 (B1), SDcharge11_46 (B1), Samaymay_46 (B1), SassyCat97_45 (B1), Schadenfreude_45 (B1), Schueller_45 (B1), Scrick_46 (B1), Selr12_46 (B1), Serendipity_46 (B1), Serpentine_0046 (B1), Sheila_46 (B1), ShiVal_46 (B1), SilverBell_46 (B1), Simielle_45 (B1), Skippy_46 (B1), Slatt_46 (B1), Solosis_45 (B1), Sophia_45 (B1), Soto_46 (B1), Spartan300_46 (B1), Squid_46 (B1), Squiggle_46 (B1), Struggle_45 (B1), Surely_46 (B1), Swiphy_48 (B1), TallGrassMM_46 (B1), Telesworld_45 (B1), Thora_46 (B1), Thunderbird_45 (B1), Timmi_45 (B1), TomBombadil_46 (B1), Tomlahrah_46 (B1), Toni_45 (B1), True_45 (B1), TyrionL_45 (B1), UAch1_46 (B1), Vaishali24_45 (B1), Valjean_46 (B1), Vaticameos_42 (B1), Veritas_45 (B1), Virapocalypse_46 (B1), Vista_46 (B1), Vivaldi_46 (B1), Vortex_46 (B1), Wallhey_45 (B1), Waterdiva_46 (B1), Weher20_46 (B1), Xavier_45 (B1), YouGoGlencoco_46 (B1), Zaider_47 (B1), Zelda_46 (B1),

Start 23:

- Found in 6 of 302 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 261
- Called 16.7% of time when present
- Phage (with cluster) where this start called: CloverMinnie_41 (DR),

Start 24:

- Found in 1 of 302 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Akoma_44 (B3),

Start 26:

- Found in 7 of 302 (2.3%) of genes in pham
- Manual Annotations of this start: 2 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC_038 (B6), 40BC_038 (B6), ForDig_39 (B6), Hosp_036 (B6), Indlovu_43 (B11), Jolie1_038 (B6), KayaCho_38 (B6),

Start 27:

- Found in 217 of 302 (71.9%) of genes in pham
- Manual Annotations of this start: 10 of 261
- Called 4.6% of time when present
- Phage (with cluster) where this start called: AnClar_40 (DR), Axumite_39 (DR), BiggityBass_39 (DR), Fresco_39 (DR), Ligma_39 (DR), LittleMunchkin_41 (DR), Mariokart_39 (DR), Shatter_39 (DR), Sisko_39 (DR), Yago84_39 (DR),

Start 28:

- Found in 1 of 302 (0.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CharlottesWeb_39 (DR),

Start 29:

- Found in 38 of 302 (12.6%) of genes in pham
- Manual Annotations of this start: 33 of 261
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Allegro_45 (B2), Arbiter_44 (B2), Ares_45 (B2), Bananafish_45 (B2), Blocker23_45 (B2), BobRoss2024_38 (DR), Boyle_45 (B2), Brownie5_45 (B2), Calamitous_45 (B2), Coffee_45 (B2), Eaglehorse_45 (B2), Faze9_44 (B2), FrenchFry_45 (B2), Glass_45 (B2), Godines_45 (B2), Hedgerow_45 (B2), Holeinone_45 (B2), ItsyBitsy1_45 (B2), Kaleb_45 (B2), Kheth_45 (B2), Kolhan_45 (B2), Lars_45 (B2), Laurie_44 (B2), Lephleur_45 (B2), LilSmirk_45 (B2), LizLemon_45 (B2), MasterPo_45 (B2), Opia_45 (B2), Phantasmagoria_45 (B2), PrinceCharming_45 (B2), Rhinoforte_45 (B2), Rosebush_44 (B2), Sabella_44 (B2), TA17A_46 (B2), Tinciduntolum_46 (B2), Tres_45 (B2), Vic9_00044 (B2), West99_45 (B2),

Start 30:

- Found in 1 of 302 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sour_44 (DR),

Start 32:

- Found in 3 of 302 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AksarBAT_39 (DR), NHagos_39 (DR), Saguaro_46 (B7),

Start 33:

- Found in 7 of 302 (2.3%) of genes in pham
- Manual Annotations of this start: 5 of 261
- Called 85.7% of time when present
- Phage (with cluster) where this start called: AnarQue_41 (DR), CaiB_41 (DR), MakoManhole_41 (DR), MossRose_41 (DR), Wooper_41 (DR), Yeshua_41 (DR),

Start 34:

- Found in 4 of 302 (1.3%) of genes in pham
- Manual Annotations of this start: 2 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Causa_61 (AI), Coldpizza_42 (DR), Evaa_39 (DR), StAugustine_57 (AI),

Start 35:

- Found in 1 of 302 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Funsized_47 (B9),

Start 36:

- Found in 20 of 302 (6.6%) of genes in pham
- Manual Annotations of this start: 11 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acadian_45 (B5), Bae_44 (B5), DigitDog_44 (B5), Donny_45 (B5), EastView9101_43 (B5), KarasumaRum_46 (B5), LilMcDreamy_42 (B12), Mysterious_46 (B5), Nangang_44 (B5), Nehemiah_44 (B5), Phelemich_44 (B5), Reprobate_45 (B5), Rich_43 (B5), Rita130_45 (B5), Serendipitous_44 (B5), Shenyu_44 (B5), SirJeffery_45 (B5), StinkyVeggy_46 (B5),

Suigeneris_45 (B5), Thonko_44 (B8),

Start 37:

- Found in 2 of 302 (0.7%) of genes in pham
- Manual Annotations of this start: 2 of 261
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Knocker_46 (B9), Rinkes_45 (B9),

Summary by clusters:

There are 12 clusters represented in this pham: A1, B8, B3, B5, B6, B7, B12, B1, B2, B11, DR, B9,

Info for manual annotations of cluster A1:

- Start number 34 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster B1:

- Start number 13 was manually annotated 190 times for cluster B1.

Info for manual annotations of cluster B11:

- Start number 26 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 36 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B2:

- Start number 29 was manually annotated 33 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 24 was manually annotated 1 time for cluster B3.

Info for manual annotations of cluster B5:

- Start number 36 was manually annotated 9 times for cluster B5.

Info for manual annotations of cluster B6:

- Start number 26 was manually annotated 1 time for cluster B6.

Info for manual annotations of cluster B7:

- Start number 32 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 36 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 35 was manually annotated 1 time for cluster B9.
- Start number 37 was manually annotated 2 times for cluster B9.

Info for manual annotations of cluster DR:

- Start number 23 was manually annotated 1 time for cluster DR.
- Start number 27 was manually annotated 10 times for cluster DR.
- Start number 30 was manually annotated 1 time for cluster DR.
- Start number 32 was manually annotated 1 time for cluster DR.
- Start number 33 was manually annotated 5 times for cluster DR.

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

Gene Information:

Gene: 39HC_038 Start: 37421, Stop: 36984, Start Num: 26

Candidate Starts for 39HC_038:

(7, 37574), (9, 37565), (14, 37511), (Start: 26 @37421 has 2 MA's), (38, 37355), (45, 37295), (56, 37208), (59, 37196), (60, 37175), (79, 37076),

Gene: 40BC_038 Start: 37421, Stop: 36984, Start Num: 26

Candidate Starts for 40BC_038:

(7, 37574), (9, 37565), (14, 37511), (Start: 26 @37421 has 2 MA's), (38, 37355), (45, 37295), (56, 37208), (59, 37196), (60, 37175), (79, 37076),

Gene: AbsoluteMadLad_45 Start: 39726, Stop: 39196, Start Num: 13

Candidate Starts for AbsoluteMadLad_45:

(Start: 13 @39726 has 190 MA's), (Start: 27 @39621 has 10 MA's), (40, 39543), (41, 39528), (49, 39483),

Gene: Acadian_45 Start: 40034, Stop: 39648, Start Num: 36

Candidate Starts for Acadian_45:

(15, 40172), (Start: 36 @40034 has 11 MA's), (38, 40013), (42, 39974), (45, 39953), (52, 39893), (56, 39866), (75, 39779), (79, 39743), (83, 39725), (90, 39689), (93, 39668),

Gene: Akoma_44 Start: 39465, Stop: 39028, Start Num: 24

Candidate Starts for Akoma_44:

(3, 39684), (12, 39582), (19, 39528), (21, 39513), (Start: 24 @39465 has 1 MA's), (39, 39375), (45, 39330), (46, 39324), (48, 39318), (53, 39267), (65, 39180), (72, 39156), (79, 39108),

Gene: AksarBAT_39 Start: 33818, Stop: 33444, Start Num: 32

Candidate Starts for AksarBAT_39:

(Start: 32 @33818 has 2 MA's), (45, 33737), (49, 33719), (56, 33650), (69, 33581), (79, 33530), (83, 33512),

Gene: Allegro_45 Start: 39852, Stop: 39463, Start Num: 29

Candidate Starts for Allegro_45:

(Start: 29 @39852 has 33 MA's), (40, 39795), (45, 39753), (49, 39732), (53, 39687), (55, 39672), (56, 39663), (59, 39651), (60, 39630), (73, 39567), (75, 39561), (79, 39525), (80, 39522), (89, 39483),

Gene: AltPhacts_46 Start: 39698, Stop: 39174, Start Num: 13

Candidate Starts for AltPhacts_46:

(Start: 13 @39698 has 190 MA's), (Start: 27 @39599 has 10 MA's), (40, 39521), (41, 39506), (49, 39461),

Gene: Altwerkus_45 Start: 39405, Stop: 38875, Start Num: 13

Candidate Starts for Altwerkus_45:

(Start: 13 @39405 has 190 MA's), (Start: 27 @39300 has 10 MA's), (40, 39222), (41, 39207), (49, 39162),

Gene: AnClar_40 Start: 36039, Stop: 35620, Start Num: 27

Candidate Starts for AnClar_40:

(Start: 27 @36039 has 10 MA's), (45, 35922), (49, 35904), (81, 35703), (86, 35667), (88, 35661),

Gene: AnarQue_41 Start: 35226, Stop: 34840, Start Num: 33

Candidate Starts for AnarQue_41:

(Start: 23 @35280 has 1 MA's), (Start: 33 @35226 has 5 MA's), (42, 35166), (44, 35151), (54, 35058), (56, 35046), (60, 35013), (74, 34965), (77, 34956),

Gene: Anderson_46 Start: 39704, Stop: 39180, Start Num: 13

Candidate Starts for Anderson_46:

(Start: 13 @39704 has 190 MA's), (Start: 27 @39605 has 10 MA's), (40, 39527), (41, 39512), (49, 39467),

Gene: AngelCake_45 Start: 39726, Stop: 39199, Start Num: 13

Candidate Starts for AngelCake_45:

(Start: 13 @39726 has 190 MA's), (Start: 27 @39624 has 10 MA's), (40, 39546), (41, 39531), (49, 39486),

Gene: Arbiter_44 Start: 39938, Stop: 39549, Start Num: 29

Candidate Starts for Arbiter_44:

(Start: 29 @39938 has 33 MA's), (40, 39881), (45, 39839), (49, 39818), (53, 39773), (55, 39758), (56, 39749), (59, 39737), (60, 39716), (73, 39653), (75, 39647), (79, 39611), (80, 39608), (89, 39569),

Gene: Ares_45 Start: 39922, Stop: 39533, Start Num: 29

Candidate Starts for Ares_45:

(Start: 29 @39922 has 33 MA's), (40, 39865), (45, 39823), (49, 39802), (53, 39757), (55, 39742), (56, 39733), (59, 39721), (60, 39700), (73, 39637), (75, 39631), (79, 39595), (80, 39592), (89, 39553),

Gene: Axumite_39 Start: 33273, Stop: 32851, Start Num: 27

Candidate Starts for Axumite_39:

(Start: 27 @33273 has 10 MA's), (45, 33156), (49, 33138), (54, 33081), (69, 32994), (74, 32979), (81, 32934), (88, 32892),

Gene: Bae_44 Start: 39937, Stop: 39551, Start Num: 36

Candidate Starts for Bae_44:

(Start: 36 @39937 has 11 MA's), (38, 39916), (42, 39877), (45, 39856), (52, 39796), (56, 39769), (75, 39682), (79, 39646), (87, 39601),

Gene: Bananafish_45 Start: 39858, Stop: 39469, Start Num: 29

Candidate Starts for Bananafish_45:

(Start: 29 @39858 has 33 MA's), (40, 39801), (45, 39759), (49, 39738), (53, 39693), (55, 39678), (56, 39669), (59, 39657), (60, 39636), (73, 39573), (75, 39567), (79, 39531), (80, 39528), (89, 39489),

Gene: Banjo_45 Start: 39409, Stop: 38885, Start Num: 13

Candidate Starts for Banjo_45:

(Start: 13 @39409 has 190 MA's), (Start: 27 @39310 has 10 MA's), (40, 39232), (41, 39217), (49, 39172),

Gene: BatteryCK_45 Start: 39331, Stop: 38804, Start Num: 13

Candidate Starts for BatteryCK_45:

(Start: 13 @39331 has 190 MA's), (Start: 27 @39229 has 10 MA's), (40, 39151), (41, 39136), (49, 39091),

Gene: Beaglebox_45 Start: 39430, Stop: 38906, Start Num: 13

Candidate Starts for Beaglebox_45:

(Start: 13 @39430 has 190 MA's), (Start: 27 @39331 has 10 MA's), (40, 39253), (41, 39238), (49, 39193),

Gene: BiggityBass_39 Start: 35501, Stop: 35082, Start Num: 27

Candidate Starts for BiggityBass_39:

(10, 35645), (17, 35582), (Start: 27 @35501 has 10 MA's), (45, 35384), (49, 35366), (56, 35297), (80, 35168), (81, 35165), (88, 35123),

Gene: Bishoperium_45 Start: 39418, Stop: 38894, Start Num: 13

Candidate Starts for Bishoperium_45:

(Start: 13 @39418 has 190 MA's), (Start: 27 @39319 has 10 MA's), (40, 39241), (41, 39226), (49, 39181),

Gene: Blocker23_45 Start: 39976, Stop: 39587, Start Num: 29

Candidate Starts for Blocker23_45:

(Start: 29 @39976 has 33 MA's), (40, 39919), (45, 39877), (49, 39856), (53, 39811), (55, 39796), (56, 39787), (59, 39775), (60, 39754), (73, 39691), (75, 39685), (79, 39649), (80, 39646), (89, 39607),

Gene: BlueHusk_46 Start: 39223, Stop: 38693, Start Num: 13

Candidate Starts for BlueHusk_46:

(Start: 13 @39223 has 190 MA's), (Start: 27 @39118 has 10 MA's), (40, 39040), (41, 39025), (49, 38980),

Gene: Bluephacebaby_45 Start: 39421, Stop: 38891, Start Num: 13

Candidate Starts for Bluephacebaby_45:

(Start: 13 @39421 has 190 MA's), (Start: 27 @39316 has 10 MA's), (40, 39238), (41, 39223), (49, 39178),

Gene: BobRoss2024_38 Start: 33364, Stop: 32954, Start Num: 29

Candidate Starts for BobRoss2024_38:

(Start: 29 @33364 has 33 MA's), (42, 33280), (47, 33250), (51, 33208), (59, 33148), (63, 33115), (67, 33097),

Gene: Boehler_46 Start: 39727, Stop: 39197, Start Num: 13

Candidate Starts for Boehler_46:

(Start: 13 @39727 has 190 MA's), (Start: 27 @39622 has 10 MA's), (40, 39544), (41, 39529), (49, 39484),

Gene: Boyle_45 Start: 39977, Stop: 39588, Start Num: 29

Candidate Starts for Boyle_45:

(Start: 29 @39977 has 33 MA's), (40, 39920), (45, 39878), (49, 39857), (53, 39812), (55, 39797), (56, 39788), (59, 39776), (60, 39755), (73, 39692), (75, 39686), (79, 39650), (80, 39647), (89, 39608),

Gene: Brilliant_46 Start: 39426, Stop: 38902, Start Num: 13

Candidate Starts for Brilliant_46:

(Start: 13 @39426 has 190 MA's), (Start: 27 @39327 has 10 MA's), (40, 39249), (41, 39234), (49, 39189),

Gene: Brownie5_45 Start: 39983, Stop: 39594, Start Num: 29

Candidate Starts for Brownie5_45:

(Start: 29 @39983 has 33 MA's), (40, 39926), (45, 39884), (49, 39863), (53, 39818), (55, 39803), (56, 39794), (59, 39782), (60, 39761), (73, 39698), (75, 39692), (79, 39656), (80, 39653), (89, 39614),

Gene: Buckeye_46 Start: 39741, Stop: 39214, Start Num: 13

Candidate Starts for Buckeye_46:

(Start: 13 @39741 has 190 MA's), (Start: 27 @39639 has 10 MA's), (40, 39561), (41, 39546), (49, 39501),

Gene: Burr_45 Start: 39415, Stop: 38891, Start Num: 13

Candidate Starts for Burr_45:

(Start: 13 @39415 has 190 MA's), (Start: 27 @39316 has 10 MA's), (40, 39238), (41, 39223), (49, 39178),

Gene: CaiB_41 Start: 35212, Stop: 34826, Start Num: 33

Candidate Starts for CaiB_41:

(Start: 23 @35266 has 1 MA's), (Start: 33 @35212 has 5 MA's), (40, 35173), (42, 35152), (44, 35137), (54, 35044), (56, 35032), (58, 35023), (60, 34999), (74, 34951), (77, 34942),

Gene: Calamitous_45 Start: 39863, Stop: 39474, Start Num: 29

Candidate Starts for Calamitous_45:

(Start: 29 @39863 has 33 MA's), (40, 39806), (45, 39764), (49, 39743), (53, 39698), (55, 39683), (56, 39674), (59, 39662), (60, 39641), (73, 39578), (75, 39572), (79, 39536), (80, 39533), (89, 39494),

Gene: CamL_46 Start: 39716, Stop: 39192, Start Num: 13

Candidate Starts for CamL_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39617 has 10 MA's), (40, 39539), (41, 39524), (49, 39479),

Gene: Cannibal_46 Start: 39699, Stop: 39175, Start Num: 13

Candidate Starts for Cannibal_46:

(Start: 13 @39699 has 190 MA's), (Start: 27 @39600 has 10 MA's), (40, 39522), (41, 39507), (49, 39462),

Gene: Carthage_44 Start: 38628, Stop: 38104, Start Num: 13

Candidate Starts for Carthage_44:

(Start: 13 @38628 has 190 MA's), (Start: 27 @38529 has 10 MA's), (40, 38451), (41, 38436), (49, 38391),

Gene: Caspiboi_47 Start: 39425, Stop: 38901, Start Num: 13

Candidate Starts for Caspiboi_47:

(Start: 13 @39425 has 190 MA's), (Start: 27 @39326 has 10 MA's), (40, 39248), (41, 39233), (49, 39188),

Gene: Causa_61 Start: 48193, Stop: 47834, Start Num: 34

Candidate Starts for Causa_61:

(18, 48304), (20, 48289), (22, 48259), (Start: 34 @48193 has 2 MA's), (45, 48100), (58, 48004), (63, 47968), (79, 47902), (83, 47884), (84, 47881),

Gene: Charles1_46 Start: 39701, Stop: 39177, Start Num: 13

Candidate Starts for Charles1_46:

(Start: 13 @39701 has 190 MA's), (Start: 27 @39602 has 10 MA's), (40, 39524), (41, 39509), (49, 39464),

Gene: CharlieGBrown_45 Start: 39291, Stop: 38767, Start Num: 13

Candidate Starts for CharlieGBrown_45:

(Start: 13 @39291 has 190 MA's), (Start: 27 @39192 has 10 MA's), (40, 39114), (41, 39099), (49, 39054),

Gene: CharlottesWeb_39 Start: 33161, Stop: 32775, Start Num: 28

Candidate Starts for CharlottesWeb_39:

(28, 33161), (48, 33047), (49, 33041), (56, 32972), (58, 32963), (74, 32888), (81, 32843), (83, 32831),

Gene: CheetO_46 Start: 39721, Stop: 39191, Start Num: 13

Candidate Starts for CheetO_46:

(Start: 13 @39721 has 190 MA's), (Start: 27 @39616 has 10 MA's), (40, 39538), (41, 39523), (49, 39478),

Gene: Cher_45 Start: 39438, Stop: 38914, Start Num: 13

Candidate Starts for Cher_45:

(Start: 13 @39438 has 190 MA's), (Start: 27 @39339 has 10 MA's), (40, 39261), (41, 39246), (49, 39201),

Gene: Childish_45 Start: 39441, Stop: 38917, Start Num: 13

Candidate Starts for Childish_45:

(Start: 13 @39441 has 190 MA's), (Start: 27 @39342 has 10 MA's), (40, 39264), (41, 39249), (49, 39204),

Gene: Chorkpop_46 Start: 39437, Stop: 38913, Start Num: 13

Candidate Starts for Chorkpop_46:

(Start: 13 @39437 has 190 MA's), (Start: 27 @39338 has 10 MA's), (40, 39260), (41, 39245), (49, 39200),

Gene: CloverMinnie_41 Start: 35206, Stop: 34766, Start Num: 23

Candidate Starts for CloverMinnie_41:

(Start: 23 @35206 has 1 MA's), (Start: 33 @35152 has 5 MA's), (42, 35092), (44, 35077), (54, 34984), (56, 34972), (60, 34939), (74, 34891), (77, 34882),

Gene: Cobra_46 Start: 39722, Stop: 39198, Start Num: 13

Candidate Starts for Cobra_46:

(Start: 13 @39722 has 190 MA's), (Start: 27 @39623 has 10 MA's), (40, 39545), (41, 39530), (49, 39485),

Gene: Coffee_45 Start: 39966, Stop: 39577, Start Num: 29

Candidate Starts for Coffee_45:

(Start: 29 @39966 has 33 MA's), (40, 39909), (45, 39867), (49, 39846), (53, 39801), (55, 39786), (56, 39777), (59, 39765), (60, 39744), (73, 39681), (75, 39675), (79, 39639), (80, 39636), (89, 39597),

Gene: Coldpizza_42 Start: 37983, Stop: 37594, Start Num: 34

Candidate Starts for Coldpizza_42:

(Start: 34 @37983 has 2 MA's), (44, 37899), (45, 37893), (49, 37875), (58, 37797), (79, 37686),

Gene: Cornbread_46 Start: 39438, Stop: 38914, Start Num: 13

Candidate Starts for Cornbread_46:

(Start: 13 @39438 has 190 MA's), (Start: 27 @39339 has 10 MA's), (40, 39261), (41, 39246), (49, 39201),

Gene: Cosmolli16_45 Start: 39429, Stop: 38902, Start Num: 13

Candidate Starts for Cosmolli16_45:

(Start: 13 @39429 has 190 MA's), (Start: 27 @39327 has 10 MA's), (40, 39249), (41, 39234), (49, 39189),

Gene: Crownjwl_46 Start: 39498, Stop: 38968, Start Num: 13

Candidate Starts for Crownjwl_46:

(Start: 13 @39498 has 190 MA's), (Start: 27 @39393 has 10 MA's), (40, 39315), (41, 39300), (49, 39255),

Gene: DaddyDaniels_46 Start: 39410, Stop: 38886, Start Num: 13

Candidate Starts for DaddyDaniels_46:

(Start: 13 @39410 has 190 MA's), (Start: 27 @39311 has 10 MA's), (40, 39233), (41, 39218), (49, 39173),

Gene: Daffy_46 Start: 39441, Stop: 38917, Start Num: 13

Candidate Starts for Daffy_46:

(Start: 13 @39441 has 190 MA's), (Start: 27 @39342 has 10 MA's), (40, 39264), (41, 39249), (49, 39204),

Gene: DelRivs_45 Start: 39442, Stop: 38912, Start Num: 13

Candidate Starts for DelRivs_45:

(Start: 13 @39442 has 190 MA's), (Start: 27 @39337 has 10 MA's), (40, 39259), (41, 39244), (49, 39199),

Gene: Derpp_45 Start: 39280, Stop: 38756, Start Num: 13

Candidate Starts for Derpp_45:

(Start: 13 @39280 has 190 MA's), (Start: 27 @39181 has 10 MA's), (40, 39103), (41, 39088), (49, 39043),

Gene: Dice_45 Start: 39412, Stop: 38891, Start Num: 13

Candidate Starts for Dice_45:

(Start: 13 @39412 has 190 MA's), (Start: 27 @39316 has 10 MA's), (40, 39238), (41, 39223), (49, 39178),

Gene: DigitDog_44 Start: 39734, Stop: 39348, Start Num: 36

Candidate Starts for DigitDog_44:

(Start: 36 @39734 has 11 MA's), (38, 39713), (42, 39674), (45, 39653), (52, 39593), (55, 39575), (56, 39566), (75, 39479), (79, 39443), (83, 39425), (90, 39389),

Gene: Dingo_46 Start: 39704, Stop: 39174, Start Num: 13

Candidate Starts for Dingo_46:

(Start: 13 @39704 has 190 MA's), (Start: 27 @39599 has 10 MA's), (40, 39521), (41, 39506), (49, 39461),

Gene: Dione_45 Start: 39420, Stop: 38896, Start Num: 13

Candidate Starts for Dione_45:

(Start: 13 @39420 has 190 MA's), (Start: 27 @39321 has 10 MA's), (40, 39243), (41, 39228), (49, 39183),

Gene: DirtJuice_46 Start: 39704, Stop: 39180, Start Num: 13

Candidate Starts for DirtJuice_46:

(Start: 13 @39704 has 190 MA's), (Start: 27 @39605 has 10 MA's), (40, 39527), (41, 39512), (49, 39467),

Gene: Doddsville_46 Start: 39434, Stop: 38910, Start Num: 13

Candidate Starts for Doddsville_46:

(Start: 13 @39434 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: DoesntMatter_45 Start: 39707, Stop: 39183, Start Num: 13

Candidate Starts for DoesntMatter_45:

(Start: 13 @39707 has 190 MA's), (Start: 27 @39608 has 10 MA's), (40, 39530), (41, 39515), (49, 39470),

Gene: Donny_45 Start: 40039, Stop: 39653, Start Num: 36

Candidate Starts for Donny_45:

(15, 40177), (Start: 36 @40039 has 11 MA's), (38, 40018), (42, 39979), (45, 39958), (52, 39898), (56, 39871), (75, 39784), (79, 39748), (83, 39730), (90, 39694), (93, 39673),

Gene: Duggie_45 Start: 39436, Stop: 38912, Start Num: 13

Candidate Starts for Duggie_45:

(Start: 13 @39436 has 190 MA's), (Start: 27 @39337 has 10 MA's), (40, 39259), (41, 39244), (49, 39199),

Gene: Eaglehorse_45 Start: 39890, Stop: 39501, Start Num: 29

Candidate Starts for Eaglehorse_45:

(Start: 29 @39890 has 33 MA's), (40, 39833), (45, 39791), (49, 39770), (53, 39725), (55, 39710), (56, 39701), (59, 39689), (60, 39668), (73, 39605), (75, 39599), (79, 39563), (80, 39560), (89, 39521),

Gene: EastView9101_43 Start: 39689, Stop: 39303, Start Num: 36

Candidate Starts for EastView9101_43:

(15, 39827), (Start: 36 @39689 has 11 MA's), (38, 39668), (42, 39629), (45, 39608), (52, 39548), (56, 39521), (75, 39434), (79, 39398), (83, 39380), (90, 39344), (93, 39323),

Gene: EmpTee_46 Start: 39720, Stop: 39190, Start Num: 13

Candidate Starts for EmpTee_46:

(Start: 13 @39720 has 190 MA's), (Start: 27 @39615 has 10 MA's), (40, 39537), (41, 39522), (49, 39477),

Gene: Etaye_46 Start: 39707, Stop: 39180, Start Num: 13

Candidate Starts for Etaye_46:

(Start: 13 @39707 has 190 MA's), (Start: 27 @39605 has 10 MA's), (40, 39527), (41, 39512), (49, 39467),

Gene: Evaa_39 Start: 34284, Stop: 33898, Start Num: 34

Candidate Starts for Evaa_39:

(31, 34296), (Start: 34 @34284 has 2 MA's), (45, 34194), (49, 34176), (59, 34095), (66, 34041), (68, 34029),

Gene: Faze9_44 Start: 39986, Stop: 39597, Start Num: 29

Candidate Starts for Faze9_44:

(Start: 29 @39986 has 33 MA's), (40, 39929), (45, 39887), (49, 39866), (53, 39821), (55, 39806), (56, 39797), (59, 39785), (60, 39764), (73, 39701), (75, 39695), (79, 39659), (80, 39656), (89, 39617),

Gene: ForDig_39 Start: 37407, Stop: 36973, Start Num: 26

Candidate Starts for ForDig_39:

(1, 37635), (6, 37563), (Start: 26 @37407 has 2 MA's), (42, 37302), (45, 37281), (52, 37221), (59, 37182), (63, 37149), (79, 37074), (83, 37056),

Gene: Fozzie_45 Start: 39742, Stop: 39212, Start Num: 13

Candidate Starts for Fozzie_45:

(Start: 13 @39742 has 190 MA's), (Start: 27 @39637 has 10 MA's), (40, 39559), (41, 39544), (49, 39499),

Gene: Frankicide_46 Start: 39732, Stop: 39208, Start Num: 13

Candidate Starts for Frankicide_46:

(Start: 13 @39732 has 190 MA's), (Start: 27 @39633 has 10 MA's), (40, 39555), (41, 39540), (49, 39495),

Gene: FrenchFry_45 Start: 39980, Stop: 39591, Start Num: 29

Candidate Starts for FrenchFry_45:

(Start: 29 @39980 has 33 MA's), (40, 39923), (45, 39881), (49, 39860), (53, 39815), (55, 39800), (56, 39791), (59, 39779), (60, 39758), (73, 39695), (75, 39689), (79, 39653), (80, 39650), (89, 39611),

Gene: Fresco_39 Start: 33273, Stop: 32851, Start Num: 27

Candidate Starts for Fresco_39:

(Start: 27 @33273 has 10 MA's), (45, 33156), (49, 33138), (54, 33081), (69, 32994), (74, 32979), (81, 32934), (88, 32892),

Gene: Freya_45 Start: 39411, Stop: 38887, Start Num: 13

Candidate Starts for Freya_45:

(Start: 13 @39411 has 190 MA's), (Start: 27 @39312 has 10 MA's), (40, 39234), (41, 39219), (49, 39174),

Gene: FriarPreacher_45 Start: 39744, Stop: 39214, Start Num: 13

Candidate Starts for FriarPreacher_45:

(Start: 13 @39744 has 190 MA's), (Start: 27 @39639 has 10 MA's), (40, 39561), (41, 39546), (49, 39501),

Gene: FugateOSU_45 Start: 39419, Stop: 38892, Start Num: 13

Candidate Starts for FugateOSU_45:

(Start: 13 @39419 has 190 MA's), (Start: 27 @39317 has 10 MA's), (40, 39239), (41, 39224), (49, 39179),

Gene: Funsized_47 Start: 42156, Stop: 41758, Start Num: 35

Candidate Starts for Funsized_47:

(Start: 35 @42156 has 1 MA's), (49, 42054), (54, 41997), (55, 41994), (61, 41946), (74, 41886), (83, 41829),

Gene: GeneCoco_46 Start: 39728, Stop: 39204, Start Num: 13

Candidate Starts for GeneCoco_46:

(Start: 13 @39728 has 190 MA's), (Start: 27 @39629 has 10 MA's), (40, 39551), (41, 39536), (49, 39491),

Gene: Giraffe_46 Start: 39422, Stop: 38898, Start Num: 13

Candidate Starts for Giraffe_46:

(Start: 13 @39422 has 190 MA's), (Start: 27 @39323 has 10 MA's), (40, 39245), (41, 39230), (49, 39185),

Gene: Glass_45 Start: 39980, Stop: 39591, Start Num: 29

Candidate Starts for Glass_45:

(Start: 29 @39980 has 33 MA's), (40, 39923), (45, 39881), (49, 39860), (53, 39815), (55, 39800), (56, 39791), (59, 39779), (60, 39758), (73, 39695), (75, 39689), (79, 39653), (80, 39650), (89, 39611),

Gene: Godines_45 Start: 39922, Stop: 39533, Start Num: 29

Candidate Starts for Godines_45:

(Start: 29 @39922 has 33 MA's), (40, 39865), (45, 39823), (49, 39802), (53, 39757), (55, 39742), (56, 39733), (59, 39721), (60, 39700), (73, 39637), (75, 39631), (79, 39595), (80, 39592), (89, 39553),

Gene: Gophee_46 Start: 39711, Stop: 39181, Start Num: 13

Candidate Starts for Gophee_46:

(Start: 13 @39711 has 190 MA's), (Start: 27 @39606 has 10 MA's), (40, 39528), (41, 39513), (49, 39468),

Gene: Grand2040_45 Start: 39437, Stop: 38913, Start Num: 13

Candidate Starts for Grand2040_45:

(Start: 13 @39437 has 190 MA's), (Start: 27 @39338 has 10 MA's), (40, 39260), (41, 39245), (49, 39200),

Gene: Gwennie1_46 Start: 39783, Stop: 39259, Start Num: 13

Candidate Starts for Gwennie1_46:

(Start: 13 @39783 has 190 MA's), (Start: 27 @39684 has 10 MA's), (40, 39606), (41, 39591), (49, 39546),

Gene: Gyarad_0046 Start: 39719, Stop: 39195, Start Num: 13

Candidate Starts for Gyarad_0046:

(Start: 13 @39719 has 190 MA's), (Start: 27 @39620 has 10 MA's), (40, 39542), (41, 39527), (49, 39482),

Gene: HSavage_46 Start: 39723, Stop: 39199, Start Num: 13

Candidate Starts for HSavage_46:

(Start: 13 @39723 has 190 MA's), (Start: 27 @39624 has 10 MA's), (40, 39546), (41, 39531), (49, 39486),

Gene: Haimas_46 Start: 39717, Stop: 39190, Start Num: 13

Candidate Starts for Haimas_46:

(Start: 13 @39717 has 190 MA's), (Start: 27 @39615 has 10 MA's), (40, 39537), (41, 39522), (49, 39477),

Gene: Haleema_45 Start: 39437, Stop: 38913, Start Num: 13

Candidate Starts for Haleema_45:

(Start: 13 @39437 has 190 MA's), (Start: 27 @39338 has 10 MA's), (40, 39260), (41, 39245), (49, 39200),

Gene: Hamish_46 Start: 39709, Stop: 39182, Start Num: 13

Candidate Starts for Hamish_46:

(Start: 13 @39709 has 190 MA's), (Start: 27 @39607 has 10 MA's), (40, 39529), (41, 39514), (49, 39469),

Gene: Hartsy_46 Start: 39760, Stop: 39233, Start Num: 13

Candidate Starts for Hartsy_46:

(Start: 13 @39760 has 190 MA's), (Start: 27 @39658 has 10 MA's), (40, 39580), (41, 39565), (49, 39520),

Gene: Hedgerow_45 Start: 39962, Stop: 39573, Start Num: 29

Candidate Starts for Hedgerow_45:

(Start: 29 @39962 has 33 MA's), (40, 39905), (45, 39863), (49, 39842), (53, 39797), (55, 39782), (56, 39773), (59, 39761), (60, 39740), (73, 39677), (75, 39671), (79, 39635), (80, 39632), (89, 39593),

Gene: Held_46 Start: 39421, Stop: 38897, Start Num: 13

Candidate Starts for Held_46:

(Start: 13 @39421 has 190 MA's), (Start: 27 @39322 has 10 MA's), (40, 39244), (41, 39229), (49, 39184),

Gene: HenryJackson_45 Start: 39437, Stop: 38913, Start Num: 13

Candidate Starts for HenryJackson_45:

(Start: 13 @39437 has 190 MA's), (Start: 27 @39338 has 10 MA's), (40, 39260), (41, 39245), (49, 39200),

Gene: Hertubise_46 Start: 39731, Stop: 39204, Start Num: 13

Candidate Starts for Hertubise_46:

(Start: 13 @39731 has 190 MA's), (Start: 27 @39629 has 10 MA's), (40, 39551), (41, 39536), (49, 39491),

Gene: Hetaeria_46 Start: 39733, Stop: 39206, Start Num: 13

Candidate Starts for Hetaeria_46:

(Start: 13 @39733 has 190 MA's), (Start: 27 @39631 has 10 MA's), (40, 39553), (41, 39538), (49, 39493),

Gene: Hocus_45 Start: 39426, Stop: 38902, Start Num: 13

Candidate Starts for Hocus_45:

(Start: 13 @39426 has 190 MA's), (Start: 27 @39327 has 10 MA's), (40, 39249), (41, 39234), (49, 39189),

Gene: Holeinone_45 Start: 39842, Stop: 39453, Start Num: 29

Candidate Starts for Holeinone_45:

(Start: 29 @39842 has 33 MA's), (40, 39785), (45, 39743), (49, 39722), (53, 39677), (55, 39662), (56, 39653), (59, 39641), (60, 39620), (73, 39557), (75, 39551), (79, 39515), (80, 39512), (89, 39473),

Gene: Horchata_46 Start: 39711, Stop: 39184, Start Num: 13

Candidate Starts for Horchata_46:

(Start: 13 @39711 has 190 MA's), (Start: 27 @39609 has 10 MA's), (40, 39531), (41, 39516), (49, 39471),

Gene: Hosp_036 Start: 35614, Stop: 35177, Start Num: 26

Candidate Starts for Hosp_036:

(1, 35842), (6, 35770), (Start: 26 @35614 has 2 MA's), (38, 35548), (45, 35488), (56, 35401), (59, 35389), (60, 35368), (79, 35269),

Gene: Indlovu_43 Start: 38910, Stop: 38503, Start Num: 26

Candidate Starts for Indlovu_43:

(Start: 26 @38910 has 2 MA's), (42, 38835), (55, 38736), (60, 38694), (71, 38637), (79, 38589),

Gene: Inverness_46 Start: 39720, Stop: 39196, Start Num: 13

Candidate Starts for Inverness_46:

(Start: 13 @39720 has 190 MA's), (Start: 27 @39621 has 10 MA's), (40, 39543), (41, 39528), (49, 39483),

Gene: Iridessa_47 Start: 39422, Stop: 38898, Start Num: 13

Candidate Starts for Iridessa_47:

(Start: 13 @39422 has 190 MA's), (Start: 27 @39323 has 10 MA's), (40, 39245), (41, 39230), (49, 39185),

Gene: Iridoclysis_46 Start: 39703, Stop: 39176, Start Num: 13

Candidate Starts for Iridoclysis_46:

(Start: 13 @39703 has 190 MA's), (Start: 27 @39601 has 10 MA's), (40, 39523), (41, 39508), (49, 39463),

Gene: ItsyBitsy1_45 Start: 39844, Stop: 39455, Start Num: 29

Candidate Starts for ItsyBitsy1_45:

(Start: 29 @39844 has 33 MA's), (40, 39787), (45, 39745), (49, 39724), (53, 39679), (55, 39664), (56, 39655), (59, 39643), (60, 39622), (73, 39559), (75, 39553), (79, 39517), (80, 39514), (89, 39475),

Gene: JakeO_45 Start: 39439, Stop: 38915, Start Num: 13

Candidate Starts for JakeO_45:

(Start: 13 @39439 has 190 MA's), (Start: 27 @39340 has 10 MA's), (40, 39262), (41, 39247), (49, 39202),

Gene: JangoPhett_46 Start: 39714, Stop: 39184, Start Num: 13

Candidate Starts for JangoPhett_46:

(Start: 13 @39714 has 190 MA's), (Start: 27 @39609 has 10 MA's), (40, 39531), (41, 39516), (49, 39471),

Gene: Jesabah_46 Start: 39442, Stop: 38915, Start Num: 13

Candidate Starts for Jesabah_46:

(Start: 13 @39442 has 190 MA's), (Start: 27 @39340 has 10 MA's), (40, 39262), (41, 39247), (49, 39202),

Gene: Jillium_45 Start: 39433, Stop: 38906, Start Num: 13

Candidate Starts for Jillium_45:

(Start: 13 @39433 has 190 MA's), (Start: 27 @39331 has 10 MA's), (40, 39253), (41, 39238), (49, 39193),

Gene: Jiminy_45 Start: 39274, Stop: 38750, Start Num: 13

Candidate Starts for Jiminy_45:

(Start: 13 @39274 has 190 MA's), (Start: 27 @39175 has 10 MA's), (40, 39097), (41, 39082), (49, 39037),

Gene: Jiraiya_45 Start: 39427, Stop: 38903, Start Num: 13

Candidate Starts for Jiraiya_45:

(Start: 13 @39427 has 190 MA's), (Start: 27 @39328 has 10 MA's), (40, 39250), (41, 39235), (49, 39190),

Gene: Jolie1_038 Start: 37398, Stop: 36964, Start Num: 26

Candidate Starts for Jolie1_038:

(1, 37626), (Start: 26 @37398 has 2 MA's), (42, 37293), (45, 37272), (52, 37212), (56, 37185), (59, 37173), (63, 37140), (79, 37065), (83, 37047),

Gene: KLucky39_46 Start: 39718, Stop: 39194, Start Num: 13

Candidate Starts for KLucky39_46:

(Start: 13 @39718 has 190 MA's), (Start: 27 @39619 has 10 MA's), (40, 39541), (41, 39526), (49, 39481),

Gene: Kahve_45 Start: 39434, Stop: 38910, Start Num: 13

Candidate Starts for Kahve_45:

(Start: 13 @39434 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: Kailash_46 Start: 39775, Stop: 39248, Start Num: 13

Candidate Starts for Kailash_46:

(Start: 13 @39775 has 190 MA's), (Start: 27 @39673 has 10 MA's), (40, 39595), (41, 39580), (49, 39535),

Gene: Kaleb_45 Start: 39977, Stop: 39588, Start Num: 29

Candidate Starts for Kaleb_45:

(Start: 29 @39977 has 33 MA's), (40, 39920), (45, 39878), (49, 39857), (53, 39812), (55, 39797), (56, 39788), (59, 39776), (60, 39755), (73, 39692), (75, 39686), (79, 39650), (80, 39647), (89, 39608),

Gene: KarasumaRum_46 Start: 40176, Stop: 39790, Start Num: 36

Candidate Starts for KarasumaRum_46:

(Start: 36 @40176 has 11 MA's), (38, 40155), (42, 40116), (45, 40095), (52, 40035), (55, 40017), (56, 40008), (79, 39885), (83, 39867), (90, 39831),

Gene: KayaCho_38 Start: 37397, Stop: 36963, Start Num: 26

Candidate Starts for KayaCho_38:

(Start: 26 @37397 has 2 MA's), (42, 37292), (45, 37271), (52, 37211), (56, 37184), (59, 37172), (63, 37139), (79, 37064), (83, 37046),

Gene: Khan1_46 Start: 39455, Stop: 38931, Start Num: 13

Candidate Starts for Khan1_46:

(Start: 13 @39455 has 190 MA's), (Start: 27 @39356 has 10 MA's), (40, 39278), (41, 39263), (49, 39218),

Gene: Kheth_45 Start: 39865, Stop: 39476, Start Num: 29

Candidate Starts for Kheth_45:

(Start: 29 @39865 has 33 MA's), (40, 39808), (45, 39766), (49, 39745), (53, 39700), (55, 39685), (56, 39676), (59, 39664), (60, 39643), (73, 39580), (75, 39574), (79, 39538), (80, 39535), (89, 39496),

Gene: Kimbrough_46 Start: 39435, Stop: 38902, Start Num: 13

Candidate Starts for Kimbrough_46:

(Start: 13 @39435 has 190 MA's), (Start: 27 @39327 has 10 MA's), (40, 39249), (41, 39234), (49, 39189),

Gene: KingTut_37 Start: 35098, Stop: 34571, Start Num: 13

Candidate Starts for KingTut_37:

(Start: 13 @35098 has 190 MA's), (Start: 27 @34996 has 10 MA's), (40, 34918), (41, 34903), (49, 34858),

Gene: KingVeVeVe_46 Start: 39705, Stop: 39175, Start Num: 13

Candidate Starts for KingVeVeVe_46:

(Start: 13 @39705 has 190 MA's), (Start: 27 @39600 has 10 MA's), (40, 39522), (41, 39507), (49, 39462),

Gene: KlimbOn_46 Start: 39712, Stop: 39188, Start Num: 13

Candidate Starts for KlimbOn_46:

(Start: 13 @39712 has 190 MA's), (Start: 27 @39613 has 10 MA's), (40, 39535), (41, 39520), (49, 39475),

Gene: Kloppinator_46 Start: 39738, Stop: 39211, Start Num: 13

Candidate Starts for Kloppinator_46:

(Start: 13 @39738 has 190 MA's), (Start: 27 @39636 has 10 MA's), (40, 39558), (41, 39543), (49, 39498),

Gene: Knocker_46 Start: 41265, Stop: 40882, Start Num: 37

Candidate Starts for Knocker_46:

(Start: 37 @41265 has 2 MA's), (45, 41190), (49, 41172), (50, 41157), (54, 41115), (62, 41061), (69, 41019), (72, 41013), (82, 40950), (91, 40914),

Gene: Kolhan_45 Start: 39856, Stop: 39467, Start Num: 29

Candidate Starts for Kolhan_45:

(Start: 29 @39856 has 33 MA's), (40, 39799), (45, 39757), (49, 39736), (53, 39691), (55, 39676), (56, 39667), (59, 39655), (60, 39634), (73, 39571), (75, 39565), (79, 39529), (80, 39526), (89, 39487),

Gene: Kwadwo_45 Start: 39416, Stop: 38892, Start Num: 13

Candidate Starts for Kwadwo_45:

(Start: 13 @39416 has 190 MA's), (Start: 27 @39317 has 10 MA's), (40, 39239), (41, 39224), (49, 39179),

Gene: Kwksand96_45 Start: 39285, Stop: 38761, Start Num: 13

Candidate Starts for Kwksand96_45:

(Start: 13 @39285 has 190 MA's), (Start: 27 @39186 has 10 MA's), (40, 39108), (41, 39093), (49, 39048),

Gene: Labeouficaum_45 Start: 39280, Stop: 38756, Start Num: 13

Candidate Starts for Labeouficaum_45:

(Start: 13 @39280 has 190 MA's), (Start: 27 @39181 has 10 MA's), (40, 39103), (41, 39088), (49, 39043),

Gene: Lars_45 Start: 39967, Stop: 39578, Start Num: 29

Candidate Starts for Lars_45:

(Start: 29 @39967 has 33 MA's), (40, 39910), (45, 39868), (49, 39847), (53, 39802), (55, 39787), (56, 39778), (59, 39766), (60, 39745), (73, 39682), (75, 39676), (79, 39640), (80, 39637), (85, 39610), (89, 39598),

Gene: Lasso_46 Start: 39691, Stop: 39167, Start Num: 13

Candidate Starts for Lasso_46:

(Start: 13 @39691 has 190 MA's), (Start: 27 @39592 has 10 MA's), (40, 39514), (41, 39499), (49, 39454),

Gene: Laurie_44 Start: 39366, Stop: 38977, Start Num: 29

Candidate Starts for Laurie_44:

(Start: 29 @39366 has 33 MA's), (40, 39309), (45, 39267), (49, 39246), (53, 39201), (55, 39186), (56, 39177), (59, 39165), (60, 39144), (73, 39081), (75, 39075), (79, 39039), (80, 39036), (83, 39021), (89,

38997),

Gene: LeeLot_46 Start: 39722, Stop: 39198, Start Num: 13

Candidate Starts for LeeLot_46:

(Start: 13 @39722 has 190 MA's), (Start: 27 @39623 has 10 MA's), (40, 39545), (41, 39530), (49, 39485),

Gene: LeiMonet_47 Start: 39423, Stop: 38899, Start Num: 13

Candidate Starts for LeiMonet_47:

(Start: 13 @39423 has 190 MA's), (Start: 27 @39324 has 10 MA's), (40, 39246), (41, 39231), (49, 39186),

Gene: LemonSlice_46 Start: 39422, Stop: 38895, Start Num: 13

Candidate Starts for LemonSlice_46:

(Start: 13 @39422 has 190 MA's), (Start: 27 @39320 has 10 MA's), (40, 39242), (41, 39227), (49, 39182),

Gene: Lephleur_45 Start: 39860, Stop: 39471, Start Num: 29

Candidate Starts for Lephleur_45:

(Start: 29 @39860 has 33 MA's), (40, 39803), (45, 39761), (49, 39740), (53, 39695), (55, 39680), (56, 39671), (59, 39659), (60, 39638), (73, 39575), (75, 39569), (79, 39533), (80, 39530), (89, 39491),

Gene: Ligma_39 Start: 33273, Stop: 32851, Start Num: 27

Candidate Starts for Ligma_39:

(Start: 27 @33273 has 10 MA's), (45, 33156), (49, 33138), (54, 33081), (69, 32994), (74, 32979), (81, 32934), (88, 32892),

Gene: LilMcDreamy_42 Start: 39137, Stop: 38754, Start Num: 36

Candidate Starts for LilMcDreamy_42:

(5, 39353), (Start: 36 @39137 has 11 MA's), (42, 39077), (45, 39056), (56, 38969), (60, 38936), (62, 38927), (83, 38831), (87, 38804),

Gene: LilSmirk_45 Start: 39854, Stop: 39465, Start Num: 29

Candidate Starts for LilSmirk_45:

(Start: 29 @39854 has 33 MA's), (40, 39797), (45, 39755), (49, 39734), (53, 39689), (55, 39674), (56, 39665), (59, 39653), (60, 39632), (73, 39569), (75, 39563), (79, 39527), (80, 39524), (89, 39485),

Gene: LittleMunchkin_41 Start: 36568, Stop: 36182, Start Num: 27

Candidate Starts for LittleMunchkin_41:

(Start: 27 @36568 has 10 MA's), (45, 36460), (49, 36442), (56, 36373), (59, 36361), (63, 36328), (81, 36247), (83, 36235),

Gene: LizLemon_45 Start: 39976, Stop: 39587, Start Num: 29

Candidate Starts for LizLemon_45:

(Start: 29 @39976 has 33 MA's), (40, 39919), (45, 39877), (49, 39856), (53, 39811), (55, 39796), (56, 39787), (59, 39775), (60, 39754), (73, 39691), (75, 39685), (79, 39649), (80, 39646), (89, 39607),

Gene: Longacauda_45 Start: 39424, Stop: 38900, Start Num: 13

Candidate Starts for Longacauda_45:

(Start: 13 @39424 has 190 MA's), (Start: 27 @39325 has 10 MA's), (40, 39247), (41, 39232), (49, 39187),

Gene: LostAndPhound_45 Start: 39425, Stop: 38901, Start Num: 13

Candidate Starts for LostAndPhound_45:

(Start: 13 @39425 has 190 MA's), (Start: 27 @39326 has 10 MA's), (40, 39248), (41, 39233), (49, 39188),

Gene: LuckyMarjie_45 Start: 39431, Stop: 38910, Start Num: 13

Candidate Starts for LuckyMarjie_45:

(Start: 13 @39431 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: Lulumae_45 Start: 39416, Stop: 38892, Start Num: 13

Candidate Starts for Lulumae_45:

(Start: 13 @39416 has 190 MA's), (Start: 27 @39317 has 10 MA's), (40, 39239), (41, 39224), (49, 39179),

Gene: Lulwa_46 Start: 39703, Stop: 39179, Start Num: 13

Candidate Starts for Lulwa_46:

(Start: 13 @39703 has 190 MA's), (Start: 27 @39604 has 10 MA's), (40, 39526), (41, 39511), (49, 39466),

Gene: Lumine_45 Start: 39412, Stop: 38888, Start Num: 13

Candidate Starts for Lumine_45:

(Start: 13 @39412 has 190 MA's), (Start: 27 @39313 has 10 MA's), (40, 39235), (41, 39220), (49, 39175),

Gene: MRabcd_45 Start: 39416, Stop: 38892, Start Num: 13

Candidate Starts for MRabcd_45:

(Start: 13 @39416 has 190 MA's), (Start: 27 @39317 has 10 MA's), (40, 39239), (41, 39224), (49, 39179),

Gene: Mag7_45 Start: 39325, Stop: 38798, Start Num: 13

Candidate Starts for Mag7_45:

(Start: 13 @39325 has 190 MA's), (Start: 27 @39223 has 10 MA's), (40, 39145), (41, 39130), (49, 39085),

Gene: Magic8_46 Start: 39760, Stop: 39233, Start Num: 13

Candidate Starts for Magic8_46:

(Start: 13 @39760 has 190 MA's), (Start: 27 @39658 has 10 MA's), (40, 39580), (41, 39565), (49, 39520),

Gene: MakoManhole_41 Start: 35230, Stop: 34844, Start Num: 33

Candidate Starts for MakoManhole_41:

(Start: 23 @35284 has 1 MA's), (Start: 33 @35230 has 5 MA's), (42, 35170), (44, 35155), (54, 35062), (56, 35050), (60, 35017), (74, 34969), (77, 34960),

Gene: Mana_45 Start: 39431, Stop: 38907, Start Num: 13

Candidate Starts for Mana_45:

(Start: 13 @39431 has 190 MA's), (Start: 27 @39332 has 10 MA's), (40, 39254), (41, 39239), (49, 39194),

Gene: Mariokart_39 Start: 33175, Stop: 32774, Start Num: 27

Candidate Starts for Mariokart_39:

(Start: 27 @33175 has 10 MA's), (48, 33046), (49, 33040), (56, 32971), (58, 32962), (74, 32887), (81, 32842), (83, 32830),

Gene: Maru_45 Start: 39374, Stop: 38850, Start Num: 13

Candidate Starts for Maru_45:

(Start: 13 @39374 has 190 MA's), (Start: 27 @39275 has 10 MA's), (40, 39197), (41, 39182), (49, 39137),

Gene: MasterPo_45 Start: 39863, Stop: 39474, Start Num: 29

Candidate Starts for MasterPo_45:

(Start: 29 @39863 has 33 MA's), (40, 39806), (45, 39764), (49, 39743), (53, 39698), (55, 39683), (56, 39674), (59, 39662), (60, 39641), (73, 39578), (75, 39572), (79, 39536), (80, 39533), (89, 39494),

Gene: Matalotodo_46 Start: 39720, Stop: 39193, Start Num: 13

Candidate Starts for Matalotodo_46:

(Start: 13 @39720 has 190 MA's), (Start: 27 @39618 has 10 MA's), (40, 39540), (41, 39525), (49, 39480),

Gene: Mcshane_45 Start: 39417, Stop: 38890, Start Num: 13

Candidate Starts for Mcshane_45:

(Start: 13 @39417 has 190 MA's), (Start: 27 @39315 has 10 MA's), (40, 39237), (41, 39222), (49, 39177),

Gene: Mecca_45 Start: 39423, Stop: 38893, Start Num: 13

Candidate Starts for Mecca_45:

(Start: 13 @39423 has 190 MA's), (Start: 27 @39318 has 10 MA's), (40, 39240), (41, 39225), (49, 39180),

Gene: Megamind20_46 Start: 39445, Stop: 38915, Start Num: 13

Candidate Starts for Megamind20_46:

(Start: 13 @39445 has 190 MA's), (Start: 27 @39340 has 10 MA's), (40, 39262), (41, 39247), (49, 39202),

Gene: Melc17_46 Start: 39715, Stop: 39188, Start Num: 13

Candidate Starts for Melc17_46:

(Start: 13 @39715 has 190 MA's), (Start: 27 @39613 has 10 MA's), (40, 39535), (41, 39520), (49, 39475),

Gene: Mesh1_46 Start: 39732, Stop: 39205, Start Num: 13

Candidate Starts for Mesh1_46:

(Start: 13 @39732 has 190 MA's), (Start: 27 @39630 has 10 MA's), (40, 39552), (41, 39537), (49, 39492),

Gene: Mesmerelda_47 Start: 39433, Stop: 38903, Start Num: 13

Candidate Starts for Mesmerelda_47:

(Start: 13 @39433 has 190 MA's), (Start: 27 @39328 has 10 MA's), (40, 39250), (41, 39235), (49, 39190),

Gene: MichaelPhcott_45 Start: 39322, Stop: 38795, Start Num: 13

Candidate Starts for MichaelPhcott_45:

(Start: 13 @39322 has 190 MA's), (Start: 27 @39220 has 10 MA's), (40, 39142), (41, 39127), (49, 39082),

Gene: Mikota_46 Start: 39702, Stop: 39178, Start Num: 13

Candidate Starts for Mikota_46:

(Start: 13 @39702 has 190 MA's), (Start: 27 @39603 has 10 MA's), (40, 39525), (41, 39510), (49, 39465),

Gene: MiniBoss_46 Start: 39708, Stop: 39184, Start Num: 13

Candidate Starts for MiniBoss_46:

(Start: 13 @39708 has 190 MA's), (Start: 27 @39609 has 10 MA's), (40, 39531), (41, 39516), (49, 39471),

Gene: MitKao_46 Start: 39423, Stop: 38899, Start Num: 13

Candidate Starts for MitKao_46:

(Start: 13 @39423 has 190 MA's), (Start: 27 @39324 has 10 MA's), (40, 39246), (41, 39231), (49, 39186),

Gene: Morgushi_46 Start: 39424, Stop: 38900, Start Num: 13

Candidate Starts for Morgushi_46:

(Start: 13 @39424 has 190 MA's), (Start: 27 @39325 has 10 MA's), (40, 39247), (41, 39232), (49, 39187),

Gene: MossRose_41 Start: 35209, Stop: 34823, Start Num: 33

Candidate Starts for MossRose_41:

(Start: 23 @35263 has 1 MA's), (Start: 33 @35209 has 5 MA's), (42, 35149), (44, 35134), (54, 35041), (56, 35029), (60, 34996), (74, 34948), (77, 34939),

Gene: MrPhizzler_45 Start: 39432, Stop: 38908, Start Num: 13

Candidate Starts for MrPhizzler_45:

(Start: 13 @39432 has 190 MA's), (Start: 27 @39333 has 10 MA's), (40, 39255), (41, 39240), (49, 39195),

Gene: Murdoc_46 Start: 39716, Stop: 39192, Start Num: 13

Candidate Starts for Murdoc_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39617 has 10 MA's), (40, 39539), (41, 39524), (49, 39479),

Gene: Mysterious_46 Start: 40306, Stop: 39920, Start Num: 36

Candidate Starts for Mysterious_46:

(Start: 36 @40306 has 11 MA's), (42, 40246), (43, 40240), (45, 40225), (55, 40147), (56, 40138), (62, 40096), (63, 40093), (75, 40051), (78, 40039), (79, 40015), (83, 39997), (90, 39961),

Gene: NHagos_39 Start: 33821, Stop: 33447, Start Num: 32

Candidate Starts for NHagos_39:

(Start: 32 @33821 has 2 MA's), (45, 33740), (49, 33722), (56, 33653), (69, 33584), (79, 33533), (83, 33515),

Gene: Nangang_44 Start: 40099, Stop: 39713, Start Num: 36

Candidate Starts for Nangang_44:

(Start: 36 @40099 has 11 MA's), (38, 40078), (42, 40039), (45, 40018), (52, 39958), (55, 39940), (56, 39931), (75, 39844), (79, 39808), (83, 39790), (90, 39754),

Gene: Nathan_47 Start: 39754, Stop: 39230, Start Num: 13

Candidate Starts for Nathan_47:

(Start: 13 @39754 has 190 MA's), (Start: 27 @39655 has 10 MA's), (40, 39577), (41, 39562), (49, 39517),

Gene: Nehemiah_44 Start: 40306, Stop: 39920, Start Num: 36

Candidate Starts for Nehemiah_44:

(Start: 36 @40306 has 11 MA's), (42, 40246), (43, 40240), (45, 40225), (55, 40147), (56, 40138), (62, 40096), (63, 40093), (75, 40051), (78, 40039), (79, 40015), (83, 39997), (90, 39961),

Gene: Newman_46 Start: 39715, Stop: 39191, Start Num: 13

Candidate Starts for Newman_46:

(Start: 13 @39715 has 190 MA's), (Start: 27 @39616 has 10 MA's), (40, 39538), (41, 39523), (49, 39478),

Gene: Nicole21_46 Start: 39716, Stop: 39189, Start Num: 13

Candidate Starts for Nicole21_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39614 has 10 MA's), (40, 39536), (41, 39521), (49, 39476),

Gene: Numberten_46 Start: 39722, Stop: 39198, Start Num: 13

Candidate Starts for Numberten_46:

(Start: 13 @39722 has 190 MA's), (Start: 27 @39623 has 10 MA's), (40, 39545), (41, 39530), (49, 39485),

Gene: Nyala_45 Start: 39421, Stop: 38891, Start Num: 13

Candidate Starts for Nyala_45:

(Start: 13 @39421 has 190 MA's), (Start: 27 @39316 has 10 MA's), (40, 39238), (41, 39223), (49, 39178),

Gene: Olak_45 Start: 39424, Stop: 38894, Start Num: 13

Candidate Starts for Olak_45:

(Start: 13 @39424 has 190 MA's), (Start: 27 @39319 has 10 MA's), (40, 39241), (41, 39226), (49, 39181),

Gene: Oline_45 Start: 39284, Stop: 38760, Start Num: 13

Candidate Starts for Oline_45:

(Start: 13 @39284 has 190 MA's), (Start: 27 @39185 has 10 MA's), (40, 39107), (41, 39092), (49, 39047),

Gene: Olive_46 Start: 39711, Stop: 39181, Start Num: 13

Candidate Starts for Olive_46:

(Start: 13 @39711 has 190 MA's), (Start: 27 @39606 has 10 MA's), (40, 39528), (41, 39513), (49, 39468),

Gene: OliverWalter_46 Start: 39733, Stop: 39203, Start Num: 13

Candidate Starts for OliverWalter_46:

(Start: 13 @39733 has 190 MA's), (Start: 27 @39628 has 10 MA's), (40, 39550), (41, 39535), (49, 39490),

Gene: Omniscient_46 Start: 39730, Stop: 39200, Start Num: 13

Candidate Starts for Omniscient_46:

(Start: 13 @39730 has 190 MA's), (Start: 27 @39625 has 10 MA's), (40, 39547), (41, 39532), (49, 39487),

Gene: Oosterbaan_46 Start: 39718, Stop: 39191, Start Num: 13

Candidate Starts for Oosterbaan_46:

(Start: 13 @39718 has 190 MA's), (Start: 27 @39616 has 10 MA's), (40, 39538), (41, 39523), (49, 39478),

Gene: Opia_45 Start: 39849, Stop: 39460, Start Num: 29

Candidate Starts for Opia_45:

(Start: 29 @39849 has 33 MA's), (40, 39792), (45, 39750), (49, 39729), (53, 39684), (55, 39669), (56, 39660), (59, 39648), (60, 39627), (73, 39564), (75, 39558), (79, 39522), (80, 39519), (89, 39480),

Gene: Orfeu_45 Start: 39423, Stop: 38899, Start Num: 13

Candidate Starts for Orfeu_45:

(Start: 13 @39423 has 190 MA's), (Start: 27 @39324 has 10 MA's), (40, 39246), (41, 39231), (49, 39186),

Gene: Orwigg_45 Start: 39417, Stop: 38887, Start Num: 13

Candidate Starts for Orwigg_45:

(Start: 13 @39417 has 190 MA's), (Start: 27 @39312 has 10 MA's), (40, 39234), (41, 39219), (49, 39174),

Gene: Pacifista_45 Start: 39420, Stop: 38893, Start Num: 13

Candidate Starts for Pacifista_45:

(Start: 13 @39420 has 190 MA's), (Start: 27 @39318 has 10 MA's), (40, 39240), (41, 39225), (49, 39180),

Gene: Phantasmagoria_45 Start: 39861, Stop: 39472, Start Num: 29

Candidate Starts for Phantasmagoria_45:

(Start: 29 @39861 has 33 MA's), (40, 39804), (45, 39762), (49, 39741), (53, 39696), (55, 39681), (56, 39672), (59, 39660), (60, 39639), (73, 39576), (75, 39570), (79, 39534), (80, 39531), (89, 39492),

Gene: Phareon_46 Start: 39425, Stop: 38901, Start Num: 13

Candidate Starts for Phareon_46:

(Start: 13 @39425 has 190 MA's), (Start: 27 @39326 has 10 MA's), (40, 39248), (41, 39233), (49, 39188),

Gene: PhatLouie_46 Start: 39722, Stop: 39195, Start Num: 13

Candidate Starts for PhatLouie_46:

(Start: 13 @39722 has 190 MA's), (Start: 27 @39620 has 10 MA's), (40, 39542), (41, 39527), (49, 39482),

Gene: Phelemich_44 Start: 40305, Stop: 39919, Start Num: 36

Candidate Starts for Phelemich_44:

(Start: 36 @40305 has 11 MA's), (42, 40245), (45, 40224), (55, 40146), (56, 40137), (62, 40095), (63, 40092), (70, 40062), (75, 40050), (78, 40038), (79, 40014), (83, 39996), (90, 39960),

Gene: PhenghisKhan_45 Start: 39328, Stop: 38801, Start Num: 13

Candidate Starts for PhenghisKhan_45:

(Start: 13 @39328 has 190 MA's), (Start: 27 @39226 has 10 MA's), (40, 39148), (41, 39133), (49, 39088),

Gene: Phergie_45 Start: 39319, Stop: 38792, Start Num: 13

Candidate Starts for Phergie_45:

(Start: 13 @39319 has 190 MA's), (Start: 27 @39217 has 10 MA's), (40, 39139), (41, 39124), (49, 39079),

Gene: Phipps_46 Start: 39698, Stop: 39168, Start Num: 13
Candidate Starts for Phipps_46:
(Start: 13 @39698 has 190 MA's), (Start: 27 @39593 has 10 MA's), (40, 39515), (41, 39500), (49, 39455),

Gene: Phleuron_45 Start: 39325, Stop: 38798, Start Num: 13
Candidate Starts for Phleuron_45:
(Start: 13 @39325 has 190 MA's), (Start: 27 @39223 has 10 MA's), (40, 39145), (41, 39130), (49, 39085),

Gene: PhrankReynolds_44 Start: 39325, Stop: 38798, Start Num: 13
Candidate Starts for PhrankReynolds_44:
(Start: 13 @39325 has 190 MA's), (Start: 27 @39223 has 10 MA's), (40, 39145), (41, 39130), (49, 39085),

Gene: Phunky_46 Start: 39722, Stop: 39198, Start Num: 13
Candidate Starts for Phunky_46:
(Start: 13 @39722 has 190 MA's), (Start: 27 @39623 has 10 MA's), (40, 39545), (41, 39530), (49, 39485),

Gene: Piglet_0045 Start: 39829, Stop: 39305, Start Num: 13
Candidate Starts for Piglet_0045:
(Start: 13 @39829 has 190 MA's), (Start: 27 @39730 has 10 MA's), (40, 39652), (41, 39637), (49, 39592),

Gene: PinheadLarry_46 Start: 39435, Stop: 38911, Start Num: 13
Candidate Starts for PinheadLarry_46:
(Start: 13 @39435 has 190 MA's), (Start: 27 @39336 has 10 MA's), (40, 39258), (41, 39243), (49, 39198),

Gene: Pinkman_45 Start: 39278, Stop: 38754, Start Num: 13
Candidate Starts for Pinkman_45:
(Start: 13 @39278 has 190 MA's), (Start: 27 @39179 has 10 MA's), (40, 39101), (41, 39086), (49, 39041),

Gene: Pipsqueak_46 Start: 39723, Stop: 39196, Start Num: 13
Candidate Starts for Pipsqueak_46:
(Start: 13 @39723 has 190 MA's), (Start: 27 @39621 has 10 MA's), (40, 39543), (41, 39528), (49, 39483),

Gene: Placalicious_45 Start: 39416, Stop: 38889, Start Num: 13
Candidate Starts for Placalicious_45:
(Start: 13 @39416 has 190 MA's), (Start: 27 @39314 has 10 MA's), (40, 39236), (41, 39221), (49, 39176),

Gene: Plata_46 Start: 39434, Stop: 38910, Start Num: 13
Candidate Starts for Plata_46:
(Start: 13 @39434 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: Plmatters_46 Start: 39719, Stop: 39195, Start Num: 13
Candidate Starts for Plmatters_46:

(Start: 13 @39719 has 190 MA's), (Start: 27 @39620 has 10 MA's), (40, 39542), (41, 39527), (49, 39482),

Gene: Podrick_46 Start: 39710, Stop: 39186, Start Num: 13

Candidate Starts for Podrick_46:

(Start: 13 @39710 has 190 MA's), (Start: 27 @39611 has 10 MA's), (40, 39533), (41, 39518), (49, 39473),

Gene: Pops_46 Start: 39734, Stop: 39210, Start Num: 13

Candidate Starts for Pops_46:

(Start: 13 @39734 has 190 MA's), (Start: 27 @39635 has 10 MA's), (40, 39557), (41, 39542), (49, 39497),

Gene: Potter_45 Start: 39434, Stop: 38910, Start Num: 13

Candidate Starts for Potter_45:

(Start: 13 @39434 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: PrinceCharming_45 Start: 39969, Stop: 39580, Start Num: 29

Candidate Starts for PrinceCharming_45:

(Start: 29 @39969 has 33 MA's), (40, 39912), (45, 39870), (49, 39849), (53, 39804), (55, 39789), (56, 39780), (59, 39768), (60, 39747), (73, 39684), (75, 39678), (79, 39642), (80, 39639), (89, 39600),

Gene: ProfessorX_46 Start: 39711, Stop: 39181, Start Num: 13

Candidate Starts for ProfessorX_46:

(Start: 13 @39711 has 190 MA's), (Start: 27 @39606 has 10 MA's), (40, 39528), (41, 39513), (49, 39468),

Gene: Puhltonio_46 Start: 39726, Stop: 39202, Start Num: 13

Candidate Starts for Puhltonio_46:

(Start: 13 @39726 has 190 MA's), (Start: 27 @39627 has 10 MA's), (40, 39549), (41, 39534), (49, 39489),

Gene: QueenBeane_46 Start: 39716, Stop: 39192, Start Num: 13

Candidate Starts for QueenBeane_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39617 has 10 MA's), (40, 39539), (41, 39524), (49, 39479),

Gene: Quisquilliae_46 Start: 39747, Stop: 39220, Start Num: 13

Candidate Starts for Quisquilliae_46:

(Start: 13 @39747 has 190 MA's), (Start: 27 @39645 has 10 MA's), (40, 39567), (41, 39552), (49, 39507),

Gene: Reprobate_45 Start: 40310, Stop: 39924, Start Num: 36

Candidate Starts for Reprobate_45:

(Start: 36 @40310 has 11 MA's), (42, 40250), (45, 40229), (55, 40151), (56, 40142), (62, 40100), (63, 40097), (70, 40067), (75, 40055), (78, 40043), (79, 40019), (83, 40001), (90, 39965),

Gene: Rhinoforte_45 Start: 39970, Stop: 39581, Start Num: 29

Candidate Starts for Rhinoforte_45:

(Start: 29 @39970 has 33 MA's), (40, 39913), (45, 39871), (49, 39850), (53, 39805), (55, 39790), (56, 39781), (59, 39769), (60, 39748), (73, 39685), (75, 39679), (79, 39643), (80, 39640), (89, 39601),

Gene: Rich_43 Start: 39907, Stop: 39521, Start Num: 36

Candidate Starts for Rich_43:

(Start: 36 @39907 has 11 MA's), (38, 39886), (42, 39847), (45, 39826), (52, 39766), (56, 39739), (75, 39652), (79, 39616), (87, 39571),

Gene: Ricotta_45 Start: 39439, Stop: 38918, Start Num: 13

Candidate Starts for Ricotta_45:

(Start: 13 @39439 has 190 MA's), (Start: 27 @39343 has 10 MA's), (40, 39265), (41, 39250), (49, 39205),

Gene: Riggan_46 Start: 39706, Stop: 39179, Start Num: 13

Candidate Starts for Riggan_46:

(Start: 13 @39706 has 190 MA's), (Start: 27 @39604 has 10 MA's), (40, 39526), (41, 39511), (49, 39466),

Gene: Rimu_48 Start: 39452, Stop: 38928, Start Num: 13

Candidate Starts for Rimu_48:

(Start: 13 @39452 has 190 MA's), (Start: 27 @39353 has 10 MA's), (40, 39275), (41, 39260), (49, 39215),

Gene: Rinkes_45 Start: 40821, Stop: 40423, Start Num: 37

Candidate Starts for Rinkes_45:

(4, 41061), (5, 41028), (11, 40998), (Start: 37 @40821 has 2 MA's), (45, 40752), (49, 40734), (58, 40656), (61, 40626), (83, 40509), (92, 40473),

Gene: Rita130_45 Start: 40037, Stop: 39651, Start Num: 36

Candidate Starts for Rita130_45:

(15, 40175), (Start: 36 @40037 has 11 MA's), (38, 40016), (42, 39977), (45, 39956), (52, 39896), (56, 39869), (75, 39782), (79, 39746), (83, 39728), (90, 39692), (93, 39671),

Gene: Riverton_45 Start: 39724, Stop: 39200, Start Num: 13

Candidate Starts for Riverton_45:

(Start: 13 @39724 has 190 MA's), (Start: 27 @39625 has 10 MA's), (40, 39547), (41, 39532), (49, 39487),

Gene: Roliet_46 Start: 39718, Stop: 39188, Start Num: 13

Candidate Starts for Roliet_46:

(Start: 13 @39718 has 190 MA's), (Start: 27 @39613 has 10 MA's), (40, 39535), (41, 39520), (49, 39475),

Gene: Roscoe_47 Start: 39956, Stop: 39426, Start Num: 13

Candidate Starts for Roscoe_47:

(Start: 13 @39956 has 190 MA's), (Start: 27 @39851 has 10 MA's), (40, 39773), (41, 39758), (49, 39713),

Gene: Rosebush_44 Start: 39977, Stop: 39588, Start Num: 29

Candidate Starts for Rosebush_44:

(Start: 29 @39977 has 33 MA's), (40, 39920), (45, 39878), (49, 39857), (53, 39812), (55, 39797), (56, 39788), (59, 39776), (60, 39755), (73, 39692), (75, 39686), (79, 39650), (80, 39647), (89, 39608),

Gene: Roy17_46 Start: 39416, Stop: 38892, Start Num: 13

Candidate Starts for Roy17_46:

(Start: 13 @39416 has 190 MA's), (Start: 27 @39317 has 10 MA's), (40, 39239), (41, 39224), (49, 39179),

Gene: SDcharge11_46 Start: 39696, Stop: 39166, Start Num: 13

Candidate Starts for SDcharge11_46:

(Start: 13 @39696 has 190 MA's), (Start: 27 @39591 has 10 MA's), (40, 39513), (41, 39498), (49, 39453),

Gene: Sabella_44 Start: 39854, Stop: 39465, Start Num: 29

Candidate Starts for Sabella_44:

(Start: 29 @39854 has 33 MA's), (40, 39797), (45, 39755), (49, 39734), (53, 39689), (55, 39674), (56, 39665), (59, 39653), (60, 39632), (73, 39569), (75, 39563), (79, 39527), (80, 39524), (89, 39485),

Gene: Saguaro_46 Start: 41034, Stop: 40648, Start Num: 32

Candidate Starts for Saguaro_46:

(Start: 32 @41034 has 2 MA's), (45, 40953), (55, 40875), (60, 40833), (62, 40824), (64, 40815),

Gene: Samaymay_46 Start: 39716, Stop: 39192, Start Num: 13

Candidate Starts for Samaymay_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39617 has 10 MA's), (40, 39539), (41, 39524), (49, 39479),

Gene: SassyCat97_45 Start: 39422, Stop: 38898, Start Num: 13

Candidate Starts for SassyCat97_45:

(Start: 13 @39422 has 190 MA's), (Start: 27 @39323 has 10 MA's), (40, 39245), (41, 39230), (49, 39185),

Gene: Schadenfreude_45 Start: 39264, Stop: 38749, Start Num: 13

Candidate Starts for Schadenfreude_45:

(Start: 13 @39264 has 190 MA's), (Start: 27 @39162 has 10 MA's), (40, 39096), (41, 39081), (49, 39036),

Gene: Schueller_45 Start: 39435, Stop: 38911, Start Num: 13

Candidate Starts for Schueller_45:

(Start: 13 @39435 has 190 MA's), (Start: 27 @39336 has 10 MA's), (40, 39258), (41, 39243), (49, 39198),

Gene: Scrick_46 Start: 39446, Stop: 38916, Start Num: 13

Candidate Starts for Scrick_46:

(Start: 13 @39446 has 190 MA's), (Start: 27 @39341 has 10 MA's), (40, 39263), (41, 39248), (49, 39203),

Gene: Selr12_46 Start: 39449, Stop: 38919, Start Num: 13

Candidate Starts for Selr12_46:

(Start: 13 @39449 has 190 MA's), (Start: 27 @39344 has 10 MA's), (40, 39266), (41, 39251), (49, 39206),

Gene: Serendipitous_44 Start: 39865, Stop: 39479, Start Num: 36

Candidate Starts for Serendipitous_44:

(25, 39916), (Start: 36 @39865 has 11 MA's), (38, 39844), (42, 39805), (45, 39784), (52, 39724), (56, 39697), (75, 39610), (79, 39574), (83, 39556), (90, 39520),

Gene: Serendipity_46 Start: 39740, Stop: 39216, Start Num: 13

Candidate Starts for Serendipity_46:

(Start: 13 @39740 has 190 MA's), (Start: 27 @39641 has 10 MA's), (40, 39563), (41, 39548), (49, 39503),

Gene: Serpentine_0046 Start: 39721, Stop: 39197, Start Num: 13

Candidate Starts for Serpentine_0046:

(Start: 13 @39721 has 190 MA's), (Start: 27 @39622 has 10 MA's), (40, 39544), (41, 39529), (49, 39484),

Gene: Shatter_39 Start: 33273, Stop: 32851, Start Num: 27

Candidate Starts for Shatter_39:

(Start: 27 @33273 has 10 MA's), (45, 33156), (49, 33138), (54, 33081), (69, 32994), (74, 32979), (81, 32934), (88, 32892),

Gene: Sheila_46 Start: 39758, Stop: 39234, Start Num: 13

Candidate Starts for Sheila_46:

(Start: 13 @39758 has 190 MA's), (Start: 27 @39659 has 10 MA's), (40, 39581), (41, 39566), (49, 39521),

Gene: Shenyu_44 Start: 40099, Stop: 39713, Start Num: 36

Candidate Starts for Shenyu_44:

(Start: 36 @40099 has 11 MA's), (38, 40078), (42, 40039), (45, 40018), (52, 39958), (55, 39940), (56, 39931), (75, 39844), (79, 39808), (83, 39790), (90, 39754),

Gene: ShiVal_46 Start: 39720, Stop: 39190, Start Num: 13

Candidate Starts for ShiVal_46:

(Start: 13 @39720 has 190 MA's), (Start: 27 @39615 has 10 MA's), (40, 39537), (41, 39522), (49, 39477),

Gene: SilverBell_46 Start: 39739, Stop: 39212, Start Num: 13

Candidate Starts for SilverBell_46:

(Start: 13 @39739 has 190 MA's), (Start: 27 @39637 has 10 MA's), (40, 39559), (41, 39544), (49, 39499),

Gene: Simielle_45 Start: 39409, Stop: 38885, Start Num: 13

Candidate Starts for Simielle_45:

(Start: 13 @39409 has 190 MA's), (Start: 27 @39310 has 10 MA's), (40, 39232), (41, 39217), (49, 39172),

Gene: SirJeffery_45 Start: 40036, Stop: 39650, Start Num: 36

Candidate Starts for SirJeffery_45:

(15, 40174), (Start: 36 @40036 has 11 MA's), (38, 40015), (42, 39976), (45, 39955), (52, 39895), (56, 39868), (75, 39781), (79, 39745), (83, 39727), (90, 39691), (93, 39670),

Gene: Sisko_39 Start: 34043, Stop: 33624, Start Num: 27

Candidate Starts for Sisko_39:

(Start: 27 @34043 has 10 MA's), (45, 33926), (49, 33908), (81, 33707), (86, 33671), (88, 33665),

Gene: Skippy_46 Start: 39704, Stop: 39180, Start Num: 13

Candidate Starts for Skippy_46:

(Start: 13 @39704 has 190 MA's), (Start: 27 @39605 has 10 MA's), (40, 39527), (41, 39512), (49, 39467),

Gene: Slatt_46 Start: 39730, Stop: 39206, Start Num: 13

Candidate Starts for Slatt_46:

(Start: 13 @39730 has 190 MA's), (Start: 27 @39631 has 10 MA's), (40, 39553), (41, 39538), (49, 39493),

Gene: Solosis_45 Start: 39431, Stop: 38907, Start Num: 13

Candidate Starts for Solosis_45:

(Start: 13 @39431 has 190 MA's), (Start: 27 @39332 has 10 MA's), (40, 39254), (41, 39239), (49, 39194),

Gene: Sophia_45 Start: 39431, Stop: 38907, Start Num: 13

Candidate Starts for Sophia_45:

(Start: 13 @39431 has 190 MA's), (Start: 27 @39332 has 10 MA's), (40, 39254), (41, 39239), (49, 39194),

Gene: Soto_46 Start: 39730, Stop: 39200, Start Num: 13

Candidate Starts for Soto_46:

(Start: 13 @39730 has 190 MA's), (Start: 27 @39625 has 10 MA's), (40, 39547), (41, 39532), (49, 39487),

Gene: Sour_44 Start: 37942, Stop: 37568, Start Num: 30

Candidate Starts for Sour_44:

(8, 38089), (16, 38026), (Start: 30 @37942 has 1 MA's), (45, 37858), (49, 37840), (56, 37771), (57, 37768), (76, 37684), (81, 37645), (94, 37582),

Gene: Spartan300_46 Start: 39716, Stop: 39186, Start Num: 13

Candidate Starts for Spartan300_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39611 has 10 MA's), (40, 39533), (41, 39518), (49, 39473),

Gene: Squid_46 Start: 39422, Stop: 38898, Start Num: 13

Candidate Starts for Squid_46:

(Start: 13 @39422 has 190 MA's), (Start: 27 @39323 has 10 MA's), (40, 39245), (41, 39230), (49, 39185),

Gene: Squiggle_46 Start: 39440, Stop: 38910, Start Num: 13

Candidate Starts for Squiggle_46:

(Start: 13 @39440 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: StAugustine_57 Start: 48208, Stop: 47849, Start Num: 34

Candidate Starts for StAugustine_57:

(18, 48319), (20, 48304), (22, 48274), (Start: 34 @48208 has 2 MA's), (45, 48115), (58, 48019), (63, 47983), (79, 47917), (83, 47899), (84, 47896),

Gene: StinkyVeggy_46 Start: 40176, Stop: 39790, Start Num: 36

Candidate Starts for StinkyVeggy_46:

(Start: 36 @40176 has 11 MA's), (38, 40155), (42, 40116), (45, 40095), (52, 40035), (55, 40017), (56, 40008), (79, 39885), (83, 39867), (90, 39831),

Gene: Struggle_45 Start: 39272, Stop: 38748, Start Num: 13

Candidate Starts for Struggle_45:

(Start: 13 @39272 has 190 MA's), (Start: 27 @39173 has 10 MA's), (40, 39095), (41, 39080), (49, 39035),

Gene: Suigeneris_45 Start: 40039, Stop: 39653, Start Num: 36

Candidate Starts for Suigeneris_45:

(15, 40177), (Start: 36 @40039 has 11 MA's), (38, 40018), (42, 39979), (45, 39958), (52, 39898), (56, 39871), (75, 39784), (79, 39748), (83, 39730), (90, 39694), (93, 39673),

Gene: Surely_46 Start: 39727, Stop: 39200, Start Num: 13

Candidate Starts for Surely_46:

(Start: 13 @39727 has 190 MA's), (Start: 27 @39625 has 10 MA's), (40, 39547), (41, 39532), (49, 39487),

Gene: Swiphy_48 Start: 39722, Stop: 39195, Start Num: 13

Candidate Starts for Swiphy_48:

(Start: 13 @39722 has 190 MA's), (Start: 27 @39620 has 10 MA's), (40, 39542), (41, 39527), (49, 39482),

Gene: TA17A_46 Start: 39844, Stop: 39455, Start Num: 29

Candidate Starts for TA17A_46:

(Start: 29 @39844 has 33 MA's), (40, 39787), (45, 39745), (49, 39724), (53, 39679), (55, 39664), (56, 39655), (59, 39643), (60, 39622), (73, 39559), (75, 39553), (79, 39517), (80, 39514), (89, 39475),

Gene: TallGrassMM_46 Start: 39346, Stop: 38822, Start Num: 13

Candidate Starts for TallGrassMM_46:

(Start: 13 @39346 has 190 MA's), (Start: 27 @39247 has 10 MA's), (40, 39169), (41, 39154), (49, 39109),

Gene: Telesworld_45 Start: 39419, Stop: 38895, Start Num: 13

Candidate Starts for Telesworld_45:

(Start: 13 @39419 has 190 MA's), (Start: 27 @39320 has 10 MA's), (40, 39242), (41, 39227), (49, 39182),

Gene: Thonko_44 Start: 37338, Stop: 36958, Start Num: 36

Candidate Starts for Thonko_44:

(15, 37470), (Start: 23 @37404 has 1 MA's), (Start: 36 @37338 has 11 MA's), (45, 37257), (49, 37239),

Gene: Thora_46 Start: 39726, Stop: 39199, Start Num: 13

Candidate Starts for Thora_46:

(Start: 13 @39726 has 190 MA's), (Start: 27 @39624 has 10 MA's), (40, 39546), (41, 39531), (49, 39486),

Gene: Thunderbird_45 Start: 39427, Stop: 38903, Start Num: 13

Candidate Starts for Thunderbird_45:

(Start: 13 @39427 has 190 MA's), (Start: 27 @39328 has 10 MA's), (40, 39250), (41, 39235), (49, 39190),

Gene: Timmi_45 Start: 39432, Stop: 38908, Start Num: 13

Candidate Starts for Timmi_45:

(Start: 13 @39432 has 190 MA's), (Start: 27 @39333 has 10 MA's), (40, 39255), (41, 39240), (49, 39195),

Gene: Tinciduntolum_46 Start: 39982, Stop: 39593, Start Num: 29

Candidate Starts for Tinciduntolum_46:

(Start: 29 @39982 has 33 MA's), (40, 39925), (45, 39883), (49, 39862), (53, 39817), (55, 39802), (56, 39793), (59, 39781), (60, 39760), (73, 39697), (75, 39691), (79, 39655), (80, 39652), (89, 39613),

Gene: TomBombadil_46 Start: 39717, Stop: 39193, Start Num: 13

Candidate Starts for TomBombadil_46:

(Start: 13 @39717 has 190 MA's), (Start: 27 @39618 has 10 MA's), (40, 39540), (41, 39525), (49, 39480),

Gene: Tomlarah_46 Start: 39714, Stop: 39184, Start Num: 13

Candidate Starts for Tomlarah_46:

(Start: 13 @39714 has 190 MA's), (Start: 27 @39609 has 10 MA's), (40, 39531), (41, 39516), (49, 39471),

Gene: Toni_45 Start: 39424, Stop: 38900, Start Num: 13

Candidate Starts for Toni_45:

(Start: 13 @39424 has 190 MA's), (Start: 27 @39325 has 10 MA's), (40, 39247), (41, 39232), (49, 39187),

Gene: Tres_45 Start: 39857, Stop: 39468, Start Num: 29

Candidate Starts for Tres_45:

(Start: 29 @39857 has 33 MA's), (40, 39800), (45, 39758), (49, 39737), (53, 39692), (55, 39677), (56, 39668), (59, 39656), (60, 39635), (73, 39572), (75, 39566), (79, 39530), (80, 39527), (89, 39488),

Gene: True_45 Start: 39424, Stop: 38897, Start Num: 13

Candidate Starts for True_45:

(Start: 13 @39424 has 190 MA's), (Start: 27 @39322 has 10 MA's), (40, 39244), (41, 39229), (49, 39184),

Gene: TyrionL_45 Start: 39280, Stop: 38756, Start Num: 13

Candidate Starts for TyrionL_45:

(Start: 13 @39280 has 190 MA's), (Start: 27 @39181 has 10 MA's), (40, 39103), (41, 39088), (49, 39043),

Gene: UAch1_46 Start: 39733, Stop: 39206, Start Num: 13

Candidate Starts for UAch1_46:

(Start: 13 @39733 has 190 MA's), (Start: 27 @39631 has 10 MA's), (40, 39553), (41, 39538), (49, 39493),

Gene: Vaishali24_45 Start: 39382, Stop: 38858, Start Num: 13

Candidate Starts for Vaishali24_45:

(Start: 13 @39382 has 190 MA's), (Start: 27 @39283 has 10 MA's), (40, 39205), (41, 39190), (49, 39145),

Gene: Valjean_46 Start: 39719, Stop: 39189, Start Num: 13

Candidate Starts for Valjean_46:

(Start: 13 @39719 has 190 MA's), (Start: 27 @39614 has 10 MA's), (40, 39536), (41, 39521), (49, 39476),

Gene: Vaticameos_42 Start: 37411, Stop: 36887, Start Num: 13

Candidate Starts for Vaticameos_42:

(Start: 13 @37411 has 190 MA's), (Start: 27 @37312 has 10 MA's), (40, 37234), (41, 37219), (49, 37174),

Gene: Veritas_45 Start: 39286, Stop: 38759, Start Num: 13

Candidate Starts for Veritas_45:

(Start: 13 @39286 has 190 MA's), (Start: 27 @39184 has 10 MA's), (40, 39106), (41, 39091), (49, 39046),

Gene: Vic9_00044 Start: 40363, Stop: 39974, Start Num: 29

Candidate Starts for Vic9_00044:

(Start: 29 @40363 has 33 MA's), (40, 40306), (45, 40264), (49, 40243), (53, 40198), (55, 40183), (56, 40174), (59, 40162), (60, 40141), (73, 40078), (75, 40072), (79, 40036), (80, 40033), (83, 40018), (89, 39994),

Gene: Virapocalypse_46 Start: 39714, Stop: 39184, Start Num: 13

Candidate Starts for Virapocalypse_46:

(Start: 13 @39714 has 190 MA's), (Start: 27 @39609 has 10 MA's), (40, 39531), (41, 39516), (49, 39471),

Gene: Vista_46 Start: 39724, Stop: 39197, Start Num: 13

Candidate Starts for Vista_46:

(Start: 13 @39724 has 190 MA's), (Start: 27 @39622 has 10 MA's), (40, 39544), (41, 39529), (49, 39484),

Gene: Vivaldi_46 Start: 39750, Stop: 39226, Start Num: 13

Candidate Starts for Vivaldi_46:

(Start: 13 @39750 has 190 MA's), (Start: 27 @39651 has 10 MA's), (40, 39573), (41, 39558), (49, 39513),

Gene: Vortex_46 Start: 39427, Stop: 38903, Start Num: 13

Candidate Starts for Vortex_46:

(Start: 13 @39427 has 190 MA's), (Start: 27 @39328 has 10 MA's), (40, 39250), (41, 39235), (49, 39190),

Gene: Wallhey_45 Start: 39284, Stop: 38760, Start Num: 13

Candidate Starts for Wallhey_45:

(Start: 13 @39284 has 190 MA's), (Start: 27 @39185 has 10 MA's), (40, 39107), (41, 39092), (49, 39047),

Gene: Waterdiva_46 Start: 39716, Stop: 39189, Start Num: 13

Candidate Starts for Waterdiva_46:

(Start: 13 @39716 has 190 MA's), (Start: 27 @39614 has 10 MA's), (40, 39536), (41, 39521), (49, 39476),

Gene: Weher20_46 Start: 39715, Stop: 39188, Start Num: 13

Candidate Starts for Weher20_46:

(Start: 13 @39715 has 190 MA's), (Start: 27 @39613 has 10 MA's), (40, 39535), (41, 39520), (49, 39475),

Gene: West99_45 Start: 39977, Stop: 39588, Start Num: 29

Candidate Starts for West99_45:

(Start: 29 @39977 has 33 MA's), (40, 39920), (45, 39878), (49, 39857), (53, 39812), (55, 39797), (56, 39788), (59, 39776), (60, 39755), (73, 39692), (75, 39686), (79, 39650), (80, 39647), (89, 39608),

Gene: Wooper_41 Start: 35248, Stop: 34859, Start Num: 33

Candidate Starts for Wooper_41:

(2, 35497), (Start: 33 @35248 has 5 MA's), (42, 35188), (44, 35173), (54, 35080), (56, 35068), (60, 35035), (74, 34987), (77, 34978), (83, 34930),

Gene: Xavier_45 Start: 39434, Stop: 38910, Start Num: 13

Candidate Starts for Xavier_45:

(Start: 13 @39434 has 190 MA's), (Start: 27 @39335 has 10 MA's), (40, 39257), (41, 39242), (49, 39197),

Gene: Yago84_39 Start: 34117, Stop: 33698, Start Num: 27

Candidate Starts for Yago84_39:

(Start: 27 @34117 has 10 MA's), (45, 34000), (49, 33982), (81, 33781), (86, 33745), (88, 33739),

Gene: Yeshua_41 Start: 35225, Stop: 34836, Start Num: 33

Candidate Starts for Yeshua_41:

(2, 35474), (Start: 33 @35225 has 5 MA's), (42, 35165), (44, 35150), (54, 35057), (56, 35045), (60, 35012), (74, 34964), (77, 34955), (83, 34907),

Gene: YouGoGlencoco_46 Start: 39718, Stop: 39191, Start Num: 13

Candidate Starts for YouGoGlencoco_46:

(Start: 13 @39718 has 190 MA's), (Start: 27 @39616 has 10 MA's), (40, 39538), (41, 39523), (49, 39478),

Gene: Zaider_47 Start: 39948, Stop: 39421, Start Num: 13

Candidate Starts for Zaider_47:

(Start: 13 @39948 has 190 MA's), (Start: 27 @39846 has 10 MA's), (40, 39768), (41, 39753), (49, 39708),

Gene: Zelda_46 Start: 39765, Stop: 39238, Start Num: 13

Candidate Starts for Zelda_46:

(Start: 13 @39765 has 190 MA's), (Start: 27 @39663 has 10 MA's), (40, 39585), (41, 39570), (49, 39525),