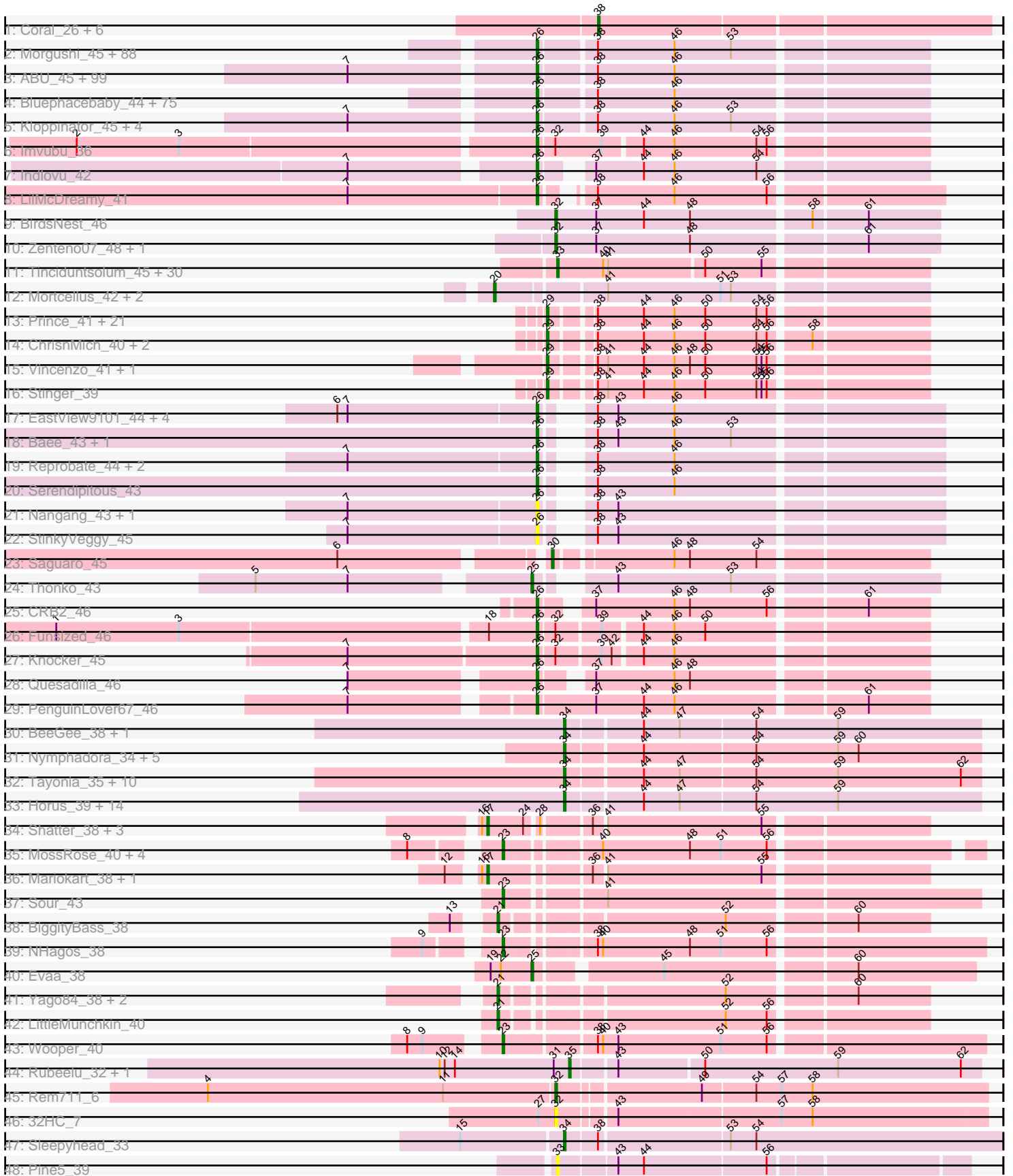


Pham 157493



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 157493 Report

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

Pham number 157493 has 426 members, 44 are drafts.

Phages represented in each track:

- Track 1 : Coral_26, Polka_26, Cote_27, Daob_27, Amelia_27, Lunar_27, Melons_27
- Track 2 : Morgushi_45, MiniBoss_45, Soile_45, Beaglebox_44, Kwadwo_44, Haleema_44, Solosis_44, Lulumae_44, Telesworld_44, Emiris_45, Brilliant_45, Cobra_45, Swish_45, Wallhey_44, Banjo_44, Vaishali24_44, JacAttac_45, Orfeu_45, Mikota_45, KingTut_36, Vaticameos_41, Piglet_0044, Vortex_45, Fozzie_44, Apizium_44, CamL_45, MRabcd_44, Puhltonio_45, MrPhizzler_44, Timmi_44, HSavage_45, Maskar_44, Derpp_44, Carthage_43, TallGrassMM_45, Labeouficaum_44, Cannibal_45, Dione_44, Sheila_45, Samaymay_45, LuckyMarjie_44, DuchessDung_43, Pacifista_47, Cher_44, RedMaple_44, Murdoc_45, Serpentine_0045, Grand2040_44, Simielle_44, Zonia_45, Maru_44, Rimu_47, OSmaximus_45, FluffyNinja_45, Mcshane_44, Yoshand_45, BlackStallion_45, Gareth_44, Kwksand96_44, Frankicide_45, Freya_44, Pherdinand_45, KlimbOn_45, KLucky39_45, Phunky_45, Roy17_45, Ashraf_44, ImtiyazSitla_44, Serendipity_45, Mana_44, QueenBeane_45, Gyarad_0045, GeneCoco_45, PinheadLarry_45, Xavier_44, MelsMeow_44, Longacauda_44, Pinkman_44, Toni_44, TyrionL_44, Childish_44, Newman_45, Hocus_44, Andre_45, Sigman_45, Legolas_44, Phareon_45, Daffy_45, Inverness_45
- Track 3 : ABU_45, Spartan300_45, PhrodoBaggins_44, Badfish_45, LasagnaCat_45, DoesntMatter_44, Horchata_45, Scrick_45, LostAndPhound_44, Chute_44, Katniss_45, True_44, Orion_45, Keitherie_45, Scoot17C_45, Charles1_45, SassyCat97_44, Megatron_45, Quisquilliae_45, Omniscient_45, Squiggle_45, PhatCats2014_45, Lulwa_45, Held_45, HenryJackson_44, Harvey_45, Robyn_44, Nyala_44, DaddyDaniels_45, Valjean_45, AltPhacts_45, Morty_45, DonSanchon_44, Gophee_45, Potter_44, HighStump_44, CampRoach_44, LeiMonet_46, Kimbrough_45, Fang_45, ShiVal_45, Lumine_44, TomBombadil_45, Craff_45, Anderson_45, CharlieGBrown_44, Struggle_44, Fringe_45, EmpTee_45, Podrick_45, Adriana_45, Chaelin_45, Mecca_44, PG1_45, Megamind20_45, Roscoe_46, Vivaldi_45, Nacho_0045, Chorkpop_45, Numberten_45, DeIRivs_44, Giraffe_45, MitKao_45, Boehler_45, Aelin_44, Inchworm_45, Bishoperium_44, Chah_46, Olive_45, SDcharge11_45, Oline_44, Tomlarah_45, Manad_44, Jiminy_44, Mosaic_44, Selr12_46, ThreeOh3D2_45, Windsor_44, Skippy_45, Lopsy_44, Coletti_44, Schadenfreude_44, Duggie_44, Mutante_44, Crownjwl_45, IsaacEli_45, Trypo_45, ProfessorX_45, Olak_45, Cornobble_44, LeeLot_45, Kikipoo_45, Doddsville_45, Lego3393_44, Virgeve_44, Durga_45, CheetO_45, LemonSlice_45, Squid_45, Antonia_44

- Track 4 : Bluephacebaby_44, Hamish_45, PhenghisKhan_44, JangoPhett_45, Eremos_45, AbsoluteMadLad_44, PhrankReynolds_43, Colbert_45, Riggan_45, UAch1_45, Phipps_45, Jillium_44, Slatt_45, FugateOSU_44, Roliet_45, Phamished_45, Mag7_44, Lasso_45, Tooj_45, Dingo_45, Hartsy_44, BlueHusk_45, Mesh1_45, Kahve_44, PhatLouie_45, Daka_46, Oosterbaan_45, YouGoGlencoco_45, Soto_45, Matalotodo_45, Placalicious_44, Zaider_46, Cosmolli16_44, BatteryCK_44, FriarPreacher_44, JDog_45, Haimas_45, DirtJuice_45, Zelda_45, Buckeye_45, Thora_45, Orwig_45, Hetaeria_45, Phleuron_44, Basato_46, Swiphy_47, Usavi_45, Pipsqueak_45, Melc17_45, Burr_44, KingVeVeVe_45, Veritas_44, Mulan_44, MichaelPhcott_44, Prickles_45, Iridoclysis_45, Magic8_45, Weher20_45, Chunky_45, Gwilliam_46, OliverWalter_45, Waterdiva_45, Nicole21_45, JakeO_44, Altwerkus_44, Suffolk_45, Dati_45, Kailash_45, Phergie_44, Schueller_45, Vista_45, Etaye_45, Sophia_44, Surely_45, Virapocalypse_45, Hertubise_45
- Track 5 : Kloppinator_45, Pops_45, Plmatters_45, UncleHowie_45, Eugenia_45
- Track 6 : Imvubu_36
- Track 7 : Indlovu_42
- Track 8 : LilMcDreamy_41
- Track 9 : BirdsNest_46
- Track 10 : Zenteno07_48, Hashim76_47
- Track 11 : Tinciduntolum_45, Hedgerow_44, TA17A_44, Lephleur_44, Rhinoforte_44, Boyle_44, Eaglehorse_44, Ares_44, Lars_44, MasterPo_44, FrenchFry_44, Bananafish_44, Blocker23_44, Tres_44, Holeinone_44, Sabella_43, Allegro_44, Glass_44, Kheth_44, Kaleb_44, Phantasmagoria_44, LizLemon_44, Brownie5_44, Calamitous_44, Faze9_43, ItsyBitsy1_44, West99_44, Coffee_44, Godines_44, Laurie_43, Opia_44
- Track 12 : Mortcellus_42, Bernardo_44, Pipefish_45
- Track 13 : Prince_41, Zemanar_41, JaguarMi_40, Fortunato_41, Apex_41, Nigel_39, Heath_39, JAMaL_40, BobbyK_40, VioletZ_41, Austelle_41, Waleliano_40, Lolalove_40, BrownCNA_42, Mudslide_40, RawrgerThat_41, Hydro_40, Magpie_39, Hangman_40, Frederick_40, Mithril_40, Cooper_41
- Track 14 : ChrisnMich_40, Nanao_39, Poster_39
- Track 15 : Vincenzo_41, AlanGrant_42
- Track 16 : Stinger_39
- Track 17 : EastView9101_44, SirJeffery_44, Acadian_44, Donny_44, Suigeneris_44
- Track 18 : Bae_43, Rich_42
- Track 19 : Reprobate_44, Phelemich_43, Mysterious_45
- Track 20 : Serendipitous_43
- Track 21 : Nangang_43, DigitDog_43
- Track 22 : StinkyVeggy_45
- Track 23 : Saguaro_45
- Track 24 : Thonko_43
- Track 25 : CRB2_46
- Track 26 : Funsized_46
- Track 27 : Knocker_45
- Track 28 : Quesadilla_46
- Track 29 : PenguinLover67_46
- Track 30 : BeeGee_38, RavenCo17_36
- Track 31 : Nymphadora_34, Bosnia_34, Herod_34, BatStarr_34, Eviarto_34, TimTam_34
- Track 32 : Tayonia_35, Antonio_35, Eudoria_35, Maridalia_34, Neobush_35, Manasvini_35, Suscepit_35, Zameen_35, Polly_32, Kita_36, Trumpet_35

- Track 33 : Horus_39, Lutum_39, Asapag_39, Leroy_39, Ecliptus_40, Whitney_42, Phabuloso_36, ODay_42, Budski_39, Getalong_40, Kenna_38, BearBQ_38, CheeseTouch_37, Holliday_38, Periwinkle_42
- Track 34 : Shatter_38, Ligma_38, Fresco_38, Axumite_38
- Track 35 : MossRose_40, MakoManhole_40, CaiB_40, AnarQue_40, CloverMinnie_40
- Track 36 : Mariokart_38, CharlottesWeb_38
- Track 37 : Sour_43
- Track 38 : BiggityBass_38
- Track 39 : NHagos_38
- Track 40 : Evaa_38
- Track 41 : Yago84_38, Sisko_38, AnClar_39
- Track 42 : LittleMunchkin_40
- Track 43 : Wooper_40
- Track 44 : Rubeelu_32, Butters_32
- Track 45 : Rem711_6
- Track 46 : 32HC_7
- Track 47 : Sleepyhead_33
- Track 48 : Pine5_39

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

The start number called the most often in the published annotations is 26, it was called in 263 of the 382 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_45, AbsoluteMadLad_44, Acadian_44, Adriana_45, Aelin_44, AltPhacts_45, Altwerkus_44, Anderson_45, Andre_45, Antonia_44, Apizium_44, Ashraf_44, Badfish_45, Bae_43, Banjo_44, Basato_46, BatteryCK_44, Beaglebox_44, Bishoperium_44, BlackStallion_45, BlueHusk_45, Bluephacebaby_44, Boehler_45, Brilliant_45, Buckeye_45, Burr_44, CRB2_46, CamL_45, CampRoach_44, Cannibal_45, Carthage_43, Chaelin_45, Chah_46, Charles1_45, CharlieGBrown_44, CheetO_45, Cher_44, Childish_44, Chorkpop_45, Chunky_45, Chute_44, Cobra_45, Colbert_45, Coletti_44, Cornobble_44, Cosmolli16_44, Craff_45, Crownjwl_45, DaddyDaniels_45, Daffy_45, Daka_46, Dati_45, DelRivs_44, Derpp_44, DigitDog_43, Dingo_45, Dione_44, DirtJuice_45, Doddsville_45, DoesntMatter_44, DonSanchon_44, Donny_44, DuchessDung_43, Duggie_44, Durga_45, EastView9101_44, Emiris_45, EmpTee_45, Eremos_45, Etaye_45, Eugenia_45, Fang_45, FluffyNinja_45, Fozzie_44, Frankicide_45, Freya_44, FriarPreacher_44, Fringe_45, FugateOSU_44, Funsized_46, Gareth_44, GeneCoco_45, Giraffe_45, Gophee_45, Grand2040_44, Gwilliam_46, Gyarad_0045, HSavage_45, Haimas_45, Haleema_44, Hamish_45, Hartsy_44, Harvey_45, Held_45, HenryJackson_44, Hertubise_45, Hetaeria_45, HighStump_44, Hocus_44, Horchata_45, ImtiyazSitla_44, Imvubu_36, Inchworm_45, Indlovu_42, Inverness_45, Iridoclysis_45, IsaacEli_45, JDog_45, JacAttac_45, JakeO_44, JangoPhett_45, Jillium_44, Jiminy_44, KLucky39_45, Kahve_44, Kailash_45, Katniss_45, Keitherie_45, Kikipoo_45, Kimbrough_45, KingTut_36, KingVeVeVe_45, KlimbOn_45, Kloppinator_45, Knocker_45, Kwadwo_44, Kwksand96_44, Labeouficaum_44, LasagnaCat_45, Lasso_45, LeeLot_45, Lego3393_44, Legolas_44, LeiMonet_46, LemonSlice_45, LilMcDreamy_41, Longacauda_44, Lopsy_44, LostAndPhound_44,

LuckyMarjie_44, Lulumae_44, Lulwa_45, Lumine_44, MRabcd_44, Mag7_44, Magic8_45, Mana_44, Manad_44, Maru_44, Maskar_44, Matalotodo_45, Mcshane_44, Mecca_44, Megamind20_45, Megatron_45, Melc17_45, MelsMeow_44, Mesh1_45, MichaelPhcott_44, Mikota_45, MiniBoss_45, MitKao_45, Morgushi_45, Morty_45, Mosaic_44, MrPhizzler_44, Mulan_44, Murdoc_45, Mutante_44, Mysterious_45, Nacho_0045, Nangang_43, Newman_45, Nicole21_45, Numberten_45, Nyala_44, OSmaximus_45, Olak_45, Oline_44, Olive_45, OliverWalter_45, Omniscient_45, Oosterbaan_45, Orfeu_45, Orion_45, Orwigg_45, PG1_45, Pacifista_47, PenguinLover67_46, Phamished_45, Phareon_45, PhatCats2014_45, PhatLouie_45, Phelemich_43, PhenghisKhan_44, Pherdinand_45, Phergie_44, Phipps_45, Phleuron_44, PhrankReynolds_43, PhrodoBaggins_44, Phunky_45, Piglet_0044, PinheadLarry_45, Pinkman_44, Pipsqueak_45, Placalicious_44, Plmatters_45, Podrick_45, Pops_45, Potter_44, Prickles_45, ProfessorX_45, Puhltonio_45, QueenBeane_45, Quesadilla_46, Quisquillae_45, RedMaple_44, Reprobate_44, Rich_42, Riggan_45, Rimu_47, Robyn_44, Roliet_45, Roscoe_46, Roy17_45, SDcharge11_45, Samaymay_45, SassyCat97_44, Schadenfreude_44, Schueller_45, Scoot17C_45, Scrick_45, Selr12_46, Serendipitous_43, Serendipity_45, Serpentine_0045, Sheila_45, ShiVal_45, Sigman_45, Simielle_44, SirJeffery_44, Skippy_45, Slatt_45, Soile_45, Solosis_44, Sophia_44, Soto_45, Spartan300_45, Squid_45, Squiggle_45, StinkyVeggy_45, Struggle_44, Suffolk_45, Suigeneris_44, Surely_45, Swiphy_47, Swish_45, TallGrassMM_45, Telesworld_44, Thora_45, ThreeOh3D2_45, Timmi_44, TomBombadil_45, Tomlarah_45, Toni_44, Tooj_45, True_44, Trypo_45, TyrionL_44, UAch1_45, UncleHowie_45, Usavi_45, Vaishali24_44, Valjean_45, Vaticameos_41, Veritas_44, Virapocalypse_45, Virgeve_44, Vista_45, Vivaldi_45, Vortex_45, Wallhey_44, Waterdiva_45, Weher20_45, Windsor_44, Xavier_44, Yoshand_45, YouGoGlencoco_45, Zaider_46, Zelda_45, Zonia_45,

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

-

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

- 32HC_7, AlanGrant_42, Allegro_44, Amelia_27, AnClar_39, AnarQue_40, Antonio_35, Apex_41, Ares_44, Asapag_39, Austelle_41, Axumite_38, Bananafish_44, BatStarr_34, BearBQ_38, BeeGee_38, Bernardo_44, BiggityBass_38, BirdsNest_46, Blocker23_44, BobbyK_40, Bosnia_34, Boyle_44, BrownCNA_42, Brownie5_44, Budski_39, Butters_32, CaiB_40, Calamitous_44, CharlottesWeb_38, CheeseTouch_37, ChrisnMich_40, CloverMinnie_40, Coffee_44, Cooper_41, Coral_26, Cote_27, Daob_27, Eaglehorse_44, Ecliptus_40, Eudoria_35, Evaa_38, Eviarto_34, Faze9_43, Fortunato_41, Frederick_40, FrenchFry_44, Fresco_38, Getalong_40, Glass_44, Godines_44, Hangman_40, Hashim76_47, Heath_39, Hedgerow_44, Herod_34, Holeinone_44, Holliday_38, Horus_39, Hydro_40, ItsyBitsy1_44, JAMaL_40, JaguarMi_40, Kaleb_44, Kenna_38, Kheth_44, Kita_36, Lars_44, Laurie_43, Lephleur_44, Leroy_39, Ligma_38, LittleMunchkin_40, LizLemon_44, Lolalove_40, Lunar_27, Lutum_39, Magpie_39, MakoManhole_40, Manasvini_35, Maridalia_34, Mariokart_38, MasterPo_44, Melons_27, Mithril_40, Mortcellus_42, MossRose_40, Mudslide_40, NHagos_38, Nanao_39, Neobush_35, Nigel_39, Nymphadora_34, ODay_42, Opia_44, Periwinkle_42, Phabuloso_36, Phantasmagoria_44, Pine5_39, Pipefish_45, Polka_26, Polly_32, Poster_39, Prince_41, RavenCo17_36, RawrgerThat_41, Rem711_6, Rhinoforte_44, Rubeelu_32, Sabella_43, Saguaro_45, Shatter_38, Sisko_38, Sleepyhead_33, Sour_43, Stinger_39, Suscepit_35, TA17A_44, Tayonia_35, Thonko_43, TimTam_34, Tinciduntolum_45, Tres_44, Trumpet_35, Vincenzo_41, VioletZ_41,

Waleliano_40, West99_44, Whitney_42, Wooper_40, Yago84_38, Zameen_35, Zemanar_41, Zenteno07_48,

Summary by start number:

Start 17:

- Found in 6 of 426 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Axumite_38 (DR), CharlottesWeb_38 (DR), Fresco_38 (DR), Ligma_38 (DR), Mariokart_38 (DR), Shatter_38 (DR),

Start 20:

- Found in 3 of 426 (0.7%) of genes in pham
- Manual Annotations of this start: 3 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bernardo_44 (B3), Mortcellus_42 (B3), Pipefish_45 (B3),

Start 21:

- Found in 5 of 426 (1.2%) of genes in pham
- Manual Annotations of this start: 5 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnClar_39 (DR), BiggityBass_38 (DR), LittleMunchkin_40 (DR), Sisko_38 (DR), Yago84_38 (DR),

Start 23:

- Found in 8 of 426 (1.9%) of genes in pham
- Manual Annotations of this start: 7 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_40 (DR), CaiB_40 (DR), CloverMinnie_40 (DR), MakoManhole_40 (DR), MossRose_40 (DR), NHagos_38 (DR), Sour_43 (DR), Wooper_40 (DR),

Start 25:

- Found in 2 of 426 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Evaa_38 (DR), Thonko_43 (B8),

Start 26:

- Found in 292 of 426 (68.5%) of genes in pham
- Manual Annotations of this start: 263 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU_45 (B1), AbsoluteMadLad_44 (B1), Acadian_44 (B5), Adriana_45 (B1), Aelin_44 (B1), AltPhacts_45 (B1), Altwerkus_44 (B1), Anderson_45 (B1), Andre_45 (B1), Antonia_44 (B1), Apizium_44 (B1), Ashraf_44 (B1), Badfish_45 (B1), Bae_43 (B5), Banjo_44 (B1), Basato_46 (B1), BatteryCK_44 (B1), Beaglebox_44 (B1), Bishoperium_44 (B1), BlackStallion_45 (B1), BlueHusk_45 (B1), Bluephacebaby_44 (B1), Boehler_45 (B1), Brilliant_45 (B1), Buckeye_45 (B1), Burr_44 (B1), CRB2_46 (B9), CamL_45 (B1), CampRoach_44 (B1), Cannibal_45 (B1), Carthage_43 (B1), Chaelin_45 (B1), Chah_46 (B1), Charles1_45 (B1), CharlieGBrown_44 (B1), CheetO_45 (B1), Cher_44 (B1),

Childish_44 (B1), Chorkpop_45 (B1), Chunky_45 (B1), Chute_44 (B1), Cobra_45 (B1), Colbert_45 (B1), Coletti_44 (B1), Cornobble_44 (B1), Cosmolli16_44 (B1), Craff_45 (B1), Crownjwl_45 (B1), DaddyDaniels_45 (B1), Daffy_45 (B1), Daka_46 (B1), Dati_45 (B1), DelRivs_44 (B1), Derpp_44 (B1), DigitDog_43 (B5), Dingo_45 (B1), Dione_44 (B1), DirtJuice_45 (B1), Doddsville_45 (B1), DoesntMatter_44 (B1), DonSanchon_44 (B1), Donny_44 (B5), DuchessDung_43 (B1), Duggie_44 (B1), Durga_45 (B1), EastView9101_44 (B5), Emiris_45 (B1), EmpTee_45 (B1), Eremos_45 (B1), Etaye_45 (B1), Eugenia_45 (B1), Fang_45 (B1), FluffyNinja_45 (B1), Fozzie_44 (B1), Frankicide_45 (B1), Freya_44 (B1), FriarPreacher_44 (B1), Fringe_45 (B1), FugateOSU_44 (B1), Funsized_46 (B9), Gareth_44 (B1), GeneCoco_45 (B1), Giraffe_45 (B1), Gophee_45 (B1), Grand2040_44 (B1), Gwilliam_46 (B1), Gyarad_0045 (B1), HSavage_45 (B1), Haimas_45 (B1), Haleema_44 (B1), Hamish_45 (B1), Hartsy_44 (B1), Harvey_45 (B1), Held_45 (B1), HenryJackson_44 (B1), Hertubise_45 (B1), Hetaeria_45 (B1), HighStump_44 (B1), Hocus_44 (B1), Horchata_45 (B1), ImtiyazSitla_44 (B1), Imvubu_36 (B10), Inchworm_45 (B1), Indlovu_42 (B11), Inverness_45 (B1), Iridoclysis_45 (B1), IsaacEli_45 (B1), JDog_45 (B1), JacAttac_45 (B1), JakeO_44 (B1), JangoPhett_45 (B1), Jillium_44 (B1), Jiminy_44 (B1), KLucky39_45 (B1), Kahve_44 (B1), Kailash_45 (B1), Katniss_45 (B1), Keitherie_45 (B1), Kikipoo_45 (B1), Kimbrough_45 (B1), KingTut_36 (B1), KingVeVeVe_45 (B1), KlimbOn_45 (B1), Kloppinator_45 (B1), Knocker_45 (B9), Kwadwo_44 (B1), Kwksand96_44 (B1), Labeouficaum_44 (B1), LasagnaCat_45 (B1), Lasso_45 (B1), LeeLot_45 (B1), Lego3393_44 (B1), Legolas_44 (B1), LeiMonet_46 (B1), LemonSlice_45 (B1), LilMcDreamy_41 (B12), Longacauda_44 (B1), Lopsy_44 (B1), LostAndPhound_44 (B1), LuckyMarjie_44 (B1), Lulumae_44 (B1), Lulwa_45 (B1), Lumine_44 (B1), MRabcd_44 (B1), Mag7_44 (B1), Magic8_45 (B1), Mana_44 (B1), Manad_44 (B1), Maru_44 (B1), Maskar_44 (B1), Matalotodo_45 (B1), Mcshane_44 (B1), Mecca_44 (B1), Megamind20_45 (B1), Megatron_45 (B1), Melc17_45 (B1), MelsMeow_44 (B1), Mesh1_45 (B1), MichaelPhcott_44 (B1), Mikota_45 (B1), MiniBoss_45 (B1), MitKao_45 (B1), Morgushi_45 (B1), Morty_45 (B1), Mosaic_44 (B1), MrPhizzler_44 (B1), Mulan_44 (B1), Murdoc_45 (B1), Mutante_44 (B1), Mysterious_45 (B5), Nacho_0045 (B1), Nangang_43 (B5), Newman_45 (B1), Nicole21_45 (B1), Numberten_45 (B1), Nyala_44 (B1), OSmaximus_45 (B1), Olak_45 (B1), Oline_44 (B1), Olive_45 (B1), OliverWalter_45 (B1), Omniscient_45 (B1), Oosterbaan_45 (B1), Orfeu_45 (B1), Orion_45 (B1), Orwigg_45 (B1), PG1_45 (B1), Pacifista_47 (B1), PenguinLover67_46 (B9), Phamished_45 (B1), Phareon_45 (B1), PhatCats2014_45 (B1), PhatLouie_45 (B1), Phelemich_43 (B5), PhenghisKhan_44 (B1), Pherdinand_45 (B1), Phergie_44 (B1), Phipps_45 (B1), Phleuron_44 (B1), PhrankReynolds_43 (B1), PhrodoBaggins_44 (B1), Phunky_45 (B1), Piglet_0044 (B1), PinheadLarry_45 (B1), Pinkman_44 (B1), Pipsqueak_45 (B1), Placalicious_44 (B1), Plmatters_45 (B1), Podrick_45 (B1), Pops_45 (B1), Potter_44 (B1), Prickles_45 (B1), ProfessorX_45 (B1), Puhltonio_45 (B1), QueenBeane_45 (B1), Quesadilla_46 (B9), Quisquillae_45 (B1), RedMaple_44 (B1), Reprobate_44 (B5), Rich_42 (B5), Riggan_45 (B1), Rimu_47 (B1), Robyn_44 (B1), Roliet_45 (B1), Roscoe_46 (B1), Roy17_45 (B1), SDcharge11_45 (B1), Samaymay_45 (B1), SassyCat97_44 (B1), Schadenfreude_44 (B1), Schueller_45 (B1), Scoot17C_45 (B1), Scrick_45 (B1), Selr12_46 (B1), Serendipitous_43 (B5), Serendipity_45 (B1), Serpentine_0045 (B1), Sheila_45 (B1), ShiVal_45 (B1), Sigman_45 (B1), Simielle_44 (B1), SirJeffery_44 (B5), Skippy_45 (B1), Slatt_45 (B1), Soile_45 (B1), Solosis_44 (B1), Sophia_44 (B1), Soto_45 (B1), Spartan300_45 (B1), Squid_45 (B1), Squiggle_45 (B1), StinkyVeggy_45 (B5), Struggle_44 (B1), Suffolk_45 (B1), Suigeneris_44 (B5), Surely_45 (B1), Swiphy_47 (B1), Swish_45 (B1), TallGrassMM_45 (B1), Telesworld_44 (B1), Thora_45 (B1), ThreeOh3D2_45 (B1), Timmi_44 (B1), TomBombadil_45 (B1), Tomlarah_45 (B1),

Toni_44 (B1), Tooj_45 (B1), True_44 (B1), Trypo_45 (B1), TyrionL_44 (B1), UAch1_45 (B1), UncleHowie_45 (B1), Usavi_45 (B1), Vaishali24_44 (B1), Valjean_45 (B1), Vaticameos_41 (B1), Veritas_44 (B1), Virapocalypse_45 (B1), Virgeve_44 (B1), Vista_45 (B1), Vivaldi_45 (B1), Vortex_45 (B1), Wallhey_44 (B1), Waterdiva_45 (B1), Weher20_45 (B1), Windsor_44 (B1), Xavier_44 (B1), Yoshand_45 (B1), YouGoGlencoco_45 (B1), Zaider_46 (B1), Zelda_45 (B1), Zonia_45 (B1),

Start 29:

- Found in 28 of 426 (6.6%) of genes in pham
- Manual Annotations of this start: 22 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant_42 (B4), Apex_41 (B4), Austelle_41 (B4), BobbyK_40 (B4), BrownCNA_42 (B4), ChrisnMich_40 (B4), Cooper_41 (B4), Fortunato_41 (B4), Frederick_40 (B4), Hangman_40 (B4), Heath_39 (B4), Hydro_40 (B4), JAMaL_40 (B4), JaguarMi_40 (B4), Lolalove_40 (B4), Magpie_39 (B4), Mithril_40 (B4), Mudslide_40 (B4), Nanao_39 (B4), Nigel_39 (B4), Poster_39 (B4), Prince_41 (B4), RawrgerThat_41 (B4), Stinger_39 (B4), Vincenzo_41 (B4), VioletZ_41 (B4), Waleliano_40 (B4), Zemanar_41 (B4),

Start 30:

- Found in 1 of 426 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Saguaro_45 (B7),

Start 32:

- Found in 8 of 426 (1.9%) of genes in pham
- Manual Annotations of this start: 3 of 382
- Called 62.5% of time when present
- Phage (with cluster) where this start called: 32HC_7 (Z), BirdsNest_46 (B13), Hashim76_47 (B13), Rem711_6 (Z), Zenteno07_48 (B13),

Start 33:

- Found in 32 of 426 (7.5%) of genes in pham
- Manual Annotations of this start: 29 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Allegro_44 (B2), Ares_44 (B2), Bananafish_44 (B2), Blocker23_44 (B2), Boyle_44 (B2), Brownie5_44 (B2), Calamitous_44 (B2), Coffee_44 (B2), Eaglehorse_44 (B2), Faze9_43 (B2), FrenchFry_44 (B2), Glass_44 (B2), Godines_44 (B2), Hedgerow_44 (B2), Holeinone_44 (B2), ItsyBitsy1_44 (B2), Kaleb_44 (B2), Kheth_44 (B2), Lars_44 (B2), Laurie_43 (B2), Lephleur_44 (B2), LizLemon_44 (B2), MasterPo_44 (B2), Opia_44 (B2), Phantasmagoria_44 (B2), Pine5_39 (singleton), Rhinoforte_44 (B2), Sabella_43 (B2), TA17A_44 (B2), Tinciduntolum_45 (B2), Tres_44 (B2), West99_44 (B2),

Start 34:

- Found in 35 of 426 (8.2%) of genes in pham
- Manual Annotations of this start: 35 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antonio_35 (CZ1), Asapag_39 (DN1), BatStarr_34 (CZ1), BearBQ_38 (DN), BeeGee_38 (CY), Bosnia_34 (CZ1), Budski_39 (DN), CheeseTouch_37 (DN1), Ecliptus_40 (DN), Eudoria_35 (CZ1), Eviarto_34

(CZ1), Getalong_40 (DN1), Herod_34 (CZ1), Holliday_38 (DN1), Horus_39 (DN1), Kenna_38 (DN1), Kita_36 (CZ1), Leroy_39 (DN1), Lutum_39 (DN1), Manasvini_35 (CZ1), Maridalia_34 (CZ1), Neobush_35 (CZ1), Nymphadora_34 (CZ1), ODay_42 (DN), Periwinkle_42 (DN1), Phabuloso_36 (DN1), Polly_32 (CZ1), RavenCo17_36 (CZ8), Sleepyhead_33 (singleton), Suscepit_35 (CZ1), Tayonia_35 (CZ1), TimTam_34 (CZ1), Trumpet_35 (CZ1), Whitney_42 (DN1), Zameen_35 (CZ1),

Start 35:

- Found in 2 of 426 (0.5%) of genes in pham
- Manual Annotations of this start: 2 of 382
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Butters_32 (N), Rubeelu_32 (N),

Start 38:

- Found in 323 of 426 (75.8%) of genes in pham
- Manual Annotations of this start: 7 of 382
- Called 2.2% of time when present
- Phage (with cluster) where this start called: Amelia_27 (AS2), Coral_26 (AS2), Cote_27 (AS2), Daob_27 (AS2), Lunar_27 (AS2), Melons_27 (AS2), Polka_26 (AS2),

Summary by clusters:

There are 22 clusters represented in this pham: DN, singleton, CZ1, CZ8, B12, B13, B10, B11, DR, DN1, AS2, N, CY, Z, B4, B5, B7, B1, B2, B3, B8, B9,

Info for manual annotations of cluster AS2:

- Start number 38 was manually annotated 7 times for cluster AS2.

Info for manual annotations of cluster B1:

- Start number 26 was manually annotated 247 times for cluster B1.

Info for manual annotations of cluster B10:

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

Info for manual annotations of cluster B11:

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

Info for manual annotations of cluster B12:

- Start number 26 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B13:

- Start number 32 was manually annotated 2 times for cluster B13.

Info for manual annotations of cluster B2:

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

Info for manual annotations of cluster B3:

- Start number 20 was manually annotated 3 times for cluster B3.

Info for manual annotations of cluster B4:

- Start number 29 was manually annotated 22 times for cluster B4.

Info for manual annotations of cluster B5:

- Start number 26 was manually annotated 8 times for cluster B5.

Info for manual annotations of cluster B7:

- Start number 30 was manually annotated 1 time for cluster B7.

Info for manual annotations of cluster B8:

- Start number 25 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 26 was manually annotated 5 times for cluster B9.

Info for manual annotations of cluster CY:

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

Info for manual annotations of cluster CZ1:

- Start number 34 was manually annotated 17 times for cluster CZ1.

Info for manual annotations of cluster CZ8:

- Start number 34 was manually annotated 1 time for cluster CZ8.

Info for manual annotations of cluster DN:

- Start number 34 was manually annotated 4 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 34 was manually annotated 11 times for cluster DN1.

Info for manual annotations of cluster DR:

- Start number 17 was manually annotated 3 times for cluster DR.
- Start number 21 was manually annotated 5 times for cluster DR.
- Start number 23 was manually annotated 7 times for cluster DR.
- Start number 25 was manually annotated 1 time for cluster DR.

Info for manual annotations of cluster N:

- Start number 35 was manually annotated 2 times for cluster N.

Info for manual annotations of cluster Z:

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

Gene Information:

Gene: 32HC_7 Start: 3414, Stop: 3172, Start Num: 32

Candidate Starts for 32HC_7:

(27, 3423), (Start: 32 @3414 has 3 MA's), (43, 3384), (57, 3291), (58, 3273),

Gene: ABU_45 Start: 39190, Stop: 38975, Start Num: 26

Candidate Starts for ABU_45:

(7, 39292), (Start: 26 @39190 has 263 MA's), (Start: 38 @39160 has 7 MA's), (46, 39115),

Gene: AbsoluteMadLad_44 Start: 39199, Stop: 38984, Start Num: 26

Candidate Starts for AbsoluteMadLad_44:

(Start: 26 @39199 has 263 MA's), (Start: 38 @39169 has 7 MA's), (46, 39124),

Gene: Acadian_44 Start: 39648, Stop: 39439, Start Num: 26
Candidate Starts for Acadian_44:
(6, 39762), (7, 39756), (Start: 26 @39648 has 263 MA's), (Start: 38 @39633 has 7 MA's), (43, 39621),
(46, 39588),

Gene: Adriana_45 Start: 39188, Stop: 38973, Start Num: 26
Candidate Starts for Adriana_45:
(7, 39290), (Start: 26 @39188 has 263 MA's), (Start: 38 @39158 has 7 MA's), (46, 39113),

Gene: Aelin_44 Start: 38754, Stop: 38539, Start Num: 26
Candidate Starts for Aelin_44:
(7, 38856), (Start: 26 @38754 has 263 MA's), (Start: 38 @38724 has 7 MA's), (46, 38679),

Gene: AlanGrant_42 Start: 39951, Stop: 39745, Start Num: 29
Candidate Starts for AlanGrant_42:
(Start: 29 @39951 has 22 MA's), (Start: 38 @39930 has 7 MA's), (41, 39924), (44, 39903), (46,
39885), (48, 39876), (50, 39867), (54, 39837), (55, 39834), (56, 39831),

Gene: Allegro_44 Start: 39432, Stop: 39226, Start Num: 33
Candidate Starts for Allegro_44:
(Start: 33 @39432 has 29 MA's), (40, 39405), (41, 39402), (50, 39348), (55, 39315),

Gene: AltPhacts_45 Start: 39177, Stop: 38962, Start Num: 26
Candidate Starts for AltPhacts_45:
(7, 39279), (Start: 26 @39177 has 263 MA's), (Start: 38 @39147 has 7 MA's), (46, 39102),

Gene: Altwerkus_44 Start: 38878, Stop: 38663, Start Num: 26
Candidate Starts for Altwerkus_44:
(Start: 26 @38878 has 263 MA's), (Start: 38 @38848 has 7 MA's), (46, 38803),

Gene: Amelia_27 Start: 19057, Stop: 18836, Start Num: 38
Candidate Starts for Amelia_27:
(Start: 38 @19057 has 7 MA's),

Gene: AnClar_39 Start: 35606, Stop: 35379, Start Num: 21
Candidate Starts for AnClar_39:
(Start: 21 @35606 has 5 MA's), (52, 35489), (60, 35420),

Gene: AnarQue_40 Start: 34838, Stop: 34584, Start Num: 23
Candidate Starts for AnarQue_40:
(8, 34880), (Start: 23 @34838 has 7 MA's), (40, 34790), (48, 34739), (51, 34721), (56, 34694),

Gene: Anderson_45 Start: 39183, Stop: 38968, Start Num: 26
Candidate Starts for Anderson_45:
(7, 39285), (Start: 26 @39183 has 263 MA's), (Start: 38 @39153 has 7 MA's), (46, 39108),

Gene: Andre_45 Start: 39182, Stop: 38967, Start Num: 26
Candidate Starts for Andre_45:
(Start: 26 @39182 has 263 MA's), (Start: 38 @39152 has 7 MA's), (46, 39107), (53, 39074),

Gene: Antonia_44 Start: 38754, Stop: 38539, Start Num: 26
Candidate Starts for Antonia_44:

(7, 38856), (Start: 26 @38754 has 263 MA's), (Start: 38 @38724 has 7 MA's), (46, 38679),

Gene: Antonio_35 Start: 29354, Stop: 29118, Start Num: 34

Candidate Starts for Antonio_35:

(Start: 34 @29354 has 35 MA's), (44, 29312), (47, 29291), (54, 29249), (59, 29201), (62, 29129),

Gene: Apex_41 Start: 39377, Stop: 39171, Start Num: 29

Candidate Starts for Apex_41:

(Start: 29 @39377 has 22 MA's), (Start: 38 @39356 has 7 MA's), (44, 39329), (46, 39311), (50, 39293), (54, 39263), (56, 39257),

Gene: Apizium_44 Start: 38943, Stop: 38728, Start Num: 26

Candidate Starts for Apizium_44:

(Start: 26 @38943 has 263 MA's), (Start: 38 @38913 has 7 MA's), (46, 38868), (53, 38835),

Gene: Ares_44 Start: 39502, Stop: 39296, Start Num: 33

Candidate Starts for Ares_44:

(Start: 33 @39502 has 29 MA's), (40, 39475), (41, 39472), (50, 39418), (55, 39385),

Gene: Asapag_39 Start: 30538, Stop: 30302, Start Num: 34

Candidate Starts for Asapag_39:

(Start: 34 @30538 has 35 MA's), (44, 30496), (47, 30475), (54, 30433), (59, 30385),

Gene: Ashraf_44 Start: 38747, Stop: 38532, Start Num: 26

Candidate Starts for Ashraf_44:

(Start: 26 @38747 has 263 MA's), (Start: 38 @38717 has 7 MA's), (46, 38672), (53, 38639),

Gene: Austelle_41 Start: 39833, Stop: 39627, Start Num: 29

Candidate Starts for Austelle_41:

(Start: 29 @39833 has 22 MA's), (Start: 38 @39812 has 7 MA's), (44, 39785), (46, 39767), (50, 39749), (54, 39719), (56, 39713),

Gene: Axumite_38 Start: 32837, Stop: 32601, Start Num: 17

Candidate Starts for Axumite_38:

(16, 32840), (Start: 17 @32837 has 3 MA's), (24, 32816), (28, 32810), (36, 32786), (41, 32780), (55, 32690),

Gene: Badfish_45 Start: 39213, Stop: 38998, Start Num: 26

Candidate Starts for Badfish_45:

(7, 39315), (Start: 26 @39213 has 263 MA's), (Start: 38 @39183 has 7 MA's), (46, 39138),

Gene: Bae_43 Start: 39550, Stop: 39341, Start Num: 26

Candidate Starts for Bae_43:

(Start: 26 @39550 has 263 MA's), (Start: 38 @39535 has 7 MA's), (43, 39523), (46, 39490), (53, 39457),

Gene: Bananafish_44 Start: 39438, Stop: 39232, Start Num: 33

Candidate Starts for Bananafish_44:

(Start: 33 @39438 has 29 MA's), (40, 39411), (41, 39408), (50, 39354), (55, 39321),

Gene: Banjo_44 Start: 38888, Stop: 38673, Start Num: 26

Candidate Starts for Banjo_44:

(Start: 26 @38888 has 263 MA's), (Start: 38 @38858 has 7 MA's), (46, 38813), (53, 38780),

Gene: Basato_46 Start: 39467, Stop: 39252, Start Num: 26

Candidate Starts for Basato_46:

(Start: 26 @39467 has 263 MA's), (Start: 38 @39437 has 7 MA's), (46, 39392),

Gene: BatStarr_34 Start: 29521, Stop: 29285, Start Num: 34

Candidate Starts for BatStarr_34:

(Start: 34 @29521 has 35 MA's), (44, 29479), (54, 29416), (59, 29368), (60, 29356),

Gene: BatteryCK_44 Start: 38807, Stop: 38592, Start Num: 26

Candidate Starts for BatteryCK_44:

(Start: 26 @38807 has 263 MA's), (Start: 38 @38777 has 7 MA's), (46, 38732),

Gene: Beaglebox_44 Start: 38909, Stop: 38694, Start Num: 26

Candidate Starts for Beaglebox_44:

(Start: 26 @38909 has 263 MA's), (Start: 38 @38879 has 7 MA's), (46, 38834), (53, 38801),

Gene: BearBQ_38 Start: 30173, Stop: 29937, Start Num: 34

Candidate Starts for BearBQ_38:

(Start: 34 @30173 has 35 MA's), (44, 30131), (47, 30110), (54, 30068), (59, 30020),

Gene: BeeGee_38 Start: 30304, Stop: 30068, Start Num: 34

Candidate Starts for BeeGee_38:

(Start: 34 @30304 has 35 MA's), (44, 30262), (47, 30241), (54, 30199), (59, 30151),

Gene: Bernardo_44 Start: 39575, Stop: 39339, Start Num: 20

Candidate Starts for Bernardo_44:

(Start: 20 @39575 has 3 MA's), (41, 39518), (51, 39452), (53, 39446),

Gene: BiggityBass_38 Start: 35067, Stop: 34840, Start Num: 21

Candidate Starts for BiggityBass_38:

(13, 35082), (Start: 21 @35067 has 5 MA's), (52, 34950), (60, 34881),

Gene: BirdsNest_46 Start: 37877, Stop: 37662, Start Num: 32

Candidate Starts for BirdsNest_46:

(Start: 32 @37877 has 3 MA's), (37, 37853), (44, 37826), (48, 37799), (58, 37733), (61, 37703),

Gene: Bishoperium_44 Start: 38897, Stop: 38682, Start Num: 26

Candidate Starts for Bishoperium_44:

(7, 38999), (Start: 26 @38897 has 263 MA's), (Start: 38 @38867 has 7 MA's), (46, 38822),

Gene: BlackStallion_45 Start: 39199, Stop: 38984, Start Num: 26

Candidate Starts for BlackStallion_45:

(Start: 26 @39199 has 263 MA's), (Start: 38 @39169 has 7 MA's), (46, 39124), (53, 39091),

Gene: Blocker23_44 Start: 39556, Stop: 39350, Start Num: 33

Candidate Starts for Blocker23_44:

(Start: 33 @39556 has 29 MA's), (40, 39529), (41, 39526), (50, 39472), (55, 39439),

Gene: BlueHusk_45 Start: 38696, Stop: 38481, Start Num: 26

Candidate Starts for BlueHusk_45:

(Start: 26 @38696 has 263 MA's), (Start: 38 @38666 has 7 MA's), (46, 38621),

Gene: Bluephacebaby_44 Start: 38894, Stop: 38679, Start Num: 26

Candidate Starts for Bluephacebaby_44:

(Start: 26 @38894 has 263 MA's), (Start: 38 @38864 has 7 MA's), (46, 38819),

Gene: BobbyK_40 Start: 39202, Stop: 38996, Start Num: 29

Candidate Starts for BobbyK_40:

(Start: 29 @39202 has 22 MA's), (Start: 38 @39181 has 7 MA's), (44, 39154), (46, 39136), (50, 39118), (54, 39088), (56, 39082),

Gene: Boehler_45 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for Boehler_45:

(7, 39302), (Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125),

Gene: Bosnia_34 Start: 29521, Stop: 29285, Start Num: 34

Candidate Starts for Bosnia_34:

(Start: 34 @29521 has 35 MA's), (44, 29479), (54, 29416), (59, 29368), (60, 29356),

Gene: Boyle_44 Start: 39557, Stop: 39351, Start Num: 33

Candidate Starts for Boyle_44:

(Start: 33 @39557 has 29 MA's), (40, 39530), (41, 39527), (50, 39473), (55, 39440),

Gene: Brilliant_45 Start: 38905, Stop: 38690, Start Num: 26

Candidate Starts for Brilliant_45:

(Start: 26 @38905 has 263 MA's), (Start: 38 @38875 has 7 MA's), (46, 38830), (53, 38797),

Gene: BrownCNA_42 Start: 39463, Stop: 39257, Start Num: 29

Candidate Starts for BrownCNA_42:

(Start: 29 @39463 has 22 MA's), (Start: 38 @39442 has 7 MA's), (44, 39415), (46, 39397), (50, 39379), (54, 39349), (56, 39343),

Gene: Brownie5_44 Start: 39563, Stop: 39357, Start Num: 33

Candidate Starts for Brownie5_44:

(Start: 33 @39563 has 29 MA's), (40, 39536), (41, 39533), (50, 39479), (55, 39446),

Gene: Buckeye_45 Start: 39217, Stop: 39002, Start Num: 26

Candidate Starts for Buckeye_45:

(Start: 26 @39217 has 263 MA's), (Start: 38 @39187 has 7 MA's), (46, 39142),

Gene: Budski_39 Start: 30500, Stop: 30264, Start Num: 34

Candidate Starts for Budski_39:

(Start: 34 @30500 has 35 MA's), (44, 30458), (47, 30437), (54, 30395), (59, 30347),

Gene: Burr_44 Start: 38894, Stop: 38679, Start Num: 26

Candidate Starts for Burr_44:

(Start: 26 @38894 has 263 MA's), (Start: 38 @38864 has 7 MA's), (46, 38819),

Gene: Butters_32 Start: 26751, Stop: 26518, Start Num: 35

Candidate Starts for Butters_32:

(10, 26826), (12, 26823), (14, 26817), (31, 26760), (Start: 35 @26751 has 2 MA's), (43, 26727), (50, 26679), (59, 26601), (62, 26529),

Gene: CRB2_46 Start: 41727, Stop: 41521, Start Num: 26

Candidate Starts for CRB2_46:

(Start: 26 @41727 has 263 MA's), (37, 41706), (46, 41661), (48, 41652), (56, 41607), (61, 41556),

Gene: CaiB_40 Start: 34824, Stop: 34570, Start Num: 23

Candidate Starts for CaiB_40:

(8, 34866), (Start: 23 @34824 has 7 MA's), (40, 34776), (48, 34725), (51, 34707), (56, 34680),

Gene: Calamitous_44 Start: 39443, Stop: 39237, Start Num: 33

Candidate Starts for Calamitous_44:

(Start: 33 @39443 has 29 MA's), (40, 39416), (41, 39413), (50, 39359), (55, 39326),

Gene: CamL_45 Start: 39195, Stop: 38980, Start Num: 26

Candidate Starts for CamL_45:

(Start: 26 @39195 has 263 MA's), (Start: 38 @39165 has 7 MA's), (46, 39120), (53, 39087),

Gene: CampRoach_44 Start: 39185, Stop: 38970, Start Num: 26

Candidate Starts for CampRoach_44:

(7, 39287), (Start: 26 @39185 has 263 MA's), (Start: 38 @39155 has 7 MA's), (46, 39110),

Gene: Cannibal_45 Start: 39178, Stop: 38963, Start Num: 26

Candidate Starts for Cannibal_45:

(Start: 26 @39178 has 263 MA's), (Start: 38 @39148 has 7 MA's), (46, 39103), (53, 39070),

Gene: Carthage_43 Start: 38107, Stop: 37892, Start Num: 26

Candidate Starts for Carthage_43:

(Start: 26 @38107 has 263 MA's), (Start: 38 @38077 has 7 MA's), (46, 38032), (53, 37999),

Gene: Chaelin_45 Start: 38892, Stop: 38677, Start Num: 26

Candidate Starts for Chaelin_45:

(7, 38994), (Start: 26 @38892 has 263 MA's), (Start: 38 @38862 has 7 MA's), (46, 38817),

Gene: Chah_46 Start: 39212, Stop: 38997, Start Num: 26

Candidate Starts for Chah_46:

(7, 39314), (Start: 26 @39212 has 263 MA's), (Start: 38 @39182 has 7 MA's), (46, 39137),

Gene: Charles1_45 Start: 39180, Stop: 38965, Start Num: 26

Candidate Starts for Charles1_45:

(7, 39282), (Start: 26 @39180 has 263 MA's), (Start: 38 @39150 has 7 MA's), (46, 39105),

Gene: CharlieGBrown_44 Start: 38770, Stop: 38555, Start Num: 26

Candidate Starts for CharlieGBrown_44:

(7, 38872), (Start: 26 @38770 has 263 MA's), (Start: 38 @38740 has 7 MA's), (46, 38695),

Gene: CharlottesWeb_38 Start: 32763, Stop: 32527, Start Num: 17

Candidate Starts for CharlottesWeb_38:

(12, 32778), (16, 32766), (Start: 17 @32763 has 3 MA's), (36, 32712), (41, 32706), (55, 32616),

Gene: CheeseTouch_37 Start: 27100, Stop: 26864, Start Num: 34

Candidate Starts for CheeseTouch_37:

(Start: 34 @27100 has 35 MA's), (44, 27058), (47, 27037), (54, 26995), (59, 26947),

Gene: CheetO_45 Start: 39194, Stop: 38979, Start Num: 26

Candidate Starts for CheetO_45:

(7, 39296), (Start: 26 @39194 has 263 MA's), (Start: 38 @39164 has 7 MA's), (46, 39119),

Gene: Cher_44 Start: 38917, Stop: 38702, Start Num: 26

Candidate Starts for Cher_44:

(Start: 26 @38917 has 263 MA's), (Start: 38 @38887 has 7 MA's), (46, 38842), (53, 38809),

Gene: Childish_44 Start: 38920, Stop: 38705, Start Num: 26

Candidate Starts for Childish_44:

(Start: 26 @38920 has 263 MA's), (Start: 38 @38890 has 7 MA's), (46, 38845), (53, 38812),

Gene: Chorkpop_45 Start: 38916, Stop: 38701, Start Num: 26

Candidate Starts for Chorkpop_45:

(7, 39018), (Start: 26 @38916 has 263 MA's), (Start: 38 @38886 has 7 MA's), (46, 38841),

Gene: ChrisnMich_40 Start: 38163, Stop: 37957, Start Num: 29

Candidate Starts for ChrisnMich_40:

(Start: 29 @38163 has 22 MA's), (Start: 38 @38142 has 7 MA's), (44, 38115), (46, 38097), (50, 38079), (54, 38049), (56, 38043), (58, 38022),

Gene: Chunky_45 Start: 39203, Stop: 38988, Start Num: 26

Candidate Starts for Chunky_45:

(Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: Chute_44 Start: 39241, Stop: 39026, Start Num: 26

Candidate Starts for Chute_44:

(7, 39343), (Start: 26 @39241 has 263 MA's), (Start: 38 @39211 has 7 MA's), (46, 39166),

Gene: CloverMinnie_40 Start: 34764, Stop: 34510, Start Num: 23

Candidate Starts for CloverMinnie_40:

(8, 34806), (Start: 23 @34764 has 7 MA's), (40, 34716), (48, 34665), (51, 34647), (56, 34620),

Gene: Cobra_45 Start: 39201, Stop: 38986, Start Num: 26

Candidate Starts for Cobra_45:

(Start: 26 @39201 has 263 MA's), (Start: 38 @39171 has 7 MA's), (46, 39126), (53, 39093),

Gene: Coffee_44 Start: 39546, Stop: 39340, Start Num: 33

Candidate Starts for Coffee_44:

(Start: 33 @39546 has 29 MA's), (40, 39519), (41, 39516), (50, 39462), (55, 39429),

Gene: Colbert_45 Start: 39256, Stop: 39041, Start Num: 26

Candidate Starts for Colbert_45:

(Start: 26 @39256 has 263 MA's), (Start: 38 @39226 has 7 MA's), (46, 39181),

Gene: Coletti_44 Start: 39241, Stop: 39026, Start Num: 26

Candidate Starts for Coletti_44:

(7, 39343), (Start: 26 @39241 has 263 MA's), (Start: 38 @39211 has 7 MA's), (46, 39166),

Gene: Cooper_41 Start: 38382, Stop: 38176, Start Num: 29

Candidate Starts for Cooper_41:

(Start: 29 @38382 has 22 MA's), (Start: 38 @38361 has 7 MA's), (44, 38334), (46, 38316), (50, 38298), (54, 38268), (56, 38262),

Gene: Coral_26 Start: 18896, Stop: 18675, Start Num: 38

Candidate Starts for Coral_26:

(Start: 38 @18896 has 7 MA's),

Gene: Cornobble_44 Start: 38755, Stop: 38540, Start Num: 26

Candidate Starts for Cornobble_44:

(7, 38857), (Start: 26 @38755 has 263 MA's), (Start: 38 @38725 has 7 MA's), (46, 38680),

Gene: Cosmolli16_44 Start: 38905, Stop: 38690, Start Num: 26

Candidate Starts for Cosmolli16_44:

(Start: 26 @38905 has 263 MA's), (Start: 38 @38875 has 7 MA's), (46, 38830),

Gene: Cote_27 Start: 19041, Stop: 18820, Start Num: 38

Candidate Starts for Cote_27:

(Start: 38 @19041 has 7 MA's),

Gene: Craff_45 Start: 39198, Stop: 38983, Start Num: 26

Candidate Starts for Craff_45:

(7, 39300), (Start: 26 @39198 has 263 MA's), (Start: 38 @39168 has 7 MA's), (46, 39123),

Gene: Crownjwl_45 Start: 38971, Stop: 38756, Start Num: 26

Candidate Starts for Crownjwl_45:

(7, 39073), (Start: 26 @38971 has 263 MA's), (Start: 38 @38941 has 7 MA's), (46, 38896),

Gene: DaddyDaniels_45 Start: 38889, Stop: 38674, Start Num: 26

Candidate Starts for DaddyDaniels_45:

(7, 38991), (Start: 26 @38889 has 263 MA's), (Start: 38 @38859 has 7 MA's), (46, 38814),

Gene: Daffy_45 Start: 38920, Stop: 38705, Start Num: 26

Candidate Starts for Daffy_45:

(Start: 26 @38920 has 263 MA's), (Start: 38 @38890 has 7 MA's), (46, 38845), (53, 38812),

Gene: Daka_46 Start: 39193, Stop: 38978, Start Num: 26

Candidate Starts for Daka_46:

(Start: 26 @39193 has 263 MA's), (Start: 38 @39163 has 7 MA's), (46, 39118),

Gene: Daob_27 Start: 19046, Stop: 18825, Start Num: 38

Candidate Starts for Daob_27:

(Start: 38 @19046 has 7 MA's),

Gene: Dati_45 Start: 38914, Stop: 38699, Start Num: 26

Candidate Starts for Dati_45:

(Start: 26 @38914 has 263 MA's), (Start: 38 @38884 has 7 MA's), (46, 38839),

Gene: DelRivs_44 Start: 38915, Stop: 38700, Start Num: 26

Candidate Starts for DelRivs_44:

(7, 39017), (Start: 26 @38915 has 263 MA's), (Start: 38 @38885 has 7 MA's), (46, 38840),

Gene: Derpp_44 Start: 38759, Stop: 38544, Start Num: 26

Candidate Starts for Derpp_44:

(Start: 26 @38759 has 263 MA's), (Start: 38 @38729 has 7 MA's), (46, 38684), (53, 38651),

Gene: DigitDog_43 Start: 39348, Stop: 39139, Start Num: 26

Candidate Starts for DigitDog_43:

(7, 39456), (Start: 26 @39348 has 263 MA's), (Start: 38 @39333 has 7 MA's), (43, 39321),

Gene: Dingo_45 Start: 39177, Stop: 38962, Start Num: 26

Candidate Starts for Dingo_45:

(Start: 26 @39177 has 263 MA's), (Start: 38 @39147 has 7 MA's), (46, 39102),

Gene: Dione_44 Start: 38899, Stop: 38684, Start Num: 26

Candidate Starts for Dione_44:

(Start: 26 @38899 has 263 MA's), (Start: 38 @38869 has 7 MA's), (46, 38824), (53, 38791),

Gene: DirtJuice_45 Start: 39183, Stop: 38968, Start Num: 26

Candidate Starts for DirtJuice_45:

(Start: 26 @39183 has 263 MA's), (Start: 38 @39153 has 7 MA's), (46, 39108),

Gene: Doddsville_45 Start: 38913, Stop: 38698, Start Num: 26

Candidate Starts for Doddsville_45:

(7, 39015), (Start: 26 @38913 has 263 MA's), (Start: 38 @38883 has 7 MA's), (46, 38838),

Gene: DoesntMatter_44 Start: 39186, Stop: 38971, Start Num: 26

Candidate Starts for DoesntMatter_44:

(7, 39288), (Start: 26 @39186 has 263 MA's), (Start: 38 @39156 has 7 MA's), (46, 39111),

Gene: DonSanchon_44 Start: 38893, Stop: 38678, Start Num: 26

Candidate Starts for DonSanchon_44:

(7, 38995), (Start: 26 @38893 has 263 MA's), (Start: 38 @38863 has 7 MA's), (46, 38818),

Gene: Donny_44 Start: 39653, Stop: 39444, Start Num: 26

Candidate Starts for Donny_44:

(6, 39767), (7, 39761), (Start: 26 @39653 has 263 MA's), (Start: 38 @39638 has 7 MA's), (43, 39626), (46, 39593),

Gene: DuchessDung_43 Start: 38047, Stop: 37832, Start Num: 26

Candidate Starts for DuchessDung_43:

(Start: 26 @38047 has 263 MA's), (Start: 38 @38017 has 7 MA's), (46, 37972), (53, 37939),

Gene: Duggie_44 Start: 38915, Stop: 38700, Start Num: 26

Candidate Starts for Duggie_44:

(7, 39017), (Start: 26 @38915 has 263 MA's), (Start: 38 @38885 has 7 MA's), (46, 38840),

Gene: Durga_45 Start: 39213, Stop: 38998, Start Num: 26

Candidate Starts for Durga_45:

(7, 39315), (Start: 26 @39213 has 263 MA's), (Start: 38 @39183 has 7 MA's), (46, 39138),

Gene: Eaglehorse_44 Start: 39470, Stop: 39264, Start Num: 33

Candidate Starts for Eaglehorse_44:

(Start: 33 @39470 has 29 MA's), (40, 39443), (41, 39440), (50, 39386), (55, 39353),

Gene: EastView9101_44 Start: 39303, Stop: 39094, Start Num: 26

Candidate Starts for EastView9101_44:

(6, 39417), (7, 39411), (Start: 26 @39303 has 263 MA's), (Start: 38 @39288 has 7 MA's), (43, 39276), (46, 39243),

Gene: Ecliptus_40 Start: 31004, Stop: 30768, Start Num: 34

Candidate Starts for Ecliptus_40:

(Start: 34 @31004 has 35 MA's), (44, 30962), (47, 30941), (54, 30899), (59, 30851),

Gene: Emiris_45 Start: 39181, Stop: 38966, Start Num: 26

Candidate Starts for Emiris_45:

(Start: 26 @39181 has 263 MA's), (Start: 38 @39151 has 7 MA's), (46, 39106), (53, 39073),

Gene: EmpTee_45 Start: 39193, Stop: 38978, Start Num: 26

Candidate Starts for EmpTee_45:

(7, 39295), (Start: 26 @39193 has 263 MA's), (Start: 38 @39163 has 7 MA's), (46, 39118),

Gene: Eremos_45 Start: 39192, Stop: 38977, Start Num: 26

Candidate Starts for Eremos_45:

(Start: 26 @39192 has 263 MA's), (Start: 38 @39162 has 7 MA's), (46, 39117),

Gene: Etaye_45 Start: 39183, Stop: 38968, Start Num: 26

Candidate Starts for Etaye_45:

(Start: 26 @39183 has 263 MA's), (Start: 38 @39153 has 7 MA's), (46, 39108),

Gene: Eudoria_35 Start: 29354, Stop: 29118, Start Num: 34

Candidate Starts for Eudoria_35:

(Start: 34 @29354 has 35 MA's), (44, 29312), (47, 29291), (54, 29249), (59, 29201), (62, 29129),

Gene: Eugenia_45 Start: 39202, Stop: 38987, Start Num: 26

Candidate Starts for Eugenia_45:

(7, 39304), (Start: 26 @39202 has 263 MA's), (Start: 38 @39172 has 7 MA's), (46, 39127), (53, 39094),

Gene: Evaa_38 Start: 33917, Stop: 33678, Start Num: 25

Candidate Starts for Evaa_38:

(19, 33941), (22, 33935), (Start: 25 @33917 has 2 MA's), (45, 33851), (60, 33746),

Gene: Eviarto_34 Start: 29497, Stop: 29261, Start Num: 34

Candidate Starts for Eviarto_34:

(Start: 34 @29497 has 35 MA's), (44, 29455), (54, 29392), (59, 29344), (60, 29332),

Gene: Fang_45 Start: 39206, Stop: 38991, Start Num: 26

Candidate Starts for Fang_45:

(7, 39308), (Start: 26 @39206 has 263 MA's), (Start: 38 @39176 has 7 MA's), (46, 39131),

Gene: Faze9_43 Start: 39566, Stop: 39360, Start Num: 33

Candidate Starts for Faze9_43:

(Start: 33 @39566 has 29 MA's), (40, 39539), (41, 39536), (50, 39482), (55, 39449),

Gene: FluffyNinja_45 Start: 39199, Stop: 38984, Start Num: 26

Candidate Starts for FluffyNinja_45:

(Start: 26 @39199 has 263 MA's), (Start: 38 @39169 has 7 MA's), (46, 39124), (53, 39091),

Gene: Fortunato_41 Start: 39196, Stop: 38990, Start Num: 29

Candidate Starts for Fortunato_41:

(Start: 29 @39196 has 22 MA's), (Start: 38 @39175 has 7 MA's), (44, 39148), (46, 39130), (50, 39112), (54, 39082), (56, 39076),

Gene: Fozzie_44 Start: 39215, Stop: 39000, Start Num: 26

Candidate Starts for Fozzie_44:

(Start: 26 @39215 has 263 MA's), (Start: 38 @39185 has 7 MA's), (46, 39140), (53, 39107),

Gene: Frankicide_45 Start: 39211, Stop: 38996, Start Num: 26

Candidate Starts for Frankicide_45:

(Start: 26 @39211 has 263 MA's), (Start: 38 @39181 has 7 MA's), (46, 39136), (53, 39103),

Gene: Frederick_40 Start: 39202, Stop: 38996, Start Num: 29

Candidate Starts for Frederick_40:

(Start: 29 @39202 has 22 MA's), (Start: 38 @39181 has 7 MA's), (44, 39154), (46, 39136), (50, 39118), (54, 39088), (56, 39082),

Gene: FrenchFry_44 Start: 39560, Stop: 39354, Start Num: 33

Candidate Starts for FrenchFry_44:

(Start: 33 @39560 has 29 MA's), (40, 39533), (41, 39530), (50, 39476), (55, 39443),

Gene: Fresco_38 Start: 32837, Stop: 32601, Start Num: 17

Candidate Starts for Fresco_38:

(16, 32840), (Start: 17 @32837 has 3 MA's), (24, 32816), (28, 32810), (36, 32786), (41, 32780), (55, 32690),

Gene: Freya_44 Start: 38890, Stop: 38675, Start Num: 26

Candidate Starts for Freya_44:

(Start: 26 @38890 has 263 MA's), (Start: 38 @38860 has 7 MA's), (46, 38815), (53, 38782),

Gene: FriarPreacher_44 Start: 39217, Stop: 39002, Start Num: 26

Candidate Starts for FriarPreacher_44:

(Start: 26 @39217 has 263 MA's), (Start: 38 @39187 has 7 MA's), (46, 39142),

Gene: Fringe_45 Start: 39182, Stop: 38967, Start Num: 26

Candidate Starts for Fringe_45:

(7, 39284), (Start: 26 @39182 has 263 MA's), (Start: 38 @39152 has 7 MA's), (46, 39107),

Gene: FugateOSU_44 Start: 38895, Stop: 38680, Start Num: 26

Candidate Starts for FugateOSU_44:

(Start: 26 @38895 has 263 MA's), (Start: 38 @38865 has 7 MA's), (46, 38820),

Gene: Funsized_46 Start: 41756, Stop: 41544, Start Num: 26

Candidate Starts for Funsized_46:

(1, 42029), (3, 41957), (18, 41783), (Start: 26 @41756 has 263 MA's), (Start: 32 @41747 has 3 MA's), (39, 41723), (44, 41702), (46, 41684), (50, 41666),

Gene: Gareth_44 Start: 38898, Stop: 38683, Start Num: 26

Candidate Starts for Gareth_44:

(Start: 26 @38898 has 263 MA's), (Start: 38 @38868 has 7 MA's), (46, 38823), (53, 38790),

Gene: GeneCoco_45 Start: 39207, Stop: 38992, Start Num: 26

Candidate Starts for GeneCoco_45:

(Start: 26 @39207 has 263 MA's), (Start: 38 @39177 has 7 MA's), (46, 39132), (53, 39099),

Gene: Getalong_40 Start: 31359, Stop: 31123, Start Num: 34

Candidate Starts for Getalong_40:

(Start: 34 @31359 has 35 MA's), (44, 31317), (47, 31296), (54, 31254), (59, 31206),

Gene: Giraffe_45 Start: 38901, Stop: 38686, Start Num: 26

Candidate Starts for Giraffe_45:

(7, 39003), (Start: 26 @38901 has 263 MA's), (Start: 38 @38871 has 7 MA's), (46, 38826),

Gene: Glass_44 Start: 39560, Stop: 39354, Start Num: 33

Candidate Starts for Glass_44:

(Start: 33 @39560 has 29 MA's), (40, 39533), (41, 39530), (50, 39476), (55, 39443),

Gene: Godines_44 Start: 39502, Stop: 39296, Start Num: 33

Candidate Starts for Godines_44:

(Start: 33 @39502 has 29 MA's), (40, 39475), (41, 39472), (50, 39418), (55, 39385),

Gene: Gophee_45 Start: 39184, Stop: 38969, Start Num: 26

Candidate Starts for Gophee_45:

(7, 39286), (Start: 26 @39184 has 263 MA's), (Start: 38 @39154 has 7 MA's), (46, 39109),

Gene: Grand2040_44 Start: 38916, Stop: 38701, Start Num: 26

Candidate Starts for Grand2040_44:

(Start: 26 @38916 has 263 MA's), (Start: 38 @38886 has 7 MA's), (46, 38841), (53, 38808),

Gene: Gwilliam_46 Start: 39196, Stop: 38981, Start Num: 26

Candidate Starts for Gwilliam_46:

(Start: 26 @39196 has 263 MA's), (Start: 38 @39166 has 7 MA's), (46, 39121),

Gene: Gyarad_0045 Start: 39198, Stop: 38983, Start Num: 26

Candidate Starts for Gyarad_0045:

(Start: 26 @39198 has 263 MA's), (Start: 38 @39168 has 7 MA's), (46, 39123), (53, 39090),

Gene: HSavage_45 Start: 39202, Stop: 38987, Start Num: 26

Candidate Starts for HSavage_45:

(Start: 26 @39202 has 263 MA's), (Start: 38 @39172 has 7 MA's), (46, 39127), (53, 39094),

Gene: Haimas_45 Start: 39193, Stop: 38978, Start Num: 26

Candidate Starts for Haimas_45:

(Start: 26 @39193 has 263 MA's), (Start: 38 @39163 has 7 MA's), (46, 39118),

Gene: Haleema_44 Start: 38916, Stop: 38701, Start Num: 26

Candidate Starts for Haleema_44:

(Start: 26 @38916 has 263 MA's), (Start: 38 @38886 has 7 MA's), (46, 38841), (53, 38808),

Gene: Hamish_45 Start: 39185, Stop: 38970, Start Num: 26

Candidate Starts for Hamish_45:

(Start: 26 @39185 has 263 MA's), (Start: 38 @39155 has 7 MA's), (46, 39110),

Gene: Hangman_40 Start: 39194, Stop: 38988, Start Num: 29

Candidate Starts for Hangman_40:

(Start: 29 @39194 has 22 MA's), (Start: 38 @39173 has 7 MA's), (44, 39146), (46, 39128), (50, 39110), (54, 39080), (56, 39074),

Gene: Hartsy_44 Start: 39236, Stop: 39021, Start Num: 26

Candidate Starts for Hartsy_44:

(Start: 26 @39236 has 263 MA's), (Start: 38 @39206 has 7 MA's), (46, 39161),

Gene: Harvey_45 Start: 39211, Stop: 38996, Start Num: 26

Candidate Starts for Harvey_45:

(7, 39313), (Start: 26 @39211 has 263 MA's), (Start: 38 @39181 has 7 MA's), (46, 39136),

Gene: Hashim76_47 Start: 38349, Stop: 38134, Start Num: 32

Candidate Starts for Hashim76_47:

(Start: 32 @38349 has 3 MA's), (37, 38325), (48, 38271), (61, 38175),

Gene: Heath_39 Start: 38801, Stop: 38595, Start Num: 29

Candidate Starts for Heath_39:

(Start: 29 @38801 has 22 MA's), (Start: 38 @38780 has 7 MA's), (44, 38753), (46, 38735), (50, 38717), (54, 38687), (56, 38681),

Gene: Hedgerow_44 Start: 39542, Stop: 39336, Start Num: 33

Candidate Starts for Hedgerow_44:

(Start: 33 @39542 has 29 MA's), (40, 39515), (41, 39512), (50, 39458), (55, 39425),

Gene: Held_45 Start: 38900, Stop: 38685, Start Num: 26

Candidate Starts for Held_45:

(7, 39002), (Start: 26 @38900 has 263 MA's), (Start: 38 @38870 has 7 MA's), (46, 38825),

Gene: HenryJackson_44 Start: 38916, Stop: 38701, Start Num: 26

Candidate Starts for HenryJackson_44:

(7, 39018), (Start: 26 @38916 has 263 MA's), (Start: 38 @38886 has 7 MA's), (46, 38841),

Gene: Herod_34 Start: 29521, Stop: 29285, Start Num: 34

Candidate Starts for Herod_34:

(Start: 34 @29521 has 35 MA's), (44, 29479), (54, 29416), (59, 29368), (60, 29356),

Gene: Hertubise_45 Start: 39207, Stop: 38992, Start Num: 26

Candidate Starts for Hertubise_45:

(Start: 26 @39207 has 263 MA's), (Start: 38 @39177 has 7 MA's), (46, 39132),

Gene: Hetaeria_45 Start: 39209, Stop: 38994, Start Num: 26

Candidate Starts for Hetaeria_45:

(Start: 26 @39209 has 263 MA's), (Start: 38 @39179 has 7 MA's), (46, 39134),

Gene: HighStump_44 Start: 38899, Stop: 38684, Start Num: 26

Candidate Starts for HighStump_44:

(7, 39001), (Start: 26 @38899 has 263 MA's), (Start: 38 @38869 has 7 MA's), (46, 38824),

Gene: Hocus_44 Start: 38905, Stop: 38690, Start Num: 26

Candidate Starts for Hocus_44:

(Start: 26 @38905 has 263 MA's), (Start: 38 @38875 has 7 MA's), (46, 38830), (53, 38797),

Gene: Holeinone_44 Start: 39422, Stop: 39216, Start Num: 33

Candidate Starts for Holeinone_44:

(Start: 33 @39422 has 29 MA's), (40, 39395), (41, 39392), (50, 39338), (55, 39305),

Gene: Holliday_38 Start: 29214, Stop: 28978, Start Num: 34

Candidate Starts for Holliday_38:

(Start: 34 @29214 has 35 MA's), (44, 29172), (47, 29151), (54, 29109), (59, 29061),

Gene: Horchata_45 Start: 39187, Stop: 38972, Start Num: 26

Candidate Starts for Horchata_45:

(7, 39289), (Start: 26 @39187 has 263 MA's), (Start: 38 @39157 has 7 MA's), (46, 39112),

Gene: Horus_39 Start: 30560, Stop: 30324, Start Num: 34

Candidate Starts for Horus_39:

(Start: 34 @30560 has 35 MA's), (44, 30518), (47, 30497), (54, 30455), (59, 30407),

Gene: Hydro_40 Start: 39211, Stop: 39005, Start Num: 29

Candidate Starts for Hydro_40:

(Start: 29 @39211 has 22 MA's), (Start: 38 @39190 has 7 MA's), (44, 39163), (46, 39145), (50, 39127), (54, 39097), (56, 39091),

Gene: ImtiyazSitla_44 Start: 38747, Stop: 38532, Start Num: 26

Candidate Starts for ImtiyazSitla_44:

(Start: 26 @38747 has 263 MA's), (Start: 38 @38717 has 7 MA's), (46, 38672), (53, 38639),

Gene: Imvubu_36 Start: 35895, Stop: 35680, Start Num: 26

Candidate Starts for Imvubu_36:

(2, 36156), (3, 36096), (Start: 26 @35895 has 263 MA's), (Start: 32 @35886 has 3 MA's), (39, 35859), (44, 35838), (46, 35820), (54, 35772), (56, 35766),

Gene: Inchworm_45 Start: 39185, Stop: 38970, Start Num: 26

Candidate Starts for Inchworm_45:

(7, 39287), (Start: 26 @39185 has 263 MA's), (Start: 38 @39155 has 7 MA's), (46, 39110),

Gene: Indlovu_42 Start: 38503, Stop: 38300, Start Num: 26

Candidate Starts for Indlovu_42:

(7, 38602), (Start: 26 @38503 has 263 MA's), (37, 38485), (44, 38458), (46, 38440), (54, 38392),

Gene: Inverness_45 Start: 39199, Stop: 38984, Start Num: 26

Candidate Starts for Inverness_45:

(Start: 26 @39199 has 263 MA's), (Start: 38 @39169 has 7 MA's), (46, 39124), (53, 39091),

Gene: Iridoclysis_45 Start: 39179, Stop: 38964, Start Num: 26

Candidate Starts for Iridoclysis_45:

(Start: 26 @39179 has 263 MA's), (Start: 38 @39149 has 7 MA's), (46, 39104),

Gene: IsaacEli_45 Start: 39203, Stop: 38988, Start Num: 26

Candidate Starts for IsaacEli_45:

(7, 39305), (Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: ItsyBitsy1_44 Start: 39424, Stop: 39218, Start Num: 33

Candidate Starts for ItsyBitsy1_44:

(Start: 33 @39424 has 29 MA's), (40, 39397), (41, 39394), (50, 39340), (55, 39307),

Gene: JAMaL_40 Start: 39382, Stop: 39176, Start Num: 29

Candidate Starts for JAMaL_40:

(Start: 29 @39382 has 22 MA's), (Start: 38 @39361 has 7 MA's), (44, 39334), (46, 39316), (50, 39298), (54, 39268), (56, 39262),

Gene: JDog_45 Start: 38916, Stop: 38701, Start Num: 26

Candidate Starts for JDog_45:

(Start: 26 @38916 has 263 MA's), (Start: 38 @38886 has 7 MA's), (46, 38841),

Gene: JacAttac_45 Start: 39185, Stop: 38970, Start Num: 26

Candidate Starts for JacAttac_45:

(Start: 26 @39185 has 263 MA's), (Start: 38 @39155 has 7 MA's), (46, 39110), (53, 39077),

Gene: JaguarMi_40 Start: 38677, Stop: 38471, Start Num: 29

Candidate Starts for JaguarMi_40:

(Start: 29 @38677 has 22 MA's), (Start: 38 @38656 has 7 MA's), (44, 38629), (46, 38611), (50, 38593), (54, 38563), (56, 38557),

Gene: JakeO_44 Start: 38918, Stop: 38703, Start Num: 26

Candidate Starts for JakeO_44:

(Start: 26 @38918 has 263 MA's), (Start: 38 @38888 has 7 MA's), (46, 38843),

Gene: JangoPhett_45 Start: 39187, Stop: 38972, Start Num: 26

Candidate Starts for JangoPhett_45:

(Start: 26 @39187 has 263 MA's), (Start: 38 @39157 has 7 MA's), (46, 39112),

Gene: Jillium_44 Start: 38909, Stop: 38694, Start Num: 26

Candidate Starts for Jillium_44:

(Start: 26 @38909 has 263 MA's), (Start: 38 @38879 has 7 MA's), (46, 38834),

Gene: Jiminy_44 Start: 38753, Stop: 38538, Start Num: 26

Candidate Starts for Jiminy_44:

(7, 38855), (Start: 26 @38753 has 263 MA's), (Start: 38 @38723 has 7 MA's), (46, 38678),

Gene: KLucky39_45 Start: 39197, Stop: 38982, Start Num: 26

Candidate Starts for KLucky39_45:

(Start: 26 @39197 has 263 MA's), (Start: 38 @39167 has 7 MA's), (46, 39122), (53, 39089),

Gene: Kahve_44 Start: 38913, Stop: 38698, Start Num: 26

Candidate Starts for Kahve_44:

(Start: 26 @38913 has 263 MA's), (Start: 38 @38883 has 7 MA's), (46, 38838),

Gene: Kailash_45 Start: 39251, Stop: 39036, Start Num: 26

Candidate Starts for Kailash_45:

(Start: 26 @39251 has 263 MA's), (Start: 38 @39221 has 7 MA's), (46, 39176),

Gene: Kaleb_44 Start: 39557, Stop: 39351, Start Num: 33

Candidate Starts for Kaleb_44:

(Start: 33 @39557 has 29 MA's), (40, 39530), (41, 39527), (50, 39473), (55, 39440),

Gene: Katniss_45 Start: 39212, Stop: 38997, Start Num: 26

Candidate Starts for Katniss_45:

(7, 39314), (Start: 26 @39212 has 263 MA's), (Start: 38 @39182 has 7 MA's), (46, 39137),

Gene: Keitherie_45 Start: 39250, Stop: 39035, Start Num: 26

Candidate Starts for Keitherie_45:

(7, 39352), (Start: 26 @39250 has 263 MA's), (Start: 38 @39220 has 7 MA's), (46, 39175),

Gene: Kenna_38 Start: 29550, Stop: 29314, Start Num: 34

Candidate Starts for Kenna_38:

(Start: 34 @29550 has 35 MA's), (44, 29508), (47, 29487), (54, 29445), (59, 29397),

Gene: Kheth_44 Start: 39445, Stop: 39239, Start Num: 33

Candidate Starts for Kheth_44:

(Start: 33 @39445 has 29 MA's), (40, 39418), (41, 39415), (50, 39361), (55, 39328),

Gene: Kikipoo_45 Start: 39203, Stop: 38988, Start Num: 26

Candidate Starts for Kikipoo_45:

(7, 39305), (Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: Kimbrough_45 Start: 38905, Stop: 38690, Start Num: 26

Candidate Starts for Kimbrough_45:

(7, 39007), (Start: 26 @38905 has 263 MA's), (Start: 38 @38875 has 7 MA's), (46, 38830),

Gene: KingTut_36 Start: 34574, Stop: 34359, Start Num: 26

Candidate Starts for KingTut_36:

(Start: 26 @34574 has 263 MA's), (Start: 38 @34544 has 7 MA's), (46, 34499), (53, 34466),

Gene: KingVeVeVe_45 Start: 39178, Stop: 38963, Start Num: 26

Candidate Starts for KingVeVeVe_45:

(Start: 26 @39178 has 263 MA's), (Start: 38 @39148 has 7 MA's), (46, 39103),

Gene: Kita_36 Start: 29363, Stop: 29127, Start Num: 34

Candidate Starts for Kita_36:

(Start: 34 @29363 has 35 MA's), (44, 29321), (47, 29300), (54, 29258), (59, 29210), (62, 29138),

Gene: KlimbOn_45 Start: 39191, Stop: 38976, Start Num: 26

Candidate Starts for KlimbOn_45:

(Start: 26 @39191 has 263 MA's), (Start: 38 @39161 has 7 MA's), (46, 39116), (53, 39083),

Gene: Kloppinator_45 Start: 39214, Stop: 38999, Start Num: 26

Candidate Starts for Kloppinator_45:

(7, 39316), (Start: 26 @39214 has 263 MA's), (Start: 38 @39184 has 7 MA's), (46, 39139), (53, 39106),

Gene: Knocker_45 Start: 40870, Stop: 40658, Start Num: 26

Candidate Starts for Knocker_45:

(7, 40978), (Start: 26 @40870 has 263 MA's), (Start: 32 @40861 has 3 MA's), (39, 40837), (42, 40831), (44, 40816), (46, 40798),

Gene: Kwadwo_44 Start: 38895, Stop: 38680, Start Num: 26

Candidate Starts for Kwadwo_44:

(Start: 26 @38895 has 263 MA's), (Start: 38 @38865 has 7 MA's), (46, 38820), (53, 38787),

Gene: Kwksand96_44 Start: 38764, Stop: 38549, Start Num: 26

Candidate Starts for Kwksand96_44:

(Start: 26 @38764 has 263 MA's), (Start: 38 @38734 has 7 MA's), (46, 38689), (53, 38656),

Gene: Labeouficaum_44 Start: 38759, Stop: 38544, Start Num: 26

Candidate Starts for Labeouficaum_44:

(Start: 26 @38759 has 263 MA's), (Start: 38 @38729 has 7 MA's), (46, 38684), (53, 38651),

Gene: Lars_44 Start: 39547, Stop: 39341, Start Num: 33
Candidate Starts for Lars_44:
(Start: 33 @39547 has 29 MA's), (40, 39520), (41, 39517), (50, 39463), (55, 39430),

Gene: LasagnaCat_45 Start: 39197, Stop: 38982, Start Num: 26
Candidate Starts for LasagnaCat_45:
(7, 39299), (Start: 26 @39197 has 263 MA's), (Start: 38 @39167 has 7 MA's), (46, 39122),

Gene: Lasso_45 Start: 39170, Stop: 38955, Start Num: 26
Candidate Starts for Lasso_45:
(Start: 26 @39170 has 263 MA's), (Start: 38 @39140 has 7 MA's), (46, 39095),

Gene: Laurie_43 Start: 38946, Stop: 38740, Start Num: 33
Candidate Starts for Laurie_43:
(Start: 33 @38946 has 29 MA's), (40, 38919), (41, 38916), (50, 38862), (55, 38829),

Gene: LeeLot_45 Start: 39201, Stop: 38986, Start Num: 26
Candidate Starts for LeeLot_45:
(7, 39303), (Start: 26 @39201 has 263 MA's), (Start: 38 @39171 has 7 MA's), (46, 39126),

Gene: Lego3393_44 Start: 39206, Stop: 38991, Start Num: 26
Candidate Starts for Lego3393_44:
(7, 39308), (Start: 26 @39206 has 263 MA's), (Start: 38 @39176 has 7 MA's), (46, 39131),

Gene: Legolas_44 Start: 38911, Stop: 38696, Start Num: 26
Candidate Starts for Legolas_44:
(Start: 26 @38911 has 263 MA's), (Start: 38 @38881 has 7 MA's), (46, 38836), (53, 38803),

Gene: LeiMonet_46 Start: 38902, Stop: 38687, Start Num: 26
Candidate Starts for LeiMonet_46:
(7, 39004), (Start: 26 @38902 has 263 MA's), (Start: 38 @38872 has 7 MA's), (46, 38827),

Gene: LemonSlice_45 Start: 38898, Stop: 38683, Start Num: 26
Candidate Starts for LemonSlice_45:
(7, 39000), (Start: 26 @38898 has 263 MA's), (Start: 38 @38868 has 7 MA's), (46, 38823),

Gene: Lephleur_44 Start: 39440, Stop: 39234, Start Num: 33
Candidate Starts for Lephleur_44:
(Start: 33 @39440 has 29 MA's), (40, 39413), (41, 39410), (50, 39356), (55, 39323),

Gene: Leroy_39 Start: 30561, Stop: 30325, Start Num: 34
Candidate Starts for Leroy_39:
(Start: 34 @30561 has 35 MA's), (44, 30519), (47, 30498), (54, 30456), (59, 30408),

Gene: Ligma_38 Start: 32837, Stop: 32601, Start Num: 17
Candidate Starts for Ligma_38:
(16, 32840), (Start: 17 @32837 has 3 MA's), (24, 32816), (28, 32810), (36, 32786), (41, 32780), (55, 32690),

Gene: LilMcDreamy_41 Start: 38754, Stop: 38542, Start Num: 26
Candidate Starts for LilMcDreamy_41:
(7, 38862), (Start: 26 @38754 has 263 MA's), (Start: 38 @38736 has 7 MA's), (46, 38691), (56, 38637),

Gene: LittleMunchkin_40 Start: 36172, Stop: 35945, Start Num: 21

Candidate Starts for LittleMunchkin_40:

(Start: 21 @36172 has 5 MA's), (52, 36055), (56, 36031),

Gene: LizLemon_44 Start: 39556, Stop: 39350, Start Num: 33

Candidate Starts for LizLemon_44:

(Start: 33 @39556 has 29 MA's), (40, 39529), (41, 39526), (50, 39472), (55, 39439),

Gene: Lolalove_40 Start: 39208, Stop: 39002, Start Num: 29

Candidate Starts for Lolalove_40:

(Start: 29 @39208 has 22 MA's), (Start: 38 @39187 has 7 MA's), (44, 39160), (46, 39142), (50, 39124), (54, 39094), (56, 39088),

Gene: Longacauda_44 Start: 38903, Stop: 38688, Start Num: 26

Candidate Starts for Longacauda_44:

(Start: 26 @38903 has 263 MA's), (Start: 38 @38873 has 7 MA's), (46, 38828), (53, 38795),

Gene: Lopsy_44 Start: 38753, Stop: 38538, Start Num: 26

Candidate Starts for Lopsy_44:

(7, 38855), (Start: 26 @38753 has 263 MA's), (Start: 38 @38723 has 7 MA's), (46, 38678),

Gene: LostAndPhound_44 Start: 38904, Stop: 38689, Start Num: 26

Candidate Starts for LostAndPhound_44:

(7, 39006), (Start: 26 @38904 has 263 MA's), (Start: 38 @38874 has 7 MA's), (46, 38829),

Gene: LuckyMarjie_44 Start: 38913, Stop: 38698, Start Num: 26

Candidate Starts for LuckyMarjie_44:

(Start: 26 @38913 has 263 MA's), (Start: 38 @38883 has 7 MA's), (46, 38838), (53, 38805),

Gene: Lulumae_44 Start: 38895, Stop: 38680, Start Num: 26

Candidate Starts for Lulumae_44:

(Start: 26 @38895 has 263 MA's), (Start: 38 @38865 has 7 MA's), (46, 38820), (53, 38787),

Gene: Lulwa_45 Start: 39182, Stop: 38967, Start Num: 26

Candidate Starts for Lulwa_45:

(7, 39284), (Start: 26 @39182 has 263 MA's), (Start: 38 @39152 has 7 MA's), (46, 39107),

Gene: Lumine_44 Start: 38891, Stop: 38676, Start Num: 26

Candidate Starts for Lumine_44:

(7, 38993), (Start: 26 @38891 has 263 MA's), (Start: 38 @38861 has 7 MA's), (46, 38816),

Gene: Lunar_27 Start: 19041, Stop: 18820, Start Num: 38

Candidate Starts for Lunar_27:

(Start: 38 @19041 has 7 MA's),

Gene: Lutum_39 Start: 29550, Stop: 29314, Start Num: 34

Candidate Starts for Lutum_39:

(Start: 34 @29550 has 35 MA's), (44, 29508), (47, 29487), (54, 29445), (59, 29397),

Gene: MRabcd_44 Start: 38895, Stop: 38680, Start Num: 26

Candidate Starts for MRabcd_44:

(Start: 26 @38895 has 263 MA's), (Start: 38 @38865 has 7 MA's), (46, 38820), (53, 38787),

Gene: Mag7_44 Start: 38801, Stop: 38586, Start Num: 26

Candidate Starts for Mag7_44:

(Start: 26 @38801 has 263 MA's), (Start: 38 @38771 has 7 MA's), (46, 38726),

Gene: Magic8_45 Start: 39236, Stop: 39021, Start Num: 26

Candidate Starts for Magic8_45:

(Start: 26 @39236 has 263 MA's), (Start: 38 @39206 has 7 MA's), (46, 39161),

Gene: Magpie_39 Start: 39044, Stop: 38838, Start Num: 29

Candidate Starts for Magpie_39:

(Start: 29 @39044 has 22 MA's), (Start: 38 @39023 has 7 MA's), (44, 38996), (46, 38978), (50, 38960), (54, 38930), (56, 38924),

Gene: MakoManhole_40 Start: 34842, Stop: 34588, Start Num: 23

Candidate Starts for MakoManhole_40:

(8, 34884), (Start: 23 @34842 has 7 MA's), (40, 34794), (48, 34743), (51, 34725), (56, 34698),

Gene: Mana_44 Start: 38910, Stop: 38695, Start Num: 26

Candidate Starts for Mana_44:

(Start: 26 @38910 has 263 MA's), (Start: 38 @38880 has 7 MA's), (46, 38835), (53, 38802),

Gene: Manad_44 Start: 38752, Stop: 38537, Start Num: 26

Candidate Starts for Manad_44:

(7, 38854), (Start: 26 @38752 has 263 MA's), (Start: 38 @38722 has 7 MA's), (46, 38677),

Gene: Manasvini_35 Start: 29355, Stop: 29119, Start Num: 34

Candidate Starts for Manasvini_35:

(Start: 34 @29355 has 35 MA's), (44, 29313), (47, 29292), (54, 29250), (59, 29202), (62, 29130),

Gene: Maridalia_34 Start: 29354, Stop: 29118, Start Num: 34

Candidate Starts for Maridalia_34:

(Start: 34 @29354 has 35 MA's), (44, 29312), (47, 29291), (54, 29249), (59, 29201), (62, 29129),

Gene: Mariokart_38 Start: 32762, Stop: 32526, Start Num: 17

Candidate Starts for Mariokart_38:

(12, 32777), (16, 32765), (Start: 17 @32762 has 3 MA's), (36, 32711), (41, 32705), (55, 32615),

Gene: Maru_44 Start: 38853, Stop: 38638, Start Num: 26

Candidate Starts for Maru_44:

(Start: 26 @38853 has 263 MA's), (Start: 38 @38823 has 7 MA's), (46, 38778), (53, 38745),

Gene: Maskar_44 Start: 38747, Stop: 38532, Start Num: 26

Candidate Starts for Maskar_44:

(Start: 26 @38747 has 263 MA's), (Start: 38 @38717 has 7 MA's), (46, 38672), (53, 38639),

Gene: MasterPo_44 Start: 39443, Stop: 39237, Start Num: 33

Candidate Starts for MasterPo_44:

(Start: 33 @39443 has 29 MA's), (40, 39416), (41, 39413), (50, 39359), (55, 39326),

Gene: Matalotodo_45 Start: 39196, Stop: 38981, Start Num: 26

Candidate Starts for Matalotodo_45:

(Start: 26 @39196 has 263 MA's), (Start: 38 @39166 has 7 MA's), (46, 39121),

Gene: Mcshane_44 Start: 38893, Stop: 38678, Start Num: 26

Candidate Starts for Mcshane_44:

(Start: 26 @38893 has 263 MA's), (Start: 38 @38863 has 7 MA's), (46, 38818), (53, 38785),

Gene: Mecca_44 Start: 38896, Stop: 38681, Start Num: 26

Candidate Starts for Mecca_44:

(7, 38998), (Start: 26 @38896 has 263 MA's), (Start: 38 @38866 has 7 MA's), (46, 38821),

Gene: Megamind20_45 Start: 38918, Stop: 38703, Start Num: 26

Candidate Starts for Megamind20_45:

(7, 39020), (Start: 26 @38918 has 263 MA's), (Start: 38 @38888 has 7 MA's), (46, 38843),

Gene: Megatron_45 Start: 39194, Stop: 38979, Start Num: 26

Candidate Starts for Megatron_45:

(7, 39296), (Start: 26 @39194 has 263 MA's), (Start: 38 @39164 has 7 MA's), (46, 39119),

Gene: Melc17_45 Start: 39191, Stop: 38976, Start Num: 26

Candidate Starts for Melc17_45:

(Start: 26 @39191 has 263 MA's), (Start: 38 @39161 has 7 MA's), (46, 39116),

Gene: Melons_27 Start: 19041, Stop: 18820, Start Num: 38

Candidate Starts for Melons_27:

(Start: 38 @19041 has 7 MA's),

Gene: MelsMeow_44 Start: 38797, Stop: 38582, Start Num: 26

Candidate Starts for MelsMeow_44:

(Start: 26 @38797 has 263 MA's), (Start: 38 @38767 has 7 MA's), (46, 38722), (53, 38689),

Gene: Mesh1_45 Start: 39208, Stop: 38993, Start Num: 26

Candidate Starts for Mesh1_45:

(Start: 26 @39208 has 263 MA's), (Start: 38 @39178 has 7 MA's), (46, 39133),

Gene: MichaelPhcott_44 Start: 38798, Stop: 38583, Start Num: 26

Candidate Starts for MichaelPhcott_44:

(Start: 26 @38798 has 263 MA's), (Start: 38 @38768 has 7 MA's), (46, 38723),

Gene: Mikota_45 Start: 39181, Stop: 38966, Start Num: 26

Candidate Starts for Mikota_45:

(Start: 26 @39181 has 263 MA's), (Start: 38 @39151 has 7 MA's), (46, 39106), (53, 39073),

Gene: MiniBoss_45 Start: 39187, Stop: 38972, Start Num: 26

Candidate Starts for MiniBoss_45:

(Start: 26 @39187 has 263 MA's), (Start: 38 @39157 has 7 MA's), (46, 39112), (53, 39079),

Gene: MitKao_45 Start: 38902, Stop: 38687, Start Num: 26

Candidate Starts for MitKao_45:

(7, 39004), (Start: 26 @38902 has 263 MA's), (Start: 38 @38872 has 7 MA's), (46, 38827),

Gene: Mithril_40 Start: 39212, Stop: 39006, Start Num: 29

Candidate Starts for Mithril_40:

(Start: 29 @39212 has 22 MA's), (Start: 38 @39191 has 7 MA's), (44, 39164), (46, 39146), (50, 39128), (54, 39098), (56, 39092),

Gene: Morgushi_45 Start: 38903, Stop: 38688, Start Num: 26

Candidate Starts for Morgushi_45:

(Start: 26 @38903 has 263 MA's), (Start: 38 @38873 has 7 MA's), (46, 38828), (53, 38795),

Gene: Mortcellus_42 Start: 39665, Stop: 39429, Start Num: 20

Candidate Starts for Mortcellus_42:

(Start: 20 @39665 has 3 MA's), (41, 39608), (51, 39542), (53, 39536),

Gene: Morty_45 Start: 39203, Stop: 38988, Start Num: 26

Candidate Starts for Morty_45:

(7, 39305), (Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: Mosaic_44 Start: 38908, Stop: 38693, Start Num: 26

Candidate Starts for Mosaic_44:

(7, 39010), (Start: 26 @38908 has 263 MA's), (Start: 38 @38878 has 7 MA's), (46, 38833),

Gene: MossRose_40 Start: 34821, Stop: 34567, Start Num: 23

Candidate Starts for MossRose_40:

(8, 34863), (Start: 23 @34821 has 7 MA's), (40, 34773), (48, 34722), (51, 34704), (56, 34677),

Gene: MrPhizzler_44 Start: 38911, Stop: 38696, Start Num: 26

Candidate Starts for MrPhizzler_44:

(Start: 26 @38911 has 263 MA's), (Start: 38 @38881 has 7 MA's), (46, 38836), (53, 38803),

Gene: Mudslide_40 Start: 39444, Stop: 39238, Start Num: 29

Candidate Starts for Mudslide_40:

(Start: 29 @39444 has 22 MA's), (Start: 38 @39423 has 7 MA's), (44, 39396), (46, 39378), (50, 39360), (54, 39330), (56, 39324),

Gene: Mulan_44 Start: 38920, Stop: 38705, Start Num: 26

Candidate Starts for Mulan_44:

(Start: 26 @38920 has 263 MA's), (Start: 38 @38890 has 7 MA's), (46, 38845),

Gene: Murdoc_45 Start: 39195, Stop: 38980, Start Num: 26

Candidate Starts for Murdoc_45:

(Start: 26 @39195 has 263 MA's), (Start: 38 @39165 has 7 MA's), (46, 39120), (53, 39087),

Gene: Mutante_44 Start: 38902, Stop: 38687, Start Num: 26

Candidate Starts for Mutante_44:

(7, 39004), (Start: 26 @38902 has 263 MA's), (Start: 38 @38872 has 7 MA's), (46, 38827),

Gene: Mysterious_45 Start: 39920, Stop: 39711, Start Num: 26

Candidate Starts for Mysterious_45:

(7, 40028), (Start: 26 @39920 has 263 MA's), (Start: 38 @39905 has 7 MA's), (46, 39860),

Gene: NHagos_38 Start: 33445, Stop: 33185, Start Num: 23

Candidate Starts for NHagos_38:

(9, 33478), (Start: 23 @33445 has 7 MA's), (Start: 38 @33403 has 7 MA's), (40, 33400), (48, 33349), (51, 33331), (56, 33304),

Gene: Nacho_0045 Start: 39197, Stop: 38982, Start Num: 26

Candidate Starts for Nacho_0045:

(7, 39299), (Start: 26 @39197 has 263 MA's), (Start: 38 @39167 has 7 MA's), (46, 39122),

Gene: Nanao_39 Start: 38170, Stop: 37964, Start Num: 29

Candidate Starts for Nanao_39:

(Start: 29 @38170 has 22 MA's), (Start: 38 @38149 has 7 MA's), (44, 38122), (46, 38104), (50, 38086), (54, 38056), (56, 38050), (58, 38029),

Gene: Nangang_43 Start: 39713, Stop: 39504, Start Num: 26

Candidate Starts for Nangang_43:

(7, 39821), (Start: 26 @39713 has 263 MA's), (Start: 38 @39698 has 7 MA's), (43, 39686),

Gene: Neobush_35 Start: 29354, Stop: 29118, Start Num: 34

Candidate Starts for Neobush_35:

(Start: 34 @29354 has 35 MA's), (44, 29312), (47, 29291), (54, 29249), (59, 29201), (62, 29129),

Gene: Newman_45 Start: 39194, Stop: 38979, Start Num: 26

Candidate Starts for Newman_45:

(Start: 26 @39194 has 263 MA's), (Start: 38 @39164 has 7 MA's), (46, 39119), (53, 39086),

Gene: Nicole21_45 Start: 39192, Stop: 38977, Start Num: 26

Candidate Starts for Nicole21_45:

(Start: 26 @39192 has 263 MA's), (Start: 38 @39162 has 7 MA's), (46, 39117),

Gene: Nigel_39 Start: 38086, Stop: 37880, Start Num: 29

Candidate Starts for Nigel_39:

(Start: 29 @38086 has 22 MA's), (Start: 38 @38065 has 7 MA's), (44, 38038), (46, 38020), (50, 38002), (54, 37972), (56, 37966),

Gene: Numberten_45 Start: 39201, Stop: 38986, Start Num: 26

Candidate Starts for Numberten_45:

(7, 39303), (Start: 26 @39201 has 263 MA's), (Start: 38 @39171 has 7 MA's), (46, 39126),

Gene: Nyala_44 Start: 38894, Stop: 38679, Start Num: 26

Candidate Starts for Nyala_44:

(7, 38996), (Start: 26 @38894 has 263 MA's), (Start: 38 @38864 has 7 MA's), (46, 38819),

Gene: Nymphadora_34 Start: 29521, Stop: 29285, Start Num: 34

Candidate Starts for Nymphadora_34:

(Start: 34 @29521 has 35 MA's), (44, 29479), (54, 29416), (59, 29368), (60, 29356),

Gene: ODay_42 Start: 31024, Stop: 30788, Start Num: 34

Candidate Starts for ODay_42:

(Start: 34 @31024 has 35 MA's), (44, 30982), (47, 30961), (54, 30919), (59, 30871),

Gene: OSmaximus_45 Start: 39236, Stop: 39021, Start Num: 26

Candidate Starts for OSmaximus_45:

(Start: 26 @39236 has 263 MA's), (Start: 38 @39206 has 7 MA's), (46, 39161), (53, 39128),

Gene: Olak_45 Start: 38897, Stop: 38682, Start Num: 26

Candidate Starts for Olak_45:

(7, 38999), (Start: 26 @38897 has 263 MA's), (Start: 38 @38867 has 7 MA's), (46, 38822),

Gene: Oline_44 Start: 38763, Stop: 38548, Start Num: 26

Candidate Starts for Oline_44:

(7, 38865), (Start: 26 @38763 has 263 MA's), (Start: 38 @38733 has 7 MA's), (46, 38688),

Gene: Olive_45 Start: 39184, Stop: 38969, Start Num: 26

Candidate Starts for Olive_45:

(7, 39286), (Start: 26 @39184 has 263 MA's), (Start: 38 @39154 has 7 MA's), (46, 39109),

Gene: OliverWalter_45 Start: 39206, Stop: 38991, Start Num: 26

Candidate Starts for OliverWalter_45:

(Start: 26 @39206 has 263 MA's), (Start: 38 @39176 has 7 MA's), (46, 39131),

Gene: Omniscient_45 Start: 39203, Stop: 38988, Start Num: 26

Candidate Starts for Omniscient_45:

(7, 39305), (Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: Oosterbaan_45 Start: 39194, Stop: 38979, Start Num: 26

Candidate Starts for Oosterbaan_45:

(Start: 26 @39194 has 263 MA's), (Start: 38 @39164 has 7 MA's), (46, 39119),

Gene: Opia_44 Start: 39429, Stop: 39223, Start Num: 33

Candidate Starts for Opia_44:

(Start: 33 @39429 has 29 MA's), (40, 39402), (41, 39399), (50, 39345), (55, 39312),

Gene: Orfeu_45 Start: 38902, Stop: 38687, Start Num: 26

Candidate Starts for Orfeu_45:

(Start: 26 @38902 has 263 MA's), (Start: 38 @38872 has 7 MA's), (46, 38827), (53, 38794),

Gene: Orion_45 Start: 39192, Stop: 38977, Start Num: 26

Candidate Starts for Orion_45:

(7, 39294), (Start: 26 @39192 has 263 MA's), (Start: 38 @39162 has 7 MA's), (46, 39117),

Gene: Orwigg_45 Start: 38890, Stop: 38675, Start Num: 26

Candidate Starts for Orwigg_45:

(Start: 26 @38890 has 263 MA's), (Start: 38 @38860 has 7 MA's), (46, 38815),

Gene: PG1_45 Start: 39205, Stop: 38990, Start Num: 26

Candidate Starts for PG1_45:

(7, 39307), (Start: 26 @39205 has 263 MA's), (Start: 38 @39175 has 7 MA's), (46, 39130),

Gene: Pacifista_47 Start: 38896, Stop: 38681, Start Num: 26

Candidate Starts for Pacifista_47:

(Start: 26 @38896 has 263 MA's), (Start: 38 @38866 has 7 MA's), (46, 38821), (53, 38788),

Gene: PenguinLover67_46 Start: 41013, Stop: 40795, Start Num: 26

Candidate Starts for PenguinLover67_46:

(7, 41109), (Start: 26 @41013 has 263 MA's), (37, 40980), (44, 40953), (46, 40935), (61, 40830),

Gene: Periwinkle_42 Start: 31005, Stop: 30769, Start Num: 34

Candidate Starts for Periwinkle_42:

(Start: 34 @31005 has 35 MA's), (44, 30963), (47, 30942), (54, 30900), (59, 30852),

Gene: Phabuloso_36 Start: 29262, Stop: 29026, Start Num: 34

Candidate Starts for Phabuloso_36:

(Start: 34 @29262 has 35 MA's), (44, 29220), (47, 29199), (54, 29157), (59, 29109),

Gene: Phamished_45 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for Phamished_45:

(Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125),

Gene: Phantasmagoria_44 Start: 39441, Stop: 39235, Start Num: 33

Candidate Starts for Phantasmagoria_44:

(Start: 33 @39441 has 29 MA's), (40, 39414), (41, 39411), (50, 39357), (55, 39324),

Gene: Phareon_45 Start: 38904, Stop: 38689, Start Num: 26

Candidate Starts for Phareon_45:

(Start: 26 @38904 has 263 MA's), (Start: 38 @38874 has 7 MA's), (46, 38829), (53, 38796),

Gene: PhatCats2014_45 Start: 39209, Stop: 38994, Start Num: 26

Candidate Starts for PhatCats2014_45:

(7, 39311), (Start: 26 @39209 has 263 MA's), (Start: 38 @39179 has 7 MA's), (46, 39134),

Gene: PhatLouie_45 Start: 39198, Stop: 38983, Start Num: 26

Candidate Starts for PhatLouie_45:

(Start: 26 @39198 has 263 MA's), (Start: 38 @39168 has 7 MA's), (46, 39123),

Gene: Phelemich_43 Start: 39919, Stop: 39710, Start Num: 26

Candidate Starts for Phelemich_43:

(7, 40027), (Start: 26 @39919 has 263 MA's), (Start: 38 @39904 has 7 MA's), (46, 39859),

Gene: PhenghisKhan_44 Start: 38804, Stop: 38589, Start Num: 26

Candidate Starts for PhenghisKhan_44:

(Start: 26 @38804 has 263 MA's), (Start: 38 @38774 has 7 MA's), (46, 38729),

Gene: Pherdinand_45 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for Pherdinand_45:

(Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125), (53, 39092),

Gene: Phergie_44 Start: 38795, Stop: 38580, Start Num: 26

Candidate Starts for Phergie_44:

(Start: 26 @38795 has 263 MA's), (Start: 38 @38765 has 7 MA's), (46, 38720),

Gene: Phipps_45 Start: 39171, Stop: 38956, Start Num: 26

Candidate Starts for Phipps_45:

(Start: 26 @39171 has 263 MA's), (Start: 38 @39141 has 7 MA's), (46, 39096),

Gene: Phleuron_44 Start: 38801, Stop: 38586, Start Num: 26

Candidate Starts for Phleuron_44:

(Start: 26 @38801 has 263 MA's), (Start: 38 @38771 has 7 MA's), (46, 38726),

Gene: PhrankReynolds_43 Start: 38801, Stop: 38586, Start Num: 26

Candidate Starts for PhrankReynolds_43:

(Start: 26 @38801 has 263 MA's), (Start: 38 @38771 has 7 MA's), (46, 38726),

Gene: PhrodoBaggins_44 Start: 39188, Stop: 38973, Start Num: 26

Candidate Starts for PhrodoBaggins_44:

(7, 39290), (Start: 26 @39188 has 263 MA's), (Start: 38 @39158 has 7 MA's), (46, 39113),

Gene: Phunky_45 Start: 39201, Stop: 38986, Start Num: 26

Candidate Starts for Phunky_45:

(Start: 26 @39201 has 263 MA's), (Start: 38 @39171 has 7 MA's), (46, 39126), (53, 39093),

Gene: Piglet_0044 Start: 39308, Stop: 39093, Start Num: 26

Candidate Starts for Piglet_0044:

(Start: 26 @39308 has 263 MA's), (Start: 38 @39278 has 7 MA's), (46, 39233), (53, 39200),

Gene: Pine5_39 Start: 32324, Stop: 32103, Start Num: 33

Candidate Starts for Pine5_39:

(Start: 33 @32324 has 29 MA's), (43, 32294), (44, 32279), (56, 32210),

Gene: PinheadLarry_45 Start: 38914, Stop: 38699, Start Num: 26

Candidate Starts for PinheadLarry_45:

(Start: 26 @38914 has 263 MA's), (Start: 38 @38884 has 7 MA's), (46, 38839), (53, 38806),

Gene: Pinkman_44 Start: 38757, Stop: 38542, Start Num: 26

Candidate Starts for Pinkman_44:

(Start: 26 @38757 has 263 MA's), (Start: 38 @38727 has 7 MA's), (46, 38682), (53, 38649),

Gene: Pipefish_45 Start: 40422, Stop: 40186, Start Num: 20

Candidate Starts for Pipefish_45:

(Start: 20 @40422 has 3 MA's), (41, 40365), (51, 40299), (53, 40293),

Gene: Pipsqueak_45 Start: 39199, Stop: 38984, Start Num: 26

Candidate Starts for Pipsqueak_45:

(Start: 26 @39199 has 263 MA's), (Start: 38 @39169 has 7 MA's), (46, 39124),

Gene: Placalicious_44 Start: 38892, Stop: 38677, Start Num: 26

Candidate Starts for Placalicious_44:

(Start: 26 @38892 has 263 MA's), (Start: 38 @38862 has 7 MA's), (46, 38817),

Gene: Plmatters_45 Start: 39198, Stop: 38983, Start Num: 26

Candidate Starts for Plmatters_45:

(7, 39300), (Start: 26 @39198 has 263 MA's), (Start: 38 @39168 has 7 MA's), (46, 39123), (53, 39090),

Gene: Podrick_45 Start: 39189, Stop: 38974, Start Num: 26

Candidate Starts for Podrick_45:

(7, 39291), (Start: 26 @39189 has 263 MA's), (Start: 38 @39159 has 7 MA's), (46, 39114),

Gene: Polka_26 Start: 18904, Stop: 18683, Start Num: 38

Candidate Starts for Polka_26:

(Start: 38 @18904 has 7 MA's),

Gene: Polly_32 Start: 28797, Stop: 28561, Start Num: 34

Candidate Starts for Polly_32:

(Start: 34 @28797 has 35 MA's), (44, 28755), (47, 28734), (54, 28692), (59, 28644), (62, 28572),

Gene: Pops_45 Start: 39213, Stop: 38998, Start Num: 26

Candidate Starts for Pops_45:

(7, 39315), (Start: 26 @39213 has 263 MA's), (Start: 38 @39183 has 7 MA's), (46, 39138), (53, 39105),

Gene: Poster_39 Start: 38171, Stop: 37965, Start Num: 29

Candidate Starts for Poster_39:

(Start: 29 @38171 has 22 MA's), (Start: 38 @38150 has 7 MA's), (44, 38123), (46, 38105), (50, 38087), (54, 38057), (56, 38051), (58, 38030),

Gene: Potter_44 Start: 38913, Stop: 38698, Start Num: 26

Candidate Starts for Potter_44:

(7, 39015), (Start: 26 @38913 has 263 MA's), (Start: 38 @38883 has 7 MA's), (46, 38838),

Gene: Prickles_45 Start: 39189, Stop: 38974, Start Num: 26

Candidate Starts for Prickles_45:

(Start: 26 @39189 has 263 MA's), (Start: 38 @39159 has 7 MA's), (46, 39114),

Gene: Prince_41 Start: 39354, Stop: 39148, Start Num: 29

Candidate Starts for Prince_41:

(Start: 29 @39354 has 22 MA's), (Start: 38 @39333 has 7 MA's), (44, 39306), (46, 39288), (50, 39270), (54, 39240), (56, 39234),

Gene: ProfessorX_45 Start: 39184, Stop: 38969, Start Num: 26

Candidate Starts for ProfessorX_45:

(7, 39286), (Start: 26 @39184 has 263 MA's), (Start: 38 @39154 has 7 MA's), (46, 39109),

Gene: Puhltonio_45 Start: 39205, Stop: 38990, Start Num: 26

Candidate Starts for Puhltonio_45:

(Start: 26 @39205 has 263 MA's), (Start: 38 @39175 has 7 MA's), (46, 39130), (53, 39097),

Gene: QueenBeane_45 Start: 39195, Stop: 38980, Start Num: 26

Candidate Starts for QueenBeane_45:

(Start: 26 @39195 has 263 MA's), (Start: 38 @39165 has 7 MA's), (46, 39120), (53, 39087),

Gene: Quesadilla_46 Start: 40987, Stop: 40781, Start Num: 26

Candidate Starts for Quesadilla_46:

(7, 41086), (Start: 26 @40987 has 263 MA's), (37, 40966), (46, 40921), (48, 40912),

Gene: Quisquilliae_45 Start: 39223, Stop: 39008, Start Num: 26

Candidate Starts for Quisquilliae_45:

(7, 39325), (Start: 26 @39223 has 263 MA's), (Start: 38 @39193 has 7 MA's), (46, 39148),

Gene: RavenCo17_36 Start: 30180, Stop: 29944, Start Num: 34

Candidate Starts for RavenCo17_36:

(Start: 34 @30180 has 35 MA's), (44, 30138), (47, 30117), (54, 30075), (59, 30027),

Gene: RawrgerThat_41 Start: 39199, Stop: 38993, Start Num: 29

Candidate Starts for RawrgerThat_41:

(Start: 29 @39199 has 22 MA's), (Start: 38 @39178 has 7 MA's), (44, 39151), (46, 39133), (50, 39115), (54, 39085), (56, 39079),

Gene: RedMaple_44 Start: 39202, Stop: 38987, Start Num: 26

Candidate Starts for RedMaple_44:

(Start: 26 @39202 has 263 MA's), (Start: 38 @39172 has 7 MA's), (46, 39127), (53, 39094),

Gene: Rem711_6 Start: 3521, Stop: 3279, Start Num: 32

Candidate Starts for Rem711_6:

(4, 3722), (11, 3584), (Start: 32 @3521 has 3 MA's), (49, 3443), (54, 3413), (57, 3398), (58, 3380),

Gene: Reprobate_44 Start: 39924, Stop: 39715, Start Num: 26

Candidate Starts for Reprobate_44:

(7, 40032), (Start: 26 @39924 has 263 MA's), (Start: 38 @39909 has 7 MA's), (46, 39864),

Gene: Rhinoforte_44 Start: 39550, Stop: 39344, Start Num: 33

Candidate Starts for Rhinoforte_44:

(Start: 33 @39550 has 29 MA's), (40, 39523), (41, 39520), (50, 39466), (55, 39433),

Gene: Rich_42 Start: 39520, Stop: 39311, Start Num: 26

Candidate Starts for Rich_42:

(Start: 26 @39520 has 263 MA's), (Start: 38 @39505 has 7 MA's), (43, 39493), (46, 39460), (53, 39427),

Gene: Riggan_45 Start: 39182, Stop: 38967, Start Num: 26

Candidate Starts for Riggan_45:

(Start: 26 @39182 has 263 MA's), (Start: 38 @39152 has 7 MA's), (46, 39107),

Gene: Rimu_47 Start: 38931, Stop: 38716, Start Num: 26

Candidate Starts for Rimu_47:

(Start: 26 @38931 has 263 MA's), (Start: 38 @38901 has 7 MA's), (46, 38856), (53, 38823),

Gene: Robyn_44 Start: 38766, Stop: 38551, Start Num: 26

Candidate Starts for Robyn_44:

(7, 38868), (Start: 26 @38766 has 263 MA's), (Start: 38 @38736 has 7 MA's), (46, 38691),

Gene: Roliet_45 Start: 39191, Stop: 38976, Start Num: 26

Candidate Starts for Roliet_45:

(Start: 26 @39191 has 263 MA's), (Start: 38 @39161 has 7 MA's), (46, 39116),

Gene: Roscoe_46 Start: 39429, Stop: 39214, Start Num: 26

Candidate Starts for Roscoe_46:

(7, 39531), (Start: 26 @39429 has 263 MA's), (Start: 38 @39399 has 7 MA's), (46, 39354),

Gene: Roy17_45 Start: 38895, Stop: 38680, Start Num: 26

Candidate Starts for Roy17_45:

(Start: 26 @38895 has 263 MA's), (Start: 38 @38865 has 7 MA's), (46, 38820), (53, 38787),

Gene: Rubeelu_32 Start: 26751, Stop: 26518, Start Num: 35

Candidate Starts for Rubeelu_32:

(10, 26826), (12, 26823), (14, 26817), (31, 26760), (Start: 35 @26751 has 2 MA's), (43, 26727), (50, 26679), (59, 26601), (62, 26529),

Gene: SDcharge11_45 Start: 39169, Stop: 38954, Start Num: 26

Candidate Starts for SDcharge11_45:

(7, 39271), (Start: 26 @39169 has 263 MA's), (Start: 38 @39139 has 7 MA's), (46, 39094),

Gene: Sabella_43 Start: 39434, Stop: 39228, Start Num: 33

Candidate Starts for Sabella_43:

(Start: 33 @39434 has 29 MA's), (40, 39407), (41, 39404), (50, 39350), (55, 39317),

Gene: Saguaro_45 Start: 40648, Stop: 40445, Start Num: 30

Candidate Starts for Saguaro_45:

(6, 40756), (Start: 30 @40648 has 1 MA's), (46, 40585), (48, 40576), (54, 40537),

Gene: Samaymay_45 Start: 39195, Stop: 38980, Start Num: 26

Candidate Starts for Samaymay_45:

(Start: 26 @39195 has 263 MA's), (Start: 38 @39165 has 7 MA's), (46, 39120), (53, 39087),

Gene: SassyCat97_44 Start: 38901, Stop: 38686, Start Num: 26

Candidate Starts for SassyCat97_44:

(7, 39003), (Start: 26 @38901 has 263 MA's), (Start: 38 @38871 has 7 MA's), (46, 38826),

Gene: Schadenfreude_44 Start: 38752, Stop: 38537, Start Num: 26

Candidate Starts for Schadenfreude_44:

(7, 38854), (Start: 26 @38752 has 263 MA's), (Start: 38 @38722 has 7 MA's), (46, 38677),

Gene: Schueller_45 Start: 38914, Stop: 38699, Start Num: 26

Candidate Starts for Schueller_45:

(Start: 26 @38914 has 263 MA's), (Start: 38 @38884 has 7 MA's), (46, 38839),

Gene: Scoot17C_45 Start: 39194, Stop: 38979, Start Num: 26

Candidate Starts for Scoot17C_45:

(7, 39296), (Start: 26 @39194 has 263 MA's), (Start: 38 @39164 has 7 MA's), (46, 39119),

Gene: Scrick_45 Start: 38919, Stop: 38704, Start Num: 26

Candidate Starts for Scrick_45:

(7, 39021), (Start: 26 @38919 has 263 MA's), (Start: 38 @38889 has 7 MA's), (46, 38844),

Gene: Selr12_46 Start: 38922, Stop: 38707, Start Num: 26

Candidate Starts for Selr12_46:

(7, 39024), (Start: 26 @38922 has 263 MA's), (Start: 38 @38892 has 7 MA's), (46, 38847),

Gene: Serendipitous_43 Start: 39478, Stop: 39269, Start Num: 26

Candidate Starts for Serendipitous_43:

(Start: 26 @39478 has 263 MA's), (Start: 38 @39463 has 7 MA's), (46, 39418),

Gene: Serendipity_45 Start: 39219, Stop: 39004, Start Num: 26

Candidate Starts for Serendipity_45:

(Start: 26 @39219 has 263 MA's), (Start: 38 @39189 has 7 MA's), (46, 39144), (53, 39111),

Gene: Serpentine_0045 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for Serpentine_0045:

(Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125), (53, 39092),

Gene: Shatter_38 Start: 32837, Stop: 32601, Start Num: 17

Candidate Starts for Shatter_38:

(16, 32840), (Start: 17 @32837 has 3 MA's), (24, 32816), (28, 32810), (36, 32786), (41, 32780), (55, 32690),

Gene: Sheila_45 Start: 39237, Stop: 39022, Start Num: 26

Candidate Starts for Sheila_45:

(Start: 26 @39237 has 263 MA's), (Start: 38 @39207 has 7 MA's), (46, 39162), (53, 39129),

Gene: ShiVal_45 Start: 39193, Stop: 38978, Start Num: 26

Candidate Starts for ShiVal_45:

(7, 39295), (Start: 26 @39193 has 263 MA's), (Start: 38 @39163 has 7 MA's), (46, 39118),

Gene: Sigman_45 Start: 39185, Stop: 38970, Start Num: 26

Candidate Starts for Sigman_45:

(Start: 26 @39185 has 263 MA's), (Start: 38 @39155 has 7 MA's), (46, 39110), (53, 39077),

Gene: Simielle_44 Start: 38888, Stop: 38673, Start Num: 26

Candidate Starts for Simielle_44:

(Start: 26 @38888 has 263 MA's), (Start: 38 @38858 has 7 MA's), (46, 38813), (53, 38780),

Gene: SirJeffery_44 Start: 39650, Stop: 39441, Start Num: 26

Candidate Starts for SirJeffery_44:

(6, 39764), (7, 39758), (Start: 26 @39650 has 263 MA's), (Start: 38 @39635 has 7 MA's), (43, 39623), (46, 39590),

Gene: Sisko_38 Start: 33610, Stop: 33383, Start Num: 21

Candidate Starts for Sisko_38:

(Start: 21 @33610 has 5 MA's), (52, 33493), (60, 33424),

Gene: Skippy_45 Start: 39183, Stop: 38968, Start Num: 26

Candidate Starts for Skippy_45:

(7, 39285), (Start: 26 @39183 has 263 MA's), (Start: 38 @39153 has 7 MA's), (46, 39108),

Gene: Slatt_45 Start: 39209, Stop: 38994, Start Num: 26

Candidate Starts for Slatt_45:

(Start: 26 @39209 has 263 MA's), (Start: 38 @39179 has 7 MA's), (46, 39134),

Gene: Sleepyhead_33 Start: 26741, Stop: 26493, Start Num: 34

Candidate Starts for Sleepyhead_33:

(15, 26798), (Start: 34 @26741 has 35 MA's), (Start: 38 @26723 has 7 MA's), (53, 26651), (54, 26636),

Gene: Soile_45 Start: 38912, Stop: 38697, Start Num: 26

Candidate Starts for Soile_45:

(Start: 26 @38912 has 263 MA's), (Start: 38 @38882 has 7 MA's), (46, 38837), (53, 38804),

Gene: Solosis_44 Start: 38910, Stop: 38695, Start Num: 26

Candidate Starts for Solosis_44:

(Start: 26 @38910 has 263 MA's), (Start: 38 @38880 has 7 MA's), (46, 38835), (53, 38802),

Gene: Sophia_44 Start: 38910, Stop: 38695, Start Num: 26

Candidate Starts for Sophia_44:

(Start: 26 @38910 has 263 MA's), (Start: 38 @38880 has 7 MA's), (46, 38835),

Gene: Soto_45 Start: 39203, Stop: 38988, Start Num: 26

Candidate Starts for Soto_45:

(Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: Sour_43 Start: 37566, Stop: 37306, Start Num: 23

Candidate Starts for Sour_43:
(Start: 23 @37566 has 7 MA's), (41, 37515),

Gene: Spartan300_45 Start: 39189, Stop: 38974, Start Num: 26
Candidate Starts for Spartan300_45:
(7, 39291), (Start: 26 @39189 has 263 MA's), (Start: 38 @39159 has 7 MA's), (46, 39114),

Gene: Squid_45 Start: 38901, Stop: 38686, Start Num: 26
Candidate Starts for Squid_45:
(7, 39003), (Start: 26 @38901 has 263 MA's), (Start: 38 @38871 has 7 MA's), (46, 38826),

Gene: Squiggle_45 Start: 38913, Stop: 38698, Start Num: 26
Candidate Starts for Squiggle_45:
(7, 39015), (Start: 26 @38913 has 263 MA's), (Start: 38 @38883 has 7 MA's), (46, 38838),

Gene: Stinger_39 Start: 37776, Stop: 37570, Start Num: 29
Candidate Starts for Stinger_39:
(Start: 29 @37776 has 22 MA's), (Start: 38 @37755 has 7 MA's), (41, 37749), (44, 37728), (46, 37710), (50, 37692), (54, 37662), (55, 37659), (56, 37656),

Gene: StinkyVeggy_45 Start: 39790, Stop: 39581, Start Num: 26
Candidate Starts for StinkyVeggy_45:
(7, 39898), (Start: 26 @39790 has 263 MA's), (Start: 38 @39775 has 7 MA's), (43, 39763),

Gene: Struggle_44 Start: 38751, Stop: 38536, Start Num: 26
Candidate Starts for Struggle_44:
(7, 38853), (Start: 26 @38751 has 263 MA's), (Start: 38 @38721 has 7 MA's), (46, 38676),

Gene: Suffolk_45 Start: 39200, Stop: 38985, Start Num: 26
Candidate Starts for Suffolk_45:
(Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125),

Gene: Suigeneris_44 Start: 39653, Stop: 39444, Start Num: 26
Candidate Starts for Suigeneris_44:
(6, 39767), (7, 39761), (Start: 26 @39653 has 263 MA's), (Start: 38 @39638 has 7 MA's), (43, 39626), (46, 39593),

Gene: Surely_45 Start: 39203, Stop: 38988, Start Num: 26
Candidate Starts for Surely_45:
(Start: 26 @39203 has 263 MA's), (Start: 38 @39173 has 7 MA's), (46, 39128),

Gene: Suscepit_35 Start: 29355, Stop: 29119, Start Num: 34
Candidate Starts for Suscepit_35:
(Start: 34 @29355 has 35 MA's), (44, 29313), (47, 29292), (54, 29250), (59, 29202), (62, 29130),

Gene: Swiphy_47 Start: 39198, Stop: 38983, Start Num: 26
Candidate Starts for Swiphy_47:
(Start: 26 @39198 has 263 MA's), (Start: 38 @39168 has 7 MA's), (46, 39123),

Gene: Swish_45 Start: 39186, Stop: 38971, Start Num: 26
Candidate Starts for Swish_45:
(Start: 26 @39186 has 263 MA's), (Start: 38 @39156 has 7 MA's), (46, 39111), (53, 39078),

Gene: TA17A_44 Start: 39424, Stop: 39218, Start Num: 33

Candidate Starts for TA17A_44:

(Start: 33 @39424 has 29 MA's), (40, 39397), (41, 39394), (50, 39340), (55, 39307),

Gene: TallGrassMM_45 Start: 38825, Stop: 38610, Start Num: 26

Candidate Starts for TallGrassMM_45:

(Start: 26 @38825 has 263 MA's), (Start: 38 @38795 has 7 MA's), (46, 38750), (53, 38717),

Gene: Tayonia_35 Start: 29354, Stop: 29118, Start Num: 34

Candidate Starts for Tayonia_35:

(Start: 34 @29354 has 35 MA's), (44, 29312), (47, 29291), (54, 29249), (59, 29201), (62, 29129),

Gene: Telesworld_44 Start: 38898, Stop: 38683, Start Num: 26

Candidate Starts for Telesworld_44:

(Start: 26 @38898 has 263 MA's), (Start: 38 @38868 has 7 MA's), (46, 38823), (53, 38790),

Gene: Thonko_43 Start: 36961, Stop: 36752, Start Num: 25

Candidate Starts for Thonko_43:

(5, 37108), (7, 37054), (Start: 25 @36961 has 2 MA's), (43, 36931), (53, 36865),

Gene: Thora_45 Start: 39202, Stop: 38987, Start Num: 26

Candidate Starts for Thora_45:

(Start: 26 @39202 has 263 MA's), (Start: 38 @39172 has 7 MA's), (46, 39127),

Gene: ThreeOh3D2_45 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for ThreeOh3D2_45:

(7, 39302), (Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125),

Gene: TimTam_34 Start: 29521, Stop: 29285, Start Num: 34

Candidate Starts for TimTam_34:

(Start: 34 @29521 has 35 MA's), (44, 29479), (54, 29416), (59, 29368), (60, 29356),

Gene: Timmi_44 Start: 38911, Stop: 38696, Start Num: 26

Candidate Starts for Timmi_44:

(Start: 26 @38911 has 263 MA's), (Start: 38 @38881 has 7 MA's), (46, 38836), (53, 38803),

Gene: Tinciduntolum_45 Start: 39562, Stop: 39356, Start Num: 33

Candidate Starts for Tinciduntolum_45:

(Start: 33 @39562 has 29 MA's), (40, 39535), (41, 39532), (50, 39478), (55, 39445),

Gene: TomBombadil_45 Start: 39196, Stop: 38981, Start Num: 26

Candidate Starts for TomBombadil_45:

(7, 39298), (Start: 26 @39196 has 263 MA's), (Start: 38 @39166 has 7 MA's), (46, 39121),

Gene: Tomlarah_45 Start: 39187, Stop: 38972, Start Num: 26

Candidate Starts for Tomlarah_45:

(7, 39289), (Start: 26 @39187 has 263 MA's), (Start: 38 @39157 has 7 MA's), (46, 39112),

Gene: Toni_44 Start: 38903, Stop: 38688, Start Num: 26

Candidate Starts for Toni_44:

(Start: 26 @38903 has 263 MA's), (Start: 38 @38873 has 7 MA's), (46, 38828), (53, 38795),

Gene: Tooj_45 Start: 39260, Stop: 39045, Start Num: 26

Candidate Starts for Tooj_45:

(Start: 26 @39260 has 263 MA's), (Start: 38 @39230 has 7 MA's), (46, 39185),

Gene: Tres_44 Start: 39437, Stop: 39231, Start Num: 33

Candidate Starts for Tres_44:

(Start: 33 @39437 has 29 MA's), (40, 39410), (41, 39407), (50, 39353), (55, 39320),

Gene: True_44 Start: 38900, Stop: 38685, Start Num: 26

Candidate Starts for True_44:

(7, 39002), (Start: 26 @38900 has 263 MA's), (Start: 38 @38870 has 7 MA's), (46, 38825),

Gene: Trumpet_35 Start: 29355, Stop: 29119, Start Num: 34

Candidate Starts for Trumpet_35:

(Start: 34 @29355 has 35 MA's), (44, 29313), (47, 29292), (54, 29250), (59, 29202), (62, 29130),

Gene: Trypo_45 Start: 39196, Stop: 38981, Start Num: 26

Candidate Starts for Trypo_45:

(7, 39298), (Start: 26 @39196 has 263 MA's), (Start: 38 @39166 has 7 MA's), (46, 39121),

Gene: TyrionL_44 Start: 38759, Stop: 38544, Start Num: 26

Candidate Starts for TyrionL_44:

(Start: 26 @38759 has 263 MA's), (Start: 38 @38729 has 7 MA's), (46, 38684), (53, 38651),

Gene: UAch1_45 Start: 39209, Stop: 38994, Start Num: 26

Candidate Starts for UAch1_45:

(Start: 26 @39209 has 263 MA's), (Start: 38 @39179 has 7 MA's), (46, 39134),

Gene: UncleHowie_45 Start: 38899, Stop: 38684, Start Num: 26

Candidate Starts for UncleHowie_45:

(7, 39001), (Start: 26 @38899 has 263 MA's), (Start: 38 @38869 has 7 MA's), (46, 38824), (53, 38791),

Gene: Usavi_45 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for Usavi_45:

(Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125),

Gene: Vaishali24_44 Start: 38861, Stop: 38646, Start Num: 26

Candidate Starts for Vaishali24_44:

(Start: 26 @38861 has 263 MA's), (Start: 38 @38831 has 7 MA's), (46, 38786), (53, 38753),

Gene: Valjean_45 Start: 39192, Stop: 38977, Start Num: 26

Candidate Starts for Valjean_45:

(7, 39294), (Start: 26 @39192 has 263 MA's), (Start: 38 @39162 has 7 MA's), (46, 39117),

Gene: Vaticameos_41 Start: 36890, Stop: 36675, Start Num: 26

Candidate Starts for Vaticameos_41:

(Start: 26 @36890 has 263 MA's), (Start: 38 @36860 has 7 MA's), (46, 36815), (53, 36782),

Gene: Veritas_44 Start: 38762, Stop: 38547, Start Num: 26

Candidate Starts for Veritas_44:

(Start: 26 @38762 has 263 MA's), (Start: 38 @38732 has 7 MA's), (46, 38687),

Gene: Vincenzo_41 Start: 39951, Stop: 39745, Start Num: 29

Candidate Starts for Vincenzo_41:

(Start: 29 @39951 has 22 MA's), (Start: 38 @39930 has 7 MA's), (41, 39924), (44, 39903), (46, 39885), (48, 39876), (50, 39867), (54, 39837), (55, 39834), (56, 39831),

Gene: VioletZ_41 Start: 39270, Stop: 39064, Start Num: 29

Candidate Starts for VioletZ_41:

(Start: 29 @39270 has 22 MA's), (Start: 38 @39249 has 7 MA's), (44, 39222), (46, 39204), (50, 39186), (54, 39156), (56, 39150),

Gene: Virapocalypse_45 Start: 39187, Stop: 38972, Start Num: 26

Candidate Starts for Virapocalypse_45:

(Start: 26 @39187 has 263 MA's), (Start: 38 @39157 has 7 MA's), (46, 39112),

Gene: Virgeve_44 Start: 38967, Stop: 38752, Start Num: 26

Candidate Starts for Virgeve_44:

(7, 39069), (Start: 26 @38967 has 263 MA's), (Start: 38 @38937 has 7 MA's), (46, 38892),

Gene: Vista_45 Start: 39200, Stop: 38985, Start Num: 26

Candidate Starts for Vista_45:

(Start: 26 @39200 has 263 MA's), (Start: 38 @39170 has 7 MA's), (46, 39125),

Gene: Vivaldi_45 Start: 39229, Stop: 39014, Start Num: 26

Candidate Starts for Vivaldi_45:

(7, 39331), (Start: 26 @39229 has 263 MA's), (Start: 38 @39199 has 7 MA's), (46, 39154),

Gene: Vortex_45 Start: 38906, Stop: 38691, Start Num: 26

Candidate Starts for Vortex_45:

(Start: 26 @38906 has 263 MA's), (Start: 38 @38876 has 7 MA's), (46, 38831), (53, 38798),

Gene: Waleliano_40 Start: 39197, Stop: 38991, Start Num: 29

Candidate Starts for Waleliano_40:

(Start: 29 @39197 has 22 MA's), (Start: 38 @39176 has 7 MA's), (44, 39149), (46, 39131), (50, 39113), (54, 39083), (56, 39077),

Gene: Wallhey_44 Start: 38763, Stop: 38548, Start Num: 26

Candidate Starts for Wallhey_44:

(Start: 26 @38763 has 263 MA's), (Start: 38 @38733 has 7 MA's), (46, 38688), (53, 38655),

Gene: Waterdiva_45 Start: 39192, Stop: 38977, Start Num: 26

Candidate Starts for Waterdiva_45:

(Start: 26 @39192 has 263 MA's), (Start: 38 @39162 has 7 MA's), (46, 39117),

Gene: Weher20_45 Start: 39191, Stop: 38976, Start Num: 26

Candidate Starts for Weher20_45:

(Start: 26 @39191 has 263 MA's), (Start: 38 @39161 has 7 MA's), (46, 39116),

Gene: West99_44 Start: 39557, Stop: 39351, Start Num: 33

Candidate Starts for West99_44:

(Start: 33 @39557 has 29 MA's), (40, 39530), (41, 39527), (50, 39473), (55, 39440),

Gene: Whitney_42 Start: 32542, Stop: 32306, Start Num: 34

Candidate Starts for Whitney_42:

(Start: 34 @32542 has 35 MA's), (44, 32500), (47, 32479), (54, 32437), (59, 32389),

Gene: Windsor_44 Start: 38896, Stop: 38681, Start Num: 26

Candidate Starts for Windsor_44:

(7, 38998), (Start: 26 @38896 has 263 MA's), (Start: 38 @38866 has 7 MA's), (46, 38821),

Gene: Wooper_40 Start: 34857, Stop: 34591, Start Num: 23

Candidate Starts for Wooper_40:

(8, 34902), (9, 34893), (Start: 23 @34857 has 7 MA's), (Start: 38 @34809 has 7 MA's), (40, 34806), (43, 34797), (51, 34737), (56, 34710),

Gene: Xavier_44 Start: 38913, Stop: 38698, Start Num: 26

Candidate Starts for Xavier_44:

(Start: 26 @38913 has 263 MA's), (Start: 38 @38883 has 7 MA's), (46, 38838), (53, 38805),

Gene: Yago84_38 Start: 33684, Stop: 33457, Start Num: 21

Candidate Starts for Yago84_38:

(Start: 21 @33684 has 5 MA's), (52, 33567), (60, 33498),

Gene: Yoshand_45 Start: 39199, Stop: 38984, Start Num: 26

Candidate Starts for Yoshand_45:

(Start: 26 @39199 has 263 MA's), (Start: 38 @39169 has 7 MA's), (46, 39124), (53, 39091),

Gene: YouGoGlencoco_45 Start: 39194, Stop: 38979, Start Num: 26

Candidate Starts for YouGoGlencoco_45:

(Start: 26 @39194 has 263 MA's), (Start: 38 @39164 has 7 MA's), (46, 39119),

Gene: Zaider_46 Start: 39424, Stop: 39209, Start Num: 26

Candidate Starts for Zaider_46:

(Start: 26 @39424 has 263 MA's), (Start: 38 @39394 has 7 MA's), (46, 39349),

Gene: Zameen_35 Start: 29354, Stop: 29118, Start Num: 34

Candidate Starts for Zameen_35:

(Start: 34 @29354 has 35 MA's), (44, 29312), (47, 29291), (54, 29249), (59, 29201), (62, 29129),

Gene: Zelda_45 Start: 39241, Stop: 39026, Start Num: 26

Candidate Starts for Zelda_45:

(Start: 26 @39241 has 263 MA's), (Start: 38 @39211 has 7 MA's), (46, 39166),

Gene: Zemanar_41 Start: 39200, Stop: 38994, Start Num: 29

Candidate Starts for Zemanar_41:

(Start: 29 @39200 has 22 MA's), (Start: 38 @39179 has 7 MA's), (44, 39152), (46, 39134), (50, 39116), (54, 39086), (56, 39080),

Gene: Zenteno07_48 Start: 38553, Stop: 38338, Start Num: 32

Candidate Starts for Zenteno07_48:

(Start: 32 @38553 has 3 MA's), (37, 38529), (48, 38475), (61, 38379),

Gene: Zonia_45 Start: 39213, Stop: 38998, Start Num: 26

Candidate Starts for Zonia_45:

(Start: 26 @39213 has 263 MA's), (Start: 38 @39183 has 7 MA's), (46, 39138), (53, 39105),