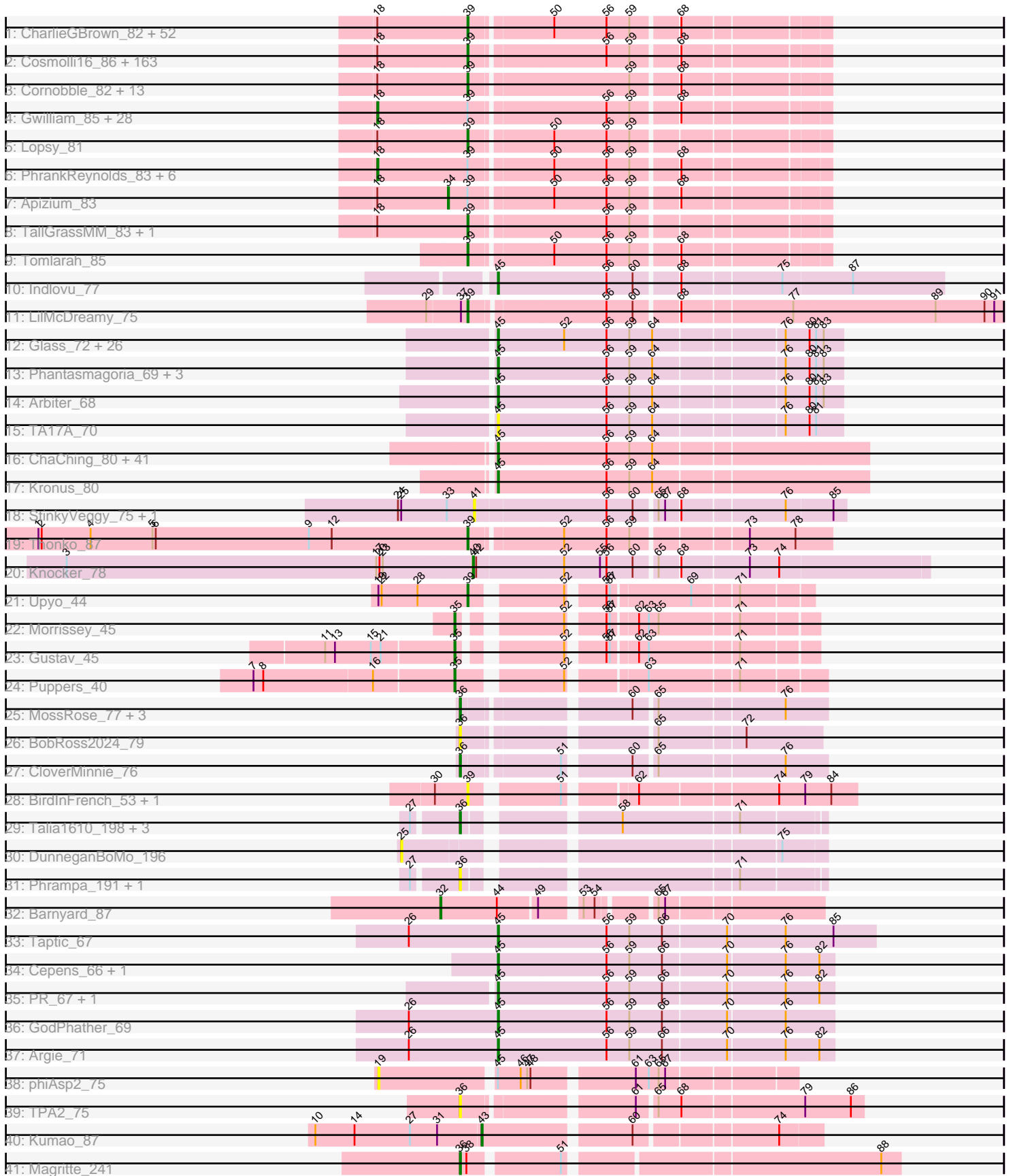


Pham 196209



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 196209 Report

This analysis was run 12/09/24 on database version 580.

Pham number 196209 has 385 members, 28 are drafts.

Phages represented in each track:

- Track 1 : CharlieGBrown_82, MelsMeow_83, Dione_82, Vivaldi_84, Iridoclysis_83, Phenghiskhan_84, Chute_84, Giraffe_84, Megatron_85, BatteryCK_82, Omniscient_85, Lego3393_82, Pherdinand_85, BlackStallion_83, Phleuron_82, EmpTee_83, Longacauda_85, Nicole21_85, Coletti_86, DonSanchon_80, Legolas_85, Megamind20_84, Veritas_83, Kwksand96_85, LasagnaCat_85, Katniss_86, Schueller_83, Phergie_84, FluffyNinja_85, JacAttac_84, Antonia_83, Mag7_82, Beaglebox_81, Samaymay_84, Kwadwo_83, Tooj_81, FugateOSU_84, Chaelin_85, Keitherie_87, CamL_84, ImtiyazSitla_85, Ashraf_85, QueenBeane_84, Telesworld_82, Aelin_83, Vista_83, Banjo_81, Maskar_85, Inchworm_85, Jiminy_84, MichaelPhcott_82, Kailash_82, Riggan_85
- Track 2 : Cosmolli16_86, HenryJackson_85, Pinkman_84, Squiggle_83, YouGoGlencoco_84, Scrick_83, Carthage_85, Mcshane_83, Podrick_83, Yoshand_85, Cannibal_85, SDcharge11_83, Etaye_83, HSavage_82, MitKao_84, Boehler_83, Thunderbird_84, Zaider_85, JDog_83, Vaishali24_85, JangoPhett_82, Squid_83, Gareth_84, Plmatters_82, Sheila_80, Roscoe_84, LuckyMarjie_81, Hamish_81, JakeO_85, Melc17_81, LostAndPhound_83, Schadenfreude_84, Vaticameos_81, Thora_83, Freya_81, KingTut_75, Mutante_85, Kimbrough_85, DelRivs_82, ThreeOh3D2_86, Windsor_84, DirtJuice_84, Serpentine_0085, Cobra_84, Maru_84, Rimu_88, PhatLouie_86, IsaacEli_86, Lumine_85, Oosterbaan_84, Placalicious_83, Oline_83, Chorkpop_85, Dingo_81, Slatt_84, Labeouficaum_84, Roliet_81, Frankicide_83, Quisquilliae_86, Selr12_85, Cher_84, Buckeye_84, Adriana_84, Orwigg_84, Virapocalypse_85, Ricotta_84, Usavi_85, Pipsqueak_81, Swiphy_88, Nyala_83, Horchata_81, Mana_82, Magic8_83, Gyarad_0083, Gophee_84, Duggie_84, UAch1_85, Swish_85, LeiMonet_86, Skippy_85, Timmi_83, Virgeve_82, Wallhey_85, TyrionL_84, Phipps_83, Numberten_83, Hocus_82, Durga_86, Andre_86, Struggle_84, OliverWalter_84, TomBombadil_84, ShiVal_82, Daffy_83, Phamished_84, Orfeu_83, Robyn_86, Soto_81, PhrodoBaggins_86, Spartan300_83, Mecca_84, Manad_83, Waterdiva_85, Fringe_88, AltPhacts_82, Grand2040_82, Bluephacebaby_83, ABU_83, KlimbOn_83, Piglet_0084, Morty_85, Scoot17C_85, Pacifista_83, BlueHusk_85, Dati_81, Jillium_85, Potter_80, ProfessorX_82, CampRoach_85, Lulwa_81, Emiris_86, Charles1_85, Weher20_81, SassyCat97_82, Anderson_86, Harvey_81, Kikipoo_86, Olive_82, Held_82, Surely_84, Childish_84, Inverness_82, RedMaple_84, Matalotodo_83, Badfish_85, Hetaeria_84, Basato_83, DaddyDaniels_87, GeneCoco_85, Haimas_82, Phareon_82, Zelda_84, Burr_84, Fozzie_82, KLucky39_82, MiniBoss_81, Soile_85, DoesntMatter_81, MRabcd_84, MrPhizzler_83, HighStump_85, Kahve_85, Mulan_83, Eugenia_86, True_82,

AbsoluteMadLad_83, Dice_83, Valjean_83, KingVeVeVe_82, Simielle_83, Craff_86, Kloppinator_84, Mikota_81, Brilliant_87

- Track 3 : Cornobble_82, Olak_83, OSmaximus_85, Bishoperium_84, Sophia_82, Haleema_83, Altwerkus_82, LemonSlice_84, Prickles_85, Phunky_82, PinheadLarry_83, Lasso_83, Daka_86, Colbert_82
- Track 4 : Gwilliam_85, Toni_84, FriarPreacher_82, Suffolk_81, CheetO_81, Nacho_0087, Mosaic_82, PG1_83, Vortex_83, Orion_83, Murdoc_81, Chunky_84, Derpp_84, Pops_82, Trypo_85, Puhltonio_81, Eremos_83, Zonia_85, Newman_82, Roy17_82, Serendipity_84, Lulumae_81, UncleHowie_81, Xavier_84, LeeLot_83, Jiraiya_88, Hertubise_84, Morgushi_82, Mesh1_85
- Track 5 : Lopsy_81
- Track 6 : PhrankReynolds_83, SilverBell_85, Doddsville_82, Hartsy_83, DuchessDung_82, Sigman_84, PhatCats2014_84
- Track 7 : Apizium_83
- Track 8 : TallGrassMM_83, Solosis_82
- Track 9 : Tomlarah_85
- Track 10 : Indlovu_77
- Track 11 : LilMcDreamy_75
- Track 12 : Glass_72, Vic9_73, Hedgerow_70, Tres_70, Godines_71, Lars_71, Opia_71, Allegro_70, Kheth_70, Eaglehorse_70, Boyle_70, LizLemon_70, Rosebush_69, Blocker23_70, Bananafish_71, MasterPo_71, FrenchFry_71, Calamitous_71, Holeinone_70, ItsyBitsy1_69, Coffee_70, Tinciduntolum_71, Lephleur_70, Brownie5_70, Rhinoforte_70, Kaleb_71, West99_70
- Track 13 : Phantasmagoria_69, Sabella_70, Faze9_69, Ares_70
- Track 14 : Arbiter_68
- Track 15 : TA17A_70
- Track 16 : ChaChing_80, Athena_82, Tydolla_76, GlenHope_81, Phaedrus_75, Casbah_80, Pipefish_82, Neos5_80, LestyG_78, Nozo_80, Jackstina_75, Heathcliff_80, Akoma_80, Yahalom_78, Phayeta_83, MmasiCarm_81, Gadget_81, Deenasa_80, HarveySr_79, Yinz_80, Audrey_80, SynergyX_80, Daisy_79, Baloo_79, Rita1961_81, Mortcellus_80, Kamiyu_80, RagingRooster_79, Bernardo_81, Corofin_80, Marley1013_81, Phlyer_80, Philly_79, Chandler_80, SlippinJimmy_83, Briakila_80, Halfpint_79, Abinghost_80, Obutu_82, Morty007_79, RomaT_80, Gervas_81
- Track 17 : Kronus_80
- Track 18 : StinkyVeggy_75, KarasumaRum_75
- Track 19 : Thonko_87
- Track 20 : Knocker_78
- Track 21 : Upyo_44
- Track 22 : Morrissey_45
- Track 23 : Gustav_45
- Track 24 : Puppies_40
- Track 25 : MossRose_77, AnarQue_79, CaiB_78, MakoManhole_74
- Track 26 : BobRoss2024_79
- Track 27 : CloverMinnie_76
- Track 28 : BirdInFrench_53, Wilca_53
- Track 29 : Talia1610_198, Mimi_203, Bloom_201, Racecar_198
- Track 30 : DunneganBoMo_196
- Track 31 : Phrampa_191, Patbob_197
- Track 32 : Barnyard_87
- Track 33 : Taptic_67
- Track 34 : Cepens_66, Megabear_66
- Track 35 : PR_67, D12_66

- Track 36 : GodPhather_69
- Track 37 : Argie_71
- Track 38 : phiAsp2_75
- Track 39 : TPA2_75
- Track 40 : Kumao_87
- Track 41 : Magritte_241

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

The start number called the most often in the published annotations is 39, it was called in 229 of the 357 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_83, AbsoluteMadLad_83, Adriana_84, Aelin_83, AltPhacts_82, Altwerkus_82, Anderson_86, Andre_86, Antonia_83, Ashraf_85, Badfish_85, Banjo_81, Basato_83, BatteryCK_82, Beaglebox_81, BirdInFrench_53, Bishoperium_84, BlackStallion_83, BlueHusk_85, Bluephacebaby_83, Boehler_83, Brilliant_87, Buckeye_84, Burr_84, CamL_84, CampRoach_85, Cannibal_85, Carthage_85, Chaelin_85, Charles1_85, CharlieGBrown_82, Cher_84, Childish_84, Chorkpop_85, Chute_84, Cobra_84, Colbert_82, Coletti_86, Cornobble_82, Cosmolli16_86, Craff_86, DaddyDaniels_87, Daffy_83, Daka_86, Dati_81, DelRivs_82, Dice_83, Dingo_81, Dione_82, DirtJuice_84, DoesntMatter_81, DonSanchon_80, Duggie_84, Durga_86, Emiris_86, EmpTee_83, Etaye_83, Eugenia_86, FluffyNinja_85, Fozzie_82, Frankicide_83, Freya_81, Fringe_88, FugateOSU_84, Gareth_84, GeneCoco_85, Giraffe_84, Gophee_84, Grand2040_82, Gyarad_0083, HSavage_82, Haimas_82, Haleema_83, Hamish_81, Harvey_81, Held_82, HenryJackson_85, Hetaeria_84, HighStump_85, Hocus_82, Horchata_81, ImtiyazSitla_85, Inchworm_85, Inverness_82, Iridoclysis_83, IsaacEli_86, JDog_83, JacAttac_84, JakeO_85, JangoPhett_82, Jillium_85, Jiminy_84, KLucky39_82, Kahve_85, Kailash_82, Katniss_86, Keitherie_87, Kikipoo_86, Kimbrough_85, KingTut_75, KingVeVeVe_82, KlimbOn_83, Kloppinator_84, Kwadwo_83, Kwksand96_85, Labeouficaum_84, LasagnaCat_85, Lasso_83, Lego3393_82, Legolas_85, LeiMonet_86, LemonSlice_84, LilMcDreamy_75, Longacauda_85, Lopsy_81, LostAndPhound_83, LuckyMarjie_81, Lulwa_81, Lumine_85, MRabcd_84, Mag7_82, Magic8_83, Mana_82, Manad_83, Maru_84, Maskar_85, Matalotodo_83, Mcshane_83, Mecca_84, Megamind20_84, Megatron_85, Melc17_81, MelsMeow_83, MichaelPhcott_82, Mikota_81, MiniBoss_81, MitKao_84, Morty_85, MrPhizzler_83, Mulan_83, Mutante_85, Nicole21_85, Numberten_83, Nyala_83, OSmaximus_85, Olak_83, Oline_83, Olive_82, OliverWalter_84, Omniscient_85, Oosterbaan_84, Orfeu_83, Orwig_84, Pacifista_83, Phamished_84, Phareon_82, PhatLouie_86, PhenghisKhan_84, Pherdinand_85, Phergie_84, Phipps_83, Phleuron_82, PhrodoBaggins_86, Phunky_82, Piglet_0084, PinheadLarry_83, Pinkman_84, Pipsqueak_81, Placalicious_83, Plmatters_82, Podrick_83, Potter_80, Prickles_85, ProfessorX_82, QueenBeane_84, Quisquilliae_86, RedMaple_84, Ricotta_84, Riggan_85, Rimu_88, Robyn_86, Roliet_81, Roscoe_84, SDcharge11_83, Samaymay_84, SassyCat97_82, Schadenfreude_84, Schueller_83, Scoot17C_85, Scrick_83, Selr12_85, Serpentine_0085, Sheila_80, ShiVal_82, Simielle_83, Skippy_85, Slatt_84, Soile_85, Solosis_82, Sophia_82, Soto_81, Spartan300_83, Squid_83, Squiggle_83, Struggle_84, Surely_84, Swiphy_88, Swish_85, TallGrassMM_83, Telesworld_82, Thonko_87, Thora_83, ThreeOh3D2_86,

Thunderbird_84, Timmi_83, TomBombadil_84, Tomlarah_85, Tooj_81, True_82, TyrionL_84, UAch1_85, Upyo_44, Usavi_85, Vaishali24_85, Valjean_83, Vaticameos_81, Veritas_83, Virapocalypse_85, Virgeve_82, Vista_83, Vivaldi_84, Wallhey_85, Waterdiva_85, Weher20_81, Wilca_53, Windsor_84, Yoshand_85, YouGoGlencoco_84, Zaider_85, Zelda_84,

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

- Apizium_83, CheetO_81, Chunky_84, Derpp_84, Doddsville_82, DuchessDung_82, Eremos_83, FriarPreacher_82, Gwilliam_85, Hartsy_83, Hertubise_84, Jiraiya_88, LeeLot_83, Lulumae_81, Mesh1_85, Morgushi_82, Mosaic_82, Murdoc_81, Nacho_0087, Newman_82, Orion_83, PG1_83, PhatCats2014_84, PhrankReynolds_83, Pops_82, Puhltonio_81, Roy17_82, Serendipity_84, Sigman_84, SilverBell_85, Suffolk_81, Toni_84, Trypo_85, UncleHowie_81, Vortex_83, Xavier_84, Zonia_85,

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

- Abingghost_80, Akoma_80, Allegro_70, AnarQue_79, Arbiter_68, Ares_70, Argie_71, Athena_82, Audrey_80, Baloo_79, Bananafish_71, Barnyard_87, Bernardo_81, Blocker23_70, Bloom_201, BobRoss2024_79, Boyle_70, Briakila_80, Brownie5_70, CaiB_78, Calamitous_71, Casbah_80, Cepens_66, ChaChing_80, Chandler_80, CloverMinnie_76, Coffee_70, Corofin_80, D12_66, Daisy_79, Deenasa_80, DunneganBoMo_196, Eaglehorse_70, Faze9_69, FrenchFry_71, Gadget_81, Gervas_81, Glass_72, GlenHope_81, GodPhather_69, Godines_71, Gustav_45, Halfpint_79, HarveySr_79, Heathcliff_80, Hedgerow_70, Holeinone_70, Indlovu_77, ItsyBitsy1_69, Jackstina_75, Kaleb_71, Kamiyu_80, KarasumaRum_75, Kheth_70, Knocker_78, Kronus_80, Kumao_87, Lars_71, Lephleur_70, LestyG_78, LizLemon_70, Magritte_241, MakoManhole_74, Marley1013_81, MasterPo_71, Megabear_66, Mimi_203, MmasiCarm_81, Morrissey_45, Mortcellus_80, Morty007_79, MossRose_77, Neos5_80, Nozo_80, Obutu_82, Opia_71, PR_67, Patbob_197, Phaedrus_75, Phantasmagoria_69, Phayeta_83, Philly_79, Phlyer_80, Phrampa_191, Pipefish_82, Puppies_40, Racecar_198, RagingRooster_79, Rhinoforte_70, Rita1961_81, RomaT_80, Rosebush_69, Sabella_70, SlippinJimmy_83, StinkyVeggy_75, SynergyX_80, TA17A_70, TPA2_75, Talia1610_198, Taptic_67, Tinciduntolum_71, Tres_70, Tydolla_76, Vic9_73, West99_70, Yahalom_78, Yinz_80, phiAsp2_75,

Summary by start number:

Start 18:

- Found in 271 of 385 (70.4%) of genes in pham
- Manual Annotations of this start: 33 of 357
- Called 13.3% of time when present
- Phage (with cluster) where this start called: CheetO_81 (B1), Chunky_84 (B1), Derpp_84 (B1), Doddsville_82 (B1), DuchessDung_82 (B1), Eremos_83 (B1), FriarPreacher_82 (B1), Gwilliam_85 (B1), Hartsy_83 (B1), Hertubise_84 (B1), Jiraiya_88 (B1), LeeLot_83 (B1), Lulumae_81 (B1), Mesh1_85 (B1), Morgushi_82 (B1), Mosaic_82 (B1), Murdoc_81 (B1), Nacho_0087 (B1), Newman_82 (B1), Orion_83 (B1), PG1_83 (B1), PhatCats2014_84 (B1), PhrankReynolds_83 (B1), Pops_82 (B1), Puhltonio_81 (B1), Roy17_82 (B1), Serendipity_84 (B1), Sigman_84 (B1), SilverBell_85 (B1), Suffolk_81 (B1), Toni_84 (B1), Trypo_85 (B1), UncleHowie_81 (B1), Vortex_83 (B1), Xavier_84 (B1), Zonia_85 (B1),

Start 19:

- Found in 2 of 385 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: phiAsp2_75 (singleton),

Start 25:

- Found in 3 of 385 (0.8%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: DunneganBoMo_196 (FC),

Start 32:

- Found in 1 of 385 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 357
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnyard_87 (H2),

Start 34:

- Found in 1 of 385 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 357
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Apizium_83 (B1),

Start 35:

- Found in 3 of 385 (0.8%) of genes in pham
- Manual Annotations of this start: 3 of 357
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gustav_45 (CD), Morrissey_45 (CD), Puppets_40 (CD),

Start 36:

- Found in 14 of 385 (3.6%) of genes in pham
- Manual Annotations of this start: 8 of 357
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_79 (DR), Bloom_201 (FC), BobRoss2024_79 (DR), CaiB_78 (DR), CloverMinnie_76 (DR), Magritte_241 (singleton), MakoManhole_74 (DR), Mimi_203 (FC), MossRose_77 (DR), Patbob_197 (FC), Phrampa_191 (FC), Racecar_198 (FC), TPA2_75 (singleton), Talia1610_198 (FC),

Start 39:

- Found in 277 of 385 (71.9%) of genes in pham
- Manual Annotations of this start: 229 of 357
- Called 86.6% of time when present
- Phage (with cluster) where this start called: ABU_83 (B1), AbsoluteMadLad_83 (B1), Adriana_84 (B1), Aelin_83 (B1), AltPhacts_82 (B1), Altwerkus_82 (B1), Anderson_86 (B1), Andre_86 (B1), Antonia_83 (B1), Ashraf_85 (B1), Badfish_85 (B1), Banjo_81 (B1), Basato_83 (B1), BatteryCK_82 (B1), Beaglebox_81 (B1), BirdInFrench_53 (EG), Bishoperium_84 (B1), BlackStallion_83 (B1), BlueHusk_85 (B1), Bluephacebaby_83 (B1), Boehler_83 (B1), Brilliant_87 (B1), Buckeye_84 (B1), Burr_84 (B1), CamL_84 (B1), CampRoach_85 (B1), Cannibal_85 (B1), Carthage_85 (B1), Chaelin_85 (B1), Charles1_85 (B1), CharlieGBrown_82 (B1), Cher_84 (B1), Childish_84 (B1), Chorkpop_85 (B1), Chute_84 (B1), Cobra_84 (B1), Colbert_82

(B1), Coletti_86 (B1), Cornobble_82 (B1), Cosmolli16_86 (B1), Craff_86 (B1), DaddyDaniels_87 (B1), Daffy_83 (B1), Daka_86 (B1), Dati_81 (B1), DelRivs_82 (B1), Dice_83 (B1), Dingo_81 (B1), Dione_82 (B1), DirtJuice_84 (B1), DoesntMatter_81 (B1), DonSanchon_80 (B1), Duggie_84 (B1), Durga_86 (B1), Emiris_86 (B1), EmpTee_83 (B1), Etaye_83 (B1), Eugenia_86 (B1), FluffyNinja_85 (B1), Fozzie_82 (B1), Frankicide_83 (B1), Freya_81 (B1), Fringe_88 (B1), FugateOSU_84 (B1), Gareth_84 (B1), GeneCoco_85 (B1), Giraffe_84 (B1), Gophee_84 (B1), Grand2040_82 (B1), Gyarad_0083 (B1), HSavage_82 (B1), Haimas_82 (B1), Haleema_83 (B1), Hamish_81 (B1), Harvey_81 (B1), Held_82 (B1), HenryJackson_85 (B1), Hetaeria_84 (B1), HighStump_85 (B1), Hocus_82 (B1), Horchata_81 (B1), ImtiyazSitla_85 (B1), Inchworm_85 (B1), Inverness_82 (B1), Iridoclysis_83 (B1), IsaacEli_86 (B1), JDog_83 (B1), JacAttac_84 (B1), JakeO_85 (B1), JangoPhett_82 (B1), Jillium_85 (B1), Jiminy_84 (B1), KLucky39_82 (B1), Kahve_85 (B1), Kailash_82 (B1), Katniss_86 (B1), Keitherie_87 (B1), Kikipoo_86 (B1), Kimbrough_85 (B1), KingTut_75 (B1), KingVeVeVe_82 (B1), KlimbOn_83 (B1), Kloppinator_84 (B1), Kwadwo_83 (B1), Kwksand96_85 (B1), Labeouficaum_84 (B1), LasagnaCat_85 (B1), Lasso_83 (B1), Lego3393_82 (B1), Legolas_85 (B1), LeiMonet_86 (B1), LemonSlice_84 (B1), LilMcDreamy_75 (B12), Longacauda_85 (B1), Lopsy_81 (B1), LostAndPhound_83 (B1), LuckyMarjie_81 (B1), Lulwa_81 (B1), Lumine_85 (B1), MRabcd_84 (B1), Mag7_82 (B1), Magic8_83 (B1), Mana_82 (B1), Manad_83 (B1), Maru_84 (B1), Maskar_85 (B1), Matalotodo_83 (B1), Mcshane_83 (B1), Mecca_84 (B1), Megamind20_84 (B1), Megatron_85 (B1), Melc17_81 (B1), MelsMeow_83 (B1), MichaelPhcott_82 (B1), Mikota_81 (B1), MiniBoss_81 (B1), MitKao_84 (B1), Morty_85 (B1), MrPhizzler_83 (B1), Mulan_83 (B1), Mutante_85 (B1), Nicole21_85 (B1), Numberten_83 (B1), Nyala_83 (B1), OSmaximus_85 (B1), Olak_83 (B1), Oline_83 (B1), Olive_82 (B1), OliverWalter_84 (B1), Omniscient_85 (B1), Oosterbaan_84 (B1), Orfeu_83 (B1), Orwigg_84 (B1), Pacifista_83 (B1), Phamished_84 (B1), Phareon_82 (B1), PhatLouie_86 (B1), PhenghisKhan_84 (B1), Pherdinand_85 (B1), Phergie_84 (B1), Phipps_83 (B1), Phleuron_82 (B1), PhrodoBaggins_86 (B1), Phunky_82 (B1), Piglet_0084 (B1), PinheadLarry_83 (B1), Pinkman_84 (B1), Pipsqueak_81 (B1), Placalicious_83 (B1), Plmatters_82 (B1), Podrick_83 (B1), Potter_80 (B1), Prickles_85 (B1), ProfessorX_82 (B1), QueenBeane_84 (B1), Quisquiliae_86 (B1), RedMaple_84 (B1), Ricotta_84 (B1), Riggan_85 (B1), Rimu_88 (B1), Robyn_86 (B1), Roliet_81 (B1), Roscoe_84 (B1), SDcharge11_83 (B1), Samaymay_84 (B1), SassyCat97_82 (B1), Schadenfreude_84 (B1), Schueller_83 (B1), Scoot17C_85 (B1), Scrick_83 (B1), Selr12_85 (B1), Serpentine_0085 (B1), Sheila_80 (B1), ShiVal_82 (B1), Simielle_83 (B1), Skippy_85 (B1), Slatt_84 (B1), Soile_85 (B1), Solosis_82 (B1), Sophia_82 (B1), Soto_81 (B1), Spartan300_83 (B1), Squid_83 (B1), Squiggle_83 (B1), Struggle_84 (B1), Surely_84 (B1), Swiphy_88 (B1), Swish_85 (B1), TallGrassMM_83 (B1), Telesworld_82 (B1), Thonko_87 (B8), Thora_83 (B1), ThreeOh3D2_86 (B1), Thunderbird_84 (B1), Timmi_83 (B1), TomBombadil_84 (B1), Tomlarah_85 (B1), Tooj_81 (B1), True_82 (B1), TyrionL_84 (B1), UAch1_85 (B1), Upyo_44 (CD), Usavi_85 (B1), Vaishali24_85 (B1), Valjean_83 (B1), Vaticameos_81 (B1), Veritas_83 (B1), Virapocalypse_85 (B1), Virgeve_82 (B1), Vista_83 (B1), Vivaldi_84 (B1), Wallhey_85 (B1), Waterdiva_85 (B1), Weher20_81 (B1), Wilca_53 (EG), Windsor_84 (B1), Yoshand_85 (B1), YouGoGlencoco_84 (B1), Zaidler_85 (B1), Zelda_84 (B1),

Start 40:

- Found in 1 of 385 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 357
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Knocker_78 (B9),

Start 41:

- Found in 2 of 385 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KarasumaRum_75 (B5), StinkyVeggy_75 (B5),

Start 43:

- Found in 1 of 385 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 357
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao_87 (singleton),

Start 45:

- Found in 85 of 385 (22.1%) of genes in pham
- Manual Annotations of this start: 80 of 357
- Called 98.8% of time when present
- Phage (with cluster) where this start called: Abinghost_80 (B3), Akoma_80 (B3), Allegro_70 (B2), Arbitrator_68 (B2), Ares_70 (B2), Argie_71 (W), Athena_82 (B3), Audrey_80 (B3), Baloo_79 (B3), Bananafish_71 (B2), Bernardo_81 (B3), Blocker23_70 (B2), Boyle_70 (B2), Briakila_80 (B3), Brownie5_70 (B2), Calamitous_71 (B2), Casbah_80 (B3), Cepens_66 (W), ChaChing_80 (B3), Chandler_80 (B3), Coffee_70 (B2), Corofin_80 (B3), D12_66 (W), Daisy_79 (B3), Deenasa_80 (B3), Eaglehorse_70 (B2), Faze9_69 (B2), FrenchFry_71 (B2), Gadget_81 (B3), Gervas_81 (B3), Glass_72 (B2), GlenHope_81 (B3), GodPhather_69 (W), Godines_71 (B2), Halfpint_79 (B3), HarveySr_79 (B3), Heathcliff_80 (B3), Hedgerow_70 (B2), Holeinone_70 (B2), Indlovu_77 (B11), ItsyBitsy1_69 (B2), Jackstina_75 (B3), Kaleb_71 (B2), Kamiyu_80 (B3), Kheth_70 (B2), Kronus_80 (B3), Lars_71 (B2), Lephleur_70 (B2), LestyG_78 (B3), LizLemon_70 (B2), Marley1013_81 (B3), MasterPo_71 (B2), Megabear_66 (W), MmasiCarm_81 (B3), Mortcellus_80 (B3), Morty007_79 (B3), Neos5_80 (B3), Nozo_80 (B3), Obutu_82 (B3), Opia_71 (B2), PR_67 (W), Phaedrus_75 (B3), Phantasmagoria_69 (B2), Phayeta_83 (B3), Philly_79 (B3), Phlyer_80 (B3), Pipefish_82 (B3), RagingRooster_79 (B3), Rhinoforte_70 (B2), Rita1961_81 (B3), RomaT_80 (B3), Rosebush_69 (B2), Sabella_70 (B2), SlippinJimmy_83 (B3), SynergyX_80 (B3), TA17A_70 (B2), Taptic_67 (W), Tinciduntolum_71 (B2), Tres_70 (B2), Tydolla_76 (B3), Vic9_73 (B2), West99_70 (B2), Yahalom_78 (B3), Yinz_80 (B3),

Summary by clusters:

There are 15 clusters represented in this pham: singleton, W, H2, B8, EG, B11, CD, B5, FC, B12, B1, B2, B3, DR, B9,

Info for manual annotations of cluster B1:

- Start number 18 was manually annotated 33 times for cluster B1.
- Start number 34 was manually annotated 1 time for cluster B1.
- Start number 39 was manually annotated 226 times for cluster B1.

Info for manual annotations of cluster B11:

- Start number 45 was manually annotated 1 time for cluster B11.

Info for manual annotations of cluster B12:

- Start number 39 was manually annotated 1 time for cluster B12.

Info for manual annotations of cluster B2:

- Start number 45 was manually annotated 30 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 45 was manually annotated 42 times for cluster B3.

Info for manual annotations of cluster B8:

- Start number 39 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster B9:

- Start number 40 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster CD:

- Start number 35 was manually annotated 3 times for cluster CD.
- Start number 39 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DR:

- Start number 36 was manually annotated 5 times for cluster DR.

Info for manual annotations of cluster FC:

- Start number 36 was manually annotated 2 times for cluster FC.

Info for manual annotations of cluster H2:

- Start number 32 was manually annotated 1 time for cluster H2.

Info for manual annotations of cluster W:

- Start number 45 was manually annotated 7 times for cluster W.

Gene Information:

Gene: ABU_83 Start: 63381, Stop: 63079, Start Num: 39

Candidate Starts for ABU_83:

(Start: 18 @63462 has 33 MA's), (Start: 39 @63381 has 229 MA's), (56, 63264), (59, 63243), (68, 63204),

Gene: Abinghost_80 Start: 61235, Stop: 60906, Start Num: 45

Candidate Starts for Abinghost_80:

(Start: 45 @61235 has 80 MA's), (56, 61136), (59, 61115), (64, 61094),

Gene: AbsoluteMadLad_83 Start: 63335, Stop: 63033, Start Num: 39

Candidate Starts for AbsoluteMadLad_83:

(Start: 18 @63416 has 33 MA's), (Start: 39 @63335 has 229 MA's), (56, 63218), (59, 63197), (68, 63158),

Gene: Adriana_84 Start: 63897, Stop: 63595, Start Num: 39

Candidate Starts for Adriana_84:

(Start: 18 @63978 has 33 MA's), (Start: 39 @63897 has 229 MA's), (56, 63780), (59, 63759), (68, 63720),

Gene: Aelin_83 Start: 62839, Stop: 62537, Start Num: 39

Candidate Starts for Aelin_83:

(Start: 18 @62920 has 33 MA's), (Start: 39 @62839 has 229 MA's), (50, 62770), (56, 62722), (59, 62701), (68, 62662),

Gene: Akoma_80 Start: 61275, Stop: 60946, Start Num: 45

Candidate Starts for Akoma_80:

(Start: 45 @61275 has 80 MA's), (56, 61176), (59, 61155), (64, 61134),

Gene: Allegro_70 Start: 59019, Stop: 58717, Start Num: 45

Candidate Starts for Allegro_70:

(Start: 45 @59019 has 80 MA's), (52, 58959), (56, 58920), (59, 58899), (64, 58878), (76, 58767), (80, 58746), (81, 58740), (83, 58734),

Gene: AltPhacts_82 Start: 62600, Stop: 62298, Start Num: 39

Candidate Starts for AltPhacts_82:

(Start: 18 @62681 has 33 MA's), (Start: 39 @62600 has 229 MA's), (56, 62483), (59, 62462), (68, 62423),

Gene: Altwerkus_82 Start: 62711, Stop: 62409, Start Num: 39

Candidate Starts for Altwerkus_82:

(Start: 18 @62792 has 33 MA's), (Start: 39 @62711 has 229 MA's), (59, 62573), (68, 62534),

Gene: AnarQue_79 Start: 58361, Stop: 58062, Start Num: 36

Candidate Starts for AnarQue_79:

(Start: 36 @58361 has 8 MA's), (60, 58229), (65, 58211), (76, 58100),

Gene: Anderson_86 Start: 63257, Stop: 62955, Start Num: 39

Candidate Starts for Anderson_86:

(Start: 18 @63338 has 33 MA's), (Start: 39 @63257 has 229 MA's), (56, 63140), (59, 63119), (68, 63080),

Gene: Andre_86 Start: 63279, Stop: 62977, Start Num: 39

Candidate Starts for Andre_86:

(Start: 18 @63360 has 33 MA's), (Start: 39 @63279 has 229 MA's), (56, 63162), (59, 63141), (68, 63102),

Gene: Antonia_83 Start: 62883, Stop: 62581, Start Num: 39

Candidate Starts for Antonia_83:

(Start: 18 @62964 has 33 MA's), (Start: 39 @62883 has 229 MA's), (50, 62814), (56, 62766), (59, 62745), (68, 62706),

Gene: Apizium_83 Start: 62557, Stop: 62237, Start Num: 34

Candidate Starts for Apizium_83:

(Start: 18 @62620 has 33 MA's), (Start: 34 @62557 has 1 MA's), (Start: 39 @62539 has 229 MA's), (50, 62470), (56, 62422), (59, 62401), (68, 62362),

Gene: Arbiter_68 Start: 59054, Stop: 58752, Start Num: 45

Candidate Starts for Arbiter_68:

(Start: 45 @59054 has 80 MA's), (56, 58955), (59, 58934), (64, 58913), (76, 58802), (80, 58781), (81, 58775), (83, 58769),

Gene: Ares_70 Start: 59025, Stop: 58723, Start Num: 45

Candidate Starts for Ares_70:

(Start: 45 @59025 has 80 MA's), (56, 58926), (59, 58905), (64, 58884), (76, 58773), (80, 58752), (81, 58746), (83, 58740),

Gene: Argie_71 Start: 51295, Stop: 51594, Start Num: 45

Candidate Starts for Argie_71:

(26, 51214), (Start: 45 @51295 has 80 MA's), (56, 51394), (59, 51415), (66, 51445), (70, 51502), (76, 51553), (82, 51583),

Gene: Ashraf_85 Start: 63370, Stop: 63068, Start Num: 39

Candidate Starts for Ashraf_85:

(Start: 18 @63451 has 33 MA's), (Start: 39 @63370 has 229 MA's), (50, 63301), (56, 63253), (59, 63232), (68, 63193),

Gene: Athena_82 Start: 62010, Stop: 61681, Start Num: 45

Candidate Starts for Athena_82:

(Start: 45 @62010 has 80 MA's), (56, 61911), (59, 61890), (64, 61869),

Gene: Audrey_80 Start: 61264, Stop: 60935, Start Num: 45

Candidate Starts for Audrey_80:

(Start: 45 @61264 has 80 MA's), (56, 61165), (59, 61144), (64, 61123),

Gene: Badfish_85 Start: 63561, Stop: 63259, Start Num: 39

Candidate Starts for Badfish_85:

(Start: 18 @63642 has 33 MA's), (Start: 39 @63561 has 229 MA's), (56, 63444), (59, 63423), (68, 63384),

Gene: Baloo_79 Start: 61116, Stop: 60787, Start Num: 45

Candidate Starts for Baloo_79:

(Start: 45 @61116 has 80 MA's), (56, 61017), (59, 60996), (64, 60975),

Gene: Bananafish_71 Start: 58955, Stop: 58653, Start Num: 45

Candidate Starts for Bananafish_71:

(Start: 45 @58955 has 80 MA's), (52, 58895), (56, 58856), (59, 58835), (64, 58814), (76, 58703), (80, 58682), (81, 58676), (83, 58670),

Gene: Banjo_81 Start: 62827, Stop: 62525, Start Num: 39

Candidate Starts for Banjo_81:

(Start: 18 @62908 has 33 MA's), (Start: 39 @62827 has 229 MA's), (50, 62758), (56, 62710), (59, 62689), (68, 62650),

Gene: Barnyard_87 Start: 60478, Stop: 60789, Start Num: 32

Candidate Starts for Barnyard_87:

(Start: 32 @60478 has 1 MA's), (44, 60529), (49, 60562), (53, 60592), (54, 60601), (65, 60646), (67, 60652),

Gene: Basato_83 Start: 63292, Stop: 62990, Start Num: 39

Candidate Starts for Basato_83:

(Start: 18 @63373 has 33 MA's), (Start: 39 @63292 has 229 MA's), (56, 63175), (59, 63154), (68, 63115),

Gene: BatteryCK_82 Start: 62818, Stop: 62516, Start Num: 39

Candidate Starts for BatteryCK_82:

(Start: 18 @62899 has 33 MA's), (Start: 39 @62818 has 229 MA's), (50, 62749), (56, 62701), (59, 62680), (68, 62641),

Gene: Beaglebox_81 Start: 62950, Stop: 62648, Start Num: 39

Candidate Starts for Beaglebox_81:

(Start: 18 @63031 has 33 MA's), (Start: 39 @62950 has 229 MA's), (50, 62881), (56, 62833), (59, 62812), (68, 62773),

Gene: Bernardo_81 Start: 61454, Stop: 61125, Start Num: 45

Candidate Starts for Bernardo_81:

(Start: 45 @61454 has 80 MA's), (56, 61355), (59, 61334), (64, 61313),

Gene: BirdInFrench_53 Start: 37010, Stop: 36696, Start Num: 39

Candidate Starts for BirdInFrench_53:

(30, 37040), (Start: 39 @37010 has 229 MA's), (51, 36941), (62, 36887), (74, 36767), (79, 36743), (84, 36719),

Gene: Bishoperium_84 Start: 63397, Stop: 63095, Start Num: 39

Candidate Starts for Bishoperium_84:

(Start: 18 @63478 has 33 MA's), (Start: 39 @63397 has 229 MA's), (59, 63259), (68, 63220),

Gene: BlackStallion_83 Start: 63247, Stop: 62945, Start Num: 39

Candidate Starts for BlackStallion_83:

(Start: 18 @63328 has 33 MA's), (Start: 39 @63247 has 229 MA's), (50, 63178), (56, 63130), (59, 63109), (68, 63070),

Gene: Blocker23_70 Start: 59020, Stop: 58718, Start Num: 45

Candidate Starts for Blocker23_70:

(Start: 45 @59020 has 80 MA's), (52, 58960), (56, 58921), (59, 58900), (64, 58879), (76, 58768), (80, 58747), (81, 58741), (83, 58735),

Gene: Bloom_201 Start: 137606, Stop: 137896, Start Num: 36

Candidate Starts for Bloom_201:

(27, 137570), (Start: 36 @137606 has 8 MA's), (58, 137723), (71, 137825),

Gene: BlueHusk_85 Start: 63070, Stop: 62768, Start Num: 39

Candidate Starts for BlueHusk_85:

(Start: 18 @63151 has 33 MA's), (Start: 39 @63070 has 229 MA's), (56, 62953), (59, 62932), (68, 62893),

Gene: Bluephacebaby_83 Start: 63430, Stop: 63128, Start Num: 39

Candidate Starts for Bluephacebaby_83:

(Start: 18 @63511 has 33 MA's), (Start: 39 @63430 has 229 MA's), (56, 63313), (59, 63292), (68, 63253),

Gene: BobRoss2024_79 Start: 57680, Stop: 57384, Start Num: 36

Candidate Starts for BobRoss2024_79:

(Start: 36 @57680 has 8 MA's), (65, 57527), (72, 57452),

Gene: Boehler_83 Start: 63221, Stop: 62919, Start Num: 39

Candidate Starts for Boehler_83:

(Start: 18 @63302 has 33 MA's), (Start: 39 @63221 has 229 MA's), (56, 63104), (59, 63083), (68, 63044),

Gene: Boyle_70 Start: 59064, Stop: 58762, Start Num: 45

Candidate Starts for Boyle_70:

(Start: 45 @59064 has 80 MA's), (52, 59004), (56, 58965), (59, 58944), (64, 58923), (76, 58812), (80, 58791), (81, 58785), (83, 58779),

Gene: Briakila_80 Start: 61462, Stop: 61133, Start Num: 45

Candidate Starts for Briakila_80:

(Start: 45 @61462 has 80 MA's), (56, 61363), (59, 61342), (64, 61321),

Gene: Brilliant_87 Start: 63410, Stop: 63108, Start Num: 39

Candidate Starts for Brilliant_87:

(Start: 18 @63491 has 33 MA's), (Start: 39 @63410 has 229 MA's), (56, 63293), (59, 63272), (68, 63233),

Gene: Brownie5_70 Start: 59065, Stop: 58763, Start Num: 45

Candidate Starts for Brownie5_70:

(Start: 45 @59065 has 80 MA's), (52, 59005), (56, 58966), (59, 58945), (64, 58924), (76, 58813), (80, 58792), (81, 58786), (83, 58780),

Gene: Buckeye_84 Start: 63948, Stop: 63646, Start Num: 39

Candidate Starts for Buckeye_84:

(Start: 18 @64029 has 33 MA's), (Start: 39 @63948 has 229 MA's), (56, 63831), (59, 63810), (68, 63771),

Gene: Burr_84 Start: 62882, Stop: 62580, Start Num: 39

Candidate Starts for Burr_84:

(Start: 18 @62963 has 33 MA's), (Start: 39 @62882 has 229 MA's), (56, 62765), (59, 62744), (68, 62705),

Gene: CaiB_78 Start: 58156, Stop: 57857, Start Num: 36

Candidate Starts for CaiB_78:

(Start: 36 @58156 has 8 MA's), (60, 58024), (65, 58006), (76, 57895),

Gene: Calamitous_71 Start: 58954, Stop: 58652, Start Num: 45

Candidate Starts for Calamitous_71:

(Start: 45 @58954 has 80 MA's), (52, 58894), (56, 58855), (59, 58834), (64, 58813), (76, 58702), (80, 58681), (81, 58675), (83, 58669),

Gene: CamL_84 Start: 63182, Stop: 62880, Start Num: 39

Candidate Starts for CamL_84:

(Start: 18 @63263 has 33 MA's), (Start: 39 @63182 has 229 MA's), (50, 63113), (56, 63065), (59, 63044), (68, 63005),

Gene: CampRoach_85 Start: 63278, Stop: 62976, Start Num: 39

Candidate Starts for CampRoach_85:

(Start: 18 @63359 has 33 MA's), (Start: 39 @63278 has 229 MA's), (56, 63161), (59, 63140), (68, 63101),

Gene: Cannibal_85 Start: 63284, Stop: 62982, Start Num: 39

Candidate Starts for Cannibal_85:

(Start: 18 @63365 has 33 MA's), (Start: 39 @63284 has 229 MA's), (56, 63167), (59, 63146), (68, 63107),

Gene: Carthage_85 Start: 62952, Stop: 62650, Start Num: 39

Candidate Starts for Carthage_85:

(Start: 18 @63033 has 33 MA's), (Start: 39 @62952 has 229 MA's), (56, 62835), (59, 62814), (68, 62775),

Gene: Casbah_80 Start: 61575, Stop: 61246, Start Num: 45

Candidate Starts for Casbah_80:

(Start: 45 @61575 has 80 MA's), (56, 61476), (59, 61455), (64, 61434),

Gene: Cepens_66 Start: 49145, Stop: 49444, Start Num: 45

Candidate Starts for Cepens_66:

(Start: 45 @49145 has 80 MA's), (56, 49244), (59, 49265), (66, 49295), (70, 49352), (76, 49403), (82, 49433),

Gene: ChaChing_80 Start: 61280, Stop: 60951, Start Num: 45

Candidate Starts for ChaChing_80:

(Start: 45 @61280 has 80 MA's), (56, 61181), (59, 61160), (64, 61139),

Gene: Chaelin_85 Start: 63412, Stop: 63110, Start Num: 39

Candidate Starts for Chaelin_85:

(Start: 18 @63493 has 33 MA's), (Start: 39 @63412 has 229 MA's), (50, 63343), (56, 63295), (59, 63274), (68, 63235),

Gene: Chandler_80 Start: 62051, Stop: 61722, Start Num: 45

Candidate Starts for Chandler_80:

(Start: 45 @62051 has 80 MA's), (56, 61952), (59, 61931), (64, 61910),

Gene: Charles1_85 Start: 63190, Stop: 62888, Start Num: 39

Candidate Starts for Charles1_85:

(Start: 18 @63271 has 33 MA's), (Start: 39 @63190 has 229 MA's), (56, 63073), (59, 63052), (68, 63013),

Gene: CharlieGBrown_82 Start: 62913, Stop: 62611, Start Num: 39

Candidate Starts for CharlieGBrown_82:

(Start: 18 @62994 has 33 MA's), (Start: 39 @62913 has 229 MA's), (50, 62844), (56, 62796), (59, 62775), (68, 62736),

Gene: CheetO_81 Start: 63368, Stop: 62985, Start Num: 18

Candidate Starts for CheetO_81:

(Start: 18 @63368 has 33 MA's), (Start: 39 @63287 has 229 MA's), (56, 63170), (59, 63149), (68, 63110),

Gene: Cher_84 Start: 63384, Stop: 63082, Start Num: 39

Candidate Starts for Cher_84:

(Start: 18 @63465 has 33 MA's), (Start: 39 @63384 has 229 MA's), (56, 63267), (59, 63246), (68, 63207),

Gene: Childish_84 Start: 63575, Stop: 63273, Start Num: 39
Candidate Starts for Childish_84:
(Start: 18 @63656 has 33 MA's), (Start: 39 @63575 has 229 MA's), (56, 63458), (59, 63437), (68, 63398),

Gene: Chorkpop_85 Start: 63038, Stop: 62736, Start Num: 39
Candidate Starts for Chorkpop_85:
(Start: 18 @63119 has 33 MA's), (Start: 39 @63038 has 229 MA's), (56, 62921), (59, 62900), (68, 62861),

Gene: Chunky_84 Start: 62964, Stop: 62581, Start Num: 18
Candidate Starts for Chunky_84:
(Start: 18 @62964 has 33 MA's), (Start: 39 @62883 has 229 MA's), (56, 62766), (59, 62745), (68, 62706),

Gene: Chute_84 Start: 63577, Stop: 63275, Start Num: 39
Candidate Starts for Chute_84:
(Start: 18 @63658 has 33 MA's), (Start: 39 @63577 has 229 MA's), (50, 63508), (56, 63460), (59, 63439), (68, 63400),

Gene: CloverMinnie_76 Start: 57325, Stop: 57026, Start Num: 36
Candidate Starts for CloverMinnie_76:
(Start: 36 @57325 has 8 MA's), (51, 57247), (60, 57193), (65, 57175), (76, 57064),

Gene: Cobra_84 Start: 63408, Stop: 63106, Start Num: 39
Candidate Starts for Cobra_84:
(Start: 18 @63489 has 33 MA's), (Start: 39 @63408 has 229 MA's), (56, 63291), (59, 63270), (68, 63231),

Gene: Coffee_70 Start: 59058, Stop: 58756, Start Num: 45
Candidate Starts for Coffee_70:
(Start: 45 @59058 has 80 MA's), (52, 58998), (56, 58959), (59, 58938), (64, 58917), (76, 58806), (80, 58785), (81, 58779), (83, 58773),

Gene: Colbert_82 Start: 62306, Stop: 62004, Start Num: 39
Candidate Starts for Colbert_82:
(Start: 18 @62387 has 33 MA's), (Start: 39 @62306 has 229 MA's), (59, 62168), (68, 62129),

Gene: Coletti_86 Start: 63933, Stop: 63631, Start Num: 39
Candidate Starts for Coletti_86:
(Start: 18 @64014 has 33 MA's), (Start: 39 @63933 has 229 MA's), (50, 63864), (56, 63816), (59, 63795), (68, 63756),

Gene: Cornobble_82 Start: 62876, Stop: 62574, Start Num: 39
Candidate Starts for Cornobble_82:
(Start: 18 @62957 has 33 MA's), (Start: 39 @62876 has 229 MA's), (59, 62738), (68, 62699),

Gene: Corofin_80 Start: 61286, Stop: 60957, Start Num: 45
Candidate Starts for Corofin_80:
(Start: 45 @61286 has 80 MA's), (56, 61187), (59, 61166), (64, 61145),

Gene: Cosmolli16_86 Start: 63753, Stop: 63451, Start Num: 39
Candidate Starts for Cosmolli16_86:

(Start: 18 @63834 has 33 MA's), (Start: 39 @63753 has 229 MA's), (56, 63636), (59, 63615), (68, 63576),

Gene: Craff_86 Start: 63796, Stop: 63494, Start Num: 39

Candidate Starts for Craff_86:

(Start: 18 @63877 has 33 MA's), (Start: 39 @63796 has 229 MA's), (56, 63679), (59, 63658), (68, 63619),

Gene: D12_66 Start: 49780, Stop: 50079, Start Num: 45

Candidate Starts for D12_66:

(Start: 45 @49780 has 80 MA's), (56, 49879), (59, 49900), (66, 49930), (70, 49987), (76, 50038), (82, 50068),

Gene: DaddyDaniels_87 Start: 63529, Stop: 63227, Start Num: 39

Candidate Starts for DaddyDaniels_87:

(Start: 18 @63610 has 33 MA's), (Start: 39 @63529 has 229 MA's), (56, 63412), (59, 63391), (68, 63352),

Gene: Daffy_83 Start: 63023, Stop: 62721, Start Num: 39

Candidate Starts for Daffy_83:

(Start: 18 @63104 has 33 MA's), (Start: 39 @63023 has 229 MA's), (56, 62906), (59, 62885), (68, 62846),

Gene: Daisy_79 Start: 60837, Stop: 60508, Start Num: 45

Candidate Starts for Daisy_79:

(Start: 45 @60837 has 80 MA's), (56, 60738), (59, 60717), (64, 60696),

Gene: Daka_86 Start: 63229, Stop: 62927, Start Num: 39

Candidate Starts for Daka_86:

(Start: 18 @63310 has 33 MA's), (Start: 39 @63229 has 229 MA's), (59, 63091), (68, 63052),

Gene: Dati_81 Start: 63207, Stop: 62905, Start Num: 39

Candidate Starts for Dati_81:

(Start: 18 @63288 has 33 MA's), (Start: 39 @63207 has 229 MA's), (56, 63090), (59, 63069), (68, 63030),

Gene: Deenasa_80 Start: 62186, Stop: 61857, Start Num: 45

Candidate Starts for Deenasa_80:

(Start: 45 @62186 has 80 MA's), (56, 62087), (59, 62066), (64, 62045),

Gene: DelRivs_82 Start: 62836, Stop: 62534, Start Num: 39

Candidate Starts for DelRivs_82:

(Start: 18 @62917 has 33 MA's), (Start: 39 @62836 has 229 MA's), (56, 62719), (59, 62698), (68, 62659),

Gene: Derpp_84 Start: 63027, Stop: 62644, Start Num: 18

Candidate Starts for Derpp_84:

(Start: 18 @63027 has 33 MA's), (Start: 39 @62946 has 229 MA's), (56, 62829), (59, 62808), (68, 62769),

Gene: Dice_83 Start: 62868, Stop: 62566, Start Num: 39

Candidate Starts for Dice_83:

(Start: 18 @62949 has 33 MA's), (Start: 39 @62868 has 229 MA's), (56, 62751), (59, 62730), (68, 62691),

Gene: Dingo_81 Start: 62589, Stop: 62287, Start Num: 39

Candidate Starts for Dingo_81:

(Start: 18 @62670 has 33 MA's), (Start: 39 @62589 has 229 MA's), (56, 62472), (59, 62451), (68, 62412),

Gene: Dione_82 Start: 62588, Stop: 62286, Start Num: 39

Candidate Starts for Dione_82:

(Start: 18 @62669 has 33 MA's), (Start: 39 @62588 has 229 MA's), (50, 62519), (56, 62471), (59, 62450), (68, 62411),

Gene: DirtJuice_84 Start: 63328, Stop: 63026, Start Num: 39

Candidate Starts for DirtJuice_84:

(Start: 18 @63409 has 33 MA's), (Start: 39 @63328 has 229 MA's), (56, 63211), (59, 63190), (68, 63151),

Gene: Doddsville_82 Start: 63109, Stop: 62726, Start Num: 18

Candidate Starts for Doddsville_82:

(Start: 18 @63109 has 33 MA's), (Start: 39 @63028 has 229 MA's), (50, 62959), (56, 62911), (59, 62890), (68, 62851),

Gene: DoesntMatter_81 Start: 62864, Stop: 62562, Start Num: 39

Candidate Starts for DoesntMatter_81:

(Start: 18 @62945 has 33 MA's), (Start: 39 @62864 has 229 MA's), (56, 62747), (59, 62726), (68, 62687),

Gene: DonSanchon_80 Start: 62546, Stop: 62244, Start Num: 39

Candidate Starts for DonSanchon_80:

(Start: 18 @62627 has 33 MA's), (Start: 39 @62546 has 229 MA's), (50, 62477), (56, 62429), (59, 62408), (68, 62369),

Gene: DuchessDung_82 Start: 62625, Stop: 62242, Start Num: 18

Candidate Starts for DuchessDung_82:

(Start: 18 @62625 has 33 MA's), (Start: 39 @62544 has 229 MA's), (50, 62475), (56, 62427), (59, 62406), (68, 62367),

Gene: Duggie_84 Start: 63170, Stop: 62868, Start Num: 39

Candidate Starts for Duggie_84:

(Start: 18 @63251 has 33 MA's), (Start: 39 @63170 has 229 MA's), (56, 63053), (59, 63032), (68, 62993),

Gene: DunneganBoMo_196 Start: 141037, Stop: 141381, Start Num: 25

Candidate Starts for DunneganBoMo_196:

(25, 141037), (75, 141343),

Gene: Durga_86 Start: 63652, Stop: 63350, Start Num: 39

Candidate Starts for Durga_86:

(Start: 18 @63733 has 33 MA's), (Start: 39 @63652 has 229 MA's), (56, 63535), (59, 63514), (68, 63475),

Gene: Eaglehorse_70 Start: 58944, Stop: 58642, Start Num: 45

Candidate Starts for Eaglehorse_70:

(Start: 45 @58944 has 80 MA's), (52, 58884), (56, 58845), (59, 58824), (64, 58803), (76, 58692), (80, 58671), (81, 58665), (83, 58659),

Gene: Emiris_86 Start: 63558, Stop: 63256, Start Num: 39

Candidate Starts for Emiris_86:

(Start: 18 @63639 has 33 MA's), (Start: 39 @63558 has 229 MA's), (56, 63441), (59, 63420), (68, 63381),

Gene: EmpTee_83 Start: 62960, Stop: 62658, Start Num: 39

Candidate Starts for EmpTee_83:

(Start: 18 @63041 has 33 MA's), (Start: 39 @62960 has 229 MA's), (50, 62891), (56, 62843), (59, 62822), (68, 62783),

Gene: Eremos_83 Start: 63331, Stop: 62948, Start Num: 18

Candidate Starts for Eremos_83:

(Start: 18 @63331 has 33 MA's), (Start: 39 @63250 has 229 MA's), (56, 63133), (59, 63112), (68, 63073),

Gene: Etaye_83 Start: 63736, Stop: 63434, Start Num: 39

Candidate Starts for Etaye_83:

(Start: 18 @63817 has 33 MA's), (Start: 39 @63736 has 229 MA's), (56, 63619), (59, 63598), (68, 63559),

Gene: Eugenia_86 Start: 63671, Stop: 63369, Start Num: 39

Candidate Starts for Eugenia_86:

(Start: 18 @63752 has 33 MA's), (Start: 39 @63671 has 229 MA's), (56, 63554), (59, 63533), (68, 63494),

Gene: Faze9_69 Start: 59082, Stop: 58780, Start Num: 45

Candidate Starts for Faze9_69:

(Start: 45 @59082 has 80 MA's), (56, 58983), (59, 58962), (64, 58941), (76, 58830), (80, 58809), (81, 58803), (83, 58797),

Gene: FluffyNinja_85 Start: 63249, Stop: 62947, Start Num: 39

Candidate Starts for FluffyNinja_85:

(Start: 18 @63330 has 33 MA's), (Start: 39 @63249 has 229 MA's), (50, 63180), (56, 63132), (59, 63111), (68, 63072),

Gene: Fozzie_82 Start: 63575, Stop: 63273, Start Num: 39

Candidate Starts for Fozzie_82:

(Start: 18 @63656 has 33 MA's), (Start: 39 @63575 has 229 MA's), (56, 63458), (59, 63437), (68, 63398),

Gene: Frankicide_83 Start: 63074, Stop: 62772, Start Num: 39

Candidate Starts for Frankicide_83:

(Start: 18 @63155 has 33 MA's), (Start: 39 @63074 has 229 MA's), (56, 62957), (59, 62936), (68, 62897),

Gene: FrenchFry_71 Start: 59069, Stop: 58767, Start Num: 45

Candidate Starts for FrenchFry_71:

(Start: 45 @59069 has 80 MA's), (52, 59009), (56, 58970), (59, 58949), (64, 58928), (76, 58817), (80, 58796), (81, 58790), (83, 58784),

Gene: Freya_81 Start: 62566, Stop: 62264, Start Num: 39

Candidate Starts for Freya_81:

(Start: 18 @62647 has 33 MA's), (Start: 39 @62566 has 229 MA's), (56, 62449), (59, 62428), (68, 62389),

Gene: FriarPreacher_82 Start: 63028, Stop: 62645, Start Num: 18

Candidate Starts for FriarPreacher_82:

(Start: 18 @63028 has 33 MA's), (Start: 39 @62947 has 229 MA's), (56, 62830), (59, 62809), (68, 62770),

Gene: Fringe_88 Start: 63724, Stop: 63422, Start Num: 39

Candidate Starts for Fringe_88:

(Start: 18 @63805 has 33 MA's), (Start: 39 @63724 has 229 MA's), (56, 63607), (59, 63586), (68, 63547),

Gene: FugateOSU_84 Start: 64008, Stop: 63706, Start Num: 39

Candidate Starts for FugateOSU_84:

(Start: 18 @64089 has 33 MA's), (Start: 39 @64008 has 229 MA's), (50, 63939), (56, 63891), (59, 63870), (68, 63831),

Gene: Gadget_81 Start: 61637, Stop: 61308, Start Num: 45

Candidate Starts for Gadget_81:

(Start: 45 @61637 has 80 MA's), (56, 61538), (59, 61517), (64, 61496),

Gene: Gareth_84 Start: 63396, Stop: 63094, Start Num: 39

Candidate Starts for Gareth_84:

(Start: 18 @63477 has 33 MA's), (Start: 39 @63396 has 229 MA's), (56, 63279), (59, 63258), (68, 63219),

Gene: GeneCoco_85 Start: 63576, Stop: 63274, Start Num: 39

Candidate Starts for GeneCoco_85:

(Start: 18 @63657 has 33 MA's), (Start: 39 @63576 has 229 MA's), (56, 63459), (59, 63438), (68, 63399),

Gene: Gervas_81 Start: 61731, Stop: 61402, Start Num: 45

Candidate Starts for Gervas_81:

(Start: 45 @61731 has 80 MA's), (56, 61632), (59, 61611), (64, 61590),

Gene: Giraffe_84 Start: 63401, Stop: 63099, Start Num: 39

Candidate Starts for Giraffe_84:

(Start: 18 @63482 has 33 MA's), (Start: 39 @63401 has 229 MA's), (50, 63332), (56, 63284), (59, 63263), (68, 63224),

Gene: Glass_72 Start: 59070, Stop: 58768, Start Num: 45

Candidate Starts for Glass_72:

(Start: 45 @59070 has 80 MA's), (52, 59010), (56, 58971), (59, 58950), (64, 58929), (76, 58818), (80, 58797), (81, 58791), (83, 58785),

Gene: GlenHope_81 Start: 61310, Stop: 60981, Start Num: 45

Candidate Starts for GlenHope_81:

(Start: 45 @61310 has 80 MA's), (56, 61211), (59, 61190), (64, 61169),

Gene: GodPhather_69 Start: 50749, Stop: 51048, Start Num: 45
Candidate Starts for GodPhather_69:
(26, 50668), (Start: 45 @50749 has 80 MA's), (56, 50848), (59, 50869), (66, 50899), (70, 50956), (76, 51007),

Gene: Godines_71 Start: 59323, Stop: 59021, Start Num: 45
Candidate Starts for Godines_71:
(Start: 45 @59323 has 80 MA's), (52, 59263), (56, 59224), (59, 59203), (64, 59182), (76, 59071), (80, 59050), (81, 59044), (83, 59038),

Gene: Gophee_84 Start: 63387, Stop: 63085, Start Num: 39
Candidate Starts for Gophee_84:
(Start: 18 @63468 has 33 MA's), (Start: 39 @63387 has 229 MA's), (56, 63270), (59, 63249), (68, 63210),

Gene: Grand2040_82 Start: 63365, Stop: 63063, Start Num: 39
Candidate Starts for Grand2040_82:
(Start: 18 @63446 has 33 MA's), (Start: 39 @63365 has 229 MA's), (56, 63248), (59, 63227), (68, 63188),

Gene: Gustav_45 Start: 33684, Stop: 33406, Start Num: 35
Candidate Starts for Gustav_45:
(11, 33798), (13, 33789), (15, 33756), (21, 33747), (Start: 35 @33684 has 3 MA's), (52, 33609), (56, 33582), (57, 33579), (62, 33558), (63, 33549), (71, 33471),

Gene: Gwilliam_85 Start: 64012, Stop: 63629, Start Num: 18
Candidate Starts for Gwilliam_85:
(Start: 18 @64012 has 33 MA's), (Start: 39 @63931 has 229 MA's), (56, 63814), (59, 63793), (68, 63754),

Gene: Gyarad_0083 Start: 62885, Stop: 62583, Start Num: 39
Candidate Starts for Gyarad_0083:
(Start: 18 @62966 has 33 MA's), (Start: 39 @62885 has 229 MA's), (56, 62768), (59, 62747), (68, 62708),

Gene: HSavage_82 Start: 62902, Stop: 62600, Start Num: 39
Candidate Starts for HSavage_82:
(Start: 18 @62983 has 33 MA's), (Start: 39 @62902 has 229 MA's), (56, 62785), (59, 62764), (68, 62725),

Gene: Haimas_82 Start: 62827, Stop: 62525, Start Num: 39
Candidate Starts for Haimas_82:
(Start: 18 @62908 has 33 MA's), (Start: 39 @62827 has 229 MA's), (56, 62710), (59, 62689), (68, 62650),

Gene: Haleema_83 Start: 62947, Stop: 62645, Start Num: 39
Candidate Starts for Haleema_83:
(Start: 18 @63028 has 33 MA's), (Start: 39 @62947 has 229 MA's), (59, 62809), (68, 62770),

Gene: Halfpint_79 Start: 61052, Stop: 60723, Start Num: 45
Candidate Starts for Halfpint_79:
(Start: 45 @61052 has 80 MA's), (56, 60953), (59, 60932), (64, 60911),

Gene: Hamish_81 Start: 63116, Stop: 62814, Start Num: 39
Candidate Starts for Hamish_81:
(Start: 18 @63197 has 33 MA's), (Start: 39 @63116 has 229 MA's), (56, 62999), (59, 62978), (68, 62939),

Gene: Hartsy_83 Start: 63145, Stop: 62762, Start Num: 18
Candidate Starts for Hartsy_83:
(Start: 18 @63145 has 33 MA's), (Start: 39 @63064 has 229 MA's), (50, 62995), (56, 62947), (59, 62926), (68, 62887),

Gene: Harvey_81 Start: 62724, Stop: 62422, Start Num: 39
Candidate Starts for Harvey_81:
(Start: 18 @62805 has 33 MA's), (Start: 39 @62724 has 229 MA's), (56, 62607), (59, 62586), (68, 62547),

Gene: HarveySr_79 Start: 60821, Stop: 60492, Start Num: 45
Candidate Starts for HarveySr_79:
(Start: 45 @60821 has 80 MA's), (56, 60722), (59, 60701), (64, 60680),

Gene: Heathcliff_80 Start: 61231, Stop: 60902, Start Num: 45
Candidate Starts for Heathcliff_80:
(Start: 45 @61231 has 80 MA's), (56, 61132), (59, 61111), (64, 61090),

Gene: Hedgerow_70 Start: 59020, Stop: 58718, Start Num: 45
Candidate Starts for Hedgerow_70:
(Start: 45 @59020 has 80 MA's), (52, 58960), (56, 58921), (59, 58900), (64, 58879), (76, 58768), (80, 58747), (81, 58741), (83, 58735),

Gene: Held_82 Start: 62845, Stop: 62543, Start Num: 39
Candidate Starts for Held_82:
(Start: 18 @62926 has 33 MA's), (Start: 39 @62845 has 229 MA's), (56, 62728), (59, 62707), (68, 62668),

Gene: HenryJackson_85 Start: 63564, Stop: 63262, Start Num: 39
Candidate Starts for HenryJackson_85:
(Start: 18 @63645 has 33 MA's), (Start: 39 @63564 has 229 MA's), (56, 63447), (59, 63426), (68, 63387),

Gene: Hertubise_84 Start: 63287, Stop: 62904, Start Num: 18
Candidate Starts for Hertubise_84:
(Start: 18 @63287 has 33 MA's), (Start: 39 @63206 has 229 MA's), (56, 63089), (59, 63068), (68, 63029),

Gene: Hetaeria_84 Start: 63213, Stop: 62911, Start Num: 39
Candidate Starts for Hetaeria_84:
(Start: 18 @63294 has 33 MA's), (Start: 39 @63213 has 229 MA's), (56, 63096), (59, 63075), (68, 63036),

Gene: HighStump_85 Start: 63351, Stop: 63049, Start Num: 39
Candidate Starts for HighStump_85:
(Start: 18 @63432 has 33 MA's), (Start: 39 @63351 has 229 MA's), (56, 63234), (59, 63213), (68, 63174),

Gene: Hocus_82 Start: 62865, Stop: 62563, Start Num: 39

Candidate Starts for Hocus_82:

(Start: 18 @62946 has 33 MA's), (Start: 39 @62865 has 229 MA's), (56, 62748), (59, 62727), (68, 62688),

Gene: Holeinone_70 Start: 58925, Stop: 58623, Start Num: 45

Candidate Starts for Holeinone_70:

(Start: 45 @58925 has 80 MA's), (52, 58865), (56, 58826), (59, 58805), (64, 58784), (76, 58673), (80, 58652), (81, 58646), (83, 58640),

Gene: Horchata_81 Start: 63042, Stop: 62740, Start Num: 39

Candidate Starts for Horchata_81:

(Start: 18 @63123 has 33 MA's), (Start: 39 @63042 has 229 MA's), (56, 62925), (59, 62904), (68, 62865),

Gene: ImtiyazSitla_85 Start: 63370, Stop: 63068, Start Num: 39

Candidate Starts for ImtiyazSitla_85:

(Start: 18 @63451 has 33 MA's), (Start: 39 @63370 has 229 MA's), (50, 63301), (56, 63253), (59, 63232), (68, 63193),

Gene: Inchworm_85 Start: 63238, Stop: 62936, Start Num: 39

Candidate Starts for Inchworm_85:

(Start: 18 @63319 has 33 MA's), (Start: 39 @63238 has 229 MA's), (50, 63169), (56, 63121), (59, 63100), (68, 63061),

Gene: Indlovu_77 Start: 63524, Stop: 63132, Start Num: 45

Candidate Starts for Indlovu_77:

(Start: 45 @63524 has 80 MA's), (56, 63425), (60, 63401), (68, 63365), (75, 63278), (87, 63215),

Gene: Inverness_82 Start: 63039, Stop: 62737, Start Num: 39

Candidate Starts for Inverness_82:

(Start: 18 @63120 has 33 MA's), (Start: 39 @63039 has 229 MA's), (56, 62922), (59, 62901), (68, 62862),

Gene: Iridoclysis_83 Start: 63129, Stop: 62827, Start Num: 39

Candidate Starts for Iridoclysis_83:

(Start: 18 @63210 has 33 MA's), (Start: 39 @63129 has 229 MA's), (50, 63060), (56, 63012), (59, 62991), (68, 62952),

Gene: IsaacEli_86 Start: 63369, Stop: 63067, Start Num: 39

Candidate Starts for IsaacEli_86:

(Start: 18 @63450 has 33 MA's), (Start: 39 @63369 has 229 MA's), (56, 63252), (59, 63231), (68, 63192),

Gene: ItsyBitsy1_69 Start: 59161, Stop: 58859, Start Num: 45

Candidate Starts for ItsyBitsy1_69:

(Start: 45 @59161 has 80 MA's), (52, 59101), (56, 59062), (59, 59041), (64, 59020), (76, 58909), (80, 58888), (81, 58882), (83, 58876),

Gene: JDog_83 Start: 63399, Stop: 63097, Start Num: 39

Candidate Starts for JDog_83:

(Start: 18 @63480 has 33 MA's), (Start: 39 @63399 has 229 MA's), (56, 63282), (59, 63261), (68, 63222),

Gene: JacAttac_84 Start: 62843, Stop: 62541, Start Num: 39

Candidate Starts for JacAttac_84:

(Start: 18 @62924 has 33 MA's), (Start: 39 @62843 has 229 MA's), (50, 62774), (56, 62726), (59, 62705), (68, 62666),

Gene: Jackstina_75 Start: 61145, Stop: 60816, Start Num: 45

Candidate Starts for Jackstina_75:

(Start: 45 @61145 has 80 MA's), (56, 61046), (59, 61025), (64, 61004),

Gene: JakeO_85 Start: 63127, Stop: 62825, Start Num: 39

Candidate Starts for JakeO_85:

(Start: 18 @63208 has 33 MA's), (Start: 39 @63127 has 229 MA's), (56, 63010), (59, 62989), (68, 62950),

Gene: JangoPhett_82 Start: 63203, Stop: 62901, Start Num: 39

Candidate Starts for JangoPhett_82:

(Start: 18 @63284 has 33 MA's), (Start: 39 @63203 has 229 MA's), (56, 63086), (59, 63065), (68, 63026),

Gene: Jillium_85 Start: 63559, Stop: 63257, Start Num: 39

Candidate Starts for Jillium_85:

(Start: 18 @63640 has 33 MA's), (Start: 39 @63559 has 229 MA's), (56, 63442), (59, 63421), (68, 63382),

Gene: Jiminy_84 Start: 63063, Stop: 62761, Start Num: 39

Candidate Starts for Jiminy_84:

(Start: 18 @63144 has 33 MA's), (Start: 39 @63063 has 229 MA's), (50, 62994), (56, 62946), (59, 62925), (68, 62886),

Gene: Jiraiya_88 Start: 63228, Stop: 62845, Start Num: 18

Candidate Starts for Jiraiya_88:

(Start: 18 @63228 has 33 MA's), (Start: 39 @63147 has 229 MA's), (56, 63030), (59, 63009), (68, 62970),

Gene: KLucky39_82 Start: 62922, Stop: 62620, Start Num: 39

Candidate Starts for KLucky39_82:

(Start: 18 @63003 has 33 MA's), (Start: 39 @62922 has 229 MA's), (56, 62805), (59, 62784), (68, 62745),

Gene: Kahve_85 Start: 63562, Stop: 63260, Start Num: 39

Candidate Starts for Kahve_85:

(Start: 18 @63643 has 33 MA's), (Start: 39 @63562 has 229 MA's), (56, 63445), (59, 63424), (68, 63385),

Gene: Kailash_82 Start: 63262, Stop: 62960, Start Num: 39

Candidate Starts for Kailash_82:

(Start: 18 @63343 has 33 MA's), (Start: 39 @63262 has 229 MA's), (50, 63193), (56, 63145), (59, 63124), (68, 63085),

Gene: Kaleb_71 Start: 59076, Stop: 58774, Start Num: 45

Candidate Starts for Kaleb_71:

(Start: 45 @59076 has 80 MA's), (52, 59016), (56, 58977), (59, 58956), (64, 58935), (76, 58824), (80, 58803), (81, 58797), (83, 58791),

Gene: Kamiyu_80 Start: 61234, Stop: 60905, Start Num: 45

Candidate Starts for Kamiyu_80:

(Start: 45 @61234 has 80 MA's), (56, 61135), (59, 61114), (64, 61093),

Gene: KarasumaRum_75 Start: 62138, Stop: 61818, Start Num: 41

Candidate Starts for KarasumaRum_75:

(24, 62207), (25, 62204), (33, 62162), (41, 62138), (56, 62021), (60, 61997), (65, 61979), (67, 61973), (68, 61961), (76, 61871), (85, 61829),

Gene: Katniss_86 Start: 62978, Stop: 62676, Start Num: 39

Candidate Starts for Katniss_86:

(Start: 18 @63059 has 33 MA's), (Start: 39 @62978 has 229 MA's), (50, 62909), (56, 62861), (59, 62840), (68, 62801),

Gene: Keitherie_87 Start: 63620, Stop: 63318, Start Num: 39

Candidate Starts for Keitherie_87:

(Start: 18 @63701 has 33 MA's), (Start: 39 @63620 has 229 MA's), (50, 63551), (56, 63503), (59, 63482), (68, 63443),

Gene: Kheth_70 Start: 58987, Stop: 58685, Start Num: 45

Candidate Starts for Kheth_70:

(Start: 45 @58987 has 80 MA's), (52, 58927), (56, 58888), (59, 58867), (64, 58846), (76, 58735), (80, 58714), (81, 58708), (83, 58702),

Gene: Kikipoo_86 Start: 63369, Stop: 63067, Start Num: 39

Candidate Starts for Kikipoo_86:

(Start: 18 @63450 has 33 MA's), (Start: 39 @63369 has 229 MA's), (56, 63252), (59, 63231), (68, 63192),

Gene: Kimbrough_85 Start: 63441, Stop: 63139, Start Num: 39

Candidate Starts for Kimbrough_85:

(Start: 18 @63522 has 33 MA's), (Start: 39 @63441 has 229 MA's), (56, 63324), (59, 63303), (68, 63264),

Gene: KingTut_75 Start: 59601, Stop: 59299, Start Num: 39

Candidate Starts for KingTut_75:

(Start: 18 @59682 has 33 MA's), (Start: 39 @59601 has 229 MA's), (56, 59484), (59, 59463), (68, 59424),

Gene: KingVeVeVe_82 Start: 62576, Stop: 62274, Start Num: 39

Candidate Starts for KingVeVeVe_82:

(Start: 18 @62657 has 33 MA's), (Start: 39 @62576 has 229 MA's), (56, 62459), (59, 62438), (68, 62399),

Gene: KlimbOn_83 Start: 62881, Stop: 62579, Start Num: 39

Candidate Starts for KlimbOn_83:

(Start: 18 @62962 has 33 MA's), (Start: 39 @62881 has 229 MA's), (56, 62764), (59, 62743), (68, 62704),

Gene: Kloppinator_84 Start: 63012, Stop: 62710, Start Num: 39

Candidate Starts for Kloppinator_84:

(Start: 18 @63093 has 33 MA's), (Start: 39 @63012 has 229 MA's), (56, 62895), (59, 62874), (68, 62835),

Gene: Knocker_78 Start: 64121, Stop: 63720, Start Num: 40

Candidate Starts for Knocker_78:

(3, 64493), (17, 64208), (20, 64205), (23, 64202), (Start: 40 @64121 has 1 MA's), (42, 64118), (52, 64040), (55, 64007), (56, 64001), (60, 63977), (65, 63959), (68, 63941), (73, 63881), (74, 63854),

Gene: Kronus_80 Start: 62318, Stop: 61989, Start Num: 45

Candidate Starts for Kronus_80:

(Start: 45 @62318 has 80 MA's), (56, 62219), (59, 62198), (64, 62177),

Gene: Kumao_87 Start: 55246, Stop: 55530, Start Num: 43

Candidate Starts for Kumao_87:

(10, 55096), (14, 55132), (27, 55183), (31, 55207), (Start: 43 @55246 has 1 MA's), (60, 55372), (74, 55492),

Gene: Kwadwo_83 Start: 62867, Stop: 62565, Start Num: 39

Candidate Starts for Kwadwo_83:

(Start: 18 @62948 has 33 MA's), (Start: 39 @62867 has 229 MA's), (50, 62798), (56, 62750), (59, 62729), (68, 62690),

Gene: Kwksand96_85 Start: 63133, Stop: 62831, Start Num: 39

Candidate Starts for Kwksand96_85:

(Start: 18 @63214 has 33 MA's), (Start: 39 @63133 has 229 MA's), (50, 63064), (56, 63016), (59, 62995), (68, 62956),

Gene: Labeouficaum_84 Start: 62946, Stop: 62644, Start Num: 39

Candidate Starts for Labeouficaum_84:

(Start: 18 @63027 has 33 MA's), (Start: 39 @62946 has 229 MA's), (56, 62829), (59, 62808), (68, 62769),

Gene: Lars_71 Start: 59048, Stop: 58746, Start Num: 45

Candidate Starts for Lars_71:

(Start: 45 @59048 has 80 MA's), (52, 58988), (56, 58949), (59, 58928), (64, 58907), (76, 58796), (80, 58775), (81, 58769), (83, 58763),

Gene: LasagnaCat_85 Start: 63248, Stop: 62946, Start Num: 39

Candidate Starts for LasagnaCat_85:

(Start: 18 @63329 has 33 MA's), (Start: 39 @63248 has 229 MA's), (50, 63179), (56, 63131), (59, 63110), (68, 63071),

Gene: Lasso_83 Start: 63108, Stop: 62806, Start Num: 39

Candidate Starts for Lasso_83:

(Start: 18 @63189 has 33 MA's), (Start: 39 @63108 has 229 MA's), (59, 62970), (68, 62931),

Gene: LeeLot_83 Start: 63532, Stop: 63149, Start Num: 18

Candidate Starts for LeeLot_83:

(Start: 18 @63532 has 33 MA's), (Start: 39 @63451 has 229 MA's), (56, 63334), (59, 63313), (68, 63274),

Gene: Lego3393_82 Start: 63569, Stop: 63267, Start Num: 39

Candidate Starts for Lego3393_82:

(Start: 18 @63650 has 33 MA's), (Start: 39 @63569 has 229 MA's), (50, 63500), (56, 63452), (59, 63431), (68, 63392),

Gene: Legolas_85 Start: 63195, Stop: 62893, Start Num: 39

Candidate Starts for Legolas_85:

(Start: 18 @63276 has 33 MA's), (Start: 39 @63195 has 229 MA's), (50, 63126), (56, 63078), (59, 63057), (68, 63018),

Gene: LeiMonet_86 Start: 63329, Stop: 63027, Start Num: 39

Candidate Starts for LeiMonet_86:

(Start: 18 @63410 has 33 MA's), (Start: 39 @63329 has 229 MA's), (56, 63212), (59, 63191), (68, 63152),

Gene: LemonSlice_84 Start: 62854, Stop: 62552, Start Num: 39

Candidate Starts for LemonSlice_84:

(Start: 18 @62935 has 33 MA's), (Start: 39 @62854 has 229 MA's), (59, 62716), (68, 62677),

Gene: Lephleur_70 Start: 58910, Stop: 58608, Start Num: 45

Candidate Starts for Lephleur_70:

(Start: 45 @58910 has 80 MA's), (52, 58850), (56, 58811), (59, 58790), (64, 58769), (76, 58658), (80, 58637), (81, 58631), (83, 58625),

Gene: LestyG_78 Start: 60804, Stop: 60475, Start Num: 45

Candidate Starts for LestyG_78:

(Start: 45 @60804 has 80 MA's), (56, 60705), (59, 60684), (64, 60663),

Gene: LilMcDreamy_75 Start: 62248, Stop: 61784, Start Num: 39

Candidate Starts for LilMcDreamy_75:

(29, 62284), (37, 62254), (Start: 39 @62248 has 229 MA's), (56, 62131), (60, 62107), (68, 62071), (77, 61975), (89, 61846), (90, 61801), (91, 61792),

Gene: LizLemon_70 Start: 59075, Stop: 58773, Start Num: 45

Candidate Starts for LizLemon_70:

(Start: 45 @59075 has 80 MA's), (52, 59015), (56, 58976), (59, 58955), (64, 58934), (76, 58823), (80, 58802), (81, 58796), (83, 58790),

Gene: Longacauda_85 Start: 63348, Stop: 63046, Start Num: 39

Candidate Starts for Longacauda_85:

(Start: 18 @63429 has 33 MA's), (Start: 39 @63348 has 229 MA's), (50, 63279), (56, 63231), (59, 63210), (68, 63171),

Gene: Lopsy_81 Start: 62535, Stop: 62233, Start Num: 39

Candidate Starts for Lopsy_81:

(Start: 18 @62616 has 33 MA's), (Start: 39 @62535 has 229 MA's), (50, 62466), (56, 62418), (59, 62397),

Gene: LostAndPhound_83 Start: 63397, Stop: 63095, Start Num: 39

Candidate Starts for LostAndPhound_83:

(Start: 18 @63478 has 33 MA's), (Start: 39 @63397 has 229 MA's), (56, 63280), (59, 63259), (68, 63220),

Gene: LuckyMarjie_81 Start: 62606, Stop: 62304, Start Num: 39

Candidate Starts for LuckyMarjie_81:

(Start: 18 @62687 has 33 MA's), (Start: 39 @62606 has 229 MA's), (56, 62489), (59, 62468), (68, 62429),

Gene: Lulumae_81 Start: 62668, Stop: 62285, Start Num: 18

Candidate Starts for Lulumae_81:

(Start: 18 @62668 has 33 MA's), (Start: 39 @62587 has 229 MA's), (56, 62470), (59, 62449), (68, 62410),

Gene: Lulwa_81 Start: 62220, Stop: 61918, Start Num: 39

Candidate Starts for Lulwa_81:

(Start: 18 @62301 has 33 MA's), (Start: 39 @62220 has 229 MA's), (56, 62103), (59, 62082), (68, 62043),

Gene: Lumine_85 Start: 63045, Stop: 62743, Start Num: 39

Candidate Starts for Lumine_85:

(Start: 18 @63126 has 33 MA's), (Start: 39 @63045 has 229 MA's), (56, 62928), (59, 62907), (68, 62868),

Gene: MRabcd_84 Start: 63322, Stop: 63020, Start Num: 39

Candidate Starts for MRabcd_84:

(Start: 18 @63403 has 33 MA's), (Start: 39 @63322 has 229 MA's), (56, 63205), (59, 63184), (68, 63145),

Gene: Mag7_82 Start: 62806, Stop: 62504, Start Num: 39

Candidate Starts for Mag7_82:

(Start: 18 @62887 has 33 MA's), (Start: 39 @62806 has 229 MA's), (50, 62737), (56, 62689), (59, 62668), (68, 62629),

Gene: Magic8_83 Start: 63174, Stop: 62872, Start Num: 39

Candidate Starts for Magic8_83:

(Start: 18 @63255 has 33 MA's), (Start: 39 @63174 has 229 MA's), (56, 63057), (59, 63036), (68, 62997),

Gene: Magritte_241 Start: 125100, Stop: 125468, Start Num: 36

Candidate Starts for Magritte_241:

(Start: 36 @125100 has 8 MA's), (38, 125106), (51, 125181), (88, 125451),

Gene: MakoManhole_74 Start: 56700, Stop: 56401, Start Num: 36

Candidate Starts for MakoManhole_74:

(Start: 36 @56700 has 8 MA's), (60, 56568), (65, 56550), (76, 56439),

Gene: Mana_82 Start: 63010, Stop: 62708, Start Num: 39

Candidate Starts for Mana_82:

(Start: 18 @63091 has 33 MA's), (Start: 39 @63010 has 229 MA's), (56, 62893), (59, 62872), (68, 62833),

Gene: Manad_83 Start: 63120, Stop: 62818, Start Num: 39

Candidate Starts for Manad_83:

(Start: 18 @63201 has 33 MA's), (Start: 39 @63120 has 229 MA's), (56, 63003), (59, 62982), (68, 62943),

Gene: Marley1013_81 Start: 62170, Stop: 61841, Start Num: 45

Candidate Starts for Marley1013_81:

(Start: 45 @62170 has 80 MA's), (56, 62071), (59, 62050), (64, 62029),

Gene: Maru_84 Start: 63458, Stop: 63156, Start Num: 39

Candidate Starts for Maru_84:

(Start: 18 @63539 has 33 MA's), (Start: 39 @63458 has 229 MA's), (56, 63341), (59, 63320), (68, 63281),

Gene: Maskar_85 Start: 63370, Stop: 63068, Start Num: 39

Candidate Starts for Maskar_85:

(Start: 18 @63451 has 33 MA's), (Start: 39 @63370 has 229 MA's), (50, 63301), (56, 63253), (59, 63232), (68, 63193),

Gene: MasterPo_71 Start: 58942, Stop: 58640, Start Num: 45

Candidate Starts for MasterPo_71:

(Start: 45 @58942 has 80 MA's), (52, 58882), (56, 58843), (59, 58822), (64, 58801), (76, 58690), (80, 58669), (81, 58663), (83, 58657),

Gene: Matalotodo_83 Start: 63854, Stop: 63552, Start Num: 39

Candidate Starts for Matalotodo_83:

(Start: 18 @63935 has 33 MA's), (Start: 39 @63854 has 229 MA's), (56, 63737), (59, 63716), (68, 63677),

Gene: Mcshane_83 Start: 62868, Stop: 62566, Start Num: 39

Candidate Starts for Mcshane_83:

(Start: 18 @62949 has 33 MA's), (Start: 39 @62868 has 229 MA's), (56, 62751), (59, 62730), (68, 62691),

Gene: Mecca_84 Start: 63422, Stop: 63120, Start Num: 39

Candidate Starts for Mecca_84:

(Start: 18 @63503 has 33 MA's), (Start: 39 @63422 has 229 MA's), (56, 63305), (59, 63284), (68, 63245),

Gene: Megabear_66 Start: 49066, Stop: 49365, Start Num: 45

Candidate Starts for Megabear_66:

(Start: 45 @49066 has 80 MA's), (56, 49165), (59, 49186), (66, 49216), (70, 49273), (76, 49324), (82, 49354),

Gene: Megamind20_84 Start: 62832, Stop: 62530, Start Num: 39

Candidate Starts for Megamind20_84:

(Start: 18 @62913 has 33 MA's), (Start: 39 @62832 has 229 MA's), (50, 62763), (56, 62715), (59, 62694), (68, 62655),

Gene: Megatron_85 Start: 63540, Stop: 63238, Start Num: 39

Candidate Starts for Megatron_85:

(Start: 18 @63621 has 33 MA's), (Start: 39 @63540 has 229 MA's), (50, 63471), (56, 63423), (59, 63402), (68, 63363),

Gene: Melc17_81 Start: 63490, Stop: 63188, Start Num: 39

Candidate Starts for Melc17_81:

(Start: 18 @63571 has 33 MA's), (Start: 39 @63490 has 229 MA's), (56, 63373), (59, 63352), (68, 63313),

Gene: MelsMeow_83 Start: 63130, Stop: 62828, Start Num: 39

Candidate Starts for MelsMeow_83:

(Start: 18 @63211 has 33 MA's), (Start: 39 @63130 has 229 MA's), (50, 63061), (56, 63013), (59, 62992), (68, 62953),

Gene: Mesh1_85 Start: 63667, Stop: 63284, Start Num: 18

Candidate Starts for Mesh1_85:

(Start: 18 @63667 has 33 MA's), (Start: 39 @63586 has 229 MA's), (56, 63469), (59, 63448), (68, 63409),

Gene: MichaelPhcott_82 Start: 62803, Stop: 62501, Start Num: 39

Candidate Starts for MichaelPhcott_82:

(Start: 18 @62884 has 33 MA's), (Start: 39 @62803 has 229 MA's), (50, 62734), (56, 62686), (59, 62665), (68, 62626),

Gene: Mikota_81 Start: 62574, Stop: 62272, Start Num: 39

Candidate Starts for Mikota_81:

(Start: 18 @62655 has 33 MA's), (Start: 39 @62574 has 229 MA's), (56, 62457), (59, 62436), (68, 62397),

Gene: Mimi_203 Start: 137277, Stop: 137567, Start Num: 36

Candidate Starts for Mimi_203:

(27, 137241), (Start: 36 @137277 has 8 MA's), (58, 137394), (71, 137496),

Gene: MiniBoss_81 Start: 62175, Stop: 61873, Start Num: 39

Candidate Starts for MiniBoss_81:

(Start: 18 @62256 has 33 MA's), (Start: 39 @62175 has 229 MA's), (56, 62058), (59, 62037), (68, 61998),

Gene: MitKao_84 Start: 63024, Stop: 62722, Start Num: 39

Candidate Starts for MitKao_84:

(Start: 18 @63105 has 33 MA's), (Start: 39 @63024 has 229 MA's), (56, 62907), (59, 62886), (68, 62847),

Gene: MmasiCarm_81 Start: 61673, Stop: 61344, Start Num: 45

Candidate Starts for MmasiCarm_81:

(Start: 45 @61673 has 80 MA's), (56, 61574), (59, 61553), (64, 61532),

Gene: Morgushi_82 Start: 62919, Stop: 62536, Start Num: 18

Candidate Starts for Morgushi_82:

(Start: 18 @62919 has 33 MA's), (Start: 39 @62838 has 229 MA's), (56, 62721), (59, 62700), (68, 62661),

Gene: Morrissey_45 Start: 34634, Stop: 34356, Start Num: 35

Candidate Starts for Morrissey_45:

(Start: 35 @34634 has 3 MA's), (52, 34559), (56, 34532), (57, 34529), (62, 34508), (63, 34499), (65, 34490), (71, 34421),

Gene: Mortcellus_80 Start: 62399, Stop: 62070, Start Num: 45

Candidate Starts for Mortcellus_80:

(Start: 45 @62399 has 80 MA's), (56, 62300), (59, 62279), (64, 62258),

Gene: Morty_85 Start: 63410, Stop: 63108, Start Num: 39

Candidate Starts for Morty_85:

(Start: 18 @63491 has 33 MA's), (Start: 39 @63410 has 229 MA's), (56, 63293), (59, 63272), (68, 63233),

Gene: Morty007_79 Start: 62170, Stop: 61841, Start Num: 45

Candidate Starts for Morty007_79:

(Start: 45 @62170 has 80 MA's), (56, 62071), (59, 62050), (64, 62029),

Gene: Mosaic_82 Start: 63101, Stop: 62718, Start Num: 18

Candidate Starts for Mosaic_82:

(Start: 18 @63101 has 33 MA's), (Start: 39 @63020 has 229 MA's), (56, 62903), (59, 62882), (68, 62843),

Gene: MossRose_77 Start: 57611, Stop: 57312, Start Num: 36

Candidate Starts for MossRose_77:

(Start: 36 @57611 has 8 MA's), (60, 57479), (65, 57461), (76, 57350),

Gene: MrPhizzler_83 Start: 63318, Stop: 63016, Start Num: 39

Candidate Starts for MrPhizzler_83:

(Start: 18 @63399 has 33 MA's), (Start: 39 @63318 has 229 MA's), (56, 63201), (59, 63180), (68, 63141),

Gene: Mulan_83 Start: 63053, Stop: 62751, Start Num: 39

Candidate Starts for Mulan_83:

(Start: 18 @63134 has 33 MA's), (Start: 39 @63053 has 229 MA's), (56, 62936), (59, 62915), (68, 62876),

Gene: Murdoc_81 Start: 63212, Stop: 62829, Start Num: 18

Candidate Starts for Murdoc_81:

(Start: 18 @63212 has 33 MA's), (Start: 39 @63131 has 229 MA's), (56, 63014), (59, 62993), (68, 62954),

Gene: Mutante_85 Start: 63025, Stop: 62723, Start Num: 39

Candidate Starts for Mutante_85:

(Start: 18 @63106 has 33 MA's), (Start: 39 @63025 has 229 MA's), (56, 62908), (59, 62887), (68, 62848),

Gene: Nacho_0087 Start: 64177, Stop: 63794, Start Num: 18

Candidate Starts for Nacho_0087:

(Start: 18 @64177 has 33 MA's), (Start: 39 @64096 has 229 MA's), (56, 63979), (59, 63958), (68, 63919),

Gene: Neos5_80 Start: 61632, Stop: 61303, Start Num: 45

Candidate Starts for Neos5_80:

(Start: 45 @61632 has 80 MA's), (56, 61533), (59, 61512), (64, 61491),

Gene: Newman_82 Start: 63454, Stop: 63071, Start Num: 18

Candidate Starts for Newman_82:

(Start: 18 @63454 has 33 MA's), (Start: 39 @63373 has 229 MA's), (56, 63256), (59, 63235), (68, 63196),

Gene: Nicole21_85 Start: 63159, Stop: 62857, Start Num: 39

Candidate Starts for Nicole21_85:

(Start: 18 @63240 has 33 MA's), (Start: 39 @63159 has 229 MA's), (50, 63090), (56, 63042), (59, 63021), (68, 62982),

Gene: Nozo_80 Start: 62041, Stop: 61712, Start Num: 45

Candidate Starts for Nozo_80:

(Start: 45 @62041 has 80 MA's), (56, 61942), (59, 61921), (64, 61900),

Gene: Numberten_83 Start: 63140, Stop: 62838, Start Num: 39

Candidate Starts for Numberten_83:

(Start: 18 @63221 has 33 MA's), (Start: 39 @63140 has 229 MA's), (56, 63023), (59, 63002), (68, 62963),

Gene: Nyala_83 Start: 62875, Stop: 62573, Start Num: 39

Candidate Starts for Nyala_83:

(Start: 18 @62956 has 33 MA's), (Start: 39 @62875 has 229 MA's), (56, 62758), (59, 62737), (68, 62698),

Gene: OSmaximus_85 Start: 63706, Stop: 63404, Start Num: 39

Candidate Starts for OSmaximus_85:

(Start: 18 @63787 has 33 MA's), (Start: 39 @63706 has 229 MA's), (59, 63568), (68, 63529),

Gene: Obutu_82 Start: 61844, Stop: 61515, Start Num: 45

Candidate Starts for Obutu_82:

(Start: 45 @61844 has 80 MA's), (56, 61745), (59, 61724), (64, 61703),

Gene: Olak_83 Start: 63039, Stop: 62737, Start Num: 39

Candidate Starts for Olak_83:

(Start: 18 @63120 has 33 MA's), (Start: 39 @63039 has 229 MA's), (59, 62901), (68, 62862),

Gene: Oline_83 Start: 63029, Stop: 62727, Start Num: 39

Candidate Starts for Oline_83:

(Start: 18 @63110 has 33 MA's), (Start: 39 @63029 has 229 MA's), (56, 62912), (59, 62891), (68, 62852),

Gene: Olive_82 Start: 63270, Stop: 62968, Start Num: 39

Candidate Starts for Olive_82:

(Start: 18 @63351 has 33 MA's), (Start: 39 @63270 has 229 MA's), (56, 63153), (59, 63132), (68, 63093),

Gene: OliverWalter_84 Start: 63326, Stop: 63024, Start Num: 39

Candidate Starts for OliverWalter_84:

(Start: 18 @63407 has 33 MA's), (Start: 39 @63326 has 229 MA's), (56, 63209), (59, 63188), (68, 63149),

Gene: Omniscient_85 Start: 63729, Stop: 63427, Start Num: 39

Candidate Starts for Omniscient_85:

(Start: 18 @63810 has 33 MA's), (Start: 39 @63729 has 229 MA's), (50, 63660), (56, 63612), (59, 63591), (68, 63552),

Gene: Oosterbaan_84 Start: 63266, Stop: 62964, Start Num: 39

Candidate Starts for Oosterbaan_84:

(Start: 18 @63347 has 33 MA's), (Start: 39 @63266 has 229 MA's), (56, 63149), (59, 63128), (68, 63089),

Gene: Opia_71 Start: 58968, Stop: 58666, Start Num: 45

Candidate Starts for Opia_71:

(Start: 45 @58968 has 80 MA's), (52, 58908), (56, 58869), (59, 58848), (64, 58827), (76, 58716), (80, 58695), (81, 58689), (83, 58683),

Gene: Orfeu_83 Start: 63388, Stop: 63086, Start Num: 39

Candidate Starts for Orfeu_83:

(Start: 18 @63469 has 33 MA's), (Start: 39 @63388 has 229 MA's), (56, 63271), (59, 63250), (68, 63211),

Gene: Orion_83 Start: 63039, Stop: 62656, Start Num: 18

Candidate Starts for Orion_83:

(Start: 18 @63039 has 33 MA's), (Start: 39 @62958 has 229 MA's), (56, 62841), (59, 62820), (68, 62781),

Gene: Orwigg_84 Start: 62794, Stop: 62492, Start Num: 39

Candidate Starts for Orwigg_84:

(Start: 18 @62875 has 33 MA's), (Start: 39 @62794 has 229 MA's), (56, 62677), (59, 62656), (68, 62617),

Gene: PG1_83 Start: 63611, Stop: 63228, Start Num: 18

Candidate Starts for PG1_83:

(Start: 18 @63611 has 33 MA's), (Start: 39 @63530 has 229 MA's), (56, 63413), (59, 63392), (68, 63353),

Gene: PR_67 Start: 49757, Stop: 50056, Start Num: 45

Candidate Starts for PR_67:

(Start: 45 @49757 has 80 MA's), (56, 49856), (59, 49877), (66, 49907), (70, 49964), (76, 50015), (82, 50045),

Gene: Pacifista_83 Start: 62879, Stop: 62577, Start Num: 39

Candidate Starts for Pacifista_83:

(Start: 18 @62960 has 33 MA's), (Start: 39 @62879 has 229 MA's), (56, 62762), (59, 62741), (68, 62702),

Gene: Patbob_197 Start: 137664, Stop: 137954, Start Num: 36

Candidate Starts for Patbob_197:

(27, 137628), (Start: 36 @137664 has 8 MA's), (71, 137883),

Gene: Phaedrus_75 Start: 60692, Stop: 60363, Start Num: 45

Candidate Starts for Phaedrus_75:

(Start: 45 @60692 has 80 MA's), (56, 60593), (59, 60572), (64, 60551),

Gene: Phamished_84 Start: 63046, Stop: 62744, Start Num: 39

Candidate Starts for Phamished_84:

(Start: 18 @63127 has 33 MA's), (Start: 39 @63046 has 229 MA's), (56, 62929), (59, 62908), (68, 62869),

Gene: Phantasmagoria_69 Start: 58957, Stop: 58655, Start Num: 45

Candidate Starts for Phantasmagoria_69:

(Start: 45 @58957 has 80 MA's), (56, 58858), (59, 58837), (64, 58816), (76, 58705), (80, 58684), (81, 58678), (83, 58672),

Gene: Phareon_82 Start: 62571, Stop: 62269, Start Num: 39
Candidate Starts for Phareon_82:
(Start: 18 @62652 has 33 MA's), (Start: 39 @62571 has 229 MA's), (56, 62454), (59, 62433), (68, 62394),

Gene: PhatCats2014_84 Start: 63611, Stop: 63228, Start Num: 18
Candidate Starts for PhatCats2014_84:
(Start: 18 @63611 has 33 MA's), (Start: 39 @63530 has 229 MA's), (50, 63461), (56, 63413), (59, 63392), (68, 63353),

Gene: PhatLouie_86 Start: 63405, Stop: 63103, Start Num: 39
Candidate Starts for PhatLouie_86:
(Start: 18 @63486 has 33 MA's), (Start: 39 @63405 has 229 MA's), (56, 63288), (59, 63267), (68, 63228),

Gene: Phayeta_83 Start: 61761, Stop: 61432, Start Num: 45
Candidate Starts for Phayeta_83:
(Start: 45 @61761 has 80 MA's), (56, 61662), (59, 61641), (64, 61620),

Gene: PhenghisKhan_84 Start: 63035, Stop: 62733, Start Num: 39
Candidate Starts for PhenghisKhan_84:
(Start: 18 @63116 has 33 MA's), (Start: 39 @63035 has 229 MA's), (50, 62966), (56, 62918), (59, 62897), (68, 62858),

Gene: Pherdinand_85 Start: 63251, Stop: 62949, Start Num: 39
Candidate Starts for Pherdinand_85:
(Start: 18 @63332 has 33 MA's), (Start: 39 @63251 has 229 MA's), (50, 63182), (56, 63134), (59, 63113), (68, 63074),

Gene: Phergie_84 Start: 63024, Stop: 62722, Start Num: 39
Candidate Starts for Phergie_84:
(Start: 18 @63105 has 33 MA's), (Start: 39 @63024 has 229 MA's), (50, 62955), (56, 62907), (59, 62886), (68, 62847),

Gene: Philly_79 Start: 61124, Stop: 60795, Start Num: 45
Candidate Starts for Philly_79:
(Start: 45 @61124 has 80 MA's), (56, 61025), (59, 61004), (64, 60983),

Gene: Phipps_83 Start: 63102, Stop: 62800, Start Num: 39
Candidate Starts for Phipps_83:
(Start: 18 @63183 has 33 MA's), (Start: 39 @63102 has 229 MA's), (56, 62985), (59, 62964), (68, 62925),

Gene: Phleuron_82 Start: 62836, Stop: 62534, Start Num: 39
Candidate Starts for Phleuron_82:
(Start: 18 @62917 has 33 MA's), (Start: 39 @62836 has 229 MA's), (50, 62767), (56, 62719), (59, 62698), (68, 62659),

Gene: Phlyer_80 Start: 61987, Stop: 61658, Start Num: 45
Candidate Starts for Phlyer_80:
(Start: 45 @61987 has 80 MA's), (56, 61888), (59, 61867), (64, 61846),

Gene: Phrampa_191 Start: 137032, Stop: 137322, Start Num: 36

Candidate Starts for Phrampa_191:

(27, 136996), (Start: 36 @137032 has 8 MA's), (71, 137251),

Gene: PhrankReynolds_83 Start: 63110, Stop: 62727, Start Num: 18

Candidate Starts for PhrankReynolds_83:

(Start: 18 @63110 has 33 MA's), (Start: 39 @63029 has 229 MA's), (50, 62960), (56, 62912), (59, 62891), (68, 62852),

Gene: PhrodoBaggins_86 Start: 63405, Stop: 63103, Start Num: 39

Candidate Starts for PhrodoBaggins_86:

(Start: 18 @63486 has 33 MA's), (Start: 39 @63405 has 229 MA's), (56, 63288), (59, 63267), (68, 63228),

Gene: Phunky_82 Start: 62909, Stop: 62607, Start Num: 39

Candidate Starts for Phunky_82:

(Start: 18 @62990 has 33 MA's), (Start: 39 @62909 has 229 MA's), (59, 62771), (68, 62732),

Gene: Piglet_0084 Start: 63524, Stop: 63222, Start Num: 39

Candidate Starts for Piglet_0084:

(Start: 18 @63605 has 33 MA's), (Start: 39 @63524 has 229 MA's), (56, 63407), (59, 63386), (68, 63347),

Gene: PinheadLarry_83 Start: 63175, Stop: 62873, Start Num: 39

Candidate Starts for PinheadLarry_83:

(Start: 18 @63256 has 33 MA's), (Start: 39 @63175 has 229 MA's), (59, 63037), (68, 62998),

Gene: Pinkman_84 Start: 63248, Stop: 62946, Start Num: 39

Candidate Starts for Pinkman_84:

(Start: 18 @63329 has 33 MA's), (Start: 39 @63248 has 229 MA's), (56, 63131), (59, 63110), (68, 63071),

Gene: Pipefish_82 Start: 62383, Stop: 62054, Start Num: 45

Candidate Starts for Pipefish_82:

(Start: 45 @62383 has 80 MA's), (56, 62284), (59, 62263), (64, 62242),

Gene: Pipsqueak_81 Start: 62861, Stop: 62559, Start Num: 39

Candidate Starts for Pipsqueak_81:

(Start: 18 @62942 has 33 MA's), (Start: 39 @62861 has 229 MA's), (56, 62744), (59, 62723), (68, 62684),

Gene: Placalicious_83 Start: 63894, Stop: 63592, Start Num: 39

Candidate Starts for Placalicious_83:

(Start: 18 @63975 has 33 MA's), (Start: 39 @63894 has 229 MA's), (56, 63777), (59, 63756), (68, 63717),

Gene: Plmatters_82 Start: 62849, Stop: 62547, Start Num: 39

Candidate Starts for Plmatters_82:

(Start: 18 @62930 has 33 MA's), (Start: 39 @62849 has 229 MA's), (56, 62732), (59, 62711), (68, 62672),

Gene: Podrick_83 Start: 62937, Stop: 62635, Start Num: 39

Candidate Starts for Podrick_83:

(Start: 18 @63018 has 33 MA's), (Start: 39 @62937 has 229 MA's), (56, 62820), (59, 62799), (68, 62760),

Gene: Pops_82 Start: 63120, Stop: 62737, Start Num: 18

Candidate Starts for Pops_82:

(Start: 18 @63120 has 33 MA's), (Start: 39 @63039 has 229 MA's), (56, 62922), (59, 62901), (68, 62862),

Gene: Potter_80 Start: 62858, Stop: 62556, Start Num: 39

Candidate Starts for Potter_80:

(Start: 18 @62939 has 33 MA's), (Start: 39 @62858 has 229 MA's), (56, 62741), (59, 62720), (68, 62681),

Gene: Prickles_85 Start: 63228, Stop: 62926, Start Num: 39

Candidate Starts for Prickles_85:

(Start: 18 @63309 has 33 MA's), (Start: 39 @63228 has 229 MA's), (59, 63090), (68, 63051),

Gene: ProfessorX_82 Start: 62895, Stop: 62593, Start Num: 39

Candidate Starts for ProfessorX_82:

(Start: 18 @62976 has 33 MA's), (Start: 39 @62895 has 229 MA's), (56, 62778), (59, 62757), (68, 62718),

Gene: Puhltonio_81 Start: 63213, Stop: 62830, Start Num: 18

Candidate Starts for Puhltonio_81:

(Start: 18 @63213 has 33 MA's), (Start: 39 @63132 has 229 MA's), (56, 63015), (59, 62994), (68, 62955),

Gene: Puppies_40 Start: 32033, Stop: 31737, Start Num: 35

Candidate Starts for Puppies_40:

(7, 32213), (8, 32204), (16, 32105), (Start: 35 @32033 has 3 MA's), (52, 31949), (63, 31889), (71, 31811),

Gene: QueenBeane_84 Start: 63182, Stop: 62880, Start Num: 39

Candidate Starts for QueenBeane_84:

(Start: 18 @63263 has 33 MA's), (Start: 39 @63182 has 229 MA's), (50, 63113), (56, 63065), (59, 63044), (68, 63005),

Gene: Quisquilliae_86 Start: 63192, Stop: 62890, Start Num: 39

Candidate Starts for Quisquilliae_86:

(Start: 18 @63273 has 33 MA's), (Start: 39 @63192 has 229 MA's), (56, 63075), (59, 63054), (68, 63015),

Gene: Racecar_198 Start: 137389, Stop: 137679, Start Num: 36

Candidate Starts for Racecar_198:

(27, 137353), (Start: 36 @137389 has 8 MA's), (58, 137506), (71, 137608),

Gene: RagingRooster_79 Start: 60967, Stop: 60638, Start Num: 45

Candidate Starts for RagingRooster_79:

(Start: 45 @60967 has 80 MA's), (56, 60868), (59, 60847), (64, 60826),

Gene: RedMaple_84 Start: 63795, Stop: 63493, Start Num: 39

Candidate Starts for RedMaple_84:

(Start: 18 @63876 has 33 MA's), (Start: 39 @63795 has 229 MA's), (56, 63678), (59, 63657), (68, 63618),

Gene: Rhinoforte_70 Start: 58995, Stop: 58693, Start Num: 45

Candidate Starts for Rhinoforte_70:

(Start: 45 @58995 has 80 MA's), (52, 58935), (56, 58896), (59, 58875), (64, 58854), (76, 58743), (80, 58722), (81, 58716), (83, 58710),

Gene: Ricotta_84 Start: 62877, Stop: 62575, Start Num: 39

Candidate Starts for Ricotta_84:

(Start: 18 @62958 has 33 MA's), (Start: 39 @62877 has 229 MA's), (56, 62760), (59, 62739), (68, 62700),

Gene: Riggan_85 Start: 63363, Stop: 63061, Start Num: 39

Candidate Starts for Riggan_85:

(Start: 18 @63444 has 33 MA's), (Start: 39 @63363 has 229 MA's), (50, 63294), (56, 63246), (59, 63225), (68, 63186),

Gene: Rimu_88 Start: 63341, Stop: 63039, Start Num: 39

Candidate Starts for Rimu_88:

(Start: 18 @63422 has 33 MA's), (Start: 39 @63341 has 229 MA's), (56, 63224), (59, 63203), (68, 63164),

Gene: Rita1961_81 Start: 61621, Stop: 61292, Start Num: 45

Candidate Starts for Rita1961_81:

(Start: 45 @61621 has 80 MA's), (56, 61522), (59, 61501), (64, 61480),

Gene: Robyn_86 Start: 63620, Stop: 63318, Start Num: 39

Candidate Starts for Robyn_86:

(Start: 18 @63701 has 33 MA's), (Start: 39 @63620 has 229 MA's), (56, 63503), (59, 63482), (68, 63443),

Gene: Roliet_81 Start: 62222, Stop: 61920, Start Num: 39

Candidate Starts for Roliet_81:

(Start: 18 @62303 has 33 MA's), (Start: 39 @62222 has 229 MA's), (56, 62105), (59, 62084), (68, 62045),

Gene: RomaT_80 Start: 61841, Stop: 61512, Start Num: 45

Candidate Starts for RomaT_80:

(Start: 45 @61841 has 80 MA's), (56, 61742), (59, 61721), (64, 61700),

Gene: Roscoe_84 Start: 63482, Stop: 63180, Start Num: 39

Candidate Starts for Roscoe_84:

(Start: 18 @63563 has 33 MA's), (Start: 39 @63482 has 229 MA's), (56, 63365), (59, 63344), (68, 63305),

Gene: Rosebush_69 Start: 59062, Stop: 58760, Start Num: 45

Candidate Starts for Rosebush_69:

(Start: 45 @59062 has 80 MA's), (52, 59002), (56, 58963), (59, 58942), (64, 58921), (76, 58810), (80, 58789), (81, 58783), (83, 58777),

Gene: Roy17_82 Start: 62668, Stop: 62285, Start Num: 18

Candidate Starts for Roy17_82:

(Start: 18 @62668 has 33 MA's), (Start: 39 @62587 has 229 MA's), (56, 62470), (59, 62449), (68, 62410),

Gene: SDcharge11_83 Start: 62515, Stop: 62213, Start Num: 39

Candidate Starts for SDcharge11_83:

(Start: 18 @62596 has 33 MA's), (Start: 39 @62515 has 229 MA's), (56, 62398), (59, 62377), (68, 62338),

Gene: Sabella_70 Start: 58897, Stop: 58595, Start Num: 45

Candidate Starts for Sabella_70:

(Start: 45 @58897 has 80 MA's), (56, 58798), (59, 58777), (64, 58756), (76, 58645), (80, 58624), (81, 58618), (83, 58612),

Gene: Samaymay_84 Start: 63182, Stop: 62880, Start Num: 39

Candidate Starts for Samaymay_84:

(Start: 18 @63263 has 33 MA's), (Start: 39 @63182 has 229 MA's), (50, 63113), (56, 63065), (59, 63044), (68, 63005),

Gene: SassyCat97_82 Start: 62849, Stop: 62547, Start Num: 39

Candidate Starts for SassyCat97_82:

(Start: 18 @62930 has 33 MA's), (Start: 39 @62849 has 229 MA's), (56, 62732), (59, 62711), (68, 62672),

Gene: Schadenfreude_84 Start: 62740, Stop: 62438, Start Num: 39

Candidate Starts for Schadenfreude_84:

(Start: 18 @62821 has 33 MA's), (Start: 39 @62740 has 229 MA's), (56, 62623), (59, 62602), (68, 62563),

Gene: Schueller_83 Start: 63123, Stop: 62821, Start Num: 39

Candidate Starts for Schueller_83:

(Start: 18 @63204 has 33 MA's), (Start: 39 @63123 has 229 MA's), (50, 63054), (56, 63006), (59, 62985), (68, 62946),

Gene: Scoot17C_85 Start: 62962, Stop: 62660, Start Num: 39

Candidate Starts for Scoot17C_85:

(Start: 18 @63043 has 33 MA's), (Start: 39 @62962 has 229 MA's), (56, 62845), (59, 62824), (68, 62785),

Gene: Scrick_83 Start: 62863, Stop: 62561, Start Num: 39

Candidate Starts for Scrick_83:

(Start: 18 @62944 has 33 MA's), (Start: 39 @62863 has 229 MA's), (56, 62746), (59, 62725), (68, 62686),

Gene: Selr12_85 Start: 62905, Stop: 62603, Start Num: 39

Candidate Starts for Selr12_85:

(Start: 18 @62986 has 33 MA's), (Start: 39 @62905 has 229 MA's), (56, 62788), (59, 62767), (68, 62728),

Gene: Serendipity_84 Start: 63416, Stop: 63033, Start Num: 18

Candidate Starts for Serendipity_84:

(Start: 18 @63416 has 33 MA's), (Start: 39 @63335 has 229 MA's), (56, 63218), (59, 63197), (68, 63158),

Gene: Serpentine_0085 Start: 63416, Stop: 63114, Start Num: 39
Candidate Starts for Serpentine_0085:
(Start: 18 @63497 has 33 MA's), (Start: 39 @63416 has 229 MA's), (56, 63299), (59, 63278), (68, 63239),

Gene: Sheila_80 Start: 62428, Stop: 62126, Start Num: 39
Candidate Starts for Sheila_80:
(Start: 18 @62509 has 33 MA's), (Start: 39 @62428 has 229 MA's), (56, 62311), (59, 62290), (68, 62251),

Gene: ShiVal_82 Start: 62887, Stop: 62585, Start Num: 39
Candidate Starts for ShiVal_82:
(Start: 18 @62968 has 33 MA's), (Start: 39 @62887 has 229 MA's), (56, 62770), (59, 62749), (68, 62710),

Gene: Sigman_84 Start: 62924, Stop: 62541, Start Num: 18
Candidate Starts for Sigman_84:
(Start: 18 @62924 has 33 MA's), (Start: 39 @62843 has 229 MA's), (50, 62774), (56, 62726), (59, 62705), (68, 62666),

Gene: SilverBell_85 Start: 63378, Stop: 62995, Start Num: 18
Candidate Starts for SilverBell_85:
(Start: 18 @63378 has 33 MA's), (Start: 39 @63297 has 229 MA's), (50, 63228), (56, 63180), (59, 63159), (68, 63120),

Gene: Simielle_83 Start: 62829, Stop: 62527, Start Num: 39
Candidate Starts for Simielle_83:
(Start: 18 @62910 has 33 MA's), (Start: 39 @62829 has 229 MA's), (56, 62712), (59, 62691), (68, 62652),

Gene: Skippy_85 Start: 63257, Stop: 62955, Start Num: 39
Candidate Starts for Skippy_85:
(Start: 18 @63338 has 33 MA's), (Start: 39 @63257 has 229 MA's), (56, 63140), (59, 63119), (68, 63080),

Gene: Slatt_84 Start: 63144, Stop: 62842, Start Num: 39
Candidate Starts for Slatt_84:
(Start: 18 @63225 has 33 MA's), (Start: 39 @63144 has 229 MA's), (56, 63027), (59, 63006), (68, 62967),

Gene: SlippinJimmy_83 Start: 62651, Stop: 62322, Start Num: 45
Candidate Starts for SlippinJimmy_83:
(Start: 45 @62651 has 80 MA's), (56, 62552), (59, 62531), (64, 62510),

Gene: Soile_85 Start: 63382, Stop: 63080, Start Num: 39
Candidate Starts for Soile_85:
(Start: 18 @63463 has 33 MA's), (Start: 39 @63382 has 229 MA's), (56, 63265), (59, 63244), (68, 63205),

Gene: Solosis_82 Start: 62850, Stop: 62548, Start Num: 39
Candidate Starts for Solosis_82:
(Start: 18 @62931 has 33 MA's), (Start: 39 @62850 has 229 MA's), (56, 62733), (59, 62712),

Gene: Sophia_82 Start: 62839, Stop: 62537, Start Num: 39
Candidate Starts for Sophia_82:
(Start: 18 @62920 has 33 MA's), (Start: 39 @62839 has 229 MA's), (59, 62701), (68, 62662),

Gene: Soto_81 Start: 62555, Stop: 62253, Start Num: 39
Candidate Starts for Soto_81:
(Start: 18 @62636 has 33 MA's), (Start: 39 @62555 has 229 MA's), (56, 62438), (59, 62417), (68, 62378),

Gene: Spartan300_83 Start: 63100, Stop: 62798, Start Num: 39
Candidate Starts for Spartan300_83:
(Start: 18 @63181 has 33 MA's), (Start: 39 @63100 has 229 MA's), (56, 62983), (59, 62962), (68, 62923),

Gene: Squid_83 Start: 63129, Stop: 62827, Start Num: 39
Candidate Starts for Squid_83:
(Start: 18 @63210 has 33 MA's), (Start: 39 @63129 has 229 MA's), (56, 63012), (59, 62991), (68, 62952),

Gene: Squiggle_83 Start: 62857, Stop: 62555, Start Num: 39
Candidate Starts for Squiggle_83:
(Start: 18 @62938 has 33 MA's), (Start: 39 @62857 has 229 MA's), (56, 62740), (59, 62719), (68, 62680),

Gene: StinkyVeggy_75 Start: 62138, Stop: 61818, Start Num: 41
Candidate Starts for StinkyVeggy_75:
(24, 62207), (25, 62204), (33, 62162), (41, 62138), (56, 62021), (60, 61997), (65, 61979), (67, 61973), (68, 61961), (76, 61871), (85, 61829),

Gene: Struggle_84 Start: 62955, Stop: 62653, Start Num: 39
Candidate Starts for Struggle_84:
(Start: 18 @63036 has 33 MA's), (Start: 39 @62955 has 229 MA's), (56, 62838), (59, 62817), (68, 62778),

Gene: Suffolk_81 Start: 62932, Stop: 62549, Start Num: 18
Candidate Starts for Suffolk_81:
(Start: 18 @62932 has 33 MA's), (Start: 39 @62851 has 229 MA's), (56, 62734), (59, 62713), (68, 62674),

Gene: Surely_84 Start: 63420, Stop: 63118, Start Num: 39
Candidate Starts for Surely_84:
(Start: 18 @63501 has 33 MA's), (Start: 39 @63420 has 229 MA's), (56, 63303), (59, 63282), (68, 63243),

Gene: Swiphy_88 Start: 63405, Stop: 63103, Start Num: 39
Candidate Starts for Swiphy_88:
(Start: 18 @63486 has 33 MA's), (Start: 39 @63405 has 229 MA's), (56, 63288), (59, 63267), (68, 63228),

Gene: Swish_85 Start: 63266, Stop: 62964, Start Num: 39
Candidate Starts for Swish_85:
(Start: 18 @63347 has 33 MA's), (Start: 39 @63266 has 229 MA's), (56, 63149), (59, 63128), (68, 63089),

Gene: SynergyX_80 Start: 61278, Stop: 60949, Start Num: 45
Candidate Starts for SynergyX_80:
(Start: 45 @61278 has 80 MA's), (56, 61179), (59, 61158), (64, 61137),

Gene: TA17A_70 Start: 58905, Stop: 58603, Start Num: 45
Candidate Starts for TA17A_70:
(Start: 45 @58905 has 80 MA's), (56, 58806), (59, 58785), (64, 58764), (76, 58653), (80, 58632), (81, 58626),

Gene: TPA2_75 Start: 59427, Stop: 59762, Start Num: 36
Candidate Starts for TPA2_75:
(Start: 36 @59427 has 8 MA's), (61, 59565), (65, 59580), (68, 59601), (79, 59709), (86, 59751),

Gene: Talia1610_198 Start: 137685, Stop: 137975, Start Num: 36
Candidate Starts for Talia1610_198:
(27, 137649), (Start: 36 @137685 has 8 MA's), (58, 137802), (71, 137904),

Gene: TallGrassMM_83 Start: 62915, Stop: 62613, Start Num: 39
Candidate Starts for TallGrassMM_83:
(Start: 18 @62996 has 33 MA's), (Start: 39 @62915 has 229 MA's), (56, 62798), (59, 62777),

Gene: Taptic_67 Start: 49153, Stop: 49491, Start Num: 45
Candidate Starts for Taptic_67:
(26, 49072), (Start: 45 @49153 has 80 MA's), (56, 49252), (59, 49273), (66, 49303), (70, 49360), (76, 49411), (85, 49453),

Gene: Telesworld_82 Start: 62993, Stop: 62691, Start Num: 39
Candidate Starts for Telesworld_82:
(Start: 18 @63074 has 33 MA's), (Start: 39 @62993 has 229 MA's), (50, 62924), (56, 62876), (59, 62855), (68, 62816),

Gene: Thonko_87 Start: 63460, Stop: 63152, Start Num: 39
Candidate Starts for Thonko_87:
(1, 63853), (2, 63850), (4, 63805), (5, 63748), (6, 63745), (9, 63604), (12, 63583), (Start: 39 @63460 has 229 MA's), (52, 63382), (56, 63343), (59, 63322), (73, 63226), (78, 63184),

Gene: Thora_83 Start: 63370, Stop: 63068, Start Num: 39
Candidate Starts for Thora_83:
(Start: 18 @63451 has 33 MA's), (Start: 39 @63370 has 229 MA's), (56, 63253), (59, 63232), (68, 63193),

Gene: ThreeOh3D2_86 Start: 63523, Stop: 63221, Start Num: 39
Candidate Starts for ThreeOh3D2_86:
(Start: 18 @63604 has 33 MA's), (Start: 39 @63523 has 229 MA's), (56, 63406), (59, 63385), (68, 63346),

Gene: Thunderbird_84 Start: 63112, Stop: 62810, Start Num: 39
Candidate Starts for Thunderbird_84:
(Start: 18 @63193 has 33 MA's), (Start: 39 @63112 has 229 MA's), (56, 62995), (59, 62974), (68, 62935),

Gene: Timmi_83 Start: 62886, Stop: 62584, Start Num: 39

Candidate Starts for Timmi_83:

(Start: 18 @62967 has 33 MA's), (Start: 39 @62886 has 229 MA's), (56, 62769), (59, 62748), (68, 62709),

Gene: Tinciduntsolum_71 Start: 59064, Stop: 58762, Start Num: 45

Candidate Starts for Tinciduntsolum_71:

(Start: 45 @59064 has 80 MA's), (52, 59004), (56, 58965), (59, 58944), (64, 58923), (76, 58812), (80, 58791), (81, 58785), (83, 58779),

Gene: TomBombadil_84 Start: 63413, Stop: 63111, Start Num: 39

Candidate Starts for TomBombadil_84:

(Start: 18 @63494 has 33 MA's), (Start: 39 @63413 has 229 MA's), (56, 63296), (59, 63275), (68, 63236),

Gene: Tomlarah_85 Start: 63720, Stop: 63418, Start Num: 39

Candidate Starts for Tomlarah_85:

(Start: 39 @63720 has 229 MA's), (50, 63651), (56, 63603), (59, 63582), (68, 63543),

Gene: Toni_84 Start: 63397, Stop: 63014, Start Num: 18

Candidate Starts for Toni_84:

(Start: 18 @63397 has 33 MA's), (Start: 39 @63316 has 229 MA's), (56, 63199), (59, 63178), (68, 63139),

Gene: Tooj_81 Start: 62529, Stop: 62227, Start Num: 39

Candidate Starts for Tooj_81:

(Start: 18 @62610 has 33 MA's), (Start: 39 @62529 has 229 MA's), (50, 62460), (56, 62412), (59, 62391), (68, 62352),

Gene: Tres_70 Start: 58918, Stop: 58616, Start Num: 45

Candidate Starts for Tres_70:

(Start: 45 @58918 has 80 MA's), (52, 58858), (56, 58819), (59, 58798), (64, 58777), (76, 58666), (80, 58645), (81, 58639), (83, 58633),

Gene: True_82 Start: 62862, Stop: 62560, Start Num: 39

Candidate Starts for True_82:

(Start: 18 @62943 has 33 MA's), (Start: 39 @62862 has 229 MA's), (56, 62745), (59, 62724), (68, 62685),

Gene: Trypo_85 Start: 63665, Stop: 63282, Start Num: 18

Candidate Starts for Trypo_85:

(Start: 18 @63665 has 33 MA's), (Start: 39 @63584 has 229 MA's), (56, 63467), (59, 63446), (68, 63407),

Gene: Tydolla_76 Start: 61257, Stop: 60928, Start Num: 45

Candidate Starts for Tydolla_76:

(Start: 45 @61257 has 80 MA's), (56, 61158), (59, 61137), (64, 61116),

Gene: TyrionL_84 Start: 62946, Stop: 62644, Start Num: 39

Candidate Starts for TyrionL_84:

(Start: 18 @63027 has 33 MA's), (Start: 39 @62946 has 229 MA's), (56, 62829), (59, 62808), (68, 62769),

Gene: UAch1_85 Start: 63213, Stop: 62911, Start Num: 39

Candidate Starts for UAch1_85:

(Start: 18 @63294 has 33 MA's), (Start: 39 @63213 has 229 MA's), (56, 63096), (59, 63075), (68, 63036),

Gene: UncleHowie_81 Start: 62631, Stop: 62248, Start Num: 18

Candidate Starts for UncleHowie_81:

(Start: 18 @62631 has 33 MA's), (Start: 39 @62550 has 229 MA's), (56, 62433), (59, 62412), (68, 62373),

Gene: Upyo_44 Start: 33729, Stop: 33457, Start Num: 39

Candidate Starts for Upyo_44:

(19, 33810), (22, 33807), (28, 33774), (Start: 39 @33729 has 229 MA's), (52, 33657), (56, 33630), (57, 33627), (69, 33558), (71, 33519),

Gene: Usavi_85 Start: 63710, Stop: 63408, Start Num: 39

Candidate Starts for Usavi_85:

(Start: 18 @63791 has 33 MA's), (Start: 39 @63710 has 229 MA's), (56, 63593), (59, 63572), (68, 63533),

Gene: Vaishali24_85 Start: 63319, Stop: 63017, Start Num: 39

Candidate Starts for Vaishali24_85:

(Start: 18 @63400 has 33 MA's), (Start: 39 @63319 has 229 MA's), (56, 63202), (59, 63181), (68, 63142),

Gene: Valjean_83 Start: 63104, Stop: 62802, Start Num: 39

Candidate Starts for Valjean_83:

(Start: 18 @63185 has 33 MA's), (Start: 39 @63104 has 229 MA's), (56, 62987), (59, 62966), (68, 62927),

Gene: Vaticameos_81 Start: 61419, Stop: 61117, Start Num: 39

Candidate Starts for Vaticameos_81:

(Start: 18 @61500 has 33 MA's), (Start: 39 @61419 has 229 MA's), (56, 61302), (59, 61281), (68, 61242),

Gene: Veritas_83 Start: 63027, Stop: 62725, Start Num: 39

Candidate Starts for Veritas_83:

(Start: 18 @63108 has 33 MA's), (Start: 39 @63027 has 229 MA's), (50, 62958), (56, 62910), (59, 62889), (68, 62850),

Gene: Vic9_73 Start: 59761, Stop: 59459, Start Num: 45

Candidate Starts for Vic9_73:

(Start: 45 @59761 has 80 MA's), (52, 59701), (56, 59662), (59, 59641), (64, 59620), (76, 59509), (80, 59488), (81, 59482), (83, 59476),

Gene: Virapocalypse_85 Start: 63212, Stop: 62910, Start Num: 39

Candidate Starts for Virapocalypse_85:

(Start: 18 @63293 has 33 MA's), (Start: 39 @63212 has 229 MA's), (56, 63095), (59, 63074), (68, 63035),

Gene: Virgeve_82 Start: 62832, Stop: 62530, Start Num: 39

Candidate Starts for Virgeve_82:

(Start: 18 @62913 has 33 MA's), (Start: 39 @62832 has 229 MA's), (56, 62715), (59, 62694), (68, 62655),

Gene: Vista_83 Start: 63026, Stop: 62724, Start Num: 39

Candidate Starts for Vista_83:

(Start: 18 @63107 has 33 MA's), (Start: 39 @63026 has 229 MA's), (50, 62957), (56, 62909), (59, 62888), (68, 62849),

Gene: Vivaldi_84 Start: 63291, Stop: 62989, Start Num: 39

Candidate Starts for Vivaldi_84:

(Start: 18 @63372 has 33 MA's), (Start: 39 @63291 has 229 MA's), (50, 63222), (56, 63174), (59, 63153), (68, 63114),

Gene: Vortex_83 Start: 63213, Stop: 62830, Start Num: 18

Candidate Starts for Vortex_83:

(Start: 18 @63213 has 33 MA's), (Start: 39 @63132 has 229 MA's), (56, 63015), (59, 62994), (68, 62955),

Gene: Wallhey_85 Start: 63133, Stop: 62831, Start Num: 39

Candidate Starts for Wallhey_85:

(Start: 18 @63214 has 33 MA's), (Start: 39 @63133 has 229 MA's), (56, 63016), (59, 62995), (68, 62956),

Gene: Waterdiva_85 Start: 63400, Stop: 63098, Start Num: 39

Candidate Starts for Waterdiva_85:

(Start: 18 @63481 has 33 MA's), (Start: 39 @63400 has 229 MA's), (56, 63283), (59, 63262), (68, 63223),

Gene: Weher20_81 Start: 63470, Stop: 63168, Start Num: 39

Candidate Starts for Weher20_81:

(Start: 18 @63551 has 33 MA's), (Start: 39 @63470 has 229 MA's), (56, 63353), (59, 63332), (68, 63293),

Gene: West99_70 Start: 59095, Stop: 58793, Start Num: 45

Candidate Starts for West99_70:

(Start: 45 @59095 has 80 MA's), (52, 59035), (56, 58996), (59, 58975), (64, 58954), (76, 58843), (80, 58822), (81, 58816), (83, 58810),

Gene: Wilca_53 Start: 37010, Stop: 36696, Start Num: 39

Candidate Starts for Wilca_53:

(30, 37040), (Start: 39 @37010 has 229 MA's), (51, 36941), (62, 36887), (74, 36767), (79, 36743), (84, 36719),

Gene: Windsor_84 Start: 63415, Stop: 63113, Start Num: 39

Candidate Starts for Windsor_84:

(Start: 18 @63496 has 33 MA's), (Start: 39 @63415 has 229 MA's), (56, 63298), (59, 63277), (68, 63238),

Gene: Xavier_84 Start: 63105, Stop: 62722, Start Num: 18

Candidate Starts for Xavier_84:

(Start: 18 @63105 has 33 MA's), (Start: 39 @63024 has 229 MA's), (56, 62907), (59, 62886), (68, 62847),

Gene: Yahalom_78 Start: 61084, Stop: 60755, Start Num: 45

Candidate Starts for Yahalom_78:

(Start: 45 @61084 has 80 MA's), (56, 60985), (59, 60964), (64, 60943),

Gene: Yinz_80 Start: 61149, Stop: 60820, Start Num: 45

Candidate Starts for Yinz_80:

(Start: 45 @61149 has 80 MA's), (56, 61050), (59, 61029), (64, 61008),

Gene: Yoshand_85 Start: 63250, Stop: 62948, Start Num: 39

Candidate Starts for Yoshand_85:

(Start: 18 @63331 has 33 MA's), (Start: 39 @63250 has 229 MA's), (56, 63133), (59, 63112), (68, 63073),

Gene: YouGoGlencoco_84 Start: 63140, Stop: 62838, Start Num: 39

Candidate Starts for YouGoGlencoco_84:

(Start: 18 @63221 has 33 MA's), (Start: 39 @63140 has 229 MA's), (56, 63023), (59, 63002), (68, 62963),

Gene: Zaider_85 Start: 63514, Stop: 63212, Start Num: 39

Candidate Starts for Zaider_85:

(Start: 18 @63595 has 33 MA's), (Start: 39 @63514 has 229 MA's), (56, 63397), (59, 63376), (68, 63337),

Gene: Zelda_84 Start: 63471, Stop: 63169, Start Num: 39

Candidate Starts for Zelda_84:

(Start: 18 @63552 has 33 MA's), (Start: 39 @63471 has 229 MA's), (56, 63354), (59, 63333), (68, 63294),

Gene: Zonia_85 Start: 63662, Stop: 63279, Start Num: 18

Candidate Starts for Zonia_85:

(Start: 18 @63662 has 33 MA's), (Start: 39 @63581 has 229 MA's), (56, 63464), (59, 63443), (68, 63404),

Gene: phiAsp2_75 Start: 57707, Stop: 58057, Start Num: 19

Candidate Starts for phiAsp2_75:

(19, 57707), (Start: 45 @57806 has 80 MA's), (46, 57827), (47, 57833), (48, 57836), (61, 57920), (63, 57932), (65, 57941), (67, 57947),