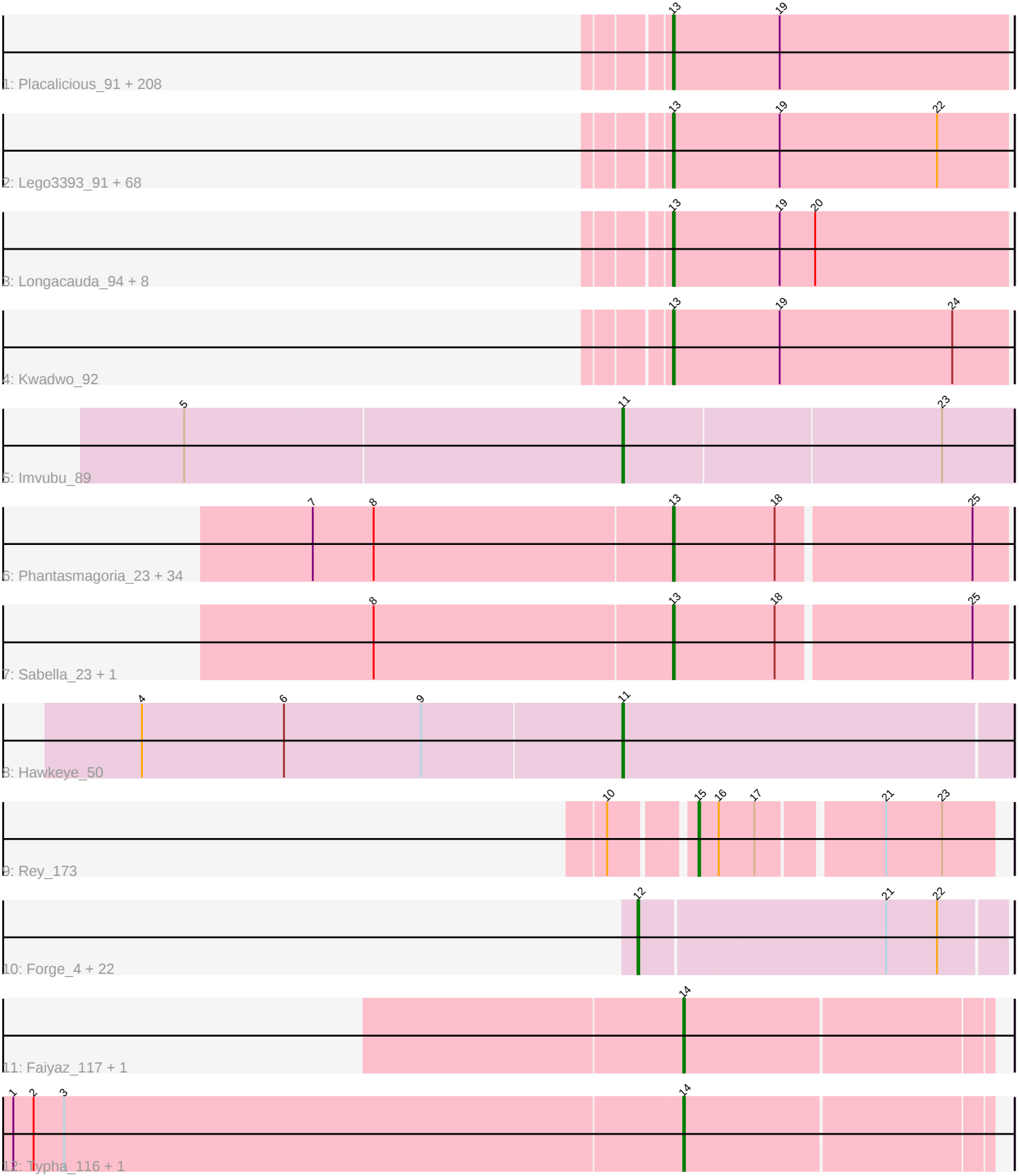




Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly 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 277772 Report

This analysis was run 02/07/26 on database version 634.

Pham number 277772 has 355 members, 28 are drafts.

Phages represented in each track:

- Track 1 : Placalicious_91, Pherdinand_94, Dingo_90, BlacksBerry_93, Mutante_94, Anderson_94, Flake_95, Gwennie1_92, Chah_95, Triad_93, CaspiBoi_92, Surely_93, Nicole21_94, Childish_93, Pipsqueak_90, Matalotodo_91, Tomlarah_93, Legolas_94, LemonSlice_93, Nyala_93, Suffolk_89, LuckyMarjie_90, Apizium_91, DaddyDaniels_96, Zelda_93, Lopsy_89, Mana_90, Magic8_92, Morgushi_90, PallasAthena_94, Mikota_88, Freya_89, Soile_94, LasagnaCat_94, JDog_92, Duggie_93, Skippy_93, DoesntMatter_90, LeiMonet_95, Murdoc_89, Iridessa_95, ShiVal_92, Lehmann_94, Craff_94, Katniss_95, Sigman_92, Happabalu_91, Struggle_93, Phunky_90, BlackStallion_92, Eugenia_95, Samaymay_93, JacAttac_93, Cornobble_91, Morty_93, TallGrassMM_92, Gwilliam_93, Yoshand_94, Cannibal_93, PhrodoBaggins_95, Etaye_92, Toni_92, FugateOSU_93, Fringe_97, Waterdiva_94, Fang_94, Bluephacebaby_92, FriarPreacher_90, OSmaximus_94, Mesmerelda_93, Gyarad_0092, Piglet_0092, Squid_92, Chuni_94, UncleHowie_89, CamL_93, Scoot17C_93, Plmatters_90, SallyH_96, Hamish_90, RedMaple_92, ProfessorX_91, JakeO_94, Hetaeria_93, Sophia_91, Iridoclysis_92, Vaticameos_90, Xavier_92, Lulwa_90, PhenghisKhan_93, Telesworld_91, Mosaic_90, Emiris_95, SassyCat97_91, PG1_91, Vortex_91, PhrankReynolds_91, Puhltonio_89, Giraffe_94, Kimbrough_94, LeeLot_91, Aelin_92, PinheadLarry_92, ThreeOh3D2_94, Omniscient_94, Aonishiki_93, Held_91, QueenBeane_93, SilverBell_94, Inchworm_94, Oosterbaan_93, Badfish_93, Chorkpop_94, Hertubise_92, GeneCoco_93, Phareon_90, Lasso_92, Haimas_90, Hartsy_91, Beaglebox_89, Fozzie_90, Simielle_93, Larson_95, Jillium_94, Timmi_91, Altwerkus_90, Cher_93, Buckeye_92, MrPhizzler_96, MRabcd_93, Thora_91, HighStump_95, Virapocalypse_94, Mulan_92, Kahve_93, Coletti_96, Swiphy_95, Mesh1_94, Dice_93, Valjean_91, Nathan_93, KingTut_84, Kloppinator_93, Trypo_93, Potter_87, Veritas_92, Ricotta_94, Lulumae_88, Cosmolli16_95, HenryJackson_93, Squiggle_92, AngelCake_93, YouGoGlencoco_93, Gophee_92, JangoPhett_91, Phamished_92, Carthage_94, UAch1_94, SDcharge11_92, Weher20_90, MitKao_93, Thunderbird_93, Phergie_93, Zaider_94, Virgeve_91, Wallhey_94, Phipps_91, Olive_89, Bishoperium_93, Vaishali24_94, Numberten_93, Khan1_93, Gareth_104, Doddsville_90, Quisquilliae_95, Dione_91, OliverWalter_92, FluffyNinja_94, Daffy_92, Antonia_92, Vivaldi_93, Robyn_95, Melc17_90, MiniBoss_89, ShadowBud_94, Nacho_0096, Jiminy_93, Haleema_92, Chute_93, LostAndPhound_92, Grand2040_91, ABU_91, Orion_91, KlimbOn_92, Serpentine_0095, Maru_93, Roy17_90, Keitherie_96, Cobra_93, Vista_92, PhatLouie_95, ElvisPhasley_94, HogWash_93, Dati_90, BatteryCK_91, Serendipity_92, Jesabah_96, Solosis_91, TomBombadil_93

- Track 2 : Lego3393_91, CampRoach_93, Labeouficaum_93, Phleuron_90, Derpp_92, Roliet_90, Oline_92, Kikipoo_95, Riverton_92, Prickles_94, Sheila_87, Basato_92, RedRaider89_95, Kailash_91, Schueller_91, AbsoluteMadLad_91, PhatCats2014_92, TyrionL_93, Zonia_93, KingVeVeVe_91, Durga_95, Riggan_94, Mecca_93, Orfeu_93, Soto_90, Podrick_91, Manad_92, Mag7_91, Horchata_88, CheetO_90, BlueHusk_94, Harvey_90, Pops_90, Chunky_92, Newman_89, Inverness_91, Jiraiya_94, Lumine_94, CharlieGBrown_91, DuchessDung_90, Frankicide_91, KLUcky39_91, EmpTee_92, Adriana_94, MichaelPhcott_91, Plata_91, Usavi_93, Daka_95, Chipette_91, Aleia_92, Colbert_91, Brilliant_96, Pinkman_92, HSavage_91, Boehler_91, Banjo_89, Eremos_91, Hocus_92, Roscoe_92, IsaacEli_95, Spartan300_92, Schadenfreude_93, AltPhacts_90, TooFast2Furius_94, Crownjwl_90, Megatron_94, Rimu_92, DolOn_97, Swish_94
- Track 3 : Longacauda_94, SirBeauregard_94, Ashraf_94, Windsor_93, Maskar_94, MelsMeow_92, Kwksand96_94, Chaelin_94, ImtiyazSitla_94
- Track 4 : Kwadwo_92
- Track 5 : Imvubu_89
- Track 6 : Phantasmagoria_23, Vic9_00023, Allegro_23, LizLemon_23, Kheth_23, Faze9_23, Godines_23, Coffee_23, Kaleb_23, West99_23, TA17A_23, Calamitous_23, Kolhan_23, Rhinoforte_23, Brownie5_23, Laurie_23, Opia_23, LilSmirk_23, Tres_23, MasterPo_23, Lars_23, Tinciduntolum_24, Bananafish_23, Boyle_23, Eaglehorse_23, Arbiter_23, Hedgerow_23, Holeinone_23, PrinceCharming_23, Glass_23, Lephleur_23, Blocker23_23, ItsyBitsy1_23, Ares_23, FrenchFry_23
- Track 7 : Sabella_23, Qyrzula_21
- Track 8 : Hawkeye_50
- Track 9 : Rey_173
- Track 10 : Forge_4, Daegal_5, Amymech_4, Webster2_4, Gancho_3, Evanesce_4, Hail_4, Wishmaker_4, LilHazelNut_4, OBUpride_4, Ein37_4, Luna22_4, Ubuntu_4, Dewey_4, BloominB_4, Giles_4, Luke_4, Hadrien_4, HH92_4, DeepSoil15_4, Gravaiilia_4, Kinbote_4, Amochick_4
- Track 11 : Faiyaz_117, Hilltopfarm_119
- Track 12 : Typha_116, AuntGwenStacy_118

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

The start number called the most often in the published annotations is 13, it was called in 299 of the 327 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ABU_91, AbsoluteMadLad_91, Adriana_94, Aelin_92, Aleia_92, Allegro_23, AltPhacts_90, Altwerkus_90, Anderson_94, AngelCake_93, Antonia_92, Aonishiki_93, Apizium_91, Arbiter_23, Ares_23, Ashraf_94, Badfish_93, Bananafish_23, Banjo_89, Basato_92, BatteryCK_91, Beaglebox_89, Bishoperium_93, BlackStallion_92, BlackBerry_93, Blocker23_23, BlueHusk_94, Bluephacebaby_92, Boehler_91, Boyle_23, Brilliant_96, Brownie5_23, Buckeye_92, Calamitous_23, CamL_93, CampRoach_93, Cannibal_93, Carthage_94, Caspiboi_92, Chaelin_94, Chah_95, CharlieGBrown_91, CheetO_90, Cher_93, Childish_93, Chipette_91, Chorkpop_94, Chuni_94, Chunky_92, Chute_93, Cobra_93, Coffee_23, Colbert_91, Coletti_96, Cornobble_91, Cosmolli16_95, Craff_94, Crownjwl_90, DaddyDaniels_96, Daffy_92, Daka_95, Dati_90, Derpp_92,

Dice_93, Dingo_90, Dione_91, Doddsville_90, DoesntMatter_90, DoIOn_97,
 DuchessDung_90, Duggie_93, Durga_95, Eaglehorse_23, ElvisPhasley_94,
 Emiris_95, EmpTee_92, Eremos_91, Etaye_92, Eugenia_95, Fang_94, Faze9_23,
 Flake_95, FluffyNinja_94, Fozzie_90, Frankicide_91, FrenchFry_23, Freya_89,
 FriarPreacher_90, Fringe_97, FugateOSU_93, Gareth_104, GeneCoco_93,
 Giraffe_94, Glass_23, Godines_23, Gophee_92, Grand2040_91, Gwennie1_92,
 Gwilliam_93, Gyarad_0092, HSavage_91, Haimas_90, Haleema_92, Hamish_90,
 Happabalu_91, Hartsy_91, Harvey_90, Hedgerow_23, Held_91, HenryJackson_93,
 Hertubise_92, Hetaeria_93, HighStump_95, Hocus_92, HogWash_93, Holeinone_23,
 Horchata_88, ImtiyazSitla_94, Inchworm_94, Inverness_91, Iridessa_95,
 Iridoclysis_92, IsaacEli_95, ItsyBitsy1_23, JDog_92, JacAttac_93, JakeO_94,
 JangoPhett_91, Jesabah_96, Jillium_94, Jiminy_93, Jiraiya_94, KLUcky39_91,
 Kahve_93, Kailash_91, Kaleb_23, Katniss_95, Keitherie_96, Khan1_93, Kheth_23,
 Kikipoo_95, Kimbrough_94, KingTut_84, KingVeVeVe_91, KlimbOn_92,
 Kloppinator_93, Kolhan_23, Kwadwo_92, Kwksand96_94, Labeouficaum_93,
 Lars_23, Larson_95, LasagnaCat_94, Lasso_92, Laurie_23, LeeLot_91,
 Lego3393_91, Legolas_94, Lehmann_94, LeiMonet_95, LemonSlice_93,
 Lephleur_23, LilSmirk_23, LizLemon_23, Longacauda_94, Lopsy_89,
 LostAndPhound_92, LuckyMarjie_90, Lulumae_88, Lulwa_90, Lumine_94,
 MRabcd_93, Mag7_91, Magic8_92, Mana_90, Manad_92, Maru_93, Maskar_94,
 MasterPo_23, Matalotodo_91, Mecca_93, Megatron_94, Melc17_90, MelsMeow_92,
 Mesh1_94, Mesmerelda_93, MichaelPhcott_91, Mikota_88, MiniBoss_89, MitKao_93,
 Morgushi_90, Morty_93, Mosaic_90, MrPhizzler_96, Mulan_92, Murdoc_89,
 Mutante_94, Nacho_0096, Nathan_93, Newman_89, Nicole21_94, Numberten_93,
 Nyala_93, OSmaximus_94, Oline_92, Olive_89, OliverWalter_92, Omniscient_94,
 Oosterbaan_93, Opia_23, Orfeu_93, Orion_91, PG1_91, PallasAthena_94,
 Phamished_92, Phantasmagoria_23, Phareon_90, PhatCats2014_92, PhatLouie_95,
 PhenghisKhan_93, Pherdinand_94, Phergie_93, Phipps_91, Phleuron_90,
 PhrankReynolds_91, PhrodoBaggins_95, Phunky_90, Piglet_0092, PinheadLarry_92,
 Pinkman_92, Pipsqueak_90, Placalicious_91, Plata_91, Plmatters_90, Podrick_91,
 Pops_90, Potter_87, Prickles_94, PrinceCharming_23, ProfessorX_91, Puhltonio_89,
 QueenBeane_93, Quisquilliae_95, Qyrzula_21, RedMaple_92, RedRaider89_95,
 Rhinoforte_23, Ricotta_94, Riggan_94, Rimu_92, Riverton_92, Robyn_95, Roliet_90,
 Roscoe_92, Roy17_90, SDcharge11_92, Sabella_23, SallyH_96, Samaymay_93,
 SassyCat97_91, Schadenfreude_93, Schueller_91, Scoot17C_93, Serendipity_92,
 Serpentine_0095, ShadowBud_94, Sheila_87, ShiVal_92, Sigman_92, SilverBell_94,
 Simielle_93, SirBeauregard_94, Skippy_93, Soile_94, Solosis_91, Sophia_91,
 Soto_90, Spartan300_92, Squid_92, Squiggle_92, Struggle_93, Suffolk_89,
 Surely_93, Swiphy_95, Swish_94, TA17A_23, TallGrassMM_92, Telesworld_91,
 Thora_91, ThreeOh3D2_94, Thunderbird_93, Timmi_91, Tinciduntolum_24,
 TomBombadil_93, Tomlarah_93, Toni_92, TooFast2Furius_94, Tres_23, Triad_93,
 Trypo_93, TyrionL_93, UAch1_94, UncleHowie_89, Usavi_93, Vaishali24_94,
 Valjean_91, Vaticameos_90, Veritas_92, Vic9_00023, Virapocalypse_94, Virgeve_91,
 Vista_92, Vivaldi_93, Vortex_91, Wallhey_94, Waterdiva_94, Weher20_90,
 West99_23, Windsor_93, Xavier_92, Yoshand_94, YouGoGlencoco_93, Zaider_94,
 Zelda_93, Zonia_93,

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

-

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

- Amochick_4, Amymech_4, AuntGwenStacy_118, BloominB_4, Daegal_5,
 DeepSoil15_4, Dewey_4, Ein37_4, Evanesce_4, Faiyaz_117, Forge_4, Gancho_3,

Giles_4, Gravaillia_4, HH92_4, Hadrien_4, Hail_4, Hawkeye_50, Hilltopfarm_119, Imvubu_89, Kinbote_4, LilHazelnut_4, Luke_4, Luna22_4, OBUpride_4, Rey_173, Typha_116, Ubuntu_4, Webster2_4, Wishmaker_4,

Summary by start number:

Start 11:

- Found in 2 of 355 (0.6%) of genes in pham
- Manual Annotations of this start: 2 of 327
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hawkeye_50 (D2), Imvubu_89 (B10),

Start 12:

- Found in 23 of 355 (6.5%) of genes in pham
- Manual Annotations of this start: 22 of 327
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amochick_4 (Q), Amymech_4 (Q), BloominB_4 (Q), Daegal_5 (Q), DeepSoil15_4 (Q), Dewey_4 (Q), Ein37_4 (Q), Evanesce_4 (Q), Forge_4 (Q), Gancho_3 (Q), Giles_4 (Q), Gravaillia_4 (Q), HH92_4 (Q), Hadrien_4 (Q), Hail_4 (Q), Kinbote_4 (Q), LilHazelnut_4 (Q), Luke_4 (Q), Luna22_4 (Q), OBUpride_4 (Q), Ubuntu_4 (Q), Webster2_4 (Q), Wishmaker_4 (Q),

Start 13:

- Found in 325 of 355 (91.5%) of genes in pham
- Manual Annotations of this start: 299 of 327
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU_91 (B1), AbsoluteMadLad_91 (B1), Adriana_94 (B1), Aelin_92 (B1), Aleia_92 (B1), Allegro_23 (B2), AltPhacts_90 (B1), Altwerkus_90 (B1), Anderson_94 (B1), AngelCake_93 (B1), Antonia_92 (B1), Aonishiki_93 (B1), Apizium_91 (B1), Arbiter_23 (B2), Ares_23 (B2), Ashraf_94 (B1), Badfish_93 (B1), Bananafish_23 (B2), Banjo_89 (B1), Basato_92 (B1), BatteryCK_91 (B1), Beaglebox_89 (B1), Bishoperium_93 (B1), BlackStallion_92 (B1), BlacksBerry_93 (B1), Blocker23_23 (B2), BlueHusk_94 (B1), Bluephacebaby_92 (B1), Boehler_91 (B1), Boyle_23 (B2), Brilliant_96 (B1), Brownie5_23 (B2), Buckeye_92 (B1), Calamitous_23 (B2), CamL_93 (B1), CampRoach_93 (B1), Cannibal_93 (B1), Carthage_94 (B1), Caspiob_92 (B1), Chaelin_94 (B1), Chah_95 (B1), CharlieGBrown_91 (B1), CheetO_90 (B1), Cher_93 (B1), Childish_93 (B1), Chipette_91 (B1), Chorkpop_94 (B1), Chuni_94 (B1), Chunky_92 (B1), Chute_93 (B1), Cobra_93 (B1), Coffee_23 (B2), Colbert_91 (B1), Coletti_96 (B1), Cornobble_91 (B1), Cosmolli16_95 (B1), Craff_94 (B1), Crownjwl_90 (B1), DaddyDaniels_96 (B1), Daffy_92 (B1), Daka_95 (B1), Dati_90 (B1), Derpp_92 (B1), Dice_93 (B1), Dingo_90 (B1), Dione_91 (B1), Doddsville_90 (B1), DoesntMatter_90 (B1), DoOn_97 (B1), DuchessDung_90 (B1), Duggie_93 (B1), Durga_95 (B1), Eaglehorse_23 (B2), ElvisPhasley_94 (B1), Emiris_95 (B1), EmpTee_92 (B1), Eremos_91 (B1), Etaye_92 (B1), Eugenia_95 (B1), Fang_94 (B1), Faze9_23 (B2), Flake_95 (B1), FluffyNinja_94 (B1), Fozzie_90 (B1), Frankicide_91 (B1), FrenchFry_23 (B2), Freya_89 (B1), FriarPreacher_90 (B1), Fringe_97 (B1), FugateOSU_93 (B1), Gareth_104 (B1), GeneCoco_93 (B1), Giraffe_94 (B1), Glass_23 (B2), Godines_23 (B2), Gophee_92 (B1), Grand2040_91 (B1), Gwennie1_92 (B1), Gwilliam_93 (B1), Gyarad_0092 (B1), HSavage_91 (B1), Haimas_90 (B1), Haleema_92 (B1), Hamish_90 (B1), Happabalu_91 (B1), Hartsy_91 (B1), Harvey_90 (B1), Hedgerow_23 (B2), Held_91 (B1), HenryJackson_93 (B1), Hertubise_92 (B1), Hetaeria_93 (B1), HighStump_95 (B1), Hocus_92 (B1), HogWash_93 (B1), Holeinone_23 (B2), Horchata_88 (B1),

ImtiyazSitla_94 (B1), Inchworm_94 (B1), Inverness_91 (B1), Iridessa_95 (B1), Iridoclysis_92 (B1), IsaacEli_95 (B1), ItsyBitsy1_23 (B2), JDog_92 (B1), JacAttac_93 (B1), JakeO_94 (B1), JangoPhett_91 (B1), Jesabah_96 (B1), Jillium_94 (B1), Jiminy_93 (B1), Jiraiya_94 (B1), KLUcky39_91 (B1), Kahve_93 (B1), Kailash_91 (B1), Kaleb_23 (B2), Katniss_95 (B1), Keitherie_96 (B1), Khan1_93 (B1), Kheth_23 (B2), Kikipoo_95 (B1), Kimbrough_94 (B1), KingTut_84 (B1), KingVeVeVe_91 (B1), KlimbOn_92 (B1), Kloppinator_93 (B1), Kolhan_23 (B2), Kwadwo_92 (B1), Kwksand96_94 (B1), Labeouficaum_93 (B1), Lars_23 (B2), Larson_95 (B1), LasagnaCat_94 (B1), Lasso_92 (B1), Laurie_23 (B2), LeeLot_91 (B1), Lego3393_91 (B1), Legolas_94 (B1), Lehmann_94 (B1), LeiMonet_95 (B1), LemonSlice_93 (B1), Lephleur_23 (B2), LilSmirk_23 (B2), LizLemon_23 (B2), Longacauda_94 (B1), Lopsy_89 (B1), LostAndPhound_92 (B1), LuckyMarjie_90 (B1), Lulumae_88 (B1), Lulwa_90 (B1), Lumine_94 (B1), MRabcd_93 (B1), Mag7_91 (B1), Magic8_92 (B1), Mana_90 (B1), Manad_92 (B1), Maru_93 (B1), Maskar_94 (B1), MasterPo_23 (B2), Matalotodo_91 (B1), Mecca_93 (B1), Megatron_94 (B1), Melc17_90 (B1), MelsMeow_92 (B1), Mesh1_94 (B1), Mesmerelda_93 (B1), MichaelPhcott_91 (B1), Mikota_88 (B1), MiniBoss_89 (B1), MitKao_93 (B1), Morgushi_90 (B1), Morty_93 (B1), Mosaic_90 (B1), MrPhizzler_96 (B1), Mulan_92 (B1), Murdoc_89 (B1), Mutante_94 (B1), Nacho_0096 (B1), Nathan_93 (B1), Newman_89 (B1), Nicole21_94 (B1), Numberten_93 (B1), Nyala_93 (B1), OSmaximus_94 (B1), Oline_92 (B1), Olive_89 (B1), OliverWalter_92 (B1), Omniscient_94 (B1), Oosterbaan_93 (B1), Opia_23 (B2), Orfeu_93 (B1), Orion_91 (B1), PG1_91 (B1), PallasAthena_94 (B1), Phamished_92 (B1), Phantasmagoria_23 (B2), Phareon_90 (B1), PhatCats2014_92 (B1), PhatLouie_95 (B1), PhenghisKhan_93 (B1), Pherdinand_94 (B1), Phergie_93 (B1), Phipps_91 (B1), Phleuron_90 (B1), PhrankReynolds_91 (B1), PhrodoBaggins_95 (B1), Phunky_90 (B1), Piglet_0092 (B1), PinheadLarry_92 (B1), Pinkman_92 (B1), Pipsqueak_90 (B1), Placalicious_91 (B1), Plata_91 (B1), Plmatters_90 (B1), Podrick_91 (B1), Pops_90 (B1), Potter_87 (B1), Prickles_94 (B1), PrinceCharming_23 (B2), ProfessorX_91 (B1), Puhltonio_89 (B1), QueenBeane_93 (B1), Quisquillae_95 (B1), Qyrzula_21 (B2), RedMaple_92 (B1), RedRaider89_95 (B1), Rhinoforte_23 (B2), Ricotta_94 (B1), Riggan_94 (B1), Rimu_92 (B1), Riverton_92 (B1), Robyn_95 (B1), Roliet_90 (B1), Roscoe_92 (B1), Roy17_90 (B1), SDcharge11_92 (B1), Sabella_23 (B2), SallyH_96 (B1), Samaymay_93 (B1), SassyCat97_91 (B1), Schadenfreude_93 (B1), Schueller_91 (B1), Scoot17C_93 (B1), Serendipity_92 (B1), Serpentine_0095 (B1), ShadowBud_94 (B1), Sheila_87 (B1), ShiVal_92 (B1), Sigman_92 (B1), SilverBell_94 (B1), Simielle_93 (B1), SirBeauregard_94 (B1), Skippy_93 (B1), Soile_94 (B1), Solosis_91 (B1), Sophia_91 (B1), Soto_90 (B1), Spartan300_92 (B1), Squid_92 (B1), Squiggle_92 (B1), Struggle_93 (B1), Suffolk_89 (B1), Surely_93 (B1), Swiphy_95 (B1), Swish_94 (B1), TA17A_23 (B2), TallGrassMM_92 (B1), Telesworld_91 (B1), Thora_91 (B1), ThreeOh3D2_94 (B1), Thunderbird_93 (B1), Timmi_91 (B1), Tinciduntsum_24 (B2), TomBombadil_93 (B1), Tomlarah_93 (B1), Toni_92 (B1), TooFast2Furius_94 (B1), Tres_23 (B2), Triad_93 (B1), Trypo_93 (B1), TyrionL_93 (B1), UAch1_94 (B1), UncleHowie_89 (B1), Usavi_93 (B1), Vaishali24_94 (B1), Valjean_91 (B1), Vaticameos_90 (B1), Veritas_92 (B1), Vic9_00023 (B2), Virapocalypse_94 (B1), Virgeve_91 (B1), Vista_92 (B1), Vivaldi_93 (B1), Vortex_91 (B1), Wallhey_94 (B1), Waterdiva_94 (B1), Weher20_90 (B1), West99_23 (B2), Windsor_93 (B1), Xavier_92 (B1), Yoshand_94 (B1), YouGoGlencoco_93 (B1), Zaider_94 (B1), Zelda_93 (B1), Zonia_93 (B1),

Start 14:

- Found in 4 of 355 (1.1%) of genes in pham
- Manual Annotations of this start: 3 of 327

- Called 100.0% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_118 (Y), Faiyaz_117 (Y), Hilltopfarm_119 (Y), Typha_116 (Y),

Start 15:

- Found in 1 of 355 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 327
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Rey_173 (M2),

Summary by clusters:

There are 7 clusters represented in this pham: B2, Q, B1, B10, M2, Y, D2,

Info for manual annotations of cluster B1:

- Start number 13 was manually annotated 264 times for cluster B1.

Info for manual annotations of cluster B10:

- Start number 11 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B2:

- Start number 13 was manually annotated 35 times for cluster B2.

Info for manual annotations of cluster D2:

- Start number 11 was manually annotated 1 time for cluster D2.

Info for manual annotations of cluster M2:

- Start number 15 was manually annotated 1 time for cluster M2.

Info for manual annotations of cluster Q:

- Start number 12 was manually annotated 22 times for cluster Q.

Info for manual annotations of cluster Y:

- Start number 14 was manually annotated 3 times for cluster Y.

Gene Information:

Gene: ABU_91 Start: 65401, Stop: 65204, Start Num: 13

Candidate Starts for ABU_91:

(Start: 13 @65401 has 299 MA's), (19, 65338),

Gene: AbsoluteMadLad_91 Start: 65354, Stop: 65157, Start Num: 13

Candidate Starts for AbsoluteMadLad_91:

(Start: 13 @65354 has 299 MA's), (19, 65291), (22, 65198),

Gene: Adriana_94 Start: 65916, Stop: 65719, Start Num: 13

Candidate Starts for Adriana_94:

(Start: 13 @65916 has 299 MA's), (19, 65853), (22, 65760),

Gene: Aelin_92 Start: 65034, Stop: 64837, Start Num: 13

Candidate Starts for Aelin_92:

(Start: 13 @65034 has 299 MA's), (19, 64971),

Gene: Aleia_92 Start: 65043, Stop: 64846, Start Num: 13

Candidate Starts for Aleia_92:

(Start: 13 @65043 has 299 MA's), (19, 64980), (22, 64887),

Gene: Allegro_23 Start: 19018, Stop: 18827, Start Num: 13

Candidate Starts for Allegro_23:

(7, 19228), (8, 19192), (Start: 13 @19018 has 299 MA's), (18, 18958), (25, 18847),

Gene: AltPhacts_90 Start: 64619, Stop: 64422, Start Num: 13

Candidate Starts for AltPhacts_90:

(Start: 13 @64619 has 299 MA's), (19, 64556), (22, 64463),

Gene: Altwerkus_90 Start: 64730, Stop: 64533, Start Num: 13

Candidate Starts for Altwerkus_90:

(Start: 13 @64730 has 299 MA's), (19, 64667),

Gene: Amochick_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Amochick_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Amymech_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Amymech_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Anderson_94 Start: 65277, Stop: 65080, Start Num: 13

Candidate Starts for Anderson_94:

(Start: 13 @65277 has 299 MA's), (19, 65214),

Gene: AngelCake_93 Start: 65026, Stop: 64829, Start Num: 13

Candidate Starts for AngelCake_93:

(Start: 13 @65026 has 299 MA's), (19, 64963),

Gene: Antonia_92 Start: 64902, Stop: 64705, Start Num: 13

Candidate Starts for Antonia_92:

(Start: 13 @64902 has 299 MA's), (19, 64839),

Gene: Aonishiki_93 Start: 65212, Stop: 65015, Start Num: 13

Candidate Starts for Aonishiki_93:

(Start: 13 @65212 has 299 MA's), (19, 65149),

Gene: Apizium_91 Start: 64555, Stop: 64358, Start Num: 13

Candidate Starts for Apizium_91:

(Start: 13 @64555 has 299 MA's), (19, 64492),

Gene: Arbiter_23 Start: 19106, Stop: 18915, Start Num: 13

Candidate Starts for Arbiter_23:

(7, 19316), (8, 19280), (Start: 13 @19106 has 299 MA's), (18, 19046), (25, 18935),

Gene: Ares_23 Start: 19022, Stop: 18831, Start Num: 13

Candidate Starts for Ares_23:

(7, 19232), (8, 19196), (Start: 13 @19022 has 299 MA's), (18, 18962), (25, 18851),

Gene: Ashraf_94 Start: 65390, Stop: 65193, Start Num: 13

Candidate Starts for Ashraf_94:

(Start: 13 @65390 has 299 MA's), (19, 65327), (20, 65306),

Gene: AuntGwenStacy_118 Start: 69404, Stop: 69580, Start Num: 14

Candidate Starts for AuntGwenStacy_118:

(1, 69011), (2, 69023), (3, 69041), (Start: 14 @69404 has 3 MA's),

Gene: Badfish_93 Start: 65581, Stop: 65384, Start Num: 13

Candidate Starts for Badfish_93:

(Start: 13 @65581 has 299 MA's), (19, 65518),

Gene: Bananafish_23 Start: 19015, Stop: 18824, Start Num: 13

Candidate Starts for Bananafish_23:

(7, 19225), (8, 19189), (Start: 13 @19015 has 299 MA's), (18, 18955), (25, 18844),

Gene: Banjo_89 Start: 64847, Stop: 64650, Start Num: 13

Candidate Starts for Banjo_89:

(Start: 13 @64847 has 299 MA's), (19, 64784), (22, 64691),

Gene: Basato_92 Start: 65310, Stop: 65113, Start Num: 13

Candidate Starts for Basato_92:

(Start: 13 @65310 has 299 MA's), (19, 65247), (22, 65154),

Gene: BatteryCK_91 Start: 64837, Stop: 64640, Start Num: 13

Candidate Starts for BatteryCK_91:

(Start: 13 @64837 has 299 MA's), (19, 64774),

Gene: Beaglebox_89 Start: 64969, Stop: 64772, Start Num: 13

Candidate Starts for Beaglebox_89:

(Start: 13 @64969 has 299 MA's), (19, 64906),

Gene: Bishoperium_93 Start: 65416, Stop: 65219, Start Num: 13

Candidate Starts for Bishoperium_93:

(Start: 13 @65416 has 299 MA's), (19, 65353),

Gene: BlackStallion_92 Start: 65265, Stop: 65068, Start Num: 13

Candidate Starts for BlackStallion_92:

(Start: 13 @65265 has 299 MA's), (19, 65202),

Gene: BlacksBerry_93 Start: 64791, Stop: 64594, Start Num: 13

Candidate Starts for BlacksBerry_93:

(Start: 13 @64791 has 299 MA's), (19, 64728),

Gene: Blocker23_23 Start: 19139, Stop: 18948, Start Num: 13

Candidate Starts for Blocker23_23:

(7, 19349), (8, 19313), (Start: 13 @19139 has 299 MA's), (18, 19079), (25, 18968),

Gene: BloominB_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for BloominB_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: BlueHusk_94 Start: 65090, Stop: 64893, Start Num: 13
Candidate Starts for BlueHusk_94:
(Start: 13 @65090 has 299 MA's), (19, 65027), (22, 64934),

Gene: Bluephacebaby_92 Start: 65450, Stop: 65253, Start Num: 13
Candidate Starts for Bluephacebaby_92:
(Start: 13 @65450 has 299 MA's), (19, 65387),

Gene: Boehler_91 Start: 65240, Stop: 65043, Start Num: 13
Candidate Starts for Boehler_91:
(Start: 13 @65240 has 299 MA's), (19, 65177), (22, 65084),

Gene: Boyle_23 Start: 19140, Stop: 18949, Start Num: 13
Candidate Starts for Boyle_23:
(7, 19350), (8, 19314), (Start: 13 @19140 has 299 MA's), (18, 19080), (25, 18969),

Gene: Brilliant_96 Start: 65429, Stop: 65232, Start Num: 13
Candidate Starts for Brilliant_96:
(Start: 13 @65429 has 299 MA's), (19, 65366), (22, 65273),

Gene: Brownie5_23 Start: 19139, Stop: 18948, Start Num: 13
Candidate Starts for Brownie5_23:
(7, 19349), (8, 19313), (Start: 13 @19139 has 299 MA's), (18, 19079), (25, 18968),

Gene: Buckeye_92 Start: 65968, Stop: 65771, Start Num: 13
Candidate Starts for Buckeye_92:
(Start: 13 @65968 has 299 MA's), (19, 65905),

Gene: Calamitous_23 Start: 19019, Stop: 18828, Start Num: 13
Candidate Starts for Calamitous_23:
(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: CamL_93 Start: 65201, Stop: 65004, Start Num: 13
Candidate Starts for CamL_93:
(Start: 13 @65201 has 299 MA's), (19, 65138),

Gene: CampRoach_93 Start: 65297, Stop: 65100, Start Num: 13
Candidate Starts for CampRoach_93:
(Start: 13 @65297 has 299 MA's), (19, 65234), (22, 65141),

Gene: Cannibal_93 Start: 65304, Stop: 65107, Start Num: 13
Candidate Starts for Cannibal_93:
(Start: 13 @65304 has 299 MA's), (19, 65241),

Gene: Carthage_94 Start: 64980, Stop: 64783, Start Num: 13
Candidate Starts for Carthage_94:
(Start: 13 @64980 has 299 MA's), (19, 64917),

Gene: Caspiroi_92 Start: 65136, Stop: 64939, Start Num: 13
Candidate Starts for Caspiroi_92:
(Start: 13 @65136 has 299 MA's), (19, 65073),

Gene: Chaelin_94 Start: 65430, Stop: 65233, Start Num: 13

Candidate Starts for Chaelin_94:
(Start: 13 @65430 has 299 MA's), (19, 65367), (20, 65346),

Gene: Chah_95 Start: 65001, Stop: 64804, Start Num: 13
Candidate Starts for Chah_95:
(Start: 13 @65001 has 299 MA's), (19, 64938),

Gene: CharlieGBrown_91 Start: 64932, Stop: 64735, Start Num: 13
Candidate Starts for CharlieGBrown_91:
(Start: 13 @64932 has 299 MA's), (19, 64869), (22, 64776),

Gene: CheetO_90 Start: 65306, Stop: 65109, Start Num: 13
Candidate Starts for CheetO_90:
(Start: 13 @65306 has 299 MA's), (19, 65243), (22, 65150),

Gene: Cher_93 Start: 65405, Stop: 65208, Start Num: 13
Candidate Starts for Cher_93:
(Start: 13 @65405 has 299 MA's), (19, 65342),

Gene: Childish_93 Start: 65595, Stop: 65398, Start Num: 13
Candidate Starts for Childish_93:
(Start: 13 @65595 has 299 MA's), (19, 65532),

Gene: Chipette_91 Start: 65131, Stop: 64934, Start Num: 13
Candidate Starts for Chipette_91:
(Start: 13 @65131 has 299 MA's), (19, 65068), (22, 64975),

Gene: Chorkpop_94 Start: 65057, Stop: 64860, Start Num: 13
Candidate Starts for Chorkpop_94:
(Start: 13 @65057 has 299 MA's), (19, 64994),

Gene: Chuni_94 Start: 65642, Stop: 65445, Start Num: 13
Candidate Starts for Chuni_94:
(Start: 13 @65642 has 299 MA's), (19, 65579),

Gene: Chunky_92 Start: 64902, Stop: 64705, Start Num: 13
Candidate Starts for Chunky_92:
(Start: 13 @64902 has 299 MA's), (19, 64839), (22, 64746),

Gene: Chute_93 Start: 65596, Stop: 65399, Start Num: 13
Candidate Starts for Chute_93:
(Start: 13 @65596 has 299 MA's), (19, 65533),

Gene: Cobra_93 Start: 65427, Stop: 65230, Start Num: 13
Candidate Starts for Cobra_93:
(Start: 13 @65427 has 299 MA's), (19, 65364),

Gene: Coffee_23 Start: 19132, Stop: 18941, Start Num: 13
Candidate Starts for Coffee_23:
(7, 19342), (8, 19306), (Start: 13 @19132 has 299 MA's), (18, 19072), (25, 18961),

Gene: Colbert_91 Start: 64325, Stop: 64128, Start Num: 13
Candidate Starts for Colbert_91:

(Start: 13 @64325 has 299 MA's), (19, 64262), (22, 64169),

Gene: Coletti_96 Start: 65952, Stop: 65755, Start Num: 13

Candidate Starts for Coletti_96:

(Start: 13 @65952 has 299 MA's), (19, 65889),

Gene: Cornobble_91 Start: 65053, Stop: 64856, Start Num: 13

Candidate Starts for Cornobble_91:

(Start: 13 @65053 has 299 MA's), (19, 64990),

Gene: Cosmolli16_95 Start: 65772, Stop: 65575, Start Num: 13

Candidate Starts for Cosmolli16_95:

(Start: 13 @65772 has 299 MA's), (19, 65709),

Gene: Craff_94 Start: 65814, Stop: 65617, Start Num: 13

Candidate Starts for Craff_94:

(Start: 13 @65814 has 299 MA's), (19, 65751),

Gene: Crownjwl_90 Start: 65081, Stop: 64884, Start Num: 13

Candidate Starts for Crownjwl_90:

(Start: 13 @65081 has 299 MA's), (19, 65018), (22, 64925),

Gene: DaddyDaniels_96 Start: 65548, Stop: 65351, Start Num: 13

Candidate Starts for DaddyDaniels_96:

(Start: 13 @65548 has 299 MA's), (19, 65485),

Gene: Daegal_5 Start: 2105, Stop: 1896, Start Num: 12

Candidate Starts for Daegal_5:

(Start: 12 @2105 has 22 MA's), (21, 1964), (22, 1934),

Gene: Daffy_92 Start: 65042, Stop: 64845, Start Num: 13

Candidate Starts for Daffy_92:

(Start: 13 @65042 has 299 MA's), (19, 64979),

Gene: Daka_95 Start: 65247, Stop: 65050, Start Num: 13

Candidate Starts for Daka_95:

(Start: 13 @65247 has 299 MA's), (19, 65184), (22, 65091),

Gene: Dati_90 Start: 65227, Stop: 65030, Start Num: 13

Candidate Starts for Dati_90:

(Start: 13 @65227 has 299 MA's), (19, 65164),

Gene: DeepSoil15_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for DeepSoil15_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Derpp_92 Start: 64965, Stop: 64768, Start Num: 13

Candidate Starts for Derpp_92:

(Start: 13 @64965 has 299 MA's), (19, 64902), (22, 64809),

Gene: Dewey_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Dewey_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Dice_93 Start: 64888, Stop: 64691, Start Num: 13

Candidate Starts for Dice_93:

(Start: 13 @64888 has 299 MA's), (19, 64825),

Gene: Dingo_90 Start: 64608, Stop: 64411, Start Num: 13

Candidate Starts for Dingo_90:

(Start: 13 @64608 has 299 MA's), (19, 64545),

Gene: Dione_91 Start: 64608, Stop: 64411, Start Num: 13

Candidate Starts for Dione_91:

(Start: 13 @64608 has 299 MA's), (19, 64545),

Gene: Doddsville_90 Start: 65048, Stop: 64851, Start Num: 13

Candidate Starts for Doddsville_90:

(Start: 13 @65048 has 299 MA's), (19, 64985),

Gene: DoesntMatter_90 Start: 64882, Stop: 64685, Start Num: 13

Candidate Starts for DoesntMatter_90:

(Start: 13 @64882 has 299 MA's), (19, 64819),

Gene: DolOn_97 Start: 66333, Stop: 66136, Start Num: 13

Candidate Starts for DolOn_97:

(Start: 13 @66333 has 299 MA's), (19, 66270), (22, 66177),

Gene: DuchessDung_90 Start: 64563, Stop: 64366, Start Num: 13

Candidate Starts for DuchessDung_90:

(Start: 13 @64563 has 299 MA's), (19, 64500), (22, 64407),

Gene: Duggie_93 Start: 65190, Stop: 64993, Start Num: 13

Candidate Starts for Duggie_93:

(Start: 13 @65190 has 299 MA's), (19, 65127),

Gene: Durga_95 Start: 65671, Stop: 65474, Start Num: 13

Candidate Starts for Durga_95:

(Start: 13 @65671 has 299 MA's), (19, 65608), (22, 65515),

Gene: Eaglehorse_23 Start: 19040, Stop: 18849, Start Num: 13

Candidate Starts for Eaglehorse_23:

(7, 19250), (8, 19214), (Start: 13 @19040 has 299 MA's), (18, 18980), (25, 18869),

Gene: Ein37_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Ein37_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: ElvisPhasley_94 Start: 66212, Stop: 66015, Start Num: 13

Candidate Starts for ElvisPhasley_94:

(Start: 13 @66212 has 299 MA's), (19, 66149),

Gene: Emiris_95 Start: 65578, Stop: 65381, Start Num: 13

Candidate Starts for Emiris_95:

(Start: 13 @65578 has 299 MA's), (19, 65515),

Gene: EmpTee_92 Start: 64979, Stop: 64782, Start Num: 13
Candidate Starts for EmpTee_92:
(Start: 13 @64979 has 299 MA's), (19, 64916), (22, 64823),

Gene: Eremos_91 Start: 65269, Stop: 65072, Start Num: 13
Candidate Starts for Eremos_91:
(Start: 13 @65269 has 299 MA's), (19, 65206), (22, 65113),

Gene: Etaye_92 Start: 65755, Stop: 65558, Start Num: 13
Candidate Starts for Etaye_92:
(Start: 13 @65755 has 299 MA's), (19, 65692),

Gene: Eugenia_95 Start: 65690, Stop: 65493, Start Num: 13
Candidate Starts for Eugenia_95:
(Start: 13 @65690 has 299 MA's), (19, 65627),

Gene: Evanescence_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Evanescence_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Faiyaz_117 Start: 69271, Stop: 69447, Start Num: 14
Candidate Starts for Faiyaz_117:
(Start: 14 @69271 has 3 MA's),

Gene: Fang_94 Start: 65398, Stop: 65201, Start Num: 13
Candidate Starts for Fang_94:
(Start: 13 @65398 has 299 MA's), (19, 65335),

Gene: Faze9_23 Start: 19136, Stop: 18945, Start Num: 13
Candidate Starts for Faze9_23:
(7, 19346), (8, 19310), (Start: 13 @19136 has 299 MA's), (18, 19076), (25, 18965),

Gene: Flake_95 Start: 65170, Stop: 64973, Start Num: 13
Candidate Starts for Flake_95:
(Start: 13 @65170 has 299 MA's), (19, 65107),

Gene: FluffyNinja_94 Start: 65267, Stop: 65070, Start Num: 13
Candidate Starts for FluffyNinja_94:
(Start: 13 @65267 has 299 MA's), (19, 65204),

Gene: Forge_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Forge_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Fozzie_90 Start: 65594, Stop: 65397, Start Num: 13
Candidate Starts for Fozzie_90:
(Start: 13 @65594 has 299 MA's), (19, 65531),

Gene: Frankicide_91 Start: 65094, Stop: 64897, Start Num: 13
Candidate Starts for Frankicide_91:
(Start: 13 @65094 has 299 MA's), (19, 65031), (22, 64938),

Gene: FrenchFry_23 Start: 19139, Stop: 18948, Start Num: 13

Candidate Starts for FrenchFry_23:
(7, 19349), (8, 19313), (Start: 13 @19139 has 299 MA's), (18, 19079), (25, 18968),

Gene: Freya_89 Start: 64586, Stop: 64389, Start Num: 13
Candidate Starts for Freya_89:
(Start: 13 @64586 has 299 MA's), (19, 64523),

Gene: FriarPreacher_90 Start: 64965, Stop: 64768, Start Num: 13
Candidate Starts for FriarPreacher_90:
(Start: 13 @64965 has 299 MA's), (19, 64902),

Gene: Fringe_97 Start: 65742, Stop: 65545, Start Num: 13
Candidate Starts for Fringe_97:
(Start: 13 @65742 has 299 MA's), (19, 65679),

Gene: FugateOSU_93 Start: 66027, Stop: 65830, Start Num: 13
Candidate Starts for FugateOSU_93:
(Start: 13 @66027 has 299 MA's), (19, 65964),

Gene: Gancho_3 Start: 1532, Stop: 1323, Start Num: 12
Candidate Starts for Gancho_3:
(Start: 12 @1532 has 22 MA's), (21, 1391), (22, 1361),

Gene: Gareth_104 Start: 65416, Stop: 65219, Start Num: 13
Candidate Starts for Gareth_104:
(Start: 13 @65416 has 299 MA's), (19, 65353),

Gene: GeneCoco_93 Start: 65595, Stop: 65398, Start Num: 13
Candidate Starts for GeneCoco_93:
(Start: 13 @65595 has 299 MA's), (19, 65532),

Gene: Giles_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Giles_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Giraffe_94 Start: 65420, Stop: 65223, Start Num: 13
Candidate Starts for Giraffe_94:
(Start: 13 @65420 has 299 MA's), (19, 65357),

Gene: Glass_23 Start: 19139, Stop: 18948, Start Num: 13
Candidate Starts for Glass_23:
(7, 19349), (8, 19313), (Start: 13 @19139 has 299 MA's), (18, 19079), (25, 18968),

Gene: Godines_23 Start: 19032, Stop: 18841, Start Num: 13
Candidate Starts for Godines_23:
(7, 19242), (8, 19206), (Start: 13 @19032 has 299 MA's), (18, 18972), (25, 18861),

Gene: Gophee_92 Start: 65407, Stop: 65210, Start Num: 13
Candidate Starts for Gophee_92:
(Start: 13 @65407 has 299 MA's), (19, 65344),

Gene: Grand2040_91 Start: 65385, Stop: 65188, Start Num: 13
Candidate Starts for Grand2040_91:

(Start: 13 @65385 has 299 MA's), (19, 65322),

Gene: Gravaillia_4 Start: 1565, Stop: 1356, Start Num: 12

Candidate Starts for Gravaillia_4:

(Start: 12 @1565 has 22 MA's), (21, 1424), (22, 1394),

Gene: Gwennie1_92 Start: 65231, Stop: 65034, Start Num: 13

Candidate Starts for Gwennie1_92:

(Start: 13 @65231 has 299 MA's), (19, 65168),

Gene: Gwilliam_93 Start: 65950, Stop: 65753, Start Num: 13

Candidate Starts for Gwilliam_93:

(Start: 13 @65950 has 299 MA's), (19, 65887),

Gene: Gyarad_0092 Start: 64905, Stop: 64708, Start Num: 13

Candidate Starts for Gyarad_0092:

(Start: 13 @64905 has 299 MA's), (19, 64842),

Gene: HH92_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for HH92_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: HSavage_91 Start: 64922, Stop: 64725, Start Num: 13

Candidate Starts for HSavage_91:

(Start: 13 @64922 has 299 MA's), (19, 64859), (22, 64766),

Gene: Hadrien_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Hadrien_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Hail_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Hail_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Haimas_90 Start: 64847, Stop: 64650, Start Num: 13

Candidate Starts for Haimas_90:

(Start: 13 @64847 has 299 MA's), (19, 64784),

Gene: Haleema_92 Start: 64966, Stop: 64769, Start Num: 13

Candidate Starts for Haleema_92:

(Start: 13 @64966 has 299 MA's), (19, 64903),

Gene: Hamish_90 Start: 65135, Stop: 64938, Start Num: 13

Candidate Starts for Hamish_90:

(Start: 13 @65135 has 299 MA's), (19, 65072),

Gene: Happabalu_91 Start: 66060, Stop: 65863, Start Num: 13

Candidate Starts for Happabalu_91:

(Start: 13 @66060 has 299 MA's), (19, 65997),

Gene: Hartsy_91 Start: 65084, Stop: 64887, Start Num: 13

Candidate Starts for Hartsy_91:

(Start: 13 @65084 has 299 MA's), (19, 65021),

Gene: Harvey_90 Start: 64744, Stop: 64547, Start Num: 13

Candidate Starts for Harvey_90:

(Start: 13 @64744 has 299 MA's), (19, 64681), (22, 64588),

Gene: Hawkeye_50 Start: 36867, Stop: 37094, Start Num: 11

Candidate Starts for Hawkeye_50:

(4, 36585), (6, 36669), (9, 36750), (Start: 11 @36867 has 2 MA's),

Gene: Hedgerow_23 Start: 19121, Stop: 18930, Start Num: 13

Candidate Starts for Hedgerow_23:

(7, 19331), (8, 19295), (Start: 13 @19121 has 299 MA's), (18, 19061), (25, 18950),

Gene: Held_91 Start: 64864, Stop: 64667, Start Num: 13

Candidate Starts for Held_91:

(Start: 13 @64864 has 299 MA's), (19, 64801),

Gene: HenryJackson_93 Start: 65584, Stop: 65387, Start Num: 13

Candidate Starts for HenryJackson_93:

(Start: 13 @65584 has 299 MA's), (19, 65521),

Gene: Hertubise_92 Start: 65226, Stop: 65029, Start Num: 13

Candidate Starts for Hertubise_92:

(Start: 13 @65226 has 299 MA's), (19, 65163),

Gene: Hetaeria_93 Start: 65233, Stop: 65036, Start Num: 13

Candidate Starts for Hetaeria_93:

(Start: 13 @65233 has 299 MA's), (19, 65170),

Gene: HighStump_95 Start: 65371, Stop: 65174, Start Num: 13

Candidate Starts for HighStump_95:

(Start: 13 @65371 has 299 MA's), (19, 65308),

Gene: Hilltopfarm_119 Start: 70095, Stop: 70271, Start Num: 14

Candidate Starts for Hilltopfarm_119:

(Start: 14 @70095 has 3 MA's),

Gene: Hocus_92 Start: 64885, Stop: 64688, Start Num: 13

Candidate Starts for Hocus_92:

(Start: 13 @64885 has 299 MA's), (19, 64822), (22, 64729),

Gene: HogWash_93 Start: 65897, Stop: 65700, Start Num: 13

Candidate Starts for HogWash_93:

(Start: 13 @65897 has 299 MA's), (19, 65834),

Gene: Holeinone_23 Start: 19017, Stop: 18826, Start Num: 13

Candidate Starts for Holeinone_23:

(7, 19227), (8, 19191), (Start: 13 @19017 has 299 MA's), (18, 18957), (25, 18846),

Gene: Horchata_88 Start: 65062, Stop: 64865, Start Num: 13

Candidate Starts for Horchata_88:

(Start: 13 @65062 has 299 MA's), (19, 64999), (22, 64906),

Gene: ImtiyazSitla_94 Start: 65390, Stop: 65193, Start Num: 13
Candidate Starts for ImtiyazSitla_94:
(Start: 13 @65390 has 299 MA's), (19, 65327), (20, 65306),

Gene: Imvubu_89 Start: 65261, Stop: 65037, Start Num: 11
Candidate Starts for Imvubu_89:
(5, 65516), (Start: 11 @65261 has 2 MA's), (23, 65078),

Gene: Inchworm_94 Start: 65257, Stop: 65060, Start Num: 13
Candidate Starts for Inchworm_94:
(Start: 13 @65257 has 299 MA's), (19, 65194),

Gene: Inverness_91 Start: 65058, Stop: 64861, Start Num: 13
Candidate Starts for Inverness_91:
(Start: 13 @65058 has 299 MA's), (19, 64995), (22, 64902),

Gene: Iridessa_95 Start: 64983, Stop: 64786, Start Num: 13
Candidate Starts for Iridessa_95:
(Start: 13 @64983 has 299 MA's), (19, 64920),

Gene: Iridoclysis_92 Start: 65148, Stop: 64951, Start Num: 13
Candidate Starts for Iridoclysis_92:
(Start: 13 @65148 has 299 MA's), (19, 65085),

Gene: IsaacEli_95 Start: 65389, Stop: 65192, Start Num: 13
Candidate Starts for IsaacEli_95:
(Start: 13 @65389 has 299 MA's), (19, 65326), (22, 65233),

Gene: ItsyBitsy1_23 Start: 19010, Stop: 18819, Start Num: 13
Candidate Starts for ItsyBitsy1_23:
(7, 19220), (8, 19184), (Start: 13 @19010 has 299 MA's), (18, 18950), (25, 18839),

Gene: JDog_92 Start: 65418, Stop: 65221, Start Num: 13
Candidate Starts for JDog_92:
(Start: 13 @65418 has 299 MA's), (19, 65355),

Gene: JacAttac_93 Start: 64862, Stop: 64665, Start Num: 13
Candidate Starts for JacAttac_93:
(Start: 13 @64862 has 299 MA's), (19, 64799),

Gene: JakeO_94 Start: 65146, Stop: 64949, Start Num: 13
Candidate Starts for JakeO_94:
(Start: 13 @65146 has 299 MA's), (19, 65083),

Gene: JangoPhett_91 Start: 65223, Stop: 65026, Start Num: 13
Candidate Starts for JangoPhett_91:
(Start: 13 @65223 has 299 MA's), (19, 65160),

Gene: Jesabah_96 Start: 65985, Stop: 65788, Start Num: 13
Candidate Starts for Jesabah_96:
(Start: 13 @65985 has 299 MA's), (19, 65922),

Gene: Jillium_94 Start: 65579, Stop: 65382, Start Num: 13

Candidate Starts for Jillium_94:
(Start: 13 @65579 has 299 MA's), (19, 65516),

Gene: Jiminy_93 Start: 65082, Stop: 64885, Start Num: 13
Candidate Starts for Jiminy_93:
(Start: 13 @65082 has 299 MA's), (19, 65019),

Gene: Jiraiya_94 Start: 65166, Stop: 64969, Start Num: 13
Candidate Starts for Jiraiya_94:
(Start: 13 @65166 has 299 MA's), (19, 65103), (22, 65010),

Gene: KLUcky39_91 Start: 64941, Stop: 64744, Start Num: 13
Candidate Starts for KLUcky39_91:
(Start: 13 @64941 has 299 MA's), (19, 64878), (22, 64785),

Gene: Kahve_93 Start: 65582, Stop: 65385, Start Num: 13
Candidate Starts for Kahve_93:
(Start: 13 @65582 has 299 MA's), (19, 65519),

Gene: Kailash_91 Start: 65281, Stop: 65084, Start Num: 13
Candidate Starts for Kailash_91:
(Start: 13 @65281 has 299 MA's), (19, 65218), (22, 65125),

Gene: Kaleb_23 Start: 19136, Stop: 18945, Start Num: 13
Candidate Starts for Kaleb_23:
(7, 19346), (8, 19310), (Start: 13 @19136 has 299 MA's), (18, 19076), (25, 18965),

Gene: Katniss_95 Start: 64998, Stop: 64801, Start Num: 13
Candidate Starts for Katniss_95:
(Start: 13 @64998 has 299 MA's), (19, 64935),

Gene: Keitherie_96 Start: 65640, Stop: 65443, Start Num: 13
Candidate Starts for Keitherie_96:
(Start: 13 @65640 has 299 MA's), (19, 65577),

Gene: Khan1_93 Start: 65361, Stop: 65164, Start Num: 13
Candidate Starts for Khan1_93:
(Start: 13 @65361 has 299 MA's), (19, 65298),

Gene: Kheth_23 Start: 19022, Stop: 18831, Start Num: 13
Candidate Starts for Kheth_23:
(7, 19232), (8, 19196), (Start: 13 @19022 has 299 MA's), (18, 18962), (25, 18851),

Gene: Kikipoo_95 Start: 65389, Stop: 65192, Start Num: 13
Candidate Starts for Kikipoo_95:
(Start: 13 @65389 has 299 MA's), (19, 65326), (22, 65233),

Gene: Kimbrough_94 Start: 65461, Stop: 65264, Start Num: 13
Candidate Starts for Kimbrough_94:
(Start: 13 @65461 has 299 MA's), (19, 65398),

Gene: Kinbote_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Kinbote_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: KingTut_84 Start: 61621, Stop: 61424, Start Num: 13

Candidate Starts for KingTut_84:

(Start: 13 @61621 has 299 MA's), (19, 61558),

Gene: KingVeVeVe_91 Start: 64594, Stop: 64397, Start Num: 13

Candidate Starts for KingVeVeVe_91:

(Start: 13 @64594 has 299 MA's), (19, 64531), (22, 64438),

Gene: KlimbOn_92 Start: 64901, Stop: 64704, Start Num: 13

Candidate Starts for KlimbOn_92:

(Start: 13 @64901 has 299 MA's), (19, 64838),

Gene: Kloppinator_93 Start: 65030, Stop: 64833, Start Num: 13

Candidate Starts for Kloppinator_93:

(Start: 13 @65030 has 299 MA's), (19, 64967),

Gene: Kolhan_23 Start: 19019, Stop: 18828, Start Num: 13

Candidate Starts for Kolhan_23:

(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: Kwadwo_92 Start: 64886, Stop: 64689, Start Num: 13

Candidate Starts for Kwadwo_92:

(Start: 13 @64886 has 299 MA's), (19, 64823), (24, 64721),

Gene: Kwksand96_94 Start: 65151, Stop: 64954, Start Num: 13

Candidate Starts for Kwksand96_94:

(Start: 13 @65151 has 299 MA's), (19, 65088), (20, 65067),

Gene: Labeouficaum_93 Start: 64965, Stop: 64768, Start Num: 13

Candidate Starts for Labeouficaum_93:

(Start: 13 @64965 has 299 MA's), (19, 64902), (22, 64809),

Gene: Lars_23 Start: 19139, Stop: 18948, Start Num: 13

Candidate Starts for Lars_23:

(7, 19349), (8, 19313), (Start: 13 @19139 has 299 MA's), (18, 19079), (25, 18968),

Gene: Larson_95 Start: 65230, Stop: 65033, Start Num: 13

Candidate Starts for Larson_95:

(Start: 13 @65230 has 299 MA's), (19, 65167),

Gene: LasagnaCat_94 Start: 65267, Stop: 65070, Start Num: 13

Candidate Starts for LasagnaCat_94:

(Start: 13 @65267 has 299 MA's), (19, 65204),

Gene: Lasso_92 Start: 65127, Stop: 64930, Start Num: 13

Candidate Starts for Lasso_92:

(Start: 13 @65127 has 299 MA's), (19, 65064),

Gene: Laurie_23 Start: 19013, Stop: 18822, Start Num: 13

Candidate Starts for Laurie_23:

(7, 19223), (8, 19187), (Start: 13 @19013 has 299 MA's), (18, 18953), (25, 18842),

Gene: LeeLot_91 Start: 65471, Stop: 65274, Start Num: 13
Candidate Starts for LeeLot_91:
(Start: 13 @65471 has 299 MA's), (19, 65408),

Gene: Lego3393_91 Start: 65588, Stop: 65391, Start Num: 13
Candidate Starts for Lego3393_91:
(Start: 13 @65588 has 299 MA's), (19, 65525), (22, 65432),

Gene: Legolas_94 Start: 65215, Stop: 65018, Start Num: 13
Candidate Starts for Legolas_94:
(Start: 13 @65215 has 299 MA's), (19, 65152),

Gene: Lehmann_94 Start: 65477, Stop: 65280, Start Num: 13
Candidate Starts for Lehmann_94:
(Start: 13 @65477 has 299 MA's), (19, 65414),

Gene: LeiMonet_95 Start: 65348, Stop: 65151, Start Num: 13
Candidate Starts for LeiMonet_95:
(Start: 13 @65348 has 299 MA's), (19, 65285),

Gene: LemonSlice_93 Start: 64874, Stop: 64677, Start Num: 13
Candidate Starts for LemonSlice_93:
(Start: 13 @64874 has 299 MA's), (19, 64811),

Gene: Lephleur_23 Start: 19019, Stop: 18828, Start Num: 13
Candidate Starts for Lephleur_23:
(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: LilHazelnut_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for LilHazelnut_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: LilSmirk_23 Start: 19019, Stop: 18828, Start Num: 13
Candidate Starts for LilSmirk_23:
(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: LizLemon_23 Start: 19136, Stop: 18945, Start Num: 13
Candidate Starts for LizLemon_23:
(7, 19346), (8, 19310), (Start: 13 @19136 has 299 MA's), (18, 19076), (25, 18965),

Gene: Longacauda_94 Start: 65366, Stop: 65169, Start Num: 13
Candidate Starts for Longacauda_94:
(Start: 13 @65366 has 299 MA's), (19, 65303), (20, 65282),

Gene: Lopsy_89 Start: 64781, Stop: 64584, Start Num: 13
Candidate Starts for Lopsy_89:
(Start: 13 @64781 has 299 MA's), (19, 64718),

Gene: LostAndPhound_92 Start: 65416, Stop: 65219, Start Num: 13
Candidate Starts for LostAndPhound_92:
(Start: 13 @65416 has 299 MA's), (19, 65353),

Gene: LuckyMarjie_90 Start: 64626, Stop: 64429, Start Num: 13
Candidate Starts for LuckyMarjie_90:
(Start: 13 @64626 has 299 MA's), (19, 64563),

Gene: Luke_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Luke_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Lulumae_88 Start: 64607, Stop: 64410, Start Num: 13
Candidate Starts for Lulumae_88:
(Start: 13 @64607 has 299 MA's), (19, 64544),

Gene: Lulwa_90 Start: 64240, Stop: 64043, Start Num: 13
Candidate Starts for Lulwa_90:
(Start: 13 @64240 has 299 MA's), (19, 64177),

Gene: Lumine_94 Start: 65065, Stop: 64868, Start Num: 13
Candidate Starts for Lumine_94:
(Start: 13 @65065 has 299 MA's), (19, 65002), (22, 64909),

Gene: Luna22_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Luna22_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: MRabcd_93 Start: 65342, Stop: 65145, Start Num: 13
Candidate Starts for MRabcd_93:
(Start: 13 @65342 has 299 MA's), (19, 65279),

Gene: Mag7_91 Start: 64825, Stop: 64628, Start Num: 13
Candidate Starts for Mag7_91:
(Start: 13 @64825 has 299 MA's), (19, 64762), (22, 64669),

Gene: Magic8_92 Start: 65193, Stop: 64996, Start Num: 13
Candidate Starts for Magic8_92:
(Start: 13 @65193 has 299 MA's), (19, 65130),

Gene: Mana_90 Start: 65030, Stop: 64833, Start Num: 13
Candidate Starts for Mana_90:
(Start: 13 @65030 has 299 MA's), (19, 64967),

Gene: Manad_92 Start: 65139, Stop: 64942, Start Num: 13
Candidate Starts for Manad_92:
(Start: 13 @65139 has 299 MA's), (19, 65076), (22, 64983),

Gene: Maru_93 Start: 65478, Stop: 65281, Start Num: 13
Candidate Starts for Maru_93:
(Start: 13 @65478 has 299 MA's), (19, 65415),

Gene: Maskar_94 Start: 65390, Stop: 65193, Start Num: 13
Candidate Starts for Maskar_94:
(Start: 13 @65390 has 299 MA's), (19, 65327), (20, 65306),

Gene: MasterPo_23 Start: 19019, Stop: 18828, Start Num: 13

Candidate Starts for MasterPo_23:
(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: Matalotodo_91 Start: 65874, Stop: 65677, Start Num: 13
Candidate Starts for Matalotodo_91:
(Start: 13 @65874 has 299 MA's), (19, 65811),

Gene: Mecca_93 Start: 65442, Stop: 65245, Start Num: 13
Candidate Starts for Mecca_93:
(Start: 13 @65442 has 299 MA's), (19, 65379), (22, 65286),

Gene: Megatron_94 Start: 65560, Stop: 65363, Start Num: 13
Candidate Starts for Megatron_94:
(Start: 13 @65560 has 299 MA's), (19, 65497), (22, 65404),

Gene: Melc17_90 Start: 65510, Stop: 65313, Start Num: 13
Candidate Starts for Melc17_90:
(Start: 13 @65510 has 299 MA's), (19, 65447),

Gene: MelsMeow_92 Start: 65148, Stop: 64951, Start Num: 13
Candidate Starts for MelsMeow_92:
(Start: 13 @65148 has 299 MA's), (19, 65085), (20, 65064),

Gene: Mesh1_94 Start: 65603, Stop: 65406, Start Num: 13
Candidate Starts for Mesh1_94:
(Start: 13 @65603 has 299 MA's), (19, 65540),

Gene: Mesmerelda_93 Start: 65441, Stop: 65244, Start Num: 13
Candidate Starts for Mesmerelda_93:
(Start: 13 @65441 has 299 MA's), (19, 65378),

Gene: MichaelPhcott_91 Start: 64822, Stop: 64625, Start Num: 13
Candidate Starts for MichaelPhcott_91:
(Start: 13 @64822 has 299 MA's), (19, 64759), (22, 64666),

Gene: Mikota_88 Start: 64593, Stop: 64396, Start Num: 13
Candidate Starts for Mikota_88:
(Start: 13 @64593 has 299 MA's), (19, 64530),

Gene: MiniBoss_89 Start: 64193, Stop: 63996, Start Num: 13
Candidate Starts for MiniBoss_89:
(Start: 13 @64193 has 299 MA's), (19, 64130),

Gene: MitKao_93 Start: 65043, Stop: 64846, Start Num: 13
Candidate Starts for MitKao_93:
(Start: 13 @65043 has 299 MA's), (19, 64980),

Gene: Morgushi_90 Start: 64858, Stop: 64661, Start Num: 13
Candidate Starts for Morgushi_90:
(Start: 13 @64858 has 299 MA's), (19, 64795),

Gene: Morty_93 Start: 65428, Stop: 65231, Start Num: 13
Candidate Starts for Morty_93:

(Start: 13 @65428 has 299 MA's), (19, 65365),

Gene: Mosaic_90 Start: 65039, Stop: 64842, Start Num: 13

Candidate Starts for Mosaic_90:

(Start: 13 @65039 has 299 MA's), (19, 64976),

Gene: MrPhizzler_96 Start: 65338, Stop: 65141, Start Num: 13

Candidate Starts for MrPhizzler_96:

(Start: 13 @65338 has 299 MA's), (19, 65275),

Gene: Mulan_92 Start: 65072, Stop: 64875, Start Num: 13

Candidate Starts for Mulan_92:

(Start: 13 @65072 has 299 MA's), (19, 65009),

Gene: Murdoc_89 Start: 65151, Stop: 64954, Start Num: 13

Candidate Starts for Murdoc_89:

(Start: 13 @65151 has 299 MA's), (19, 65088),

Gene: Mutante_94 Start: 65045, Stop: 64848, Start Num: 13

Candidate Starts for Mutante_94:

(Start: 13 @65045 has 299 MA's), (19, 64982),

Gene: Nacho_0096 Start: 66116, Stop: 65919, Start Num: 13

Candidate Starts for Nacho_0096:

(Start: 13 @66116 has 299 MA's), (19, 66053),

Gene: Nathan_93 Start: 65571, Stop: 65374, Start Num: 13

Candidate Starts for Nathan_93:

(Start: 13 @65571 has 299 MA's), (19, 65508),

Gene: Newman_89 Start: 65392, Stop: 65195, Start Num: 13

Candidate Starts for Newman_89:

(Start: 13 @65392 has 299 MA's), (19, 65329), (22, 65236),

Gene: Nicole21_94 Start: 65178, Stop: 64981, Start Num: 13

Candidate Starts for Nicole21_94:

(Start: 13 @65178 has 299 MA's), (19, 65115),

Gene: Numberten_93 Start: 65158, Stop: 64961, Start Num: 13

Candidate Starts for Numberten_93:

(Start: 13 @65158 has 299 MA's), (19, 65095),

Gene: Nyala_93 Start: 64894, Stop: 64697, Start Num: 13

Candidate Starts for Nyala_93:

(Start: 13 @64894 has 299 MA's), (19, 64831),

Gene: OBUpride_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for OBUpride_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: OSmaximus_94 Start: 65724, Stop: 65527, Start Num: 13

Candidate Starts for OSmaximus_94:

(Start: 13 @65724 has 299 MA's), (19, 65661),

Gene: Oline_92 Start: 65049, Stop: 64852, Start Num: 13
Candidate Starts for Oline_92:
(Start: 13 @65049 has 299 MA's), (19, 64986), (22, 64893),

Gene: Olive_89 Start: 65290, Stop: 65093, Start Num: 13
Candidate Starts for Olive_89:
(Start: 13 @65290 has 299 MA's), (19, 65227),

Gene: OliverWalter_92 Start: 65343, Stop: 65146, Start Num: 13
Candidate Starts for OliverWalter_92:
(Start: 13 @65343 has 299 MA's), (19, 65280),

Gene: Omniscient_94 Start: 65748, Stop: 65551, Start Num: 13
Candidate Starts for Omniscient_94:
(Start: 13 @65748 has 299 MA's), (19, 65685),

Gene: Oosterbaan_93 Start: 65285, Stop: 65088, Start Num: 13
Candidate Starts for Oosterbaan_93:
(Start: 13 @65285 has 299 MA's), (19, 65222),

Gene: Opia_23 Start: 19019, Stop: 18828, Start Num: 13
Candidate Starts for Opia_23:
(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: Orfeu_93 Start: 65408, Stop: 65211, Start Num: 13
Candidate Starts for Orfeu_93:
(Start: 13 @65408 has 299 MA's), (19, 65345), (22, 65252),

Gene: Orion_91 Start: 64978, Stop: 64781, Start Num: 13
Candidate Starts for Orion_91:
(Start: 13 @64978 has 299 MA's), (19, 64915),

Gene: PG1_91 Start: 65550, Stop: 65353, Start Num: 13
Candidate Starts for PG1_91:
(Start: 13 @65550 has 299 MA's), (19, 65487),

Gene: PallasAthena_94 Start: 64880, Stop: 64683, Start Num: 13
Candidate Starts for PallasAthena_94:
(Start: 13 @64880 has 299 MA's), (19, 64817),

Gene: Phamished_92 Start: 65066, Stop: 64869, Start Num: 13
Candidate Starts for Phamished_92:
(Start: 13 @65066 has 299 MA's), (19, 65003),

Gene: Phantasmagoria_23 Start: 19015, Stop: 18824, Start Num: 13
Candidate Starts for Phantasmagoria_23:
(7, 19225), (8, 19189), (Start: 13 @19015 has 299 MA's), (18, 18955), (25, 18844),

Gene: Phareon_90 Start: 64591, Stop: 64394, Start Num: 13
Candidate Starts for Phareon_90:
(Start: 13 @64591 has 299 MA's), (19, 64528),

Gene: PhatCats2014_92 Start: 65550, Stop: 65353, Start Num: 13
Candidate Starts for PhatCats2014_92:
(Start: 13 @65550 has 299 MA's), (19, 65487), (22, 65394),

Gene: PhatLouie_95 Start: 65424, Stop: 65227, Start Num: 13
Candidate Starts for PhatLouie_95:
(Start: 13 @65424 has 299 MA's), (19, 65361),

Gene: PhenghisKhan_93 Start: 65055, Stop: 64858, Start Num: 13
Candidate Starts for PhenghisKhan_93:
(Start: 13 @65055 has 299 MA's), (19, 64992),

Gene: Pherdinand_94 Start: 65270, Stop: 65073, Start Num: 13
Candidate Starts for Pherdinand_94:
(Start: 13 @65270 has 299 MA's), (19, 65207),

Gene: Phergie_93 Start: 65044, Stop: 64847, Start Num: 13
Candidate Starts for Phergie_93:
(Start: 13 @65044 has 299 MA's), (19, 64981),

Gene: Phipps_91 Start: 65122, Stop: 64925, Start Num: 13
Candidate Starts for Phipps_91:
(Start: 13 @65122 has 299 MA's), (19, 65059),

Gene: Phleuron_90 Start: 64855, Stop: 64658, Start Num: 13
Candidate Starts for Phleuron_90:
(Start: 13 @64855 has 299 MA's), (19, 64792), (22, 64699),

Gene: PhrankReynolds_91 Start: 65049, Stop: 64852, Start Num: 13
Candidate Starts for PhrankReynolds_91:
(Start: 13 @65049 has 299 MA's), (19, 64986),

Gene: PhrodoBaggins_95 Start: 65424, Stop: 65227, Start Num: 13
Candidate Starts for PhrodoBaggins_95:
(Start: 13 @65424 has 299 MA's), (19, 65361),

Gene: Phunky_90 Start: 64926, Stop: 64729, Start Num: 13
Candidate Starts for Phunky_90:
(Start: 13 @64926 has 299 MA's), (19, 64863),

Gene: Piglet_0092 Start: 65542, Stop: 65345, Start Num: 13
Candidate Starts for Piglet_0092:
(Start: 13 @65542 has 299 MA's), (19, 65479),

Gene: PinheadLarry_92 Start: 65195, Stop: 64998, Start Num: 13
Candidate Starts for PinheadLarry_92:
(Start: 13 @65195 has 299 MA's), (19, 65132),

Gene: Pinkman_92 Start: 65267, Stop: 65070, Start Num: 13
Candidate Starts for Pinkman_92:
(Start: 13 @65267 has 299 MA's), (19, 65204), (22, 65111),

Gene: Pipsqueak_90 Start: 64879, Stop: 64682, Start Num: 13

Candidate Starts for Pipsqueak_90:
(Start: 13 @64879 has 299 MA's), (19, 64816),

Gene: Placalicious_91 Start: 65914, Stop: 65717, Start Num: 13
Candidate Starts for Placalicious_91:
(Start: 13 @65914 has 299 MA's), (19, 65851),

Gene: Plata_91 Start: 65135, Stop: 64938, Start Num: 13
Candidate Starts for Plata_91:
(Start: 13 @65135 has 299 MA's), (19, 65072), (22, 64979),

Gene: Plmatters_90 Start: 64869, Stop: 64672, Start Num: 13
Candidate Starts for Plmatters_90:
(Start: 13 @64869 has 299 MA's), (19, 64806),

Gene: Podrick_91 Start: 64957, Stop: 64760, Start Num: 13
Candidate Starts for Podrick_91:
(Start: 13 @64957 has 299 MA's), (19, 64894), (22, 64801),

Gene: Pops_90 Start: 65058, Stop: 64861, Start Num: 13
Candidate Starts for Pops_90:
(Start: 13 @65058 has 299 MA's), (19, 64995), (22, 64902),

Gene: Potter_87 Start: 64878, Stop: 64681, Start Num: 13
Candidate Starts for Potter_87:
(Start: 13 @64878 has 299 MA's), (19, 64815),

Gene: Prickles_94 Start: 65246, Stop: 65049, Start Num: 13
Candidate Starts for Prickles_94:
(Start: 13 @65246 has 299 MA's), (19, 65183), (22, 65090),

Gene: PrinceCharming_23 Start: 19135, Stop: 18944, Start Num: 13
Candidate Starts for PrinceCharming_23:
(7, 19345), (8, 19309), (Start: 13 @19135 has 299 MA's), (18, 19075), (25, 18964),

Gene: ProfessorX_91 Start: 64915, Stop: 64718, Start Num: 13
Candidate Starts for ProfessorX_91:
(Start: 13 @64915 has 299 MA's), (19, 64852),

Gene: Puhltonio_89 Start: 65152, Stop: 64955, Start Num: 13
Candidate Starts for Puhltonio_89:
(Start: 13 @65152 has 299 MA's), (19, 65089),

Gene: QueenBeane_93 Start: 65201, Stop: 65004, Start Num: 13
Candidate Starts for QueenBeane_93:
(Start: 13 @65201 has 299 MA's), (19, 65138),

Gene: Quisquiliae_95 Start: 65212, Stop: 65015, Start Num: 13
Candidate Starts for Quisquiliae_95:
(Start: 13 @65212 has 299 MA's), (19, 65149),

Gene: Qyrzula_21 Start: 19105, Stop: 18914, Start Num: 13
Candidate Starts for Qyrzula_21:

(8, 19279), (Start: 13 @19105 has 299 MA's), (18, 19045), (25, 18934),

Gene: RedMaple_92 Start: 65813, Stop: 65616, Start Num: 13

Candidate Starts for RedMaple_92:

(Start: 13 @65813 has 299 MA's), (19, 65750),

Gene: RedRaider89_95 Start: 65500, Stop: 65303, Start Num: 13

Candidate Starts for RedRaider89_95:

(Start: 13 @65500 has 299 MA's), (19, 65437), (22, 65344),

Gene: Rey_173 Start: 81447, Stop: 81283, Start Num: 15

Candidate Starts for Rey_173:

(10, 81489), (Start: 15 @81447 has 1 MA's), (16, 81435), (17, 81414), (21, 81345), (23, 81312),

Gene: Rhinoforte_23 Start: 19136, Stop: 18945, Start Num: 13

Candidate Starts for Rhinoforte_23:

(7, 19346), (8, 19310), (Start: 13 @19136 has 299 MA's), (18, 19076), (25, 18965),

Gene: Ricotta_94 Start: 64897, Stop: 64700, Start Num: 13

Candidate Starts for Ricotta_94:

(Start: 13 @64897 has 299 MA's), (19, 64834),

Gene: Riggan_94 Start: 65382, Stop: 65185, Start Num: 13

Candidate Starts for Riggan_94:

(Start: 13 @65382 has 299 MA's), (19, 65319), (22, 65226),

Gene: Rimu_92 Start: 65361, Stop: 65164, Start Num: 13

Candidate Starts for Rimu_92:

(Start: 13 @65361 has 299 MA's), (19, 65298), (22, 65205),

Gene: Riverton_92 Start: 65140, Stop: 64943, Start Num: 13

Candidate Starts for Riverton_92:

(Start: 13 @65140 has 299 MA's), (19, 65077), (22, 64984),

Gene: Robyn_95 Start: 65648, Stop: 65451, Start Num: 13

Candidate Starts for Robyn_95:

(Start: 13 @65648 has 299 MA's), (19, 65585),

Gene: Roliet_90 Start: 64241, Stop: 64044, Start Num: 13

Candidate Starts for Roliet_90:

(Start: 13 @64241 has 299 MA's), (19, 64178), (22, 64085),

Gene: Roscoe_92 Start: 65501, Stop: 65304, Start Num: 13

Candidate Starts for Roscoe_92:

(Start: 13 @65501 has 299 MA's), (19, 65438), (22, 65345),

Gene: Roy17_90 Start: 64607, Stop: 64410, Start Num: 13

Candidate Starts for Roy17_90:

(Start: 13 @64607 has 299 MA's), (19, 64544),

Gene: SDcharge11_92 Start: 64535, Stop: 64338, Start Num: 13

Candidate Starts for SDcharge11_92:

(Start: 13 @64535 has 299 MA's), (19, 64472),

Gene: Sabella_23 Start: 19022, Stop: 18831, Start Num: 13
Candidate Starts for Sabella_23:
(8, 19196), (Start: 13 @19022 has 299 MA's), (18, 18962), (25, 18851),

Gene: SallyH_96 Start: 65141, Stop: 64944, Start Num: 13
Candidate Starts for SallyH_96:
(Start: 13 @65141 has 299 MA's), (19, 65078),

Gene: Samaymay_93 Start: 65201, Stop: 65004, Start Num: 13
Candidate Starts for Samaymay_93:
(Start: 13 @65201 has 299 MA's), (19, 65138),

Gene: SassyCat97_91 Start: 64869, Stop: 64672, Start Num: 13
Candidate Starts for SassyCat97_91:
(Start: 13 @64869 has 299 MA's), (19, 64806),

Gene: Schadenfreude_93 Start: 64918, Stop: 64721, Start Num: 13
Candidate Starts for Schadenfreude_93:
(Start: 13 @64918 has 299 MA's), (19, 64855), (22, 64762),

Gene: Schueller_91 Start: 65142, Stop: 64945, Start Num: 13
Candidate Starts for Schueller_91:
(Start: 13 @65142 has 299 MA's), (19, 65079), (22, 64986),

Gene: Scoot17C_93 Start: 64982, Stop: 64785, Start Num: 13
Candidate Starts for Scoot17C_93:
(Start: 13 @64982 has 299 MA's), (19, 64919),

Gene: Serendipity_92 Start: 65355, Stop: 65158, Start Num: 13
Candidate Starts for Serendipity_92:
(Start: 13 @65355 has 299 MA's), (19, 65292),

Gene: Serpentine_0095 Start: 65434, Stop: 65237, Start Num: 13
Candidate Starts for Serpentine_0095:
(Start: 13 @65434 has 299 MA's), (19, 65371),

Gene: ShadowBud_94 Start: 65209, Stop: 65012, Start Num: 13
Candidate Starts for ShadowBud_94:
(Start: 13 @65209 has 299 MA's), (19, 65146),

Gene: Sheila_87 Start: 64447, Stop: 64250, Start Num: 13
Candidate Starts for Sheila_87:
(Start: 13 @64447 has 299 MA's), (19, 64384), (22, 64291),

Gene: ShiVal_92 Start: 64906, Stop: 64709, Start Num: 13
Candidate Starts for ShiVal_92:
(Start: 13 @64906 has 299 MA's), (19, 64843),

Gene: Sigman_92 Start: 64862, Stop: 64665, Start Num: 13
Candidate Starts for Sigman_92:
(Start: 13 @64862 has 299 MA's), (19, 64799),

Gene: SilverBell_94 Start: 65316, Stop: 65119, Start Num: 13
Candidate Starts for SilverBell_94:
(Start: 13 @65316 has 299 MA's), (19, 65253),

Gene: Simielle_93 Start: 64848, Stop: 64651, Start Num: 13
Candidate Starts for Simielle_93:
(Start: 13 @64848 has 299 MA's), (19, 64785),

Gene: SirBeauregard_94 Start: 65427, Stop: 65230, Start Num: 13
Candidate Starts for SirBeauregard_94:
(Start: 13 @65427 has 299 MA's), (19, 65364), (20, 65343),

Gene: Skippy_93 Start: 65277, Stop: 65080, Start Num: 13
Candidate Starts for Skippy_93:
(Start: 13 @65277 has 299 MA's), (19, 65214),

Gene: Soile_94 Start: 65402, Stop: 65205, Start Num: 13
Candidate Starts for Soile_94:
(Start: 13 @65402 has 299 MA's), (19, 65339),

Gene: Solosis_91 Start: 64870, Stop: 64673, Start Num: 13
Candidate Starts for Solosis_91:
(Start: 13 @64870 has 299 MA's), (19, 64807),

Gene: Sophia_91 Start: 64858, Stop: 64661, Start Num: 13
Candidate Starts for Sophia_91:
(Start: 13 @64858 has 299 MA's), (19, 64795),

Gene: Soto_90 Start: 64574, Stop: 64377, Start Num: 13
Candidate Starts for Soto_90:
(Start: 13 @64574 has 299 MA's), (19, 64511), (22, 64418),

Gene: Spartan300_92 Start: 65120, Stop: 64923, Start Num: 13
Candidate Starts for Spartan300_92:
(Start: 13 @65120 has 299 MA's), (19, 65057), (22, 64964),

Gene: Squid_92 Start: 65149, Stop: 64952, Start Num: 13
Candidate Starts for Squid_92:
(Start: 13 @65149 has 299 MA's), (19, 65086),

Gene: Squiggle_92 Start: 64876, Stop: 64679, Start Num: 13
Candidate Starts for Squiggle_92:
(Start: 13 @64876 has 299 MA's), (19, 64813),

Gene: Struggle_93 Start: 64974, Stop: 64777, Start Num: 13
Candidate Starts for Struggle_93:
(Start: 13 @64974 has 299 MA's), (19, 64911),

Gene: Suffolk_89 Start: 65047, Stop: 64850, Start Num: 13
Candidate Starts for Suffolk_89:
(Start: 13 @65047 has 299 MA's), (19, 64984),

Gene: Surely_93 Start: 65440, Stop: 65243, Start Num: 13

Candidate Starts for Surely_93:
(Start: 13 @65440 has 299 MA's), (19, 65377),

Gene: Swiphy_95 Start: 65424, Stop: 65227, Start Num: 13
Candidate Starts for Swiphy_95:
(Start: 13 @65424 has 299 MA's), (19, 65361),

Gene: Swish_94 Start: 65286, Stop: 65089, Start Num: 13
Candidate Starts for Swish_94:
(Start: 13 @65286 has 299 MA's), (19, 65223), (22, 65130),

Gene: TA17A_23 Start: 19016, Stop: 18825, Start Num: 13
Candidate Starts for TA17A_23:
(7, 19226), (8, 19190), (Start: 13 @19016 has 299 MA's), (18, 18956), (25, 18845),

Gene: TallGrassMM_92 Start: 64935, Stop: 64738, Start Num: 13
Candidate Starts for TallGrassMM_92:
(Start: 13 @64935 has 299 MA's), (19, 64872),

Gene: Telesworld_91 Start: 65009, Stop: 64812, Start Num: 13
Candidate Starts for Telesworld_91:
(Start: 13 @65009 has 299 MA's), (19, 64946),

Gene: Thora_91 Start: 65389, Stop: 65192, Start Num: 13
Candidate Starts for Thora_91:
(Start: 13 @65389 has 299 MA's), (19, 65326),

Gene: ThreeOh3D2_94 Start: 65543, Stop: 65346, Start Num: 13
Candidate Starts for ThreeOh3D2_94:
(Start: 13 @65543 has 299 MA's), (19, 65480),

Gene: Thunderbird_93 Start: 65131, Stop: 64934, Start Num: 13
Candidate Starts for Thunderbird_93:
(Start: 13 @65131 has 299 MA's), (19, 65068),

Gene: Timmi_91 Start: 64906, Stop: 64709, Start Num: 13
Candidate Starts for Timmi_91:
(Start: 13 @64906 has 299 MA's), (19, 64843),

Gene: Tinciduntolum_24 Start: 19138, Stop: 18947, Start Num: 13
Candidate Starts for Tinciduntolum_24:
(7, 19348), (8, 19312), (Start: 13 @19138 has 299 MA's), (18, 19078), (25, 18967),

Gene: TomBombadil_93 Start: 65432, Stop: 65235, Start Num: 13
Candidate Starts for TomBombadil_93:
(Start: 13 @65432 has 299 MA's), (19, 65369),

Gene: Tomlarah_93 Start: 65739, Stop: 65542, Start Num: 13
Candidate Starts for Tomlarah_93:
(Start: 13 @65739 has 299 MA's), (19, 65676),

Gene: Toni_92 Start: 65335, Stop: 65138, Start Num: 13
Candidate Starts for Toni_92:

(Start: 13 @65335 has 299 MA's), (19, 65272),

Gene: TooFast2Furius_94 Start: 65296, Stop: 65099, Start Num: 13

Candidate Starts for TooFast2Furius_94:

(Start: 13 @65296 has 299 MA's), (19, 65233), (22, 65140),

Gene: Tres_23 Start: 19019, Stop: 18828, Start Num: 13

Candidate Starts for Tres_23:

(7, 19229), (8, 19193), (Start: 13 @19019 has 299 MA's), (18, 18959), (25, 18848),

Gene: Triad_93 Start: 64782, Stop: 64585, Start Num: 13

Candidate Starts for Triad_93:

(Start: 13 @64782 has 299 MA's), (19, 64719),

Gene: Trypo_93 Start: 65603, Stop: 65406, Start Num: 13

Candidate Starts for Trypo_93:

(Start: 13 @65603 has 299 MA's), (19, 65540),

Gene: Typha_116 Start: 69405, Stop: 69581, Start Num: 14

Candidate Starts for Typha_116:

(1, 69012), (2, 69024), (3, 69042), (Start: 14 @69405 has 3 MA's),

Gene: TyrionL_93 Start: 64965, Stop: 64768, Start Num: 13

Candidate Starts for TyrionL_93:

(Start: 13 @64965 has 299 MA's), (19, 64902), (22, 64809),

Gene: UAch1_94 Start: 65233, Stop: 65036, Start Num: 13

Candidate Starts for UAch1_94:

(Start: 13 @65233 has 299 MA's), (19, 65170),

Gene: Ubuntu_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Ubuntu_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: UncleHowie_89 Start: 64567, Stop: 64370, Start Num: 13

Candidate Starts for UncleHowie_89:

(Start: 13 @64567 has 299 MA's), (19, 64504),

Gene: Usavi_93 Start: 65729, Stop: 65532, Start Num: 13

Candidate Starts for Usavi_93:

(Start: 13 @65729 has 299 MA's), (19, 65666), (22, 65573),

Gene: Vaishali24_94 Start: 65329, Stop: 65132, Start Num: 13

Candidate Starts for Vaishali24_94:

(Start: 13 @65329 has 299 MA's), (19, 65266),

Gene: Valjean_91 Start: 65123, Stop: 64926, Start Num: 13

Candidate Starts for Valjean_91:

(Start: 13 @65123 has 299 MA's), (19, 65060),

Gene: Vaticameos_90 Start: 63439, Stop: 63242, Start Num: 13

Candidate Starts for Vaticameos_90:

(Start: 13 @63439 has 299 MA's), (19, 63376),

Gene: Veritas_92 Start: 65046, Stop: 64849, Start Num: 13

Candidate Starts for Veritas_92:

(Start: 13 @65046 has 299 MA's), (19, 64983),

Gene: Vic9_00023 Start: 19461, Stop: 19270, Start Num: 13

Candidate Starts for Vic9_00023:

(7, 19671), (8, 19635), (Start: 13 @19461 has 299 MA's), (18, 19401), (25, 19290),

Gene: Virapocalypse_94 Start: 65232, Stop: 65035, Start Num: 13

Candidate Starts for Virapocalypse_94:

(Start: 13 @65232 has 299 MA's), (19, 65169),

Gene: Virgeve_91 Start: 64851, Stop: 64654, Start Num: 13

Candidate Starts for Virgeve_91:

(Start: 13 @64851 has 299 MA's), (19, 64788),

Gene: Vista_92 Start: 65045, Stop: 64848, Start Num: 13

Candidate Starts for Vista_92:

(Start: 13 @65045 has 299 MA's), (19, 64982),

Gene: Vivaldi_93 Start: 65310, Stop: 65113, Start Num: 13

Candidate Starts for Vivaldi_93:

(Start: 13 @65310 has 299 MA's), (19, 65247),

Gene: Vortex_91 Start: 65151, Stop: 64954, Start Num: 13

Candidate Starts for Vortex_91:

(Start: 13 @65151 has 299 MA's), (19, 65088),

Gene: Wallhey_94 Start: 65150, Stop: 64953, Start Num: 13

Candidate Starts for Wallhey_94:

(Start: 13 @65150 has 299 MA's), (19, 65087),

Gene: Waterdiva_94 Start: 65417, Stop: 65220, Start Num: 13

Candidate Starts for Waterdiva_94:

(Start: 13 @65417 has 299 MA's), (19, 65354),

Gene: Webster2_4 Start: 1826, Stop: 1617, Start Num: 12

Candidate Starts for Webster2_4:

(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Weher20_90 Start: 65489, Stop: 65292, Start Num: 13

Candidate Starts for Weher20_90:

(Start: 13 @65489 has 299 MA's), (19, 65426),

Gene: West99_23 Start: 19139, Stop: 18948, Start Num: 13

Candidate Starts for West99_23:

(7, 19349), (8, 19313), (Start: 13 @19139 has 299 MA's), (18, 19079), (25, 18968),

Gene: Windsor_93 Start: 65433, Stop: 65236, Start Num: 13

Candidate Starts for Windsor_93:

(Start: 13 @65433 has 299 MA's), (19, 65370), (20, 65349),

Gene: Wishmaker_4 Start: 1826, Stop: 1617, Start Num: 12
Candidate Starts for Wishmaker_4:
(Start: 12 @1826 has 22 MA's), (21, 1685), (22, 1655),

Gene: Xavier_92 Start: 65044, Stop: 64847, Start Num: 13
Candidate Starts for Xavier_92:
(Start: 13 @65044 has 299 MA's), (19, 64981),

Gene: Yoshand_94 Start: 65269, Stop: 65072, Start Num: 13
Candidate Starts for Yoshand_94:
(Start: 13 @65269 has 299 MA's), (19, 65206),

Gene: YouGoGlencoco_93 Start: 65159, Stop: 64962, Start Num: 13
Candidate Starts for YouGoGlencoco_93:
(Start: 13 @65159 has 299 MA's), (19, 65096),

Gene: Zaider_94 Start: 65534, Stop: 65337, Start Num: 13
Candidate Starts for Zaider_94:
(Start: 13 @65534 has 299 MA's), (19, 65471),

Gene: Zelda_93 Start: 65490, Stop: 65293, Start Num: 13
Candidate Starts for Zelda_93:
(Start: 13 @65490 has 299 MA's), (19, 65427),

Gene: Zonia_93 Start: 65600, Stop: 65403, Start Num: 13
Candidate Starts for Zonia_93:
(Start: 13 @65600 has 299 MA's), (19, 65537), (22, 65444),