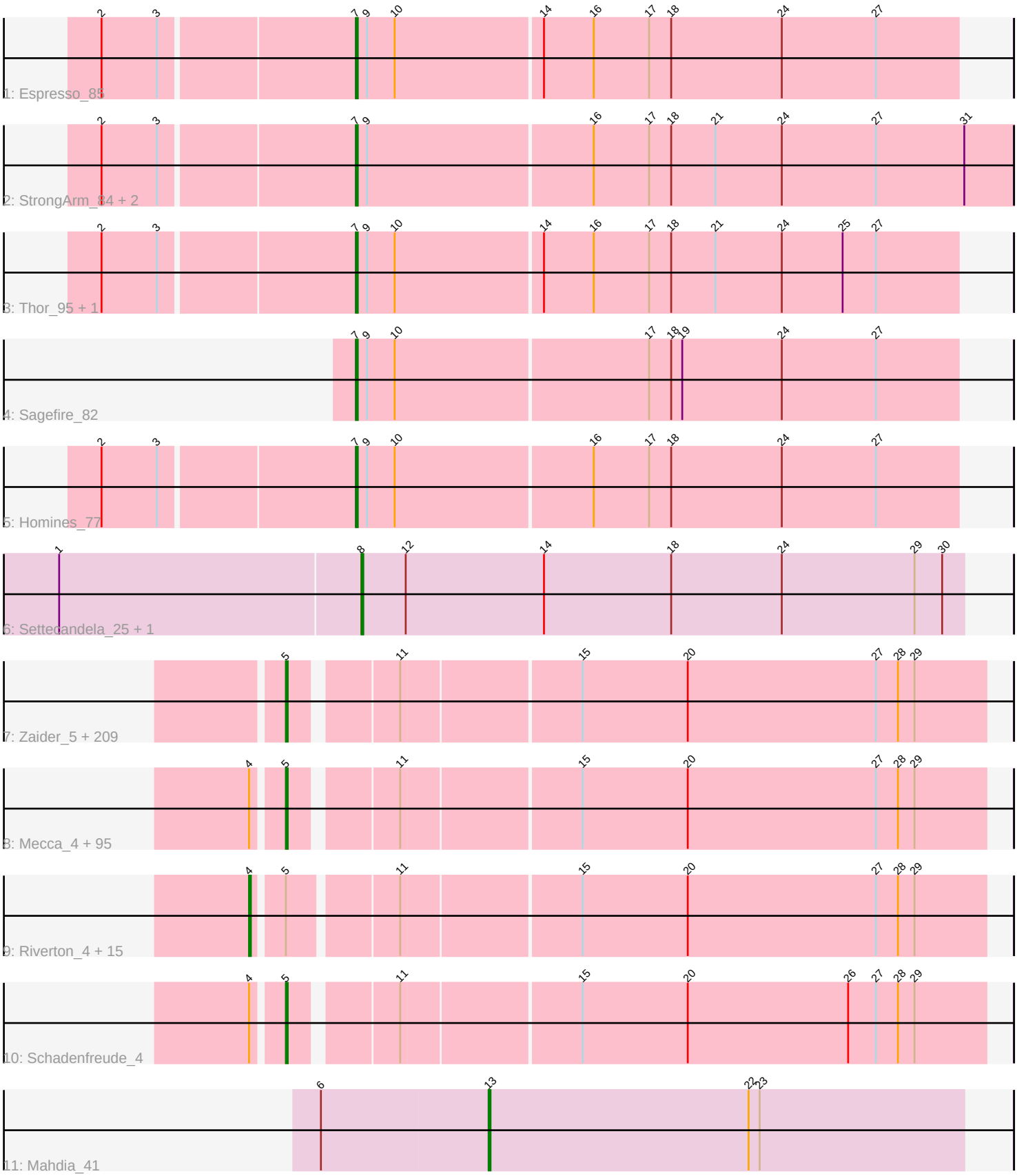
Pham 332407


1: Espresso_85
2: StrongArm_84 + 2
3: Thor_95 + 1
4: Sagefire_82
5: Homines_77
6: Settecandela_25 + 1
7: Zaider_5 + 209
8: Mecca_4 + 95
9: Riverton_4 + 15
10: Schadenfreude_4
11: Mahdia_41

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 332407 Report

This analysis was run 11/14/26 on database version 672.

Pham number 332407 has 334 members, 26 are drafts.

Phages represented in each track:
• Track 1 : Espresso_85
• Track 2 : StrongArm_84, Beatrix_85, Bexan_83
• Track 3 : Thor_95, SarFire_95
• Track 4 : Sagefire_82
• Track 5 : Homines_77
• Track 6 : Settecandela_25, Phrappuccino_25
• Track 7 : Zaider_5, LasagnaCat_4, Jillium_4, KlimbOn_4, PinheadLarry_4, SilverBell_4, Olive_4, Virgeve_4, Plata_4, Daffy_4, Jiminy_4, Inchworm_4, Soto_4, Jbug01_4, Vista_4, Andre_4, Soile_4, Placalicious_4, Boehler_4, Doddsville_4, Brilliant_4, ABU_4, Megamind20_5, Hamish_4, Morty_4, KingTut_4, Iridessa_4, Melc17_4, Lulumae_4, Cornbread_4, Chute_4, OneBrain_4, HenryJackson_4, Chorkpop_4, JacAttac_4, Hetaeria_4, Antonia_4, Hertubise_4, Durga_4, BatteryCK_4, Chaelin_4, CheetO_4, BlacksBerry_4, Weher20_4, MitKao_4, Bluephacebaby_4, Gareth_4, Hekos_4, Xavier_4, Childish_4, Swish_4, Badfish_4, Coletti_4, Eugenia_4, Chuni_4, FleetyMac_4, Skippy_4, IsaacEli_4, HogWash_4, Phamished_4, LemonSlice_4, EmpTee_4, Oline_4, TallGrassMM_4, Duggie_4, ImtiyazSitla_4, Mag7_4, Prickles_4, Legolas_4, Larson_5, Roy17_4, Burr_4, MelsMeow_4, Buckeye_4, Magic8_4, Mosaic_4, Windsor_4, OliverWalter_4, Colbert_4, Held_4, DoesntMatter_4, Nova1_4, Mutante_4, Veritas_4, Adriana_4, CampRoach_4, Toni_4, UncleHowie_4, ElvisPhasley_4, Salazzle_4, Dingo_4, Scoot17C_4, Dati_4, DonSanchon_4, Ricotta_4, MichaelPhcott_4, Flake_4, EmGer13_4, JakeO_4, Giraffe_4, FremontTroll_4, PhrodoBaggins_4, Manad_4, Murdoc_4, Taraxa_4, Waterdiva_4, Vectra_4, Vaticameos_4, LeiMonet_4, Ashraf_4, Pinkman_4, PallasAthena_4, SirBeauregard_4, PhrankReynolds_4, AngelCake_4, Phareon_4, Pacifista_4, Maskar_4, DelRivs_4, Kailash_4, TyrionL_4, MrPhizzler_4, Trypo_4, Katniss_4, FugateOSU_4, Matalotodo_4, Solosis_4, Charles1_4, Orwigg_4, PhenghisKhan_4, Daka_4, JDog_4, Usavi_4, Anderson_4, Serendipity_4, Etaye_4, Cher_4, PhatLouie_4, Craff_4, Karn_4, Schueller_4, Potter_4, Olak_4, Fang_4, Sigman_4, Kwadwo_4, Swiphy_4, Mikota_4, Kwksand96_4, Banjo_4, Bishoperium_4, Zonia_4, LeeLot_4, LostAndPhound_4, Sophia_4, AbsoluteMadLad_4, Kahve_4, Zelda_4, GeneCoco_4, PhatCats2014_4, Wallhey_4, Happabalu_4, Haimas_4, Surely_4, Labeouficaum_4, True_4, Timmi_4, Jesabah_4, Jiraiya_4, Gwennie1_4, CharlieGBrown_4, DuchessDung_4, Phleuron_4, Kikipoo_4, Oosterbaan_4, Mesh1_4, Telesworld_4, Kiwot_4, HighStump_4, Emiris_4, Nyala_4, Megatron_4, Spartan300_4, Nehme_4, Vortex_4, Cannibal_4, Phergie_4, Thunderbird_4, Orfeu_4, Squiggle_4, Aelin_4, Caspiboi_4, DaddyDaniels_4, Mana_4, Gophee_4, DirtJuice_4, Hocus_4, Khan1_4, UAch1_4, Rimu_4, Derpp_4, TomBombadil_4, Newman_4,

Valjean_4, Hartsy_4, Aleia_4, Thora_4, Mulan_4, Longacauda_4, BlueHusk_4
• Track 8 : Mecca_4, Nicole21_4, Struggle_4, Eremos_4, ShadowBud_4, Aonishiki_4, Fozzie_4, Phunky_4, Chipette_5, MRabcd_4, Roscoe_5, Cobra_4, Gyarad_004, FluffyNinja_4, YouGoGlencoco_4, Plmatters_4, Lasso_4, Selr12_4, Yoshand_4, CamL_4, Robyn_4, Kloppinator_4, AltPhacts_4, Carthage_4, Harvey_4, Maru_4, Inverness_4, Chunky_4, Nathan_4, Puhltonio_4, ThreeOh3D2_4, Dice_4, Dione_4, Omniscient_4, Lopsy_4, Pherdinand_4, Sheila_4, QueenBeane_4, SDcharge11_4, Crownjwl_5, Fringe_4, Chah_4, Podrick_4, Quisquiliae_4, KLucky39_4, Gwilliam_4, Virapocalypse_4, Apizium_4, Phipps_4, ProfessorX_4, Suffolk_4, Mesmerelda_4, Lulwa_4, Basato_5, ShiVal_4, SassyCat97_4, HSavage_4, MiniBoss_4, BoogieWoogie_4, Cosmolli16_4, JangoPhett_4, Scrick_4, Tooj_4, Tomlarah_4, Grand2040_4, Morgushi_4, Cornobble_4, Freya_4, Samaymay_4, Squid_4, Triad_4, RedMaple_4, Haleema_4, Frankicide_4, Beaglebox_4, Kimbrough_4, Vivaldi_4, OSmaximus_4, Mcshane_4, Lumine_4, Numberten_4, FriarPreacher_4, Lego3393_4, PG1_4, Keitherie_4, Orion_4, RedRaider89_5, Slatt_4, Altwerkus_4, Iridoclysis_4, LuckyMarjie_4, Pipsqueak_4, Horchata_4, Simielle_4, Roliet_4, KingVeVeVe_4
• Track 9 : Riverton_4, Pops_4, NiaNia_4, DolOn_6, Serpentine_004, Riggan_4, Azuria_4, BlackStallion_4, GreenChile_5, Piglet_004, Nacho_004, Septica_4, Vaishali24_4, TooFast2Furius_5, Lehmann_5, SallyH_5
• Track 10 : Schadenfreude_4
• Track 11 : Mahdia_41

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

The start number called the most often in the published annotations is 5, it was called in 288 of the 308 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• ABU_4, AbsoluteMadLad_4, Adriana_4, Aelin_4, Aleia_4, AltPhacts_4, Altwerkus_4, Anderson_4, Andre_4, AngelCake_4, Antonia_4, Aonishiki_4, Apizium_4, Ashraf_4, Badfish_4, Banjo_4, Basato_5, BatteryCK_4, Beaglebox_4, Bishoperium_4, BlacksBerry_4, BlueHusk_4, Bluephacebaby_4, Boehler_4, BoogieWoogie_4, Brilliant_4, Buckeye_4, Burr_4, CamL_4, CampRoach_4, Cannibal_4, Carthage_4, Caspiboi_4, Chaelin_4, Chah_4, Charles1_4, CharlieGBrown_4, CheetO_4, Cher_4, Childish_4, Chipette_5, Chorkpop_4, Chuni_4, Chunky_4, Chute_4, Cobra_4, Colbert_4, Coletti_4, Cornbread_4, Cornobble_4, Cosmolli16_4, Craff_4, Crownjwl_5, DaddyDaniels_4, Daffy_4, Daka_4, Dati_4, DelRivs_4, Derpp_4, Dice_4, Dingo_4, Dione_4, DirtJuice_4, Doddsville_4, DoesntMatter_4, DonSanchon_4, DuchessDung_4, Duggie_4, Durga_4, ElvisPhasley_4, EmGer13_4, Emiris_4, EmpTee_4, Eremos_4, Etaye_4, Eugenia_4, Fang_4, Flake_4, FleetyMac_4, FluffyNinja_4, Fozzie_4, Frankicide_4, FremontTroll_4, Freya_4, FriarPreacher_4, Fringe_4, FugateOSU_4, Gareth_4, GeneCoco_4, Giraffe_4, Gophee_4, Grand2040_4, Gwennie1_4, Gwilliam_4, Gyarad_004, HSavage_4, Haimas_4, Haleema_4, Hamish_4, Happabalu_4, Hartsy_4, Harvey_4, Hekos_4, Held_4, HenryJackson_4, Hertubise_4, Hetaeria_4, HighStump_4, Hocus_4, HogWash_4, Horchata_4, ImtiyazSitla_4, Inchworm_4, Inverness_4, Iridessa_4, Iridoclysis_4, IsaacEli_4, JDog_4, JacAttac_4, JakeO_4, JangoPhett_4, Jbug01_4, Jesabah_4, Jillium_4, Jiminy_4, Jiraiya_4, KLucky39_4, Kahve_4, Kailash_4, Karn_4, Katniss_4, Keitherie_4, Khan1_4, Kikipoo_4, Kimbrough_4, KingTut_4, KingVeVeVe_4, Kiwot_4, KlimbOn_4, Kloppinator_4, Kwadwo_4, Kwksand96_4, Labeouficaum_4, Larson_5,

LasagnaCat_4, Lasso_4, LeeLot_4, Lego3393_4, Legolas_4, LeiMonet_4, LemonSlice_4, Longacauda_4, Lopsy_4, LostAndPhound_4, LuckyMarjie_4, Lulumae_4, Lulwa_4, Lumine_4, MRabcd_4, Mag7_4, Magic8_4, Mana_4, Manad_4, Maru_4, Maskar_4, Matalotodo_4, Mcshane_4, Mecca_4, Megamind20_5, Megatron_4, Melc17_4, MelsMeow_4, Mesh1_4, Mesmerelda_4, MichaelPhcott_4, Mikota_4, MiniBoss_4, MitKao_4, Morgushi_4, Morty_4, Mosaic_4, MrPhizzler_4, Mulan_4, Murdoc_4, Mutante_4, Nathan_4, Nehme_4, Newman_4, Nicole21_4, Nova1_4, Numberten_4, Nyala_4, OSmaximus_4, Olak_4, Oline_4, Olive_4, OliverWalter_4, Omniscient_4, OneBrain_4, Oosterbaan_4, Orfeu_4, Orion_4, Orwigg_4, PG1_4, Pacifista_4, PallasAthena_4, Phamished_4, Phareon_4, PhatCats2014_4, PhatLouie_4, PhenghisKhan_4, Pherdinand_4, Phergie_4, Phipps_4, Phleuron_4, PhrankReynolds_4, PhrodoBaggins_4, Phunky_4, PinheadLarry_4, Pinkman_4, Pipsqueak_4, Placalicious_4, Plata_4, Plmatters_4, Podrick_4, Potter_4, Prickles_4, ProfessorX_4, Puhltonio_4, QueenBeane_4, Quisquiliae_4, RedMaple_4, RedRaider89_5, Ricotta_4, Rimu_4, Robyn_4, Roliet_4, Roscoe_5, Roy17_4, SDcharge11_4, Salazzle_4, Samaymay_4, SassyCat97_4, Schadenfreude_4, Schueller_4, Scoot17C_4, Scrick_4, Selr12_4, Serendipity_4, ShadowBud_4, Sheila_4, ShiVal_4, Sigman_4, SilverBell_4, Simielle_4, SirBeauregard_4, Skippy_4, Slatt_4, Soile_4, Solosis_4, Sophia_4, Soto_4, Spartan300_4, Squid_4, Squiggle_4, Struggle_4, Suffolk_4, Surely_4, Swiphy_4, Swish_4, TallGrassMM_4, Taraxa_4, Telesworld_4, Thora_4, ThreeOh3D2_4, Thunderbird_4, Timmi_4, TomBombadil_4, Tomlarah_4, Toni_4, Tooj_4, Triad_4, True_4, Trypo_4, TyrionL_4, UAch1_4, UncleHowie_4, Usavi_4, Valjean_4, Vaticameos_4, Vectra_4, Veritas_4, Virapocalypse_4, Virgeve_4, Vista_4, Vivaldi_4, Vortex_4, Wallhey_4, Waterdiva_4, Weher20_4, Windsor_4, Xavier_4, Yoshand_4, YouGoGlencoco_4, Zaider_5, Zelda_4, Zonia_4,

Genes that have the "Most Annotated" start but do not call it:
• Azuria_4, BlackStallion_4, DolOn_6, GreenChile_5, Lehmann_5, Nacho_004, NiaNia_4, Piglet_004, Pops_4, Riggan_4, Riverton_4, SallyH_5, Septica_4, Serpentine_004, TooFast2Furius_5, Vaishali24_4,

Genes that do not have the "Most Annotated" start:
• Beatrix_85, Bexan_83, Espresso_85, Homines_77, Mahdia_41, Phrappuccino_25, Sagefire_82, SarFire_95, Settecandela_25, StrongArm_84, Thor_95,

Summary by start number:

Start 4:
• Found in 113 of 334 (33.8%) of genes in pham
• Manual Annotations of this start: 9 of 308
• Called 14.2% of time when present
• Phage (with cluster) where this start called: Azuria_4 (B1), BlackStallion_4 (B1), DolOn_6 (B1), GreenChile_5 (B1), Lehmann_5 (B1), Nacho_004 (B1), NiaNia_4 (B1), Piglet_004 (B1), Pops_4 (B1), Riggan_4 (B1), Riverton_4 (B1), SallyH_5 (B1), Septica_4 (B1), Serpentine_004 (B1), TooFast2Furius_5 (B1), Vaishali24_4 (B1),

Start 5:
• Found in 323 of 334 (96.7%) of genes in pham
• Manual Annotations of this start: 288 of 308
• Called 95.0% of time when present
• Phage (with cluster) where this start called: ABU_4 (B1), AbsoluteMadLad_4 (B1), Adriana_4 (B1), Aelin_4 (B1), Aleia_4 (B1), AltPhacts_4 (B1), Altwerkus_4 (B1),

Anderson_4 (B1), Andre_4 (B1), AngelCake_4 (B1), Antonia_4 (B1), Aonishiki_4 (B1), Apizium_4 (B1), Ashraf_4 (B1), Badfish_4 (B1), Banjo_4 (B1), Basato_5 (B1), BatteryCK_4 (B1), Beaglebox_4 (B1), Bishoperium_4 (B1), BlacksBerry_4 (B1), BlueHusk_4 (B1), Bluephacebaby_4 (B1), Boehler_4 (B1), BoogieWoogie_4 (B1), Brilliant_4 (B1), Buckeye_4 (B1), Burr_4 (B1), CamL_4 (B1), CampRoach_4 (B1), Cannibal_4 (B1), Carthage_4 (B1), Caspiboi_4 (B1), Chaelin_4 (B1), Chah_4 (B1), Charles1_4 (B1), CharlieGBrown_4 (B1), CheetO_4 (B1), Cher_4 (B1), Childish_4 (B1), Chipette_5 (B1), Chorkpop_4 (B1), Chuni_4 (B1), Chunky_4 (B1), Chute_4 (B1), Cobra_4 (B1), Colbert_4 (B1), Coletti_4 (B1), Cornbread_4 (B1), Cornobble_4 (B1), Cosmolli16_4 (B1), Craff_4 (B1), Crownjwl_5 (B1), DaddyDaniels_4 (B1), Daffy_4 (B1), Daka_4 (B1), Dati_4 (B1), DelRivs_4 (B1), Derpp_4 (B1), Dice_4 (B1), Dingo_4 (B1), Dione_4 (B1), DirtJuice_4 (B1), Doddsville_4 (B1), DoesntMatter_4 (B1), DonSanchon_4 (B1), DuchessDung_4 (B1), Duggie_4 (B1), Durga_4 (B1), ElvisPhasley_4 (B1), EmGer13_4 (B1), Emiris_4 (B1), EmpTee_4 (B1), Eremos_4 (B1), Etaye_4 (B1), Eugenia_4 (B1), Fang_4 (B1), Flake_4 (B1), FleetyMac_4 (B1), FluffyNinja_4 (B1), Fozzie_4 (B1), Frankicide_4 (B1), FremontTroll_4 (B1), Freya_4 (B1), FriarPreacher_4 (B1), Fringe_4 (B1), FugateOSU_4 (B1), Gareth_4 (B1), GeneCoco_4 (B1), Giraffe_4 (B1), Gophee_4 (B1), Grand2040_4 (B1), Gwennie1_4 (B1), Gwilliam_4 (B1), Gyarad_004 (B1), HSavage_4 (B1), Haimas_4 (B1), Haleema_4 (B1), Hamish_4 (B1), Happabalu_4 (B1), Hartsy_4 (B1), Harvey_4 (B1), Hekos_4 (B1), Held_4 (B1), HenryJackson_4 (B1), Hertubise_4 (B1), Hetaeria_4 (B1), HighStump_4 (B1), Hocus_4 (B1), HogWash_4 (B1), Horchata_4 (B1), ImtiyazSitla_4 (B1), Inchworm_4 (B1), Inverness_4 (B1), Iridessa_4 (B1), Iridoclysis_4 (B1), IsaacEli_4 (B1), JDog_4 (B1), JacAttac_4 (B1), JakeO_4 (B1), JangoPhett_4 (B1), Jbug01_4 (B1), Jesabah_4 (B1), Jillium_4 (B1), Jiminy_4 (B1), Jiraiya_4 (B1), KLucky39_4 (B1), Kahve_4 (B1), Kailash_4 (B1), Karn_4 (B1), Katniss_4 (B1), Keitherie_4 (B1), Khan1_4 (B1), Kikipoo_4 (B1), Kimbrough_4 (B1), KingTut_4 (B1), KingVeVeVe_4 (B1), Kiwot_4 (B1), KlimbOn_4 (B1), Kloppinator_4 (B1), Kwadwo_4 (B1), Kwksand96_4 (B1), Labeouficaum_4 (B1), Larson_5 (B1), LasagnaCat_4 (B1), Lasso_4 (B1), LeeLot_4 (B1), Lego3393_4 (B1), Legolas_4 (B1), LeiMonet_4 (B1), LemonSlice_4 (B1), Longacauda_4 (B1), Lopsy_4 (B1), LostAndPhound_4 (B1), LuckyMarjie_4 (B1), Lulumae_4 (B1), Lulwa_4 (B1), Lumine_4 (B1), MRabcd_4 (B1), Mag7_4 (B1), Magic8_4 (B1), Mana_4 (B1), Manad_4 (B1), Maru_4 (B1), Maskar_4 (B1), Matalotodo_4 (B1), Mcshane_4 (B1), Mecca_4 (B1), Megamind20_5 (B1), Megatron_4 (B1), Melc17_4 (B1), MelsMeow_4 (B1), Mesh1_4 (B1), Mesmerelda_4 (B1), MichaelPhcott_4 (B1), Mikota_4 (B1), MiniBoss_4 (B1), MitKao_4 (B1), Morgushi_4 (B1), Morty_4 (B1), Mosaic_4 (B1), MrPhizzler_4 (B1), Mulan_4 (B1), Murdoc_4 (B1), Mutante_4 (B1), Nathan_4 (B1), Nehme_4 (B1), Newman_4 (B1), Nicole21_4 (B1), Nova1_4 (B1), Numberten_4 (B1), Nyala_4 (B1), OSmaximus_4 (B1), Olak_4 (B1), Oline_4 (B1), Olive_4 (B1), OliverWalter_4 (B1), Omniscient_4 (B1), OneBrain_4 (B1), Oosterbaan_4 (B1), Orfeu_4 (B1), Orion_4 (B1), Orwigg_4 (B1), PG1_4 (B1), Pacifista_4 (B1), PallasAthena_4 (B1), Phamished_4 (B1), Phareon_4 (B1), PhatCats2014_4 (B1), PhatLouie_4 (B1), PhenghisKhan_4 (B1), Pherdinand_4 (B1), Phergie_4 (B1), Phipps_4 (B1), Phleuron_4 (B1), PhrankReynolds_4 (B1), PhrodoBaggins_4 (B1), Phunky_4 (B1), PinheadLarry_4 (B1), Pinkman_4 (B1), Pipsqueak_4 (B1), Placalicious_4 (B1), Plata_4 (B1), Plmatters_4 (B1), Podrick_4 (B1), Potter_4 (B1), Prickles_4 (B1), ProfessorX_4 (B1), Puhltonio_4 (B1), QueenBeane_4 (B1), Quisquiliae_4 (B1), RedMaple_4 (B1), RedRaider89_5 (B1), Ricotta_4 (B1), Rimu_4 (B1), Robyn_4 (B1), Roliet_4 (B1), Roscoe_5 (B1), Roy17_4 (B1), SDcharge11_4 (B1), Salazzle_4 (B1), Samaymay_4 (B1), SassyCat97_4 (B1), Schadenfreude_4 (B1), Schueller_4 (B1), Scoot17C_4 (B1), Scrick_4 (B1), Selr12_4 (B1), Serendipity_4 (B1), ShadowBud_4 (B1), Sheila_4 (B1), ShiVal_4 (B1), Sigman_4 (B1), SilverBell_4

(B1), Simielle_4 (B1), SirBeauregard_4 (B1), Skippy_4 (B1), Slatt_4 (B1), Soile_4 (B1), Solosis_4 (B1), Sophia_4 (B1), Soto_4 (B1), Spartan300_4 (B1), Squid_4 (B1), Squiggle_4 (B1), Struggle_4 (B1), Suffolk_4 (B1), Surely_4 (B1), Swiphy_4 (B1), Swish_4 (B1), TallGrassMM_4 (B1), Taraxa_4 (B1), Telesworld_4 (B1), Thora_4 (B1), ThreeOh3D2_4 (B1), Thunderbird_4 (B1), Timmi_4 (B1), TomBombadil_4 (B1), Tomlarah_4 (B1), Toni_4 (B1), Tooj_4 (B1), Triad_4 (B1), True_4 (B1), Trypo_4 (B1), TyrionL_4 (B1), UAch1_4 (B1), UncleHowie_4 (B1), Usavi_4 (B1), Valjean_4 (B1), Vaticameos_4 (B1), Vectra_4 (B1), Veritas_4 (B1), Virapocalypse_4 (B1), Virgeve_4 (B1), Vista_4 (B1), Vivaldi_4 (B1), Vortex_4 (B1), Wallhey_4 (B1), Waterdiva_4 (B1), Weher20_4 (B1), Windsor_4 (B1), Xavier_4 (B1), Yoshand_4 (B1), YouGoGlencoco_4 (B1), Zaider_5 (B1), Zelda_4 (B1), Zonia_4 (B1),

Start 7:
• Found in 8 of 334 (2.4%) of genes in pham
• Manual Annotations of this start: 8 of 308
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Beatrix_85 (A1), Bexan_83 (A1), Espresso_85 (A1), Homines_77 (A1), Sagefire_82 (A1), SarFire_95 (A1), StrongArm_84 (A1), Thor_95 (A1),

Start 8:
• Found in 2 of 334 (0.6%) of genes in pham
• Manual Annotations of this start: 2 of 308
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Phrappuccino_25 (AA), Settecandela_25 (AA),

Start 13:
• Found in 1 of 334 (0.3%) of genes in pham
• Manual Annotations of this start: 1 of 308
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Mahdia_41 (CD),

Summary by clusters:

There are 4 clusters represented in this pham: A1, AA, B1, CD,

Info for manual annotations of cluster A1:
•Start number 7 was manually annotated 8 times for cluster A1.

Info for manual annotations of cluster AA:
•Start number 8 was manually annotated 2 times for cluster AA.

Info for manual annotations of cluster B1:
•Start number 4 was manually annotated 9 times for cluster B1.
•Start number 5 was manually annotated 288 times for cluster B1.

Info for manual annotations of cluster CD:
•Start number 13 was manually annotated 1 time for cluster CD.

Gene Information:

Gene: ABU_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for ABU_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: AbsoluteMadLad_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for AbsoluteMadLad_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Adriana_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Adriana_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Aelin_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Aelin_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Aleia_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Aleia_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: AltPhacts_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for AltPhacts_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Altwerkus_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Altwerkus_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Anderson_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Anderson_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Andre_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Andre_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: AngelCake_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for AngelCake_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Antonia_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Antonia_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Aonishiki_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Aonishiki_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Apizium_4 Start: 2648, Stop: 3001, Start Num: 5
Candidate Starts for Apizium_4:

(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Ashraf_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Ashraf_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Azuria_4 Start: 2633, Stop: 3010, Start Num: 4
Candidate Starts for Azuria_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Badfish_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Badfish_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Banjo_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Banjo_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Basato_5 Start: 2881, Stop: 3246, Start Num: 5
Candidate Starts for Basato_5:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: BatteryCK_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for BatteryCK_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Beaglebox_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Beaglebox_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Beatrix_85 Start: 50114, Stop: 49761, Start Num: 7
Candidate Starts for Beatrix_85:
(2, 50246), (3, 50216), (Start: 7 @50114 has 8 MA's), (9, 50108), (16, 49988), (17, 49958), (18, 49946), (21, 49922), (24, 49886), (27, 49835), (31, 49787),

Gene: Bexan_83 Start: 49890, Stop: 49537, Start Num: 7
Candidate Starts for Bexan_83:
(2, 50022), (3, 49992), (Start: 7 @49890 has 8 MA's), (9, 49884), (16, 49764), (17, 49734), (18, 49722), (21, 49698), (24, 49662), (27, 49611), (31, 49563),

Gene: Bishoperium_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Bishoperium_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: BlackStallion_4 Start: 2633, Stop: 3010, Start Num: 4
Candidate Starts for BlackStallion_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: BlacksBerry_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for BlacksBerry_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: BlueHusk_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for BlueHusk_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Bluephacebaby_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Bluephacebaby_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Boehler_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Boehler_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: BoogieWoogie_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for BoogieWoogie_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Brilliant_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Brilliant_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Buckeye_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Buckeye_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Burr_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Burr_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: CamL_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for CamL_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: CampRoach_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for CampRoach_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Cannibal_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Cannibal_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Carthage_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Carthage_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Caspiboi_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Caspiboi_4:

(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Chaelin_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Chaelin_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Chah_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Chah_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Charles1_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Charles1_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: CharlieGBrown_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for CharlieGBrown_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: CheetO_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for CheetO_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Cher_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Cher_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Childish_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Childish_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Chipette_5 Start: 2881, Stop: 3246, Start Num: 5
Candidate Starts for Chipette_5:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: Chorkpop_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Chorkpop_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Chuni_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Chuni_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Chunky_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Chunky_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Chute_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Chute_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Cobra_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Cobra_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Colbert_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Colbert_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Coletti_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Coletti_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Cornbread_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Cornbread_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Cornobble_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Cornobble_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Cosmolli16_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Cosmolli16_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Craff_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Craff_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Crownjwl_5 Start: 2881, Stop: 3246, Start Num: 5
Candidate Starts for Crownjwl_5:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: DaddyDaniels_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for DaddyDaniels_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Daffy_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Daffy_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Daka_4 Start: 2648, Stop: 3016, Start Num: 5
Candidate Starts for Daka_4:
(Start: 5 @2648 has 288 MA's), (11, 2705), (15, 2798), (20, 2855), (27, 2957), (28, 2969), (29, 2978),

Gene: Dati_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Dati_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: DelRivs_4 Start: 2647, Stop: 3012, Start Num: 5

Candidate Starts for DelRivs_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Derpp_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Derpp_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Dice_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Dice_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Dingo_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Dingo_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Dione_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Dione_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: DirtJuice_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for DirtJuice_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Doddsville_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Doddsville_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: DoesntMatter_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for DoesntMatter_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: DolOn_6 Start: 2866, Stop: 3246, Start Num: 4
Candidate Starts for DolOn_6:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: DonSanchon_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for DonSanchon_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: DuchessDung_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for DuchessDung_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Duggie_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Duggie_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Durga_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Durga_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: ElvisPhasley_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for ElvisPhasley_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: EmGer13_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for EmGer13_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Emiris_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Emiris_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: EmpTee_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for EmpTee_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Eremos_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Eremos_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Espresso_85 Start: 50081, Stop: 49758, Start Num: 7
Candidate Starts for Espresso_85:
(2, 50213), (3, 50183), (Start: 7 @50081 has 8 MA's), (9, 50075), (10, 50060), (14, 49982), (16, 49955), (17, 49925), (18, 49913), (24, 49853), (27, 49802),

Gene: Etaye_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Etaye_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Eugenia_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Eugenia_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Fang_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Fang_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Flake_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Flake_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: FleetyMac_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for FleetyMac_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: FluffyNinja_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for FluffyNinja_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Fozzie_4 Start: 2648, Stop: 3010, Start Num: 5

Candidate Starts for Fozzie_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Frankicide_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Frankicide_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: FremontTroll_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for FremontTroll_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Freya_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Freya_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: FriarPreacher_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for FriarPreacher_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Fringe_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Fringe_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: FugateOSU_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for FugateOSU_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Gareth_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Gareth_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: GeneCoco_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for GeneCoco_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Giraffe_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Giraffe_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Gophee_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Gophee_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Grand2040_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Grand2040_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: GreenChile_5 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for GreenChile_5:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Gwennie1_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Gwennie1_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Gwilliam_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Gwilliam_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Gyarad_004 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Gyarad_004:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: HSavage_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for HSavage_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Haimas_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Haimas_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Haleema_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Haleema_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Hamish_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Hamish_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Happabalu_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Happabalu_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Hartsy_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Hartsy_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Harvey_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Harvey_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Hekos_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Hekos_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Held_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Held_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: HenryJackson_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for HenryJackson_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Hertubise_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Hertubise_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Hetaeria_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Hetaeria_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: HighStump_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for HighStump_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Hocus_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Hocus_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: HogWash_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for HogWash_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Homines_77 Start: 45464, Stop: 45141, Start Num: 7
Candidate Starts for Homines_77:
(2, 45596), (3, 45566), (Start: 7 @45464 has 8 MA's), (9, 45458), (10, 45443), (16, 45338), (17, 45308), (18, 45296), (24, 45236), (27, 45185),

Gene: Horchata_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Horchata_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: ImtiyazSitla_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for ImtiyazSitla_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Inchworm_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Inchworm_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Inverness_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Inverness_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Iridessa_4 Start: 2647, Stop: 3012, Start Num: 5

Candidate Starts for Iridessa_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Iridoclysis_4 Start: 2648, Stop: 3016, Start Num: 5
Candidate Starts for Iridoclysis_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2705), (15, 2798), (20, 2855), (27, 2957), (28, 2969), (29, 2978),

Gene: IsaacEli_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for IsaacEli_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: JDog_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for JDog_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: JacAttac_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for JacAttac_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: JakeO_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for JakeO_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: JangoPhett_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for JangoPhett_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Jbug01_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Jbug01_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Jesabah_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Jesabah_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Jillium_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Jillium_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Jiminy_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Jiminy_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Jiraiya_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Jiraiya_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: KLucky39_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for KLucky39_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Kahve_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Kahve_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Kailash_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Kailash_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Karn_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Karn_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Katniss_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Katniss_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Keitherie_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Keitherie_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Khan1_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Khan1_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Kikipoo_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Kikipoo_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Kimbrough_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Kimbrough_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: KingTut_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for KingTut_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: KingVeVeVe_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for KingVeVeVe_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Kiwot_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Kiwot_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: KlimbOn_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for KlimbOn_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Kloppinator_4 Start: 2648, Stop: 3010, Start Num: 5

Candidate Starts for Kloppinator_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Kwadwo_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Kwadwo_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Kwksand96_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Kwksand96_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Labeouficaum_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Labeouficaum_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Larson_5 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Larson_5:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: LasagnaCat_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for LasagnaCat_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Lasso_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Lasso_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: LeeLot_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for LeeLot_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Lego3393_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Lego3393_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Legolas_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Legolas_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Lehmann_5 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for Lehmann_5:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: LeiMonet_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for LeiMonet_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: LemonSlice_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for LemonSlice_4:

(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Longacauda_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Longacauda_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Lopsy_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Lopsy_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: LostAndPhound_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for LostAndPhound_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: LuckyMarjie_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for LuckyMarjie_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Lulumae_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Lulumae_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Lulwa_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Lulwa_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Lumine_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Lumine_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: MRabcd_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for MRabcd_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Mag7_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Mag7_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Magic8_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Magic8_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Mahdia_41 Start: 32100, Stop: 31843, Start Num: 13
Candidate Starts for Mahdia_41:
(6, 32190), (Start: 13 @32100 has 1 MA's), (22, 31959), (23, 31953),

Gene: Mana_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Mana_4:

(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Manad_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Manad_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Maru_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Maru_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Maskar_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Maskar_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Matalotodo_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Matalotodo_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Mcshane_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Mcshane_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Mecca_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Mecca_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Megamind20_5 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Megamind20_5:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Megatron_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Megatron_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Melc17_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Melc17_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: MelsMeow_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for MelsMeow_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Mesh1_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Mesh1_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Mesmerelda_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Mesmerelda_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: MichaelPhcott_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for MichaelPhcott_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Mikota_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Mikota_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: MiniBoss_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for MiniBoss_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: MitKao_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for MitKao_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Morgushi_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Morgushi_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Morty_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Morty_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Mosaic_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Mosaic_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: MrPhizzler_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for MrPhizzler_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Mulan_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Mulan_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Murdoc_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Murdoc_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Mutante_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Mutante_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Nacho_004 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for Nacho_004:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Nathan_4 Start: 2648, Stop: 3010, Start Num: 5

Candidate Starts for Nathan_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Nehme_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Nehme_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Newman_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Newman_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: NiaNia_4 Start: 2632, Stop: 3012, Start Num: 4
Candidate Starts for NiaNia_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Nicole21_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Nicole21_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Nova1_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Nova1_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Numberten_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Numberten_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Nyala_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Nyala_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: OSmaximus_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for OSmaximus_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Olak_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Olak_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Oline_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Oline_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Olive_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Olive_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: OliverWalter_4 Start: 2647, Stop: 3009, Start Num: 5

Candidate Starts for OliverWalter_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Omniscient_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Omniscient_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: OneBrain_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for OneBrain_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Oosterbaan_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Oosterbaan_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Orfeu_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Orfeu_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Orion_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Orion_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Orwigg_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Orwigg_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: PG1_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for PG1_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Pacifista_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Pacifista_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: PallasAthena_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for PallasAthena_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Phamished_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Phamished_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Phareon_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Phareon_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: PhatCats2014_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for PhatCats2014_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: PhatLouie_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for PhatLouie_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: PhenghisKhan_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for PhenghisKhan_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Pherdinand_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Pherdinand_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Phergie_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Phergie_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Phipps_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Phipps_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Phleuron_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Phleuron_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: PhrankReynolds_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for PhrankReynolds_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Phrappuccino_25 Start: 13081, Stop: 13407, Start Num: 8
Candidate Starts for Phrappuccino_25:
(1, 12919), (Start: 8 @13081 has 2 MA's), (12, 13105), (14, 13180), (18, 13249), (24, 13309), (29, 13381), (30, 13396),

Gene: PhrodoBaggins_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for PhrodoBaggins_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Phunky_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Phunky_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Piglet_004 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for Piglet_004:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: PinheadLarry_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for PinheadLarry_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Pinkman_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Pinkman_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Pipsqueak_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Pipsqueak_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Placalicious_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Placalicious_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Plata_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Plata_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Plmatters_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Plmatters_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Podrick_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Podrick_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Pops_4 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for Pops_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Potter_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Potter_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Prickles_4 Start: 2648, Stop: 3019, Start Num: 5
Candidate Starts for Prickles_4:
(Start: 5 @2648 has 288 MA's), (11, 2708), (15, 2801), (20, 2858), (27, 2960), (28, 2972), (29, 2981),

Gene: ProfessorX_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for ProfessorX_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Puhltonio_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Puhltonio_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: QueenBeane_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for QueenBeane_4:

(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Quisquiliae_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Quisquiliae_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: RedMaple_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for RedMaple_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: RedRaider89_5 Start: 2881, Stop: 3246, Start Num: 5
Candidate Starts for RedRaider89_5:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: Ricotta_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Ricotta_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Riggan_4 Start: 2633, Stop: 3016, Start Num: 4
Candidate Starts for Riggan_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2705), (15, 2798), (20, 2855), (27, 2957), (28, 2969), (29, 2978),

Gene: Rimu_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Rimu_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Riverton_4 Start: 2632, Stop: 3012, Start Num: 4
Candidate Starts for Riverton_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Robyn_4 Start: 2649, Stop: 3014, Start Num: 5
Candidate Starts for Robyn_4:
(Start: 4 @2634 has 9 MA's), (Start: 5 @2649 has 288 MA's), (11, 2703), (15, 2796), (20, 2853), (27, 2955), (28, 2967), (29, 2976),

Gene: Roliet_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Roliet_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Roscoe_5 Start: 2881, Stop: 3246, Start Num: 5
Candidate Starts for Roscoe_5:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: Roy17_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Roy17_4:

(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: SDcharge11_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for SDcharge11_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Sagefire_82 Start: 49439, Stop: 49116, Start Num: 7
Candidate Starts for Sagefire_82:
(Start: 7 @49439 has 8 MA's), (9, 49433), (10, 49418), (17, 49283), (18, 49271), (19, 49265), (24, 49211), (27, 49160),

Gene: Salazzle_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Salazzle_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: SallyH_5 Start: 2633, Stop: 3010, Start Num: 4
Candidate Starts for SallyH_5:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Samaymay_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Samaymay_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: SarFire_95 Start: 52708, Stop: 52385, Start Num: 7
Candidate Starts for SarFire_95:
(2, 52840), (3, 52810), (Start: 7 @52708 has 8 MA's), (9, 52702), (10, 52687), (14, 52609), (16, 52582), (17, 52552), (18, 52540), (21, 52516), (24, 52480), (25, 52447), (27, 52429),

Gene: SassyCat97_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for SassyCat97_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Schadenfreude_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Schadenfreude_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (26, 2936), (27, 2951), (28, 2963), (29, 2972),

Gene: Schueller_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Schueller_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Scoot17C_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Scoot17C_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Scrick_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Scrick_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Selr12_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Selr12_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Septica_4 Start: 2633, Stop: 3010, Start Num: 4
Candidate Starts for Septica_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Serendipity_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Serendipity_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Serpentine_004 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for Serpentine_004:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Settecandela_25 Start: 13081, Stop: 13407, Start Num: 8
Candidate Starts for Settecandela_25:
(1, 12919), (Start: 8 @13081 has 2 MA's), (12, 13105), (14, 13180), (18, 13249), (24, 13309), (29, 13381), (30, 13396),

Gene: ShadowBud_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for ShadowBud_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Sheila_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Sheila_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: ShiVal_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for ShiVal_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Sigman_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Sigman_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: SilverBell_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for SilverBell_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Simielle_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Simielle_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: SirBeauregard_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for SirBeauregard_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Skippy_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Skippy_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Slatt_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Slatt_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Soile_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Soile_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Solosis_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Solosis_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Sophia_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Sophia_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Soto_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Soto_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Spartan300_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Spartan300_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Squid_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Squid_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Squiggle_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Squiggle_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: StrongArm_84 Start: 50018, Stop: 49665, Start Num: 7
Candidate Starts for StrongArm_84:
(2, 50150), (3, 50120), (Start: 7 @50018 has 8 MA's), (9, 50012), (16, 49892), (17, 49862), (18, 49850), (21, 49826), (24, 49790), (27, 49739), (31, 49691),

Gene: Struggle_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Struggle_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Suffolk_4 Start: 2648, Stop: 3013, Start Num: 5

Candidate Starts for Suffolk_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Surely_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Surely_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Swiphy_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Swiphy_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Swish_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Swish_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: TallGrassMM_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for TallGrassMM_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Taraxa_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Taraxa_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Telesworld_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Telesworld_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Thor_95 Start: 52066, Stop: 51743, Start Num: 7
Candidate Starts for Thor_95:
(2, 52198), (3, 52168), (Start: 7 @52066 has 8 MA's), (9, 52060), (10, 52045), (14, 51967), (16, 51940), (17, 51910), (18, 51898), (21, 51874), (24, 51838), (25, 51805), (27, 51787),

Gene: Thora_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Thora_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: ThreeOh3D2_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for ThreeOh3D2_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Thunderbird_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Thunderbird_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Timmi_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Timmi_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: TomBombadil_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for TomBombadil_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Tomlarah_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Tomlarah_4:
(Start: 4 @2632 has 9 MA's), (Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Toni_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Toni_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: TooFast2Furius_5 Start: 2866, Stop: 3246, Start Num: 4
Candidate Starts for TooFast2Furius_5:
(Start: 4 @2866 has 9 MA's), (Start: 5 @2881 has 288 MA's), (11, 2935), (15, 3028), (20, 3085), (27, 3187), (28, 3199), (29, 3208),

Gene: Tooj_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Tooj_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Triad_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Triad_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: True_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for True_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Trypo_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Trypo_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: TyrionL_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for TyrionL_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: UAch1_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for UAch1_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: UncleHowie_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for UncleHowie_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Usavi_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Usavi_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Vaishali24_4 Start: 2633, Stop: 3013, Start Num: 4
Candidate Starts for Vaishali24_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Valjean_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Valjean_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Vaticameos_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Vaticameos_4:
(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Vectra_4 Start: 2647, Stop: 3012, Start Num: 5
Candidate Starts for Vectra_4:
(Start: 5 @2647 has 288 MA's), (11, 2701), (15, 2794), (20, 2851), (27, 2953), (28, 2965), (29, 2974),

Gene: Veritas_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Veritas_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Virapocalypse_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Virapocalypse_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Virgeve_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Virgeve_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Vista_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Vista_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Vivaldi_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Vivaldi_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Vortex_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Vortex_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Wallhey_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Wallhey_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Waterdiva_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Waterdiva_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Weher20_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Weher20_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),

Gene: Windsor_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Windsor_4:

(Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Xavier_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Xavier_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Yoshand_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for Yoshand_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: YouGoGlencoco_4 Start: 2648, Stop: 3010, Start Num: 5
Candidate Starts for YouGoGlencoco_4:
(Start: 4 @2633 has 9 MA's), (Start: 5 @2648 has 288 MA's), (11, 2699), (15, 2792), (20, 2849), (27, 2951), (28, 2963), (29, 2972),

Gene: Zaider_5 Start: 2881, Stop: 3243, Start Num: 5
Candidate Starts for Zaider_5:
(Start: 5 @2881 has 288 MA's), (11, 2932), (15, 3025), (20, 3082), (27, 3184), (28, 3196), (29, 3205),

Gene: Zelda_4 Start: 2648, Stop: 3013, Start Num: 5
Candidate Starts for Zelda_4:
(Start: 5 @2648 has 288 MA's), (11, 2702), (15, 2795), (20, 2852), (27, 2954), (28, 2966), (29, 2975),

Gene: Zonia_4 Start: 2647, Stop: 3009, Start Num: 5
Candidate Starts for Zonia_4:
(Start: 5 @2647 has 288 MA's), (11, 2698), (15, 2791), (20, 2848), (27, 2950), (28, 2962), (29, 2971),