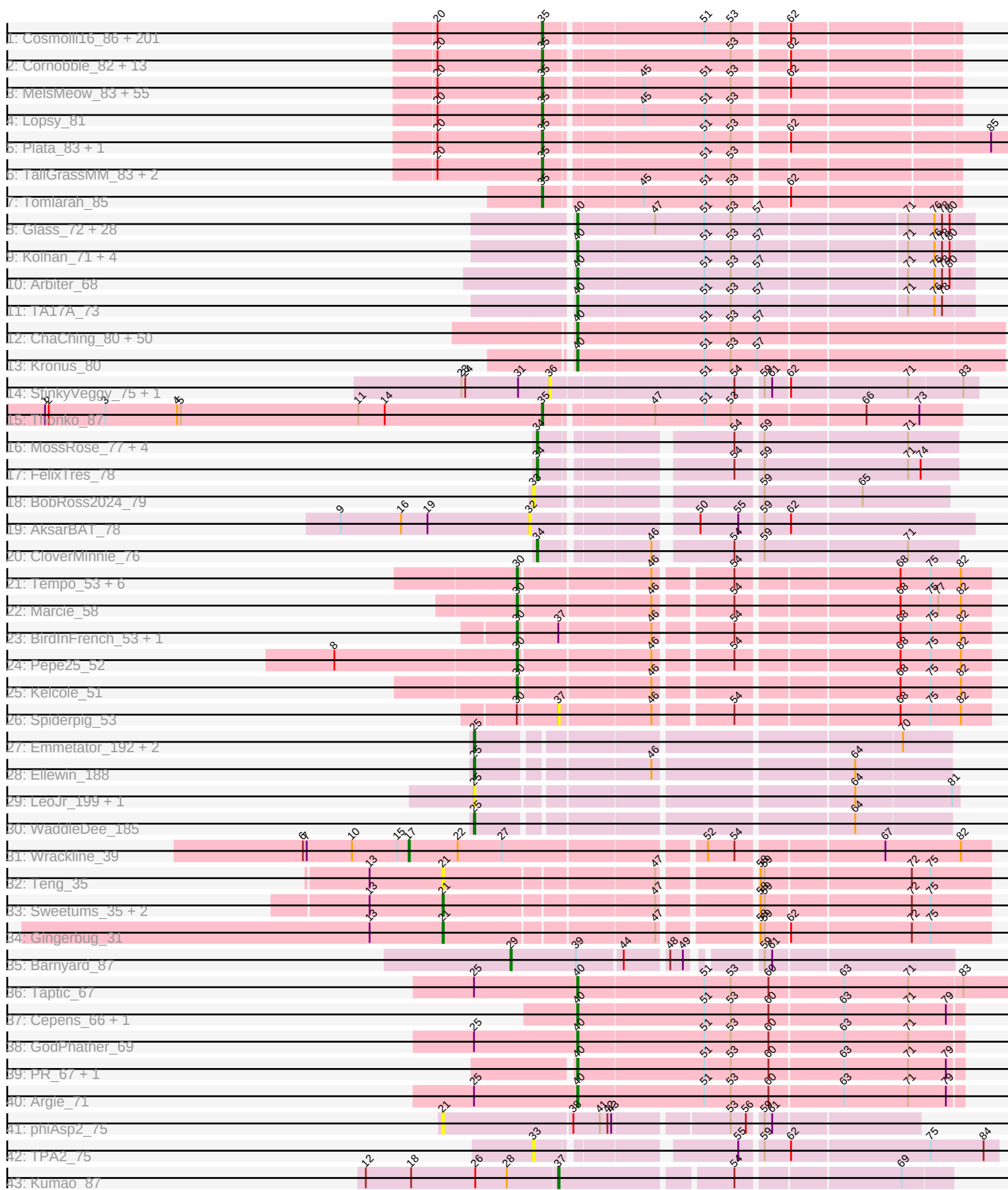


Pham 330346



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 330346 Report

This analysis was run 09/05/26 on database version 662.

Pham number 330346 has 416 members, 36 are drafts.

Phages represented in each track:

- Track 1 : Cosmolli16_86, HenryJackson_85, Pinkman_84, Nova1_84, Squiggle_83, AngelCake_83, YouGoGlencoco_84, Scrick_83, Carthage_85, Mcshane_83, Podrick_83, Yoshand_85, Cannibal_85, SDcharge11_83, Etaye_83, HSavage_82, MitKao_84, Boehler_83, Thunderbird_84, Taraxa_84, Zaider_85, Selr12_85, Jbug01_83, JDog_83, Vaishali24_85, Khan1_83, Squid_83, Gareth_84, Plmatters_82, Sheila_80, Roscoe_84, Hamish_81, RedMaple_84, Karn_84, JakeO_85, Melc17_81, Schadenfreude_84, Vaticameos_81, Thora_83, ShadowBud_84, Freya_81, KingTut_75, Mutante_85, FremontTroll_82, Kimbrough_85, DolOn_88, DelRivs_82, ThreeOh3D2_86, Windsor_84, Phareon_82, Serpentine_0085, Cobra_84, Maru_84, Salazzle_82, Rimu_84, PhatLouie_86, OneBrain_87, IsaacEli_86, HogWash_85, ElvisPhasley_85, Lumine_85, Oosterbaan_84, LostAndPhound_83, Placalicious_83, Oline_83, Chorkpop_85, Dingo_81, Slatt_84, Labeouficaum_84, Fozzie_82, Hekos_82, Roliet_81, Frankicide_83, Quisquilliae_86, Flake_83, Cher_84, Buckeye_84, Adriana_84, Orwigg_83, Virapocalypse_85, Ricotta_84, Usavi_85, Pipsqueak_81, Swiphy_86, Chipette_84, Nyala_83, Horchata_81, Nathan_85, Aleia_83, Mana_82, Magic8_83, RedRaider89_83, Gyarad_0083, Gophee_84, Duggie_84, JangoPhett_82, UAch1_85, Swish_85, LeiMonet_87, DoesntMatter_81, Timmi_83, Virgeve_82, Wallhey_85, Lehmann_87, TyrionL_84, Numberten_83, Hocus_82, Durga_86, Andre_86, Struggle_84, NiaNia_85, OliverWalter_84, TomBombadil_84, ShiVal_82, GreenChile_83, Daffy_83, Phamished_84, Orfeu_83, Kiwot_84, Robyn_86, Soto_81, PhrodoBaggins_86, Spartan300_83, Mecca_84, Manad_83, Waterdiva_85, Phipps_83, Fringe_88, AltPhacts_82, Grand2040_82, PallasAthena_85, Nehme_81, Bluephacebaby_83, Mesmerelda_83, ABU_83, KlimbOn_83, Piglet_0084, Morty_85, Scoot17C_85, Pacifista_83, SallyH_87, Dati_81, Jillium_85, BoogieWoogie_85, Potter_80, Jesabah_86, ProfessorX_82, CampRoach_85, Lulwa_81, Emiris_86, Charles1_85, BlacksBerry_85, Weher20_81, SassyCat97_82, Cornbread_83, Anderson_86, Gwennie1_83, Aonishiki_84, Harvey_81, Kikipoo_86, Triad_86, Olive_82, Held_82, Childish_84, Inverness_82, Jiraiya_85, TooFast2Furius_83, Badfish_85, Hetaeria_84, LuckyMarjie_81, Basato_83, DaddyDaniels_87, Surely_84, GeneCoco_85, Haimas_82, DirtJuice_84, Zelda_84, Burr_84, KLUcky39_82, MiniBoss_81, Soile_85, Skippy_85, MRabcd_84, MrPhizzler_87, HighStump_85, Iridessa_86, Kahve_85, Mulan_83, Eugenia_86, True_82, AbsoluteMadLad_83, Dice_83, Valjean_83, Riverton_83, KingVeVeVe_82, BlueHusk_85, Simielle_83, Craff_86, Kloppinator_84, Matalotodo_83, Mikota_81, Brilliant_87
- Track 2 : Cornobble_82, Olak_83, OSmaximus_85, Bishoperium_84, Sophia_82, Haleema_83, Altwerkus_82, LemonSlice_84, Phunky_82, PinheadLarry_83,

Prickles_85, Lasso_83, Daka_86, Colbert_82

- Track 3 : MelsMeow_83, Dione_82, Vivaldi_84, Iridoclysis_83, PhenghisKhan_84, Chute_84, Giraffe_84, Megatron_85, BatteryCK_82, Omniscient_85, Lego3393_82, Pherdinand_85, BlackStallion_83, Phleuron_82, EmpTee_83, Longacauda_85, Nicole21_85, Coletti_87, DonSancho_80, Legolas_85, Megamind20_84, Veritas_83, FleetyMac_84, Antonia_83, LasagnaCat_85, Katniss_86, Schueller_82, Phergie_84, QueenBeane_84, FluffyNinja_85, JacAttac_84, Kwksand96_85, Mag7_82, Aelin_83, Beaglebox_81, Samaymay_84, Kwadwo_83, Tooj_81, FugateOSU_84, Chaelin_85, Keitherie_87, Chuni_87, CamL_84, ImtiyazSitla_85, Ashraf_85, Telesworld_82, Vista_83, Banjo_81, SirBeauregard_85, CharlieGBrown_82, Maskar_85, Inchworm_85, Jiminy_84, MichaelPhcott_82, Kailash_82, Riggan_85

- Track 4 : Lopsy_81

- Track 5 : Plata_83, Happabalu_82

- Track 6 : TallGrassMM_83, Solosis_82, Caspiboi_83

- Track 7 : Tomlarah_85

- Track 8 : Glass_72, Vic9_00070, Tres_70, Godines_71, Lars_71, Brownie5_70, Opia_71, Boyle_70, Allegro_70, Kheth_70, Hedgerow_70, Eaglehorse_70, LizLemon_70, Rosebush_69, LilSmirk_70, Blocker23_70, Bananafish_71, MasterPo_71, FrenchFry_71, Calamitous_71, Holeinone_70, PrinceCharming_71, ItsyBitsy1_69, Coffee_70, Tinciduntolum_71, Lephleur_70, Rhinoforte_70, Kaleb_70, West99_70

- Track 9 : Kolhan_71, Phantasmagoria_69, Sabella_70, Faze9_69, Ares_70

- Track 10 : Arbiter_68

- Track 11 : TA17A_73

- Track 12 : ChaChing_80, Athena_82, Tydolla_76, GlenHope_81, Phayeta_83, Chentzyk_82, Glubnar_81, Casbah_80, Pipefish_82, HarveySr_79, Neos5_80, LestyG_78, Nozo_80, Jackstina_75, Heathcliff_80, Akoma_80, Yahalom_78, Mulaychimus_81, MmasiCarm_81, Gadjet_81, Deenasa_80, Yinz_80, Audrey_80, SynergyX_80, Baloo_79, Rita1961_81, Mortcellus_80, Shenandoah_79, Kamiyu_80, Phaedrus_75, RagingRooster_79, Bernardo_81, Marlia_81, Daisy_79, TinyTerror_81, Ben11_80, Corofin_80, Marley1013_81, Phlyer_80, Philly_79, Chalmers_79, Chandler_80, SlippinJimmy_83, Briakila_80, Halfpint_79, Abinghost_80, Obutu_82, Morty007_79, SwainyDoc_81, RomaT_80, Gervas_81

- Track 13 : Kronus_80

- Track 14 : StinkyVeggy_75, KarasumaRum_75

- Track 15 : Thonko_87

- Track 16 : MossRose_77, AnarQue_79, Yeshua_78, CaiB_78, MakoManhole_74

- Track 17 : FelixTres_78

- Track 18 : BobRoss2024_79

- Track 19 : AksarBAT_78

- Track 20 : CloverMinnie_76

- Track 21 : Tempo_53, RobinRose_55, CandC_52, Fregley_54, KillerQueen_54, Romm_55, OneinaGillian_53

- Track 22 : Marcie_58

- Track 23 : BirdInFrench_53, Wilca_53

- Track 24 : Pepe25_52

- Track 25 : Kelcole_51

- Track 26 : Spiderpig_53

- Track 27 : Emmetator_192, BooTeria_187, DunneganBoMo_189

- Track 28 : Ellewin_188

- Track 29 : LeoJr_199, ReginaGlobina_203

- Track 30 : WaddleDee_185

- Track 31 : Wrackline_39

- Track 32 : Teng_35
- Track 33 : Sweetums_35, Lesiram_34, DelaGarza_33
- Track 34 : Gingerbug_31
- Track 35 : Barnyard_87
- Track 36 : Taptic_67
- Track 37 : Cepens_66, Megabear_66
- Track 38 : GodPhather_69
- Track 39 : PR_67, D12_66
- Track 40 : Argie_71
- Track 41 : phiAsp2_75
- Track 42 : TPA2_75
- Track 43 : Kumao_87

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

The start number called the most often in the published annotations is 35, it was called in 259 of the 380 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• ABU_83, AbsoluteMadLad_83, Adriana_84, Aelin_83, Aleia_83, AltPhacts_82, Altwerkus_82, Anderson_86, Andre_86, AngelCake_83, Antonia_83, Aonishiki_84, Ashraf_85, Badfish_85, Banjo_81, Basato_83, BatteryCK_82, Beaglebox_81, Bishoperium_84, BlackStallion_83, BlacksBerry_85, BlueHusk_85, Bluephacebaby_83, Boehler_83, BoogieWoogie_85, Brilliant_87, Buckeye_84, Burr_84, CamL_84, CampRoach_85, Cannibal_85, Carthage_85, CaspiBoi_83, Chaelin_85, Charles1_85, CharlieGBrown_82, Cher_84, Childish_84, Chipette_84, Chorkpop_85, Chuni_87, Chute_84, Cobra_84, Colbert_82, Coletti_87, Cornbread_83, Cornobble_82, Cosmolli16_86, Craff_86, DaddyDaniels_87, Daffy_83, Daka_86, Dati_81, DelRivs_82, Dice_83, Dingo_81, Dione_82, DirtJuice_84, DoesntMatter_81, DolOn_88, DonSanchon_80, Duggie_84, Durga_86, ElvisPhasley_85, Emiris_86, EmpTee_83, Etaye_83, Eugenia_86, Flake_83, FleetyMac_84, FluffyNinja_85, Fozzie_82, Frankicide_83, FremontTroll_82, Freya_81, Fringe_88, FugateOSU_84, Gareth_84, GeneCoco_85, Giraffe_84, Gophe_84, Grand2040_82, GreenChile_83, Gwennie1_83, Gyarad_0083, HSavage_82, Haimas_82, Haleema_83, Hamish_81, Happabalu_82, Harvey_81, Hekos_82, Held_82, HenryJackson_85, Hetaeria_84, HighStump_85, Hocus_82, HogWash_85, Horchata_81, ImtiyazSitla_85, Inchworm_85, Inverness_82, Iridessa_86, Iridoclysis_83, IsaacEli_86, JDog_83, JacAttac_84, JakeO_85, JangoPhett_82, Jbug01_83, Jesabah_86, Jillium_85, Jiminy_84, Jiraiya_85, KLUcky39_82, Kahve_85, Kailash_82, Karn_84, Katniss_86, Keitherie_87, Khan1_83, Kikipoo_86, Kimbrough_85, KingTut_75, KingVeVeVe_82, Kiwot_84, KlimbOn_83, Kloppinator_84, Kwadwo_83, Kwksand96_85, Labeouficaum_84, LasagnaCat_85, Lasso_83, Lego3393_82, Legolas_85, Lehmann_87, LeiMonet_87, LemonSlice_84, Longacauda_85, Lopsy_81, LostAndPhound_83, LuckyMarjie_81, Lulwa_81, Lumine_85, MRabcd_84, Mag7_82, Magic8_83, Mana_82, Manad_83, Maru_84, Maskar_85, Matalotodo_83, Mcshane_83, Mecca_84, Megamind20_84, Megatron_85, Melc17_81, MelsMeow_83, Mesmerelda_83, MichaelPhcott_82, Mikota_81, MiniBoss_81, MitKao_84, Morty_85, MrPhizzler_87, Mulan_83, Mutante_85, Nathan_85, Nehme_81, NiaNia_85, Nicole21_85, Nova1_84, Numberten_83, Nyala_83, OSmaximus_85, Olak_83, Oline_83, Olive_82,

OliverWalter_84, Omniscient_85, OneBrain_87, Oosterbaan_84, Orfeu_83, Orwigg_83, Pacifista_83, PallasAthena_85, Phamished_84, Phareon_82, PhatLouie_86, PhenghisKhan_84, Pherdinand_85, Phergie_84, Phipps_83, Phleuron_82, PhrodoBaggins_86, Phunky_82, Piglet_0084, PinheadLarry_83, Pinkman_84, Pipsqueak_81, Placalicious_83, Plata_83, Plmatters_82, Podrick_83, Potter_80, Prickles_85, ProfessorX_82, QueenBeane_84, Quisquilliae_86, RedMaple_84, RedRaider89_83, Ricotta_84, Riggan_85, Rimu_84, Riverton_83, Robyn_86, Roliet_81, Roscoe_84, SDcharge11_83, Salazzle_82, SallyH_87, Samaymay_84, SassyCat97_82, Schadenfreude_84, Schueller_82, Scoot17C_85, Scrick_83, Selr12_85, Serpentine_0085, ShadowBud_84, Sheila_80, ShiVal_82, Simielle_83, SirBeauregard_85, Skippy_85, Slatt_84, Soile_85, Solosis_82, Sophia_82, Soto_81, Spartan300_83, Squid_83, Squiggle_83, Struggle_84, Surely_84, Swiphy_86, Swish_85, TallGrassMM_83, Taraxa_84, Telesworld_82, Thonko_87, Thora_83, ThreeOh3D2_86, Thunderbird_84, Timmi_83, TomBombadil_84, Tomlarah_85, TooFast2Furius_83, Tooj_81, Triad_86, True_82, TyrionL_84, UAch1_85, Usavi_85, Vaishali24_85, Valjean_83, Vaticameos_81, Veritas_83, Virapocalypse_85, Virgeve_82, Vista_83, Vivaldi_84, Wallhey_85, Waterdiva_85, Weher20_81, Windsor_84, Yoshand_85, YouGoGlencoco_84, Zaider_85, Zelda_84,

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

-

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

- Abinghost_80, Akoma_80, AksarBAT_78, Allegro_70, AnarQue_79, Arbiter_68, Ares_70, Argie_71, Athena_82, Audrey_80, Baloo_79, Bananafish_71, Barnyard_87, Ben11_80, Bernardo_81, BirdInFrench_53, Blocker23_70, BobRoss2024_79, BooTeria_187, Boyle_70, Briakila_80, Brownie5_70, CaiB_78, Calamitous_71, CandC_52, Casbah_80, Cepens_66, ChaChing_80, Chalmers_79, Chandler_80, Chentzyk_82, CloverMinnie_76, Coffee_70, Corofin_80, D12_66, Daisy_79, Deenasa_80, DelaGarza_33, DunneganBoMo_189, Eaglehorse_70, Ellewin_188, Emmetator_192, Faze9_69, FelixTres_78, Fregley_54, FrenchFry_71, Gadget_81, Gervas_81, Gingerbug_31, Glass_72, GlenHope_81, Glubnar_81, GodPhather_69, Godines_71, Halfpint_79, HarveySr_79, Heathcliff_80, Hedgerow_70, Holeinone_70, ItsyBitsy1_69, Jackstina_75, Kaleb_70, Kamiyu_80, KarasumaRum_75, Kelcole_51, Kheth_70, KillerQueen_54, Kolhan_71, Kronus_80, Kumao_87, Lars_71, LeoJr_199, Lephleur_70, Lesiram_34, LestyG_78, LilSmirk_70, LizLemon_70, MakoManhole_74, Marcie_58, Marley1013_81, Marlia_81, MasterPo_71, Megabear_66, MmasiCarm_81, Mortcellus_80, Morty007_79, MossRose_77, Mulaychimus_81, Neos5_80, Nozo_80, Obutu_82, OneinaGillian_53, Opia_71, PR_67, Pepe25_52, Phaedrus_75, Phantasmagoria_69, Phayeta_83, Philly_79, Phlyer_80, Pipefish_82, PrinceCharming_71, RagingRooster_79, ReginaGlobina_203, Rhinoforte_70, Rita1961_81, RobinRose_55, RomaT_80, Romm_55, Rosebush_69, Sabella_70, Shenandoah_79, SlippinJimmy_83, Spiderpig_53, StinkyVeggy_75, SwainyDoc_81, Sweetums_35, SynergyX_80, TA17A_73, TPA2_75, Taptic_67, Tempo_53, Teng_35, Tinciduntolum_71, TinyTerror_81, Tres_70, Tydolla_76, Vic9_00070, WaddleDee_185, West99_70, Wilca_53, Wrackline_39, YahaIom_78, Yeshua_78, Yinz_80, phiAsp2_75,

Summary by start number:

Start 17:

- Found in 1 of 416 (0.2%) of genes in pham

- Manual Annotations of this start: 1 of 380
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Wrackline_39 (GF),

Start 21:

- Found in 6 of 416 (1.4%) of genes in pham
- Manual Annotations of this start: 4 of 380
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DelaGarza_33 (GF), Gingerbug_31 (GF), Lesiram_34 (GF), Sweetums_35 (GF), Teng_35 (GF), phiAsp2_75 (singleton),

Start 25:

- Found in 10 of 416 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 380
- Called 70.0% of time when present
- Phage (with cluster) where this start called: BooTeria_187 (FC), DunneganBoMo_189 (FC), Ellewin_188 (FC), Emmetator_192 (FC), LeoJr_199 (FC), ReginaGlobina_203 (FC), WaddleDee_185 (FC),

Start 29:

- Found in 1 of 416 (0.2%) of genes in pham
- Manual Annotations of this start: 1 of 380
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnyard_87 (H2),

Start 30:

- Found in 13 of 416 (3.1%) of genes in pham
- Manual Annotations of this start: 11 of 380
- Called 92.3% of time when present
- Phage (with cluster) where this start called: BirdInFrench_53 (EG), CandC_52 (EG), Fregley_54 (EG), Kelcole_51 (EG), KillerQueen_54 (EG), Marcie_58 (EG), OneinaGillian_53 (EG), Pepe25_52 (EG), RobinRose_55 (EG), Romm_55 (EG), Tempo_53 (EG), Wilca_53 (EG),

Start 32:

- Found in 1 of 416 (0.2%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AksarBAT_78 (DR),

Start 33:

- Found in 2 of 416 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BobRoss2024_79 (DR), TPA2_75 (singleton),

Start 34:

- Found in 7 of 416 (1.7%) of genes in pham
- Manual Annotations of this start: 7 of 380
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnarQue_79 (DR), CaiB_78 (DR), CloverMinnie_76 (DR), FelixTres_78 (DR), MakoManhole_74 (DR), MossRose_77

(DR), Yeshua_78 (DR),

Start 35:

- Found in 280 of 416 (67.3%) of genes in pham
- Manual Annotations of this start: 259 of 380
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ABU_83 (B1), AbsoluteMadLad_83 (B1), Adriana_84 (B1), Aelin_83 (B1), Aleia_83 (B1), AltPhacts_82 (B1), Altwerkus_82 (B1), Anderson_86 (B1), Andre_86 (B1), AngelCake_83 (B1), Antonia_83 (B1), Aonishiki_84 (B1), Ashraf_85 (B1), Badfish_85 (B1), Banjo_81 (B1), Basato_83 (B1), BatteryCK_82 (B1), Beaglebox_81 (B1), Bishoperium_84 (B1), BlackStallion_83 (B1), BlacksBerry_85 (B1), BlueHusk_85 (B1), Bluephacebaby_83 (B1), Boehler_83 (B1), BoogieWoogie_85 (B1), Brilliant_87 (B1), Buckeye_84 (B1), Burr_84 (B1), CamL_84 (B1), CampRoach_85 (B1), Cannibal_85 (B1), Carthage_85 (B1), Caspiroi_83 (B1), Chaelin_85 (B1), Charles1_85 (B1), CharlieGBrown_82 (B1), Cher_84 (B1), Childish_84 (B1), Chipette_84 (B1), Chorkpop_85 (B1), Chuni_87 (B1), Chute_84 (B1), Cobra_84 (B1), Colbert_82 (B1), Coletti_87 (B1), Cornbread_83 (B1), Cornobble_82 (B1), Cosmolli16_86 (B1), Craff_86 (B1), DaddyDaniels_87 (B1), Daffy_83 (B1), Daka_86 (B1), Dati_81 (B1), DelRivs_82 (B1), Dice_83 (B1), Dingo_81 (B1), Dione_82 (B1), DirtJuice_84 (B1), DoesntMatter_81 (B1), DoOn_88 (B1), DonSancho_80 (B1), Duggie_84 (B1), Durga_86 (B1), ElvisPhasley_85 (B1), Emiris_86 (B1), EmpTee_83 (B1), Etaye_83 (B1), Eugenia_86 (B1), Flake_83 (B1), FleetyMac_84 (B1), FluffyNinja_85 (B1), Fozzie_82 (B1), Frankicide_83 (B1), FremontTroll_82 (B1), Freya_81 (B1), Fringe_88 (B1), FugateOSU_84 (B1), Gareth_84 (B1), GeneCoco_85 (B1), Giraffe_84 (B1), Gophee_84 (B1), Grand2040_82 (B1), GreenChile_83 (B1), Gwennie1_83 (B1), Gyarad_0083 (B1), HSavage_82 (B1), Haimas_82 (B1), Haleema_83 (B1), Hamish_81 (B1), Happabalu_82 (B1), Harvey_81 (B1), Hekos_82 (B1), Held_82 (B1), HenryJackson_85 (B1), Hetaeria_84 (B1), HighStump_85 (B1), Hocus_82 (B1), HogWash_85 (B1), Horchata_81 (B1), ImtiyazSitla_85 (B1), Inchworm_85 (B1), Inverness_82 (B1), Iridessa_86 (B1), Iridoclysis_83 (B1), IsaacEli_86 (B1), JDog_83 (B1), JacAttac_84 (B1), JakeO_85 (B1), JangoPhett_82 (B1), Jbug01_83 (B1), Jesabah_86 (B1), Jillium_85 (B1), Jiminy_84 (B1), Jiraiya_85 (B1), KLucky39_82 (B1), Kahve_85 (B1), Kailash_82 (B1), Karn_84 (B1), Katniss_86 (B1), Keitherie_87 (B1), Khan1_83 (B1), Kikipoo_86 (B1), Kimbrough_85 (B1), KingTut_75 (B1), KingVeVeVe_82 (B1), Kiwot_84 (B1), KlimbOn_83 (B1), Kloppinator_84 (B1), Kwadwo_83 (B1), Kwksand96_85 (B1), Labeouficaum_84 (B1), LasagnaCat_85 (B1), Lasso_83 (B1), Lego3393_82 (B1), Legolas_85 (B1), Lehmann_87 (B1), LeiMonet_87 (B1), LemonSlice_84 (B1), Longacauda_85 (B1), Lopsy_81 (B1), LostAndPhound_83 (B1), LuckyMarjie_81 (B1), Lulwa_81 (B1), Lumine_85 (B1), MRabcd_84 (B1), Mag7_82 (B1), Magic8_83 (B1), Mana_82 (B1), Manad_83 (B1), Maru_84 (B1), Maskar_85 (B1), Matalotodo_83 (B1), Mcshane_83 (B1), Mecca_84 (B1), Megamind20_84 (B1), Megatron_85 (B1), Melc17_81 (B1), MelsMeow_83 (B1), Mesmerelda_83 (B1), MichaelPhcott_82 (B1), Mikota_81 (B1), MiniBoss_81 (B1), MitKao_84 (B1), Morty_85 (B1), MrPhizzler_87 (B1), Mulan_83 (B1), Mutante_85 (B1), Nathan_85 (B1), Nehme_81 (B1), NiaNia_85 (B1), Nicole21_85 (B1), Nova1_84 (B1), Numberten_83 (B1), Nyala_83 (B1), OSmaximus_85 (B1), Olak_83 (B1), Oline_83 (B1), Olive_82 (B1), OliverWalter_84 (B1), Omniscient_85 (B1), OneBrain_87 (B1), Oosterbaan_84 (B1), Orfeu_83 (B1), Orwigg_83 (B1), Pacifista_83 (B1), PallasAthena_85 (B1), Phamished_84 (B1), Phareon_82 (B1), PhatLouie_86 (B1), PhenghisKhan_84 (B1), Pherdinand_85 (B1), Phergie_84 (B1), Phipps_83 (B1), Phleuron_82 (B1), PhrodoBaggins_86 (B1), Phunky_82 (B1), Piglet_0084 (B1), PinheadLarry_83 (B1), Pinkman_84 (B1), Pipsqueak_81 (B1),

Placalicious_83 (B1), Plata_83 (B1), Plmatters_82 (B1), Podrick_83 (B1), Potter_80 (B1), Prickles_85 (B1), ProfessorX_82 (B1), QueenBeane_84 (B1), Quisquilliae_86 (B1), RedMaple_84 (B1), RedRaider89_83 (B1), Ricotta_84 (B1), Riggan_85 (B1), Rimu_84 (B1), Riverton_83 (B1), Robyn_86 (B1), Roliet_81 (B1), Roscoe_84 (B1), SDcharge11_83 (B1), Salazzle_82 (B1), SallyH_87 (B1), Samaymay_84 (B1), SassyCat97_82 (B1), Schadenfreude_84 (B1), Schueller_82 (B1), Scoot17C_85 (B1), Scrick_83 (B1), Selr12_85 (B1), Serpentine_0085 (B1), ShadowBud_84 (B1), Sheila_80 (B1), ShiVal_82 (B1), Simielle_83 (B1), SirBeauregard_85 (B1), Skippy_85 (B1), Slatt_84 (B1), Soile_85 (B1), Solosis_82 (B1), Sophia_82 (B1), Soto_81 (B1), Spartan300_83 (B1), Squid_83 (B1), Squiggle_83 (B1), Struggle_84 (B1), Surely_84 (B1), Swiphy_86 (B1), Swish_85 (B1), TallGrassMM_83 (B1), Taraxa_84 (B1), Telesworld_82 (B1), Thonko_87 (B8), Thora_83 (B1), ThreeOh3D2_86 (B1), Thunderbird_84 (B1), Timmi_83 (B1), TomBombadil_84 (B1), Tomlarah_85 (B1), TooFast2Furius_83 (B1), Tooj_81 (B1), Triad_86 (B1), True_82 (B1), TyrionL_84 (B1), UAch1_85 (B1), Usavi_85 (B1), Vaishali24_85 (B1), Valjean_83 (B1), Vaticameos_81 (B1), Veritas_83 (B1), Virapocalypse_85 (B1), Virgeve_82 (B1), Vista_83 (B1), Vivaldi_84 (B1), Wallhey_85 (B1), Waterdiva_85 (B1), Weher20_81 (B1), Windsor_84 (B1), Yoshand_85 (B1), YouGoGlencoco_84 (B1), Zaider_85 (B1), Zelda_84 (B1),

Start 36:

- Found in 2 of 416 (0.5%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: KarasumaRum_75 (B5), StinkyVeggy_75 (B5),

Start 37:

- Found in 4 of 416 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 380
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kumao_87 (singleton), Spiderpig_53 (EG),

Start 40:

- Found in 95 of 416 (22.8%) of genes in pham
- Manual Annotations of this start: 92 of 380
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abinghost_80 (B3), Akoma_80 (B3), Allegro_70 (B2), Arbiter_68 (B2), Ares_70 (B2), Argie_71 (W), Athena_82 (B3), Audrey_80 (B3), Baloo_79 (B3), Bananafish_71 (B2), Ben11_80 (B3), Bernardo_81 (B3), Blocker23_70 (B2), Boyle_70 (B2), Briakila_80 (B3), Brownie5_70 (B2), Calamitous_71 (B2), Casbah_80 (B3), Cepens_66 (W), ChaChing_80 (B3), Chalmers_79 (B3), Chandler_80 (B3), Chentzyk_82 (B3), Coffee_70 (B2), Corofin_80 (B3), D12_66 (W), Daisy_79 (B3), Deenasa_80 (B3), Eaglehorse_70 (B2), Faze9_69 (B2), FrenchFry_71 (B2), Gadget_81 (B3), Gervas_81 (B3), Glass_72 (B2), GlenHope_81 (B3), Glubnar_81 (B3), GodPhather_69 (W), Godines_71 (B2), Halfpint_79 (B3), HarveySr_79 (B3), Heathcliff_80 (B3), Hedgerow_70 (B2), Holeinone_70 (B2), ItsyBitsy1_69 (B2), Jackstina_75 (B3), Kaleb_70 (B2), Kamiyu_80 (B3), Kheth_70 (B2), Kolhan_71 (B2), Kronus_80 (B3), Lars_71 (B2), Lephleur_70 (B2), LestyG_78 (B3), LilSmirk_70 (B2), LizLemon_70 (B2), Marley1013_81 (B3), Marlia_81 (B3), MasterPo_71 (B2), Megabear_66 (W), MmasiCarm_81 (B3), Mortcellus_80 (B3), Morty007_79 (B3), Mulaychimus_81 (B3), Neos5_80 (B3),

Nozo_80 (B3), Obutu_82 (B3), Opia_71 (B2), PR_67 (W), Phaedrus_75 (B3), Phantasmagoria_69 (B2), Phayeta_83 (B3), Philly_79 (B3), Phlyer_80 (B3), Pipefish_82 (B3), PrinceCharming_71 (B2), RagingRooster_79 (B3), Rhinoforte_70 (B2), Rita1961_81 (B3), RomaT_80 (B3), Rosebush_69 (B2), Sabella_70 (B2), Shenandoah_79 (B3), SlippinJimmy_83 (B3), SwainyDoc_81 (B3), SynergyX_80 (B3), TA17A_73 (B2), Taptic_67 (W), Tinciduntolum_71 (B2), TinyTerror_81 (B3), Tres_70 (B2), Tydolla_76 (B3), Vic9_00070 (B2), West99_70 (B2), Yahalom_78 (B3), Yinz_80 (B3),

Summary by clusters:

There are 12 clusters represented in this pham: singleton, W, B5, H2, B8, EG, GF, FC, B1, B2, B3, DR,

Info for manual annotations of cluster B1:

- Start number 35 was manually annotated 258 times for cluster B1.

Info for manual annotations of cluster B2:

- Start number 40 was manually annotated 35 times for cluster B2.

Info for manual annotations of cluster B3:

- Start number 40 was manually annotated 50 times for cluster B3.

Info for manual annotations of cluster B8:

- Start number 35 was manually annotated 1 time for cluster B8.

Info for manual annotations of cluster DR:

- Start number 34 was manually annotated 7 times for cluster DR.

Info for manual annotations of cluster EG:

- Start number 30 was manually annotated 11 times for cluster EG.

Info for manual annotations of cluster FC:

- Start number 25 was manually annotated 4 times for cluster FC.

Info for manual annotations of cluster GF:

- Start number 17 was manually annotated 1 time for cluster GF.
- Start number 21 was manually annotated 4 times for cluster GF.

Info for manual annotations of cluster H2:

- Start number 29 was manually annotated 1 time for cluster H2.

Info for manual annotations of cluster W:

- Start number 40 was manually annotated 7 times for cluster W.

Gene Information:

Gene: ABU_83 Start: 63381, Stop: 63079, Start Num: 35

Candidate Starts for ABU_83:

(20, 63462), (Start: 35 @63381 has 259 MA's), (51, 63264), (53, 63243), (62, 63204),

Gene: Abinghost_80 Start: 61235, Stop: 60906, Start Num: 40
Candidate Starts for Abinghost_80:
(Start: 40 @61235 has 92 MA's), (51, 61136), (53, 61115), (57, 61094),

Gene: AbsoluteMadLad_83 Start: 63335, Stop: 63033, Start Num: 35
Candidate Starts for AbsoluteMadLad_83:
(20, 63416), (Start: 35 @63335 has 259 MA's), (51, 63218), (53, 63197), (62, 63158),

Gene: Adriana_84 Start: 63897, Stop: 63595, Start Num: 35
Candidate Starts for Adriana_84:
(20, 63978), (Start: 35 @63897 has 259 MA's), (51, 63780), (53, 63759), (62, 63720),

Gene: Aelin_83 Start: 62839, Stop: 62537, Start Num: 35
Candidate Starts for Aelin_83:
(20, 62920), (Start: 35 @62839 has 259 MA's), (45, 62770), (51, 62722), (53, 62701), (62, 62662),

Gene: Akoma_80 Start: 61275, Stop: 60946, Start Num: 40
Candidate Starts for Akoma_80:
(Start: 40 @61275 has 92 MA's), (51, 61176), (53, 61155), (57, 61134),

Gene: AksarBAT_78 Start: 57238, Stop: 56921, Start Num: 32
Candidate Starts for AksarBAT_78:
(9, 57388), (16, 57340), (19, 57319), (32, 57238), (50, 57127), (55, 57097), (59, 57082), (62, 57061),

Gene: Aleia_83 Start: 63024, Stop: 62722, Start Num: 35
Candidate Starts for Aleia_83:
(20, 63105), (Start: 35 @63024 has 259 MA's), (51, 62907), (53, 62886), (62, 62847),

Gene: Allegro_70 Start: 59019, Stop: 58717, Start Num: 40
Candidate Starts for Allegro_70:
(Start: 40 @59019 has 92 MA's), (47, 58959), (51, 58920), (53, 58899), (57, 58878), (71, 58767), (76, 58746), (78, 58740), (80, 58734),

Gene: AltPhacts_82 Start: 62600, Stop: 62298, Start Num: 35
Candidate Starts for AltPhacts_82:
(20, 62681), (Start: 35 @62600 has 259 MA's), (51, 62483), (53, 62462), (62, 62423),

Gene: Altwerkus_82 Start: 62711, Stop: 62409, Start Num: 35
Candidate Starts for Altwerkus_82:
(20, 62792), (Start: 35 @62711 has 259 MA's), (53, 62573), (62, 62534),

Gene: AnarQue_79 Start: 58361, Stop: 58062, Start Num: 34
Candidate Starts for AnarQue_79:
(Start: 34 @58361 has 7 MA's), (54, 58229), (59, 58211), (71, 58100),

Gene: Anderson_86 Start: 63257, Stop: 62955, Start Num: 35
Candidate Starts for Anderson_86:
(20, 63338), (Start: 35 @63257 has 259 MA's), (51, 63140), (53, 63119), (62, 63080),

Gene: Andre_86 Start: 63279, Stop: 62977, Start Num: 35
Candidate Starts for Andre_86:
(20, 63360), (Start: 35 @63279 has 259 MA's), (51, 63162), (53, 63141), (62, 63102),

Gene: AngelCake_83 Start: 63006, Stop: 62704, Start Num: 35

Candidate Starts for AngelCake_83:

(20, 63087), (Start: 35 @63006 has 259 MA's), (51, 62889), (53, 62868), (62, 62829),

Gene: Antonia_83 Start: 62883, Stop: 62581, Start Num: 35

Candidate Starts for Antonia_83:

(20, 62964), (Start: 35 @62883 has 259 MA's), (45, 62814), (51, 62766), (53, 62745), (62, 62706),

Gene: Aonishiki_84 Start: 63192, Stop: 62890, Start Num: 35

Candidate Starts for Aonishiki_84:

(20, 63273), (Start: 35 @63192 has 259 MA's), (51, 63075), (53, 63054), (62, 63015),

Gene: Arbiter_68 Start: 59054, Stop: 58752, Start Num: 40

Candidate Starts for Arbiter_68:

(Start: 40 @59054 has 92 MA's), (51, 58955), (53, 58934), (57, 58913), (71, 58802), (76, 58781), (78, 58775), (80, 58769),

Gene: Ares_70 Start: 59025, Stop: 58723, Start Num: 40

Candidate Starts for Ares_70:

(Start: 40 @59025 has 92 MA's), (51, 58926), (53, 58905), (57, 58884), (71, 58773), (76, 58752), (78, 58746), (80, 58740),

Gene: Argie_71 Start: 51295, Stop: 51594, Start Num: 40

Candidate Starts for Argie_71:

(Start: 25 @51214 has 4 MA's), (Start: 40 @51295 has 92 MA's), (51, 51394), (53, 51415), (60, 51445), (63, 51502), (71, 51553), (79, 51583),

Gene: Ashraf_85 Start: 63370, Stop: 63068, Start Num: 35

Candidate Starts for Ashraf_85:

(20, 63451), (Start: 35 @63370 has 259 MA's), (45, 63301), (51, 63253), (53, 63232), (62, 63193),

Gene: Athena_82 Start: 62010, Stop: 61681, Start Num: 40

Candidate Starts for Athena_82:

(Start: 40 @62010 has 92 MA's), (51, 61911), (53, 61890), (57, 61869),

Gene: Audrey_80 Start: 61264, Stop: 60935, Start Num: 40

Candidate Starts for Audrey_80:

(Start: 40 @61264 has 92 MA's), (51, 61165), (53, 61144), (57, 61123),

Gene: Badfish_85 Start: 63561, Stop: 63259, Start Num: 35

Candidate Starts for Badfish_85:

(20, 63642), (Start: 35 @63561 has 259 MA's), (51, 63444), (53, 63423), (62, 63384),

Gene: Baloo_79 Start: 61116, Stop: 60787, Start Num: 40

Candidate Starts for Baloo_79:

(Start: 40 @61116 has 92 MA's), (51, 61017), (53, 60996), (57, 60975),

Gene: Bananafish_71 Start: 58955, Stop: 58653, Start Num: 40

Candidate Starts for Bananafish_71:

(Start: 40 @58955 has 92 MA's), (47, 58895), (51, 58856), (53, 58835), (57, 58814), (71, 58703), (76, 58682), (78, 58676), (80, 58670),

Gene: Banjo_81 Start: 62827, Stop: 62525, Start Num: 35

Candidate Starts for Banjo_81:

(20, 62908), (Start: 35 @62827 has 259 MA's), (45, 62758), (51, 62710), (53, 62689), (62, 62650),

Gene: Barnyard_87 Start: 60478, Stop: 60789, Start Num: 29

Candidate Starts for Barnyard_87:

(Start: 29 @60478 has 1 MA's), (39, 60529), (44, 60562), (48, 60592), (49, 60601), (59, 60646), (61, 60652),

Gene: Basato_83 Start: 63292, Stop: 62990, Start Num: 35

Candidate Starts for Basato_83:

(20, 63373), (Start: 35 @63292 has 259 MA's), (51, 63175), (53, 63154), (62, 63115),

Gene: BatteryCK_82 Start: 62818, Stop: 62516, Start Num: 35

Candidate Starts for BatteryCK_82:

(20, 62899), (Start: 35 @62818 has 259 MA's), (45, 62749), (51, 62701), (53, 62680), (62, 62641),

Gene: Beaglebox_81 Start: 62950, Stop: 62648, Start Num: 35

Candidate Starts for Beaglebox_81:

(20, 63031), (Start: 35 @62950 has 259 MA's), (45, 62881), (51, 62833), (53, 62812), (62, 62773),

Gene: Ben11_80 Start: 61491, Stop: 61162, Start Num: 40

Candidate Starts for Ben11_80:

(Start: 40 @61491 has 92 MA's), (51, 61392), (53, 61371), (57, 61350),

Gene: Bernardo_81 Start: 61454, Stop: 61125, Start Num: 40

Candidate Starts for Bernardo_81:

(Start: 40 @61454 has 92 MA's), (51, 61355), (53, 61334), (57, 61313),

Gene: BirdInFrench_53 Start: 37040, Stop: 36696, Start Num: 30

Candidate Starts for BirdInFrench_53:

(Start: 30 @37040 has 11 MA's), (Start: 37 @37010 has 1 MA's), (46, 36941), (54, 36887), (68, 36767), (75, 36743), (82, 36719),

Gene: Bishoperium_84 Start: 63397, Stop: 63095, Start Num: 35

Candidate Starts for Bishoperium_84:

(20, 63478), (Start: 35 @63397 has 259 MA's), (53, 63259), (62, 63220),

Gene: BlackStallion_83 Start: 63247, Stop: 62945, Start Num: 35

Candidate Starts for BlackStallion_83:

(20, 63328), (Start: 35 @63247 has 259 MA's), (45, 63178), (51, 63130), (53, 63109), (62, 63070),

Gene: BlacksBerry_85 Start: 62772, Stop: 62470, Start Num: 35

Candidate Starts for BlacksBerry_85:

(20, 62853), (Start: 35 @62772 has 259 MA's), (51, 62655), (53, 62634), (62, 62595),

Gene: Blocker23_70 Start: 59020, Stop: 58718, Start Num: 40

Candidate Starts for Blocker23_70:

(Start: 40 @59020 has 92 MA's), (47, 58960), (51, 58921), (53, 58900), (57, 58879), (71, 58768), (76, 58747), (78, 58741), (80, 58735),

Gene: BlueHusk_85 Start: 63070, Stop: 62768, Start Num: 35

Candidate Starts for BlueHusk_85:

(20, 63151), (Start: 35 @63070 has 259 MA's), (51, 62953), (53, 62932), (62, 62893),

Gene: Bluephacebaby_83 Start: 63430, Stop: 63128, Start Num: 35

Candidate Starts for Bluephacebaby_83:

(20, 63511), (Start: 35 @63430 has 259 MA's), (51, 63313), (53, 63292), (62, 63253),

Gene: BobRoss2024_79 Start: 57680, Stop: 57384, Start Num: 33

Candidate Starts for BobRoss2024_79:

(33, 57680), (59, 57527), (65, 57452),

Gene: Boehler_83 Start: 63221, Stop: 62919, Start Num: 35

Candidate Starts for Boehler_83:

(20, 63302), (Start: 35 @63221 has 259 MA's), (51, 63104), (53, 63083), (62, 63044),

Gene: BooTeria_187 Start: 141572, Stop: 141916, Start Num: 25

Candidate Starts for BooTeria_187:

(Start: 25 @141572 has 4 MA's), (70, 141878),

Gene: BoogieWoogie_85 Start: 62842, Stop: 62540, Start Num: 35

Candidate Starts for BoogieWoogie_85:

(20, 62923), (Start: 35 @62842 has 259 MA's), (51, 62725), (53, 62704), (62, 62665),

Gene: Boyle_70 Start: 59064, Stop: 58762, Start Num: 40

Candidate Starts for Boyle_70:

(Start: 40 @59064 has 92 MA's), (47, 59004), (51, 58965), (53, 58944), (57, 58923), (71, 58812), (76, 58791), (78, 58785), (80, 58779),

Gene: Briakila_80 Start: 61462, Stop: 61133, Start Num: 40

Candidate Starts for Briakila_80:

(Start: 40 @61462 has 92 MA's), (51, 61363), (53, 61342), (57, 61321),

Gene: Brilliant_87 Start: 63410, Stop: 63108, Start Num: 35

Candidate Starts for Brilliant_87:

(20, 63491), (Start: 35 @63410 has 259 MA's), (51, 63293), (53, 63272), (62, 63233),

Gene: Brownie5_70 Start: 59065, Stop: 58763, Start Num: 40

Candidate Starts for Brownie5_70:

(Start: 40 @59065 has 92 MA's), (47, 59005), (51, 58966), (53, 58945), (57, 58924), (71, 58813), (76, 58792), (78, 58786), (80, 58780),

Gene: Buckeye_84 Start: 63948, Stop: 63646, Start Num: 35

Candidate Starts for Buckeye_84:

(20, 64029), (Start: 35 @63948 has 259 MA's), (51, 63831), (53, 63810), (62, 63771),

Gene: Burr_84 Start: 62882, Stop: 62580, Start Num: 35

Candidate Starts for Burr_84:

(20, 62963), (Start: 35 @62882 has 259 MA's), (51, 62765), (53, 62744), (62, 62705),

Gene: CaiB_78 Start: 58156, Stop: 57857, Start Num: 34

Candidate Starts for CaiB_78:

(Start: 34 @58156 has 7 MA's), (54, 58024), (59, 58006), (71, 57895),

Gene: Calamitous_71 Start: 58954, Stop: 58652, Start Num: 40

Candidate Starts for Calamitous_71:

(Start: 40 @58954 has 92 MA's), (47, 58894), (51, 58855), (53, 58834), (57, 58813), (71, 58702), (76, 58681), (78, 58675), (80, 58669),

Gene: CamL_84 Start: 63182, Stop: 62880, Start Num: 35

Candidate Starts for CamL_84:

(20, 63263), (Start: 35 @63182 has 259 MA's), (45, 63113), (51, 63065), (53, 63044), (62, 63005),

Gene: CampRoach_85 Start: 63278, Stop: 62976, Start Num: 35

Candidate Starts for CampRoach_85:

(20, 63359), (Start: 35 @63278 has 259 MA's), (51, 63161), (53, 63140), (62, 63101),

Gene: CandC_52 Start: 36674, Stop: 36330, Start Num: 30

Candidate Starts for CandC_52:

(Start: 30 @36674 has 11 MA's), (46, 36575), (54, 36521), (68, 36401), (75, 36377), (82, 36353),

Gene: Cannibal_85 Start: 63284, Stop: 62982, Start Num: 35

Candidate Starts for Cannibal_85:

(20, 63365), (Start: 35 @63284 has 259 MA's), (51, 63167), (53, 63146), (62, 63107),

Gene: Carthage_85 Start: 62952, Stop: 62650, Start Num: 35

Candidate Starts for Carthage_85:

(20, 63033), (Start: 35 @62952 has 259 MA's), (51, 62835), (53, 62814), (62, 62775),

Gene: Casbah_80 Start: 61575, Stop: 61246, Start Num: 40

Candidate Starts for Casbah_80:

(Start: 40 @61575 has 92 MA's), (51, 61476), (53, 61455), (57, 61434),

Gene: Caspiboi_83 Start: 63117, Stop: 62815, Start Num: 35

Candidate Starts for Caspiboi_83:

(20, 63198), (Start: 35 @63117 has 259 MA's), (51, 63000), (53, 62979),

Gene: Cepens_66 Start: 49145, Stop: 49444, Start Num: 40

Candidate Starts for Cepens_66:

(Start: 40 @49145 has 92 MA's), (51, 49244), (53, 49265), (60, 49295), (63, 49352), (71, 49403), (79, 49433),

Gene: ChaChing_80 Start: 61280, Stop: 60951, Start Num: 40

Candidate Starts for ChaChing_80:

(Start: 40 @61280 has 92 MA's), (51, 61181), (53, 61160), (57, 61139),

Gene: Chaelin_85 Start: 63412, Stop: 63110, Start Num: 35

Candidate Starts for Chaelin_85:

(20, 63493), (Start: 35 @63412 has 259 MA's), (45, 63343), (51, 63295), (53, 63274), (62, 63235),

Gene: Chalmers_79 Start: 61710, Stop: 61381, Start Num: 40

Candidate Starts for Chalmers_79:

(Start: 40 @61710 has 92 MA's), (51, 61611), (53, 61590), (57, 61569),

Gene: Chandler_80 Start: 62051, Stop: 61722, Start Num: 40

Candidate Starts for Chandler_80:

(Start: 40 @62051 has 92 MA's), (51, 61952), (53, 61931), (57, 61910),

Gene: Charles1_85 Start: 63190, Stop: 62888, Start Num: 35

Candidate Starts for Charles1_85:

(20, 63271), (Start: 35 @63190 has 259 MA's), (51, 63073), (53, 63052), (62, 63013),

Gene: CharlieGBrown_82 Start: 62913, Stop: 62611, Start Num: 35

Candidate Starts for CharlieGBrown_82:

(20, 62994), (Start: 35 @62913 has 259 MA's), (45, 62844), (51, 62796), (53, 62775), (62, 62736),

Gene: Chentzyk_82 Start: 62218, Stop: 61889, Start Num: 40

Candidate Starts for Chentzyk_82:

(Start: 40 @62218 has 92 MA's), (51, 62119), (53, 62098), (57, 62077),

Gene: Cher_84 Start: 63384, Stop: 63082, Start Num: 35

Candidate Starts for Cher_84:

(20, 63465), (Start: 35 @63384 has 259 MA's), (51, 63267), (53, 63246), (62, 63207),

Gene: Childish_84 Start: 63575, Stop: 63273, Start Num: 35

Candidate Starts for Childish_84:

(20, 63656), (Start: 35 @63575 has 259 MA's), (51, 63458), (53, 63437), (62, 63398),

Gene: Chipette_84 Start: 63112, Stop: 62810, Start Num: 35

Candidate Starts for Chipette_84:

(20, 63193), (Start: 35 @63112 has 259 MA's), (51, 62995), (53, 62974), (62, 62935),

Gene: Chorkpop_85 Start: 63038, Stop: 62736, Start Num: 35

Candidate Starts for Chorkpop_85:

(20, 63119), (Start: 35 @63038 has 259 MA's), (51, 62921), (53, 62900), (62, 62861),

Gene: Chuni_87 Start: 63624, Stop: 63322, Start Num: 35

Candidate Starts for Chuni_87:

(20, 63705), (Start: 35 @63624 has 259 MA's), (45, 63555), (51, 63507), (53, 63486), (62, 63447),

Gene: Chute_84 Start: 63577, Stop: 63275, Start Num: 35

Candidate Starts for Chute_84:

(20, 63658), (Start: 35 @63577 has 259 MA's), (45, 63508), (51, 63460), (53, 63439), (62, 63400),

Gene: CloverMinnie_76 Start: 57325, Stop: 57026, Start Num: 34

Candidate Starts for CloverMinnie_76:

(Start: 34 @57325 has 7 MA's), (46, 57247), (54, 57193), (59, 57175), (71, 57064),

Gene: Cobra_84 Start: 63408, Stop: 63106, Start Num: 35

Candidate Starts for Cobra_84:

(20, 63489), (Start: 35 @63408 has 259 MA's), (51, 63291), (53, 63270), (62, 63231),

Gene: Coffee_70 Start: 59058, Stop: 58756, Start Num: 40

Candidate Starts for Coffee_70:

(Start: 40 @59058 has 92 MA's), (47, 58998), (51, 58959), (53, 58938), (57, 58917), (71, 58806), (76, 58785), (78, 58779), (80, 58773),

Gene: Colbert_82 Start: 62306, Stop: 62004, Start Num: 35

Candidate Starts for Colbert_82:

(20, 62387), (Start: 35 @62306 has 259 MA's), (53, 62168), (62, 62129),

Gene: Coletti_87 Start: 63933, Stop: 63631, Start Num: 35
Candidate Starts for Coletti_87:
(20, 64014), (Start: 35 @63933 has 259 MA's), (45, 63864), (51, 63816), (53, 63795), (62, 63756),

Gene: Cornbread_83 Start: 63065, Stop: 62763, Start Num: 35
Candidate Starts for Cornbread_83:
(20, 63146), (Start: 35 @63065 has 259 MA's), (51, 62948), (53, 62927), (62, 62888),

Gene: Cornobble_82 Start: 62876, Stop: 62574, Start Num: 35
Candidate Starts for Cornobble_82:
(20, 62957), (Start: 35 @62876 has 259 MA's), (53, 62738), (62, 62699),

Gene: Corofin_80 Start: 61286, Stop: 60957, Start Num: 40
Candidate Starts for Corofin_80:
(Start: 40 @61286 has 92 MA's), (51, 61187), (53, 61166), (57, 61145),

Gene: Cosmolli16_86 Start: 63753, Stop: 63451, Start Num: 35
Candidate Starts for Cosmolli16_86:
(20, 63834), (Start: 35 @63753 has 259 MA's), (51, 63636), (53, 63615), (62, 63576),

Gene: Craff_86 Start: 63796, Stop: 63494, Start Num: 35
Candidate Starts for Craff_86:
(20, 63877), (Start: 35 @63796 has 259 MA's), (51, 63679), (53, 63658), (62, 63619),

Gene: D12_66 Start: 49780, Stop: 50079, Start Num: 40
Candidate Starts for D12_66:
(Start: 40 @49780 has 92 MA's), (51, 49879), (53, 49900), (60, 49930), (63, 49987), (71, 50038), (79, 50068),

Gene: DaddyDaniels_87 Start: 63529, Stop: 63227, Start Num: 35
Candidate Starts for DaddyDaniels_87:
(20, 63610), (Start: 35 @63529 has 259 MA's), (51, 63412), (53, 63391), (62, 63352),

Gene: Daffy_83 Start: 63023, Stop: 62721, Start Num: 35
Candidate Starts for Daffy_83:
(20, 63104), (Start: 35 @63023 has 259 MA's), (51, 62906), (53, 62885), (62, 62846),

Gene: Daisy_79 Start: 60837, Stop: 60508, Start Num: 40
Candidate Starts for Daisy_79:
(Start: 40 @60837 has 92 MA's), (51, 60738), (53, 60717), (57, 60696),

Gene: Daka_86 Start: 63229, Stop: 62927, Start Num: 35
Candidate Starts for Daka_86:
(20, 63310), (Start: 35 @63229 has 259 MA's), (53, 63091), (62, 63052),

Gene: Dati_81 Start: 63207, Stop: 62905, Start Num: 35
Candidate Starts for Dati_81:
(20, 63288), (Start: 35 @63207 has 259 MA's), (51, 63090), (53, 63069), (62, 63030),

Gene: Deenasa_80 Start: 62186, Stop: 61857, Start Num: 40
Candidate Starts for Deenasa_80:
(Start: 40 @62186 has 92 MA's), (51, 62087), (53, 62066), (57, 62045),

Gene: DelRivs_82 Start: 62836, Stop: 62534, Start Num: 35

Candidate Starts for DelRivs_82:

(20, 62917), (Start: 35 @62836 has 259 MA's), (51, 62719), (53, 62698), (62, 62659),

Gene: DelaGarza_33 Start: 22446, Stop: 22048, Start Num: 21

Candidate Starts for DelaGarza_33:

(13, 22503), (Start: 21 @22446 has 4 MA's), (47, 22290), (58, 22224), (59, 22221), (72, 22110), (75, 22095),

Gene: Dice_83 Start: 62868, Stop: 62566, Start Num: 35

Candidate Starts for Dice_83:

(20, 62949), (Start: 35 @62868 has 259 MA's), (51, 62751), (53, 62730), (62, 62691),

Gene: Dingo_81 Start: 62589, Stop: 62287, Start Num: 35

Candidate Starts for Dingo_81:

(20, 62670), (Start: 35 @62589 has 259 MA's), (51, 62472), (53, 62451), (62, 62412),

Gene: Dione_82 Start: 62588, Stop: 62286, Start Num: 35

Candidate Starts for Dione_82:

(20, 62669), (Start: 35 @62588 has 259 MA's), (45, 62519), (51, 62471), (53, 62450), (62, 62411),

Gene: DirtJuice_84 Start: 63328, Stop: 63026, Start Num: 35

Candidate Starts for DirtJuice_84:

(20, 63409), (Start: 35 @63328 has 259 MA's), (51, 63211), (53, 63190), (62, 63151),

Gene: DoesntMatter_81 Start: 62864, Stop: 62562, Start Num: 35

Candidate Starts for DoesntMatter_81:

(20, 62945), (Start: 35 @62864 has 259 MA's), (51, 62747), (53, 62726), (62, 62687),

Gene: DolOn_88 Start: 64314, Stop: 64012, Start Num: 35

Candidate Starts for DolOn_88:

(20, 64395), (Start: 35 @64314 has 259 MA's), (51, 64197), (53, 64176), (62, 64137),

Gene: DonSanchon_80 Start: 62546, Stop: 62244, Start Num: 35

Candidate Starts for DonSanchon_80:

(20, 62627), (Start: 35 @62546 has 259 MA's), (45, 62477), (51, 62429), (53, 62408), (62, 62369),

Gene: Duggie_84 Start: 63170, Stop: 62868, Start Num: 35

Candidate Starts for Duggie_84:

(20, 63251), (Start: 35 @63170 has 259 MA's), (51, 63053), (53, 63032), (62, 62993),

Gene: DunneganBoMo_189 Start: 141037, Stop: 141381, Start Num: 25

Candidate Starts for DunneganBoMo_189:

(Start: 25 @141037 has 4 MA's), (70, 141343),

Gene: Durga_86 Start: 63652, Stop: 63350, Start Num: 35

Candidate Starts for Durga_86:

(20, 63733), (Start: 35 @63652 has 259 MA's), (51, 63535), (53, 63514), (62, 63475),

Gene: Eaglehorse_70 Start: 58944, Stop: 58642, Start Num: 40

Candidate Starts for Eaglehorse_70:

(Start: 40 @58944 has 92 MA's), (47, 58884), (51, 58845), (53, 58824), (57, 58803), (71, 58692), (76, 58671), (78, 58665), (80, 58659),

Gene: Ellewin_188 Start: 140305, Stop: 140649, Start Num: 25

Candidate Starts for Ellewin_188:

(Start: 25 @140305 has 4 MA's), (46, 140428), (64, 140575),

Gene: ElvisPhasley_85 Start: 64194, Stop: 63892, Start Num: 35

Candidate Starts for ElvisPhasley_85:

(20, 64275), (Start: 35 @64194 has 259 MA's), (51, 64077), (53, 64056), (62, 64017),

Gene: Emiris_86 Start: 63558, Stop: 63256, Start Num: 35

Candidate Starts for Emiris_86:

(20, 63639), (Start: 35 @63558 has 259 MA's), (51, 63441), (53, 63420), (62, 63381),

Gene: Emmetator_192 Start: 140436, Stop: 140780, Start Num: 25

Candidate Starts for Emmetator_192:

(Start: 25 @140436 has 4 MA's), (70, 140742),

Gene: EmpTee_83 Start: 62960, Stop: 62658, Start Num: 35

Candidate Starts for EmpTee_83:

(20, 63041), (Start: 35 @62960 has 259 MA's), (45, 62891), (51, 62843), (53, 62822), (62, 62783),

Gene: Etaye_83 Start: 63736, Stop: 63434, Start Num: 35

Candidate Starts for Etaye_83:

(20, 63817), (Start: 35 @63736 has 259 MA's), (51, 63619), (53, 63598), (62, 63559),

Gene: Eugenia_86 Start: 63671, Stop: 63369, Start Num: 35

Candidate Starts for Eugenia_86:

(20, 63752), (Start: 35 @63671 has 259 MA's), (51, 63554), (53, 63533), (62, 63494),

Gene: Faze9_69 Start: 59082, Stop: 58780, Start Num: 40

Candidate Starts for Faze9_69:

(Start: 40 @59082 has 92 MA's), (51, 58983), (53, 58962), (57, 58941), (71, 58830), (76, 58809), (78, 58803), (80, 58797),

Gene: FelixTres_78 Start: 57603, Stop: 57304, Start Num: 34

Candidate Starts for FelixTres_78:

(Start: 34 @57603 has 7 MA's), (54, 57471), (59, 57453), (71, 57342), (74, 57333),

Gene: Flake_83 Start: 63150, Stop: 62848, Start Num: 35

Candidate Starts for Flake_83:

(20, 63231), (Start: 35 @63150 has 259 MA's), (51, 63033), (53, 63012), (62, 62973),

Gene: FleetyMac_84 Start: 63060, Stop: 62758, Start Num: 35

Candidate Starts for FleetyMac_84:

(20, 63141), (Start: 35 @63060 has 259 MA's), (45, 62991), (51, 62943), (53, 62922), (62, 62883),

Gene: FluffyNinja_85 Start: 63249, Stop: 62947, Start Num: 35

Candidate Starts for FluffyNinja_85:

(20, 63330), (Start: 35 @63249 has 259 MA's), (45, 63180), (51, 63132), (53, 63111), (62, 63072),

Gene: Fozzie_82 Start: 63575, Stop: 63273, Start Num: 35

Candidate Starts for Fozzie_82:

(20, 63656), (Start: 35 @63575 has 259 MA's), (51, 63458), (53, 63437), (62, 63398),

Gene: Frankicide_83 Start: 63074, Stop: 62772, Start Num: 35

Candidate Starts for Frankicide_83:

(20, 63155), (Start: 35 @63074 has 259 MA's), (51, 62957), (53, 62936), (62, 62897),

Gene: Fregley_54 Start: 37235, Stop: 36891, Start Num: 30

Candidate Starts for Fregley_54:

(Start: 30 @37235 has 11 MA's), (46, 37136), (54, 37082), (68, 36962), (75, 36938), (82, 36914),

Gene: FremontTroll_82 Start: 63487, Stop: 63185, Start Num: 35

Candidate Starts for FremontTroll_82:

(20, 63568), (Start: 35 @63487 has 259 MA's), (51, 63370), (53, 63349), (62, 63310),

Gene: FrenchFry_71 Start: 59069, Stop: 58767, Start Num: 40

Candidate Starts for FrenchFry_71:

(Start: 40 @59069 has 92 MA's), (47, 59009), (51, 58970), (53, 58949), (57, 58928), (71, 58817), (76, 58796), (78, 58790), (80, 58784),

Gene: Freya_81 Start: 62566, Stop: 62264, Start Num: 35

Candidate Starts for Freya_81:

(20, 62647), (Start: 35 @62566 has 259 MA's), (51, 62449), (53, 62428), (62, 62389),

Gene: Fringe_88 Start: 63724, Stop: 63422, Start Num: 35

Candidate Starts for Fringe_88:

(20, 63805), (Start: 35 @63724 has 259 MA's), (51, 63607), (53, 63586), (62, 63547),

Gene: FugateOSU_84 Start: 64008, Stop: 63706, Start Num: 35

Candidate Starts for FugateOSU_84:

(20, 64089), (Start: 35 @64008 has 259 MA's), (45, 63939), (51, 63891), (53, 63870), (62, 63831),

Gene: Gadget_81 Start: 61637, Stop: 61308, Start Num: 40

Candidate Starts for Gadget_81:

(Start: 40 @61637 has 92 MA's), (51, 61538), (53, 61517), (57, 61496),

Gene: Gareth_84 Start: 63396, Stop: 63094, Start Num: 35

Candidate Starts for Gareth_84:

(20, 63477), (Start: 35 @63396 has 259 MA's), (51, 63279), (53, 63258), (62, 63219),

Gene: GeneCoco_85 Start: 63576, Stop: 63274, Start Num: 35

Candidate Starts for GeneCoco_85:

(20, 63657), (Start: 35 @63576 has 259 MA's), (51, 63459), (53, 63438), (62, 63399),

Gene: Gervas_81 Start: 61731, Stop: 61402, Start Num: 40

Candidate Starts for Gervas_81:

(Start: 40 @61731 has 92 MA's), (51, 61632), (53, 61611), (57, 61590),

Gene: Gingerbug_31 Start: 22564, Stop: 22166, Start Num: 21

Candidate Starts for Gingerbug_31:

(13, 22621), (Start: 21 @22564 has 4 MA's), (47, 22408), (58, 22342), (59, 22339), (62, 22321), (72, 22228), (75, 22213),

Gene: Giraffe_84 Start: 63401, Stop: 63099, Start Num: 35

Candidate Starts for Giraffe_84:

(20, 63482), (Start: 35 @63401 has 259 MA's), (45, 63332), (51, 63284), (53, 63263), (62, 63224),

Gene: Glass_72 Start: 59070, Stop: 58768, Start Num: 40

Candidate Starts for Glass_72:

(Start: 40 @59070 has 92 MA's), (47, 59010), (51, 58971), (53, 58950), (57, 58929), (71, 58818), (76, 58797), (78, 58791), (80, 58785),

Gene: GlenHope_81 Start: 61310, Stop: 60981, Start Num: 40

Candidate Starts for GlenHope_81:

(Start: 40 @61310 has 92 MA's), (51, 61211), (53, 61190), (57, 61169),

Gene: Glubnar_81 Start: 61169, Stop: 60840, Start Num: 40

Candidate Starts for Glubnar_81:

(Start: 40 @61169 has 92 MA's), (51, 61070), (53, 61049), (57, 61028),

Gene: GodPhather_69 Start: 50749, Stop: 51048, Start Num: 40

Candidate Starts for GodPhather_69:

(Start: 25 @50668 has 4 MA's), (Start: 40 @50749 has 92 MA's), (51, 50848), (53, 50869), (60, 50899), (63, 50956), (71, 51007),

Gene: Godines_71 Start: 59323, Stop: 59021, Start Num: 40

Candidate Starts for Godines_71:

(Start: 40 @59323 has 92 MA's), (47, 59263), (51, 59224), (53, 59203), (57, 59182), (71, 59071), (76, 59050), (78, 59044), (80, 59038),

Gene: Gophee_84 Start: 63387, Stop: 63085, Start Num: 35

Candidate Starts for Gophee_84:

(20, 63468), (Start: 35 @63387 has 259 MA's), (51, 63270), (53, 63249), (62, 63210),

Gene: Grand2040_82 Start: 63365, Stop: 63063, Start Num: 35

Candidate Starts for Grand2040_82:

(20, 63446), (Start: 35 @63365 has 259 MA's), (51, 63248), (53, 63227), (62, 63188),

Gene: GreenChile_83 Start: 63061, Stop: 62759, Start Num: 35

Candidate Starts for GreenChile_83:

(20, 63142), (Start: 35 @63061 has 259 MA's), (51, 62944), (53, 62923), (62, 62884),

Gene: Gwennie1_83 Start: 63211, Stop: 62909, Start Num: 35

Candidate Starts for Gwennie1_83:

(20, 63292), (Start: 35 @63211 has 259 MA's), (51, 63094), (53, 63073), (62, 63034),

Gene: Gyarad_0083 Start: 62885, Stop: 62583, Start Num: 35

Candidate Starts for Gyarad_0083:

(20, 62966), (Start: 35 @62885 has 259 MA's), (51, 62768), (53, 62747), (62, 62708),

Gene: HSavage_82 Start: 62902, Stop: 62600, Start Num: 35

Candidate Starts for HSavage_82:

(20, 62983), (Start: 35 @62902 has 259 MA's), (51, 62785), (53, 62764), (62, 62725),

Gene: Haimas_82 Start: 62827, Stop: 62525, Start Num: 35

Candidate Starts for Haimas_82:

(20, 62908), (Start: 35 @62827 has 259 MA's), (51, 62710), (53, 62689), (62, 62650),

Gene: Haleema_83 Start: 62947, Stop: 62645, Start Num: 35

Candidate Starts for Haleema_83:

(20, 63028), (Start: 35 @62947 has 259 MA's), (53, 62809), (62, 62770),

Gene: Halfpint_79 Start: 61052, Stop: 60723, Start Num: 40

Candidate Starts for Halfpint_79:

(Start: 40 @61052 has 92 MA's), (51, 60953), (53, 60932), (57, 60911),

Gene: Hamish_81 Start: 63116, Stop: 62814, Start Num: 35

Candidate Starts for Hamish_81:

(20, 63197), (Start: 35 @63116 has 259 MA's), (51, 62999), (53, 62978), (62, 62939),

Gene: Happabalu_82 Start: 64042, Stop: 63701, Start Num: 35

Candidate Starts for Happabalu_82:

(20, 64123), (Start: 35 @64042 has 259 MA's), (51, 63925), (53, 63904), (62, 63865), (85, 63715),

Gene: Harvey_81 Start: 62724, Stop: 62422, Start Num: 35

Candidate Starts for Harvey_81:

(20, 62805), (Start: 35 @62724 has 259 MA's), (51, 62607), (53, 62586), (62, 62547),

Gene: HarveySr_79 Start: 60821, Stop: 60492, Start Num: 40

Candidate Starts for HarveySr_79:

(Start: 40 @60821 has 92 MA's), (51, 60722), (53, 60701), (57, 60680),

Gene: Heathcliff_80 Start: 61231, Stop: 60902, Start Num: 40

Candidate Starts for Heathcliff_80:

(Start: 40 @61231 has 92 MA's), (51, 61132), (53, 61111), (57, 61090),

Gene: Hedgerow_70 Start: 59020, Stop: 58718, Start Num: 40

Candidate Starts for Hedgerow_70:

(Start: 40 @59020 has 92 MA's), (47, 58960), (51, 58921), (53, 58900), (57, 58879), (71, 58768), (76, 58747), (78, 58741), (80, 58735),

Gene: Hekos_82 Start: 62739, Stop: 62437, Start Num: 35

Candidate Starts for Hekos_82:

(20, 62820), (Start: 35 @62739 has 259 MA's), (51, 62622), (53, 62601), (62, 62562),

Gene: Held_82 Start: 62845, Stop: 62543, Start Num: 35

Candidate Starts for Held_82:

(20, 62926), (Start: 35 @62845 has 259 MA's), (51, 62728), (53, 62707), (62, 62668),

Gene: HenryJackson_85 Start: 63564, Stop: 63262, Start Num: 35

Candidate Starts for HenryJackson_85:

(20, 63645), (Start: 35 @63564 has 259 MA's), (51, 63447), (53, 63426), (62, 63387),

Gene: Hetaeria_84 Start: 63213, Stop: 62911, Start Num: 35

Candidate Starts for Hetaeria_84:

(20, 63294), (Start: 35 @63213 has 259 MA's), (51, 63096), (53, 63075), (62, 63036),

Gene: HighStump_85 Start: 63351, Stop: 63049, Start Num: 35

Candidate Starts for HighStump_85:

(20, 63432), (Start: 35 @63351 has 259 MA's), (51, 63234), (53, 63213), (62, 63174),

Gene: Hocus_82 Start: 62865, Stop: 62563, Start Num: 35

Candidate Starts for Hocus_82:

(20, 62946), (Start: 35 @62865 has 259 MA's), (51, 62748), (53, 62727), (62, 62688),

Gene: HogWash_85 Start: 63878, Stop: 63576, Start Num: 35

Candidate Starts for HogWash_85:

(20, 63959), (Start: 35 @63878 has 259 MA's), (51, 63761), (53, 63740), (62, 63701),

Gene: Holeinone_70 Start: 58925, Stop: 58623, Start Num: 40

Candidate Starts for Holeinone_70:

(Start: 40 @58925 has 92 MA's), (47, 58865), (51, 58826), (53, 58805), (57, 58784), (71, 58673), (76, 58652), (78, 58646), (80, 58640),

Gene: Horchata_81 Start: 63042, Stop: 62740, Start Num: 35

Candidate Starts for Horchata_81:

(20, 63123), (Start: 35 @63042 has 259 MA's), (51, 62925), (53, 62904), (62, 62865),

Gene: ImtiyazSitla_85 Start: 63370, Stop: 63068, Start Num: 35

Candidate Starts for ImtiyazSitla_85:

(20, 63451), (Start: 35 @63370 has 259 MA's), (45, 63301), (51, 63253), (53, 63232), (62, 63193),

Gene: Inchworm_85 Start: 63238, Stop: 62936, Start Num: 35

Candidate Starts for Inchworm_85:

(20, 63319), (Start: 35 @63238 has 259 MA's), (45, 63169), (51, 63121), (53, 63100), (62, 63061),

Gene: Inverness_82 Start: 63039, Stop: 62737, Start Num: 35

Candidate Starts for Inverness_82:

(20, 63120), (Start: 35 @63039 has 259 MA's), (51, 62922), (53, 62901), (62, 62862),

Gene: Iridessa_86 Start: 62963, Stop: 62661, Start Num: 35

Candidate Starts for Iridessa_86:

(20, 63044), (Start: 35 @62963 has 259 MA's), (51, 62846), (53, 62825), (62, 62786),

Gene: Iridoclysis_83 Start: 63129, Stop: 62827, Start Num: 35

Candidate Starts for Iridoclysis_83:

(20, 63210), (Start: 35 @63129 has 259 MA's), (45, 63060), (51, 63012), (53, 62991), (62, 62952),

Gene: IsaacEli_86 Start: 63369, Stop: 63067, Start Num: 35

Candidate Starts for IsaacEli_86:

(20, 63450), (Start: 35 @63369 has 259 MA's), (51, 63252), (53, 63231), (62, 63192),

Gene: ItsyBitsy1_69 Start: 59161, Stop: 58859, Start Num: 40

Candidate Starts for ItsyBitsy1_69:

(Start: 40 @59161 has 92 MA's), (47, 59101), (51, 59062), (53, 59041), (57, 59020), (71, 58909), (76, 58888), (78, 58882), (80, 58876),

Gene: JDog_83 Start: 63399, Stop: 63097, Start Num: 35

Candidate Starts for JDog_83:

(20, 63480), (Start: 35 @63399 has 259 MA's), (51, 63282), (53, 63261), (62, 63222),

Gene: JacAttac_84 Start: 62843, Stop: 62541, Start Num: 35

Candidate Starts for JacAttac_84:

(20, 62924), (Start: 35 @62843 has 259 MA's), (45, 62774), (51, 62726), (53, 62705), (62, 62666),

Gene: Jackstina_75 Start: 61145, Stop: 60816, Start Num: 40
Candidate Starts for Jackstina_75:
(Start: 40 @61145 has 92 MA's), (51, 61046), (53, 61025), (57, 61004),

Gene: JakeO_85 Start: 63127, Stop: 62825, Start Num: 35
Candidate Starts for JakeO_85:
(20, 63208), (Start: 35 @63127 has 259 MA's), (51, 63010), (53, 62989), (62, 62950),

Gene: JangoPhett_82 Start: 63203, Stop: 62901, Start Num: 35
Candidate Starts for JangoPhett_82:
(20, 63284), (Start: 35 @63203 has 259 MA's), (51, 63086), (53, 63065), (62, 63026),

Gene: Jbug01_83 Start: 62755, Stop: 62453, Start Num: 35
Candidate Starts for Jbug01_83:
(20, 62836), (Start: 35 @62755 has 259 MA's), (51, 62638), (53, 62617), (62, 62578),

Gene: Jesabah_86 Start: 63966, Stop: 63664, Start Num: 35
Candidate Starts for Jesabah_86:
(20, 64047), (Start: 35 @63966 has 259 MA's), (51, 63849), (53, 63828), (62, 63789),

Gene: Jillium_85 Start: 63559, Stop: 63257, Start Num: 35
Candidate Starts for Jillium_85:
(20, 63640), (Start: 35 @63559 has 259 MA's), (51, 63442), (53, 63421), (62, 63382),

Gene: Jiminy_84 Start: 63063, Stop: 62761, Start Num: 35
Candidate Starts for Jiminy_84:
(20, 63144), (Start: 35 @63063 has 259 MA's), (45, 62994), (51, 62946), (53, 62925), (62, 62886),

Gene: Jiraiya_85 Start: 63147, Stop: 62845, Start Num: 35
Candidate Starts for Jiraiya_85:
(20, 63228), (Start: 35 @63147 has 259 MA's), (51, 63030), (53, 63009), (62, 62970),

Gene: KLUcky39_82 Start: 62922, Stop: 62620, Start Num: 35
Candidate Starts for KLUcky39_82:
(20, 63003), (Start: 35 @62922 has 259 MA's), (51, 62805), (53, 62784), (62, 62745),

Gene: Kahve_85 Start: 63562, Stop: 63260, Start Num: 35
Candidate Starts for Kahve_85:
(20, 63643), (Start: 35 @63562 has 259 MA's), (51, 63445), (53, 63424), (62, 63385),

Gene: Kailash_82 Start: 63262, Stop: 62960, Start Num: 35
Candidate Starts for Kailash_82:
(20, 63343), (Start: 35 @63262 has 259 MA's), (45, 63193), (51, 63145), (53, 63124), (62, 63085),

Gene: Kaleb_70 Start: 59076, Stop: 58774, Start Num: 40
Candidate Starts for Kaleb_70:
(Start: 40 @59076 has 92 MA's), (47, 59016), (51, 58977), (53, 58956), (57, 58935), (71, 58824), (76, 58803), (78, 58797), (80, 58791),

Gene: Kamiyu_80 Start: 61234, Stop: 60905, Start Num: 40
Candidate Starts for Kamiyu_80:
(Start: 40 @61234 has 92 MA's), (51, 61135), (53, 61114), (57, 61093),

Gene: KarasumaRum_75 Start: 62138, Stop: 61818, Start Num: 36

Candidate Starts for KarasumaRum_75:

(23, 62207), (24, 62204), (31, 62162), (36, 62138), (51, 62021), (54, 61997), (59, 61979), (61, 61973), (62, 61961), (71, 61871), (83, 61829),

Gene: Karn_84 Start: 63118, Stop: 62816, Start Num: 35

Candidate Starts for Karn_84:

(20, 63199), (Start: 35 @63118 has 259 MA's), (51, 63001), (53, 62980), (62, 62941),

Gene: Katniss_86 Start: 62978, Stop: 62676, Start Num: 35

Candidate Starts for Katniss_86:

(20, 63059), (Start: 35 @62978 has 259 MA's), (45, 62909), (51, 62861), (53, 62840), (62, 62801),

Gene: Keitherie_87 Start: 63620, Stop: 63318, Start Num: 35

Candidate Starts for Keitherie_87:

(20, 63701), (Start: 35 @63620 has 259 MA's), (45, 63551), (51, 63503), (53, 63482), (62, 63443),

Gene: Kelcole_51 Start: 36869, Stop: 36525, Start Num: 30

Candidate Starts for Kelcole_51:

(Start: 30 @36869 has 11 MA's), (46, 36770), (68, 36596), (75, 36572), (82, 36548),

Gene: Khan1_83 Start: 63341, Stop: 63039, Start Num: 35

Candidate Starts for Khan1_83:

(20, 63422), (Start: 35 @63341 has 259 MA's), (51, 63224), (53, 63203), (62, 63164),

Gene: Kheth_70 Start: 58987, Stop: 58685, Start Num: 40

Candidate Starts for Kheth_70:

(Start: 40 @58987 has 92 MA's), (47, 58927), (51, 58888), (53, 58867), (57, 58846), (71, 58735), (76, 58714), (78, 58708), (80, 58702),

Gene: Kikipoo_86 Start: 63369, Stop: 63067, Start Num: 35

Candidate Starts for Kikipoo_86:

(20, 63450), (Start: 35 @63369 has 259 MA's), (51, 63252), (53, 63231), (62, 63192),

Gene: KillerQueen_54 Start: 37119, Stop: 36775, Start Num: 30

Candidate Starts for KillerQueen_54:

(Start: 30 @37119 has 11 MA's), (46, 37020), (54, 36966), (68, 36846), (75, 36822), (82, 36798),

Gene: Kimbrough_85 Start: 63441, Stop: 63139, Start Num: 35

Candidate Starts for Kimbrough_85:

(20, 63522), (Start: 35 @63441 has 259 MA's), (51, 63324), (53, 63303), (62, 63264),

Gene: KingTut_75 Start: 59601, Stop: 59299, Start Num: 35

Candidate Starts for KingTut_75:

(20, 59682), (Start: 35 @59601 has 259 MA's), (51, 59484), (53, 59463), (62, 59424),

Gene: KingVeVeVe_82 Start: 62576, Stop: 62274, Start Num: 35

Candidate Starts for KingVeVeVe_82:

(20, 62657), (Start: 35 @62576 has 259 MA's), (51, 62459), (53, 62438), (62, 62399),

Gene: Kiwot_84 Start: 63028, Stop: 62726, Start Num: 35

Candidate Starts for Kiwot_84:

(20, 63109), (Start: 35 @63028 has 259 MA's), (51, 62911), (53, 62890), (62, 62851),

Gene: KlimbOn_83 Start: 62881, Stop: 62579, Start Num: 35

Candidate Starts for KlimbOn_83:

(20, 62962), (Start: 35 @62881 has 259 MA's), (51, 62764), (53, 62743), (62, 62704),

Gene: Kloppinator_84 Start: 63012, Stop: 62710, Start Num: 35

Candidate Starts for Kloppinator_84:

(20, 63093), (Start: 35 @63012 has 259 MA's), (51, 62895), (53, 62874), (62, 62835),

Gene: Kolhan_71 Start: 58964, Stop: 58662, Start Num: 40

Candidate Starts for Kolhan_71:

(Start: 40 @58964 has 92 MA's), (51, 58865), (53, 58844), (57, 58823), (71, 58712), (76, 58691), (78, 58685), (80, 58679),

Gene: Kronus_80 Start: 62318, Stop: 61989, Start Num: 40

Candidate Starts for Kronus_80:

(Start: 40 @62318 has 92 MA's), (51, 62219), (53, 62198), (57, 62177),

Gene: Kumao_87 Start: 55246, Stop: 55530, Start Num: 37

Candidate Starts for Kumao_87:

(12, 55096), (18, 55132), (26, 55183), (28, 55207), (Start: 37 @55246 has 1 MA's), (54, 55372), (69, 55492),

Gene: Kwadwo_83 Start: 62867, Stop: 62565, Start Num: 35

Candidate Starts for Kwadwo_83:

(20, 62948), (Start: 35 @62867 has 259 MA's), (45, 62798), (51, 62750), (53, 62729), (62, 62690),

Gene: Kwksand96_85 Start: 63133, Stop: 62831, Start Num: 35

Candidate Starts for Kwksand96_85:

(20, 63214), (Start: 35 @63133 has 259 MA's), (45, 63064), (51, 63016), (53, 62995), (62, 62956),

Gene: Labeouficaum_84 Start: 62946, Stop: 62644, Start Num: 35

Candidate Starts for Labeouficaum_84:

(20, 63027), (Start: 35 @62946 has 259 MA's), (51, 62829), (53, 62808), (62, 62769),

Gene: Lars_71 Start: 59048, Stop: 58746, Start Num: 40

Candidate Starts for Lars_71:

(Start: 40 @59048 has 92 MA's), (47, 58988), (51, 58949), (53, 58928), (57, 58907), (71, 58796), (76, 58775), (78, 58769), (80, 58763),

Gene: LasagnaCat_85 Start: 63248, Stop: 62946, Start Num: 35

Candidate Starts for LasagnaCat_85:

(20, 63329), (Start: 35 @63248 has 259 MA's), (45, 63179), (51, 63131), (53, 63110), (62, 63071),

Gene: Lasso_83 Start: 63108, Stop: 62806, Start Num: 35

Candidate Starts for Lasso_83:

(20, 63189), (Start: 35 @63108 has 259 MA's), (53, 62970), (62, 62931),

Gene: Lego3393_82 Start: 63569, Stop: 63267, Start Num: 35

Candidate Starts for Lego3393_82:

(20, 63650), (Start: 35 @63569 has 259 MA's), (45, 63500), (51, 63452), (53, 63431), (62, 63392),

Gene: Legolas_85 Start: 63195, Stop: 62893, Start Num: 35
Candidate Starts for Legolas_85:
(20, 63276), (Start: 35 @63195 has 259 MA's), (45, 63126), (51, 63078), (53, 63057), (62, 63018),

Gene: Lehmann_87 Start: 63406, Stop: 63104, Start Num: 35
Candidate Starts for Lehmann_87:
(20, 63487), (Start: 35 @63406 has 259 MA's), (51, 63289), (53, 63268), (62, 63229),

Gene: LeiMonet_87 Start: 63329, Stop: 63027, Start Num: 35
Candidate Starts for LeiMonet_87:
(20, 63410), (Start: 35 @63329 has 259 MA's), (51, 63212), (53, 63191), (62, 63152),

Gene: LemonSlice_84 Start: 62854, Stop: 62552, Start Num: 35
Candidate Starts for LemonSlice_84:
(20, 62935), (Start: 35 @62854 has 259 MA's), (53, 62716), (62, 62677),

Gene: LeoJr_199 Start: 136061, Stop: 136414, Start Num: 25
Candidate Starts for LeoJr_199:
(Start: 25 @136061 has 4 MA's), (64, 136334), (81, 136409),

Gene: Lephleur_70 Start: 58910, Stop: 58608, Start Num: 40
Candidate Starts for Lephleur_70:
(Start: 40 @58910 has 92 MA's), (47, 58850), (51, 58811), (53, 58790), (57, 58769), (71, 58658), (76, 58637), (78, 58631), (80, 58625),

Gene: Lesiram_34 Start: 22418, Stop: 22020, Start Num: 21
Candidate Starts for Lesiram_34:
(13, 22475), (Start: 21 @22418 has 4 MA's), (47, 22262), (58, 22196), (59, 22193), (72, 22082), (75, 22067),

Gene: LestyG_78 Start: 60804, Stop: 60475, Start Num: 40
Candidate Starts for LestyG_78:
(Start: 40 @60804 has 92 MA's), (51, 60705), (53, 60684), (57, 60663),

Gene: LilSmirk_70 Start: 58947, Stop: 58645, Start Num: 40
Candidate Starts for LilSmirk_70:
(Start: 40 @58947 has 92 MA's), (47, 58887), (51, 58848), (53, 58827), (57, 58806), (71, 58695), (76, 58674), (78, 58668), (80, 58662),

Gene: LizLemon_70 Start: 59075, Stop: 58773, Start Num: 40
Candidate Starts for LizLemon_70:
(Start: 40 @59075 has 92 MA's), (47, 59015), (51, 58976), (53, 58955), (57, 58934), (71, 58823), (76, 58802), (78, 58796), (80, 58790),

Gene: Longacauda_85 Start: 63348, Stop: 63046, Start Num: 35
Candidate Starts for Longacauda_85:
(20, 63429), (Start: 35 @63348 has 259 MA's), (45, 63279), (51, 63231), (53, 63210), (62, 63171),

Gene: Lopsy_81 Start: 62535, Stop: 62233, Start Num: 35
Candidate Starts for Lopsy_81:
(20, 62616), (Start: 35 @62535 has 259 MA's), (45, 62466), (51, 62418), (53, 62397),

Gene: LostAndPhound_83 Start: 63397, Stop: 63095, Start Num: 35

Candidate Starts for LostAndPhound_83:

(20, 63478), (Start: 35 @63397 has 259 MA's), (51, 63280), (53, 63259), (62, 63220),

Gene: LuckyMarjie_81 Start: 62606, Stop: 62304, Start Num: 35

Candidate Starts for LuckyMarjie_81:

(20, 62687), (Start: 35 @62606 has 259 MA's), (51, 62489), (53, 62468), (62, 62429),

Gene: Lulwa_81 Start: 62220, Stop: 61918, Start Num: 35

Candidate Starts for Lulwa_81:

(20, 62301), (Start: 35 @62220 has 259 MA's), (51, 62103), (53, 62082), (62, 62043),

Gene: Lumine_85 Start: 63045, Stop: 62743, Start Num: 35

Candidate Starts for Lumine_85:

(20, 63126), (Start: 35 @63045 has 259 MA's), (51, 62928), (53, 62907), (62, 62868),

Gene: MRabcd_84 Start: 63322, Stop: 63020, Start Num: 35

Candidate Starts for MRabcd_84:

(20, 63403), (Start: 35 @63322 has 259 MA's), (51, 63205), (53, 63184), (62, 63145),

Gene: Mag7_82 Start: 62806, Stop: 62504, Start Num: 35

Candidate Starts for Mag7_82:

(20, 62887), (Start: 35 @62806 has 259 MA's), (45, 62737), (51, 62689), (53, 62668), (62, 62629),

Gene: Magic8_83 Start: 63174, Stop: 62872, Start Num: 35

Candidate Starts for Magic8_83:

(20, 63255), (Start: 35 @63174 has 259 MA's), (51, 63057), (53, 63036), (62, 62997),

Gene: MakoManhole_74 Start: 56700, Stop: 56401, Start Num: 34

Candidate Starts for MakoManhole_74:

(Start: 34 @56700 has 7 MA's), (54, 56568), (59, 56550), (71, 56439),

Gene: Mana_82 Start: 63010, Stop: 62708, Start Num: 35

Candidate Starts for Mana_82:

(20, 63091), (Start: 35 @63010 has 259 MA's), (51, 62893), (53, 62872), (62, 62833),

Gene: Manad_83 Start: 63120, Stop: 62818, Start Num: 35

Candidate Starts for Manad_83:

(20, 63201), (Start: 35 @63120 has 259 MA's), (51, 63003), (53, 62982), (62, 62943),

Gene: Marcie_58 Start: 37738, Stop: 37394, Start Num: 30

Candidate Starts for Marcie_58:

(Start: 30 @37738 has 11 MA's), (46, 37639), (54, 37585), (68, 37465), (75, 37441), (77, 37435), (82, 37417),

Gene: Marley1013_81 Start: 62170, Stop: 61841, Start Num: 40

Candidate Starts for Marley1013_81:

(Start: 40 @62170 has 92 MA's), (51, 62071), (53, 62050), (57, 62029),

Gene: Marlia_81 Start: 61703, Stop: 61374, Start Num: 40

Candidate Starts for Marlia_81:

(Start: 40 @61703 has 92 MA's), (51, 61604), (53, 61583), (57, 61562),

Gene: Maru_84 Start: 63458, Stop: 63156, Start Num: 35

Candidate Starts for Maru_84:

(20, 63539), (Start: 35 @63458 has 259 MA's), (51, 63341), (53, 63320), (62, 63281),

Gene: Maskar_85 Start: 63370, Stop: 63068, Start Num: 35

Candidate Starts for Maskar_85:

(20, 63451), (Start: 35 @63370 has 259 MA's), (45, 63301), (51, 63253), (53, 63232), (62, 63193),

Gene: MasterPo_71 Start: 58942, Stop: 58640, Start Num: 40

Candidate Starts for MasterPo_71:

(Start: 40 @58942 has 92 MA's), (47, 58882), (51, 58843), (53, 58822), (57, 58801), (71, 58690), (76, 58669), (78, 58663), (80, 58657),

Gene: Matalotodo_83 Start: 63854, Stop: 63552, Start Num: 35

Candidate Starts for Matalotodo_83:

(20, 63935), (Start: 35 @63854 has 259 MA's), (51, 63737), (53, 63716), (62, 63677),

Gene: Mcshane_83 Start: 62868, Stop: 62566, Start Num: 35

Candidate Starts for Mcshane_83:

(20, 62949), (Start: 35 @62868 has 259 MA's), (51, 62751), (53, 62730), (62, 62691),

Gene: Mecca_84 Start: 63422, Stop: 63120, Start Num: 35

Candidate Starts for Mecca_84:

(20, 63503), (Start: 35 @63422 has 259 MA's), (51, 63305), (53, 63284), (62, 63245),

Gene: Megabear_66 Start: 49066, Stop: 49365, Start Num: 40

Candidate Starts for Megabear_66:

(Start: 40 @49066 has 92 MA's), (51, 49165), (53, 49186), (60, 49216), (63, 49273), (71, 49324), (79, 49354),

Gene: Megamind20_84 Start: 62832, Stop: 62530, Start Num: 35

Candidate Starts for Megamind20_84:

(20, 62913), (Start: 35 @62832 has 259 MA's), (45, 62763), (51, 62715), (53, 62694), (62, 62655),

Gene: Megatron_85 Start: 63540, Stop: 63238, Start Num: 35

Candidate Starts for Megatron_85:

(20, 63621), (Start: 35 @63540 has 259 MA's), (45, 63471), (51, 63423), (53, 63402), (62, 63363),

Gene: Melc17_81 Start: 63490, Stop: 63188, Start Num: 35

Candidate Starts for Melc17_81:

(20, 63571), (Start: 35 @63490 has 259 MA's), (51, 63373), (53, 63352), (62, 63313),

Gene: MelsMeow_83 Start: 63130, Stop: 62828, Start Num: 35

Candidate Starts for MelsMeow_83:

(20, 63211), (Start: 35 @63130 has 259 MA's), (45, 63061), (51, 63013), (53, 62992), (62, 62953),

Gene: Mesmerelda_83 Start: 63422, Stop: 63120, Start Num: 35

Candidate Starts for Mesmerelda_83:

(20, 63503), (Start: 35 @63422 has 259 MA's), (51, 63305), (53, 63284), (62, 63245),

Gene: MichaelPhcott_82 Start: 62803, Stop: 62501, Start Num: 35

Candidate Starts for MichaelPhcott_82:

(20, 62884), (Start: 35 @62803 has 259 MA's), (45, 62734), (51, 62686), (53, 62665), (62, 62626),

Gene: Mikota_81 Start: 62574, Stop: 62272, Start Num: 35
Candidate Starts for Mikota_81:
(20, 62655), (Start: 35 @62574 has 259 MA's), (51, 62457), (53, 62436), (62, 62397),

Gene: MiniBoss_81 Start: 62175, Stop: 61873, Start Num: 35
Candidate Starts for MiniBoss_81:
(20, 62256), (Start: 35 @62175 has 259 MA's), (51, 62058), (53, 62037), (62, 61998),

Gene: MitKao_84 Start: 63024, Stop: 62722, Start Num: 35
Candidate Starts for MitKao_84:
(20, 63105), (Start: 35 @63024 has 259 MA's), (51, 62907), (53, 62886), (62, 62847),

Gene: MmasiCarm_81 Start: 61673, Stop: 61344, Start Num: 40
Candidate Starts for MmasiCarm_81:
(Start: 40 @61673 has 92 MA's), (51, 61574), (53, 61553), (57, 61532),

Gene: Mortcellus_80 Start: 62399, Stop: 62070, Start Num: 40
Candidate Starts for Mortcellus_80:
(Start: 40 @62399 has 92 MA's), (51, 62300), (53, 62279), (57, 62258),

Gene: Morty_85 Start: 63410, Stop: 63108, Start Num: 35
Candidate Starts for Morty_85:
(20, 63491), (Start: 35 @63410 has 259 MA's), (51, 63293), (53, 63272), (62, 63233),

Gene: Morty007_79 Start: 62170, Stop: 61841, Start Num: 40
Candidate Starts for Morty007_79:
(Start: 40 @62170 has 92 MA's), (51, 62071), (53, 62050), (57, 62029),

Gene: MossRose_77 Start: 57611, Stop: 57312, Start Num: 34
Candidate Starts for MossRose_77:
(Start: 34 @57611 has 7 MA's), (54, 57479), (59, 57461), (71, 57350),

Gene: MrPhizzler_87 Start: 63318, Stop: 63016, Start Num: 35
Candidate Starts for MrPhizzler_87:
(20, 63399), (Start: 35 @63318 has 259 MA's), (51, 63201), (53, 63180), (62, 63141),

Gene: Mulan_83 Start: 63053, Stop: 62751, Start Num: 35
Candidate Starts for Mulan_83:
(20, 63134), (Start: 35 @63053 has 259 MA's), (51, 62936), (53, 62915), (62, 62876),

Gene: Mulaychimus_81 Start: 61683, Stop: 61354, Start Num: 40
Candidate Starts for Mulaychimus_81:
(Start: 40 @61683 has 92 MA's), (51, 61584), (53, 61563), (57, 61542),

Gene: Mutante_85 Start: 63025, Stop: 62723, Start Num: 35
Candidate Starts for Mutante_85:
(20, 63106), (Start: 35 @63025 has 259 MA's), (51, 62908), (53, 62887), (62, 62848),

Gene: Nathan_85 Start: 63551, Stop: 63249, Start Num: 35
Candidate Starts for Nathan_85:
(20, 63632), (Start: 35 @63551 has 259 MA's), (51, 63434), (53, 63413), (62, 63374),

Gene: Nehme_81 Start: 63214, Stop: 62912, Start Num: 35

Candidate Starts for Nehme_81:

(20, 63295), (Start: 35 @63214 has 259 MA's), (51, 63097), (53, 63076), (62, 63037),

Gene: Neos5_80 Start: 61632, Stop: 61303, Start Num: 40

Candidate Starts for Neos5_80:

(Start: 40 @61632 has 92 MA's), (51, 61533), (53, 61512), (57, 61491),

Gene: NiaNia_85 Start: 62898, Stop: 62596, Start Num: 35

Candidate Starts for NiaNia_85:

(20, 62979), (Start: 35 @62898 has 259 MA's), (51, 62781), (53, 62760), (62, 62721),

Gene: Nicole21_85 Start: 63159, Stop: 62857, Start Num: 35

Candidate Starts for Nicole21_85:

(20, 63240), (Start: 35 @63159 has 259 MA's), (45, 63090), (51, 63042), (53, 63021), (62, 62982),

Gene: Nova1_84 Start: 63004, Stop: 62702, Start Num: 35

Candidate Starts for Nova1_84:

(20, 63085), (Start: 35 @63004 has 259 MA's), (51, 62887), (53, 62866), (62, 62827),

Gene: Nozo_80 Start: 62041, Stop: 61712, Start Num: 40

Candidate Starts for Nozo_80:

(Start: 40 @62041 has 92 MA's), (51, 61942), (53, 61921), (57, 61900),

Gene: Numberten_83 Start: 63140, Stop: 62838, Start Num: 35

Candidate Starts for Numberten_83:

(20, 63221), (Start: 35 @63140 has 259 MA's), (51, 63023), (53, 63002), (62, 62963),

Gene: Nyala_83 Start: 62875, Stop: 62573, Start Num: 35

Candidate Starts for Nyala_83:

(20, 62956), (Start: 35 @62875 has 259 MA's), (51, 62758), (53, 62737), (62, 62698),

Gene: OSmaximus_85 Start: 63706, Stop: 63404, Start Num: 35

Candidate Starts for OSmaximus_85:

(20, 63787), (Start: 35 @63706 has 259 MA's), (53, 63568), (62, 63529),

Gene: Obutu_82 Start: 61844, Stop: 61515, Start Num: 40

Candidate Starts for Obutu_82:

(Start: 40 @61844 has 92 MA's), (51, 61745), (53, 61724), (57, 61703),

Gene: Olak_83 Start: 63039, Stop: 62737, Start Num: 35

Candidate Starts for Olak_83:

(20, 63120), (Start: 35 @63039 has 259 MA's), (53, 62901), (62, 62862),

Gene: Oline_83 Start: 63029, Stop: 62727, Start Num: 35

Candidate Starts for Oline_83:

(20, 63110), (Start: 35 @63029 has 259 MA's), (51, 62912), (53, 62891), (62, 62852),

Gene: Olive_82 Start: 63270, Stop: 62968, Start Num: 35

Candidate Starts for Olive_82:

(20, 63351), (Start: 35 @63270 has 259 MA's), (51, 63153), (53, 63132), (62, 63093),

Gene: OliverWalter_84 Start: 63326, Stop: 63024, Start Num: 35

Candidate Starts for OliverWalter_84:

(20, 63407), (Start: 35 @63326 has 259 MA's), (51, 63209), (53, 63188), (62, 63149),

Gene: Omniscient_85 Start: 63729, Stop: 63427, Start Num: 35

Candidate Starts for Omniscient_85:

(20, 63810), (Start: 35 @63729 has 259 MA's), (45, 63660), (51, 63612), (53, 63591), (62, 63552),

Gene: OneBrain_87 Start: 63289, Stop: 62987, Start Num: 35

Candidate Starts for OneBrain_87:

(20, 63370), (Start: 35 @63289 has 259 MA's), (51, 63172), (53, 63151), (62, 63112),

Gene: OneinaGillian_53 Start: 36771, Stop: 36427, Start Num: 30

Candidate Starts for OneinaGillian_53:

(Start: 30 @36771 has 11 MA's), (46, 36672), (54, 36618), (68, 36498), (75, 36474), (82, 36450),

Gene: Oosterbaan_84 Start: 63266, Stop: 62964, Start Num: 35

Candidate Starts for Oosterbaan_84:

(20, 63347), (Start: 35 @63266 has 259 MA's), (51, 63149), (53, 63128), (62, 63089),

Gene: Opia_71 Start: 58968, Stop: 58666, Start Num: 40

Candidate Starts for Opia_71:

(Start: 40 @58968 has 92 MA's), (47, 58908), (51, 58869), (53, 58848), (57, 58827), (71, 58716), (76, 58695), (78, 58689), (80, 58683),

Gene: Orfeu_83 Start: 63388, Stop: 63086, Start Num: 35

Candidate Starts for Orfeu_83:

(20, 63469), (Start: 35 @63388 has 259 MA's), (51, 63271), (53, 63250), (62, 63211),

Gene: Orwigg_83 Start: 62794, Stop: 62492, Start Num: 35

Candidate Starts for Orwigg_83:

(20, 62875), (Start: 35 @62794 has 259 MA's), (51, 62677), (53, 62656), (62, 62617),

Gene: PR_67 Start: 49757, Stop: 50056, Start Num: 40

Candidate Starts for PR_67:

(Start: 40 @49757 has 92 MA's), (51, 49856), (53, 49877), (60, 49907), (63, 49964), (71, 50015), (79, 50045),

Gene: Pacifista_83 Start: 62879, Stop: 62577, Start Num: 35

Candidate Starts for Pacifista_83:

(20, 62960), (Start: 35 @62879 has 259 MA's), (51, 62762), (53, 62741), (62, 62702),

Gene: PallasAthena_85 Start: 62860, Stop: 62558, Start Num: 35

Candidate Starts for PallasAthena_85:

(20, 62941), (Start: 35 @62860 has 259 MA's), (51, 62743), (53, 62722), (62, 62683),

Gene: Pepe25_52 Start: 36314, Stop: 35970, Start Num: 30

Candidate Starts for Pepe25_52:

(8, 36455), (Start: 30 @36314 has 11 MA's), (46, 36215), (54, 36161), (68, 36041), (75, 36017), (82, 35993),

Gene: Phaedrus_75 Start: 60692, Stop: 60363, Start Num: 40

Candidate Starts for Phaedrus_75:

(Start: 40 @60692 has 92 MA's), (51, 60593), (53, 60572), (57, 60551),

Gene: Phamished_84 Start: 63046, Stop: 62744, Start Num: 35

Candidate Starts for Phamished_84:

(20, 63127), (Start: 35 @63046 has 259 MA's), (51, 62929), (53, 62908), (62, 62869),

Gene: Phantasmagoria_69 Start: 58957, Stop: 58655, Start Num: 40

Candidate Starts for Phantasmagoria_69:

(Start: 40 @58957 has 92 MA's), (51, 58858), (53, 58837), (57, 58816), (71, 58705), (76, 58684), (78, 58678), (80, 58672),

Gene: Phareon_82 Start: 62571, Stop: 62269, Start Num: 35

Candidate Starts for Phareon_82:

(20, 62652), (Start: 35 @62571 has 259 MA's), (51, 62454), (53, 62433), (62, 62394),

Gene: PhatLouie_86 Start: 63405, Stop: 63103, Start Num: 35

Candidate Starts for PhatLouie_86:

(20, 63486), (Start: 35 @63405 has 259 MA's), (51, 63288), (53, 63267), (62, 63228),

Gene: Phayeta_83 Start: 61761, Stop: 61432, Start Num: 40

Candidate Starts for Phayeta_83:

(Start: 40 @61761 has 92 MA's), (51, 61662), (53, 61641), (57, 61620),

Gene: PhenghisKhan_84 Start: 63035, Stop: 62733, Start Num: 35

Candidate Starts for PhenghisKhan_84:

(20, 63116), (Start: 35 @63035 has 259 MA's), (45, 62966), (51, 62918), (53, 62897), (62, 62858),

Gene: Pherdinand_85 Start: 63251, Stop: 62949, Start Num: 35

Candidate Starts for Pherdinand_85:

(20, 63332), (Start: 35 @63251 has 259 MA's), (45, 63182), (51, 63134), (53, 63113), (62, 63074),

Gene: Phergie_84 Start: 63024, Stop: 62722, Start Num: 35

Candidate Starts for Phergie_84:

(20, 63105), (Start: 35 @63024 has 259 MA's), (45, 62955), (51, 62907), (53, 62886), (62, 62847),

Gene: Philly_79 Start: 61124, Stop: 60795, Start Num: 40

Candidate Starts for Philly_79:

(Start: 40 @61124 has 92 MA's), (51, 61025), (53, 61004), (57, 60983),

Gene: Phipps_83 Start: 63102, Stop: 62800, Start Num: 35

Candidate Starts for Phipps_83:

(20, 63183), (Start: 35 @63102 has 259 MA's), (51, 62985), (53, 62964), (62, 62925),

Gene: Phleuron_82 Start: 62836, Stop: 62534, Start Num: 35

Candidate Starts for Phleuron_82:

(20, 62917), (Start: 35 @62836 has 259 MA's), (45, 62767), (51, 62719), (53, 62698), (62, 62659),

Gene: Phlyer_80 Start: 61987, Stop: 61658, Start Num: 40

Candidate Starts for Phlyer_80:

(Start: 40 @61987 has 92 MA's), (51, 61888), (53, 61867), (57, 61846),

Gene: PhrodoBaggins_86 Start: 63405, Stop: 63103, Start Num: 35

Candidate Starts for PhrodoBaggins_86:

(20, 63486), (Start: 35 @63405 has 259 MA's), (51, 63288), (53, 63267), (62, 63228),

Gene: Phunky_82 Start: 62909, Stop: 62607, Start Num: 35

Candidate Starts for Phunky_82:

(20, 62990), (Start: 35 @62909 has 259 MA's), (53, 62771), (62, 62732),

Gene: Piglet_0084 Start: 63524, Stop: 63222, Start Num: 35

Candidate Starts for Piglet_0084:

(20, 63605), (Start: 35 @63524 has 259 MA's), (51, 63407), (53, 63386), (62, 63347),

Gene: PinheadLarry_83 Start: 63175, Stop: 62873, Start Num: 35

Candidate Starts for PinheadLarry_83:

(20, 63256), (Start: 35 @63175 has 259 MA's), (53, 63037), (62, 62998),

Gene: Pinkman_84 Start: 63248, Stop: 62946, Start Num: 35

Candidate Starts for Pinkman_84:

(20, 63329), (Start: 35 @63248 has 259 MA's), (51, 63131), (53, 63110), (62, 63071),

Gene: Pipefish_82 Start: 62383, Stop: 62054, Start Num: 40

Candidate Starts for Pipefish_82:

(Start: 40 @62383 has 92 MA's), (51, 62284), (53, 62263), (57, 62242),

Gene: Pipsqueak_81 Start: 62861, Stop: 62559, Start Num: 35

Candidate Starts for Pipsqueak_81:

(20, 62942), (Start: 35 @62861 has 259 MA's), (51, 62744), (53, 62723), (62, 62684),

Gene: Placalicious_83 Start: 63894, Stop: 63592, Start Num: 35

Candidate Starts for Placalicious_83:

(20, 63975), (Start: 35 @63894 has 259 MA's), (51, 63777), (53, 63756), (62, 63717),

Gene: Plata_83 Start: 63116, Stop: 62775, Start Num: 35

Candidate Starts for Plata_83:

(20, 63197), (Start: 35 @63116 has 259 MA's), (51, 62999), (53, 62978), (62, 62939), (85, 62789),

Gene: Plmatters_82 Start: 62849, Stop: 62547, Start Num: 35

Candidate Starts for Plmatters_82:

(20, 62930), (Start: 35 @62849 has 259 MA's), (51, 62732), (53, 62711), (62, 62672),

Gene: Podrick_83 Start: 62937, Stop: 62635, Start Num: 35

Candidate Starts for Podrick_83:

(20, 63018), (Start: 35 @62937 has 259 MA's), (51, 62820), (53, 62799), (62, 62760),

Gene: Potter_80 Start: 62858, Stop: 62556, Start Num: 35

Candidate Starts for Potter_80:

(20, 62939), (Start: 35 @62858 has 259 MA's), (51, 62741), (53, 62720), (62, 62681),

Gene: Prickles_85 Start: 63228, Stop: 62926, Start Num: 35

Candidate Starts for Prickles_85:

(20, 63309), (Start: 35 @63228 has 259 MA's), (53, 63090), (62, 63051),

Gene: PrinceCharming_71 Start: 58997, Stop: 58695, Start Num: 40

Candidate Starts for PrinceCharming_71:

(Start: 40 @58997 has 92 MA's), (47, 58937), (51, 58898), (53, 58877), (57, 58856), (71, 58745), (76, 58724), (78, 58718), (80, 58712),

Gene: ProfessorX_82 Start: 62895, Stop: 62593, Start Num: 35

Candidate Starts for ProfessorX_82:

(20, 62976), (Start: 35 @62895 has 259 MA's), (51, 62778), (53, 62757), (62, 62718),

Gene: QueenBeane_84 Start: 63182, Stop: 62880, Start Num: 35

Candidate Starts for QueenBeane_84:

(20, 63263), (Start: 35 @63182 has 259 MA's), (45, 63113), (51, 63065), (53, 63044), (62, 63005),

Gene: Quisquilliae_86 Start: 63192, Stop: 62890, Start Num: 35

Candidate Starts for Quisquilliae_86:

(20, 63273), (Start: 35 @63192 has 259 MA's), (51, 63075), (53, 63054), (62, 63015),

Gene: RagingRooster_79 Start: 60967, Stop: 60638, Start Num: 40

Candidate Starts for RagingRooster_79:

(Start: 40 @60967 has 92 MA's), (51, 60868), (53, 60847), (57, 60826),

Gene: RedMaple_84 Start: 63795, Stop: 63493, Start Num: 35

Candidate Starts for RedMaple_84:

(20, 63876), (Start: 35 @63795 has 259 MA's), (51, 63678), (53, 63657), (62, 63618),

Gene: RedRaider89_83 Start: 63481, Stop: 63179, Start Num: 35

Candidate Starts for RedRaider89_83:

(20, 63562), (Start: 35 @63481 has 259 MA's), (51, 63364), (53, 63343), (62, 63304),

Gene: ReginaGlobina_203 Start: 137344, Stop: 137697, Start Num: 25

Candidate Starts for ReginaGlobina_203:

(Start: 25 @137344 has 4 MA's), (64, 137617), (81, 137692),

Gene: Rhinoforte_70 Start: 58995, Stop: 58693, Start Num: 40

Candidate Starts for Rhinoforte_70:

(Start: 40 @58995 has 92 MA's), (47, 58935), (51, 58896), (53, 58875), (57, 58854), (71, 58743), (76, 58722), (78, 58716), (80, 58710),

Gene: Ricotta_84 Start: 62877, Stop: 62575, Start Num: 35

Candidate Starts for Ricotta_84:

(20, 62958), (Start: 35 @62877 has 259 MA's), (51, 62760), (53, 62739), (62, 62700),

Gene: Riggan_85 Start: 63363, Stop: 63061, Start Num: 35

Candidate Starts for Riggan_85:

(20, 63444), (Start: 35 @63363 has 259 MA's), (45, 63294), (51, 63246), (53, 63225), (62, 63186),

Gene: Rimu_84 Start: 63341, Stop: 63039, Start Num: 35

Candidate Starts for Rimu_84:

(20, 63422), (Start: 35 @63341 has 259 MA's), (51, 63224), (53, 63203), (62, 63164),

Gene: Rita1961_81 Start: 61621, Stop: 61292, Start Num: 40

Candidate Starts for Rita1961_81:

(Start: 40 @61621 has 92 MA's), (51, 61522), (53, 61501), (57, 61480),

Gene: Riverton_83 Start: 63121, Stop: 62819, Start Num: 35

Candidate Starts for Riverton_83:

(20, 63202), (Start: 35 @63121 has 259 MA's), (51, 63004), (53, 62983), (62, 62944),

Gene: RobinRose_55 Start: 37280, Stop: 36936, Start Num: 30
Candidate Starts for RobinRose_55:
(Start: 30 @37280 has 11 MA's), (46, 37181), (54, 37127), (68, 37007), (75, 36983), (82, 36959),

Gene: Robyn_86 Start: 63620, Stop: 63318, Start Num: 35
Candidate Starts for Robyn_86:
(20, 63701), (Start: 35 @63620 has 259 MA's), (51, 63503), (53, 63482), (62, 63443),

Gene: Roliet_81 Start: 62222, Stop: 61920, Start Num: 35
Candidate Starts for Roliet_81:
(20, 62303), (Start: 35 @62222 has 259 MA's), (51, 62105), (53, 62084), (62, 62045),

Gene: RomaT_80 Start: 61841, Stop: 61512, Start Num: 40
Candidate Starts for RomaT_80:
(Start: 40 @61841 has 92 MA's), (51, 61742), (53, 61721), (57, 61700),

Gene: Romm_55 Start: 37280, Stop: 36936, Start Num: 30
Candidate Starts for Romm_55:
(Start: 30 @37280 has 11 MA's), (46, 37181), (54, 37127), (68, 37007), (75, 36983), (82, 36959),

Gene: Roscoe_84 Start: 63482, Stop: 63180, Start Num: 35
Candidate Starts for Roscoe_84:
(20, 63563), (Start: 35 @63482 has 259 MA's), (51, 63365), (53, 63344), (62, 63305),

Gene: Rosebush_69 Start: 59062, Stop: 58760, Start Num: 40
Candidate Starts for Rosebush_69:
(Start: 40 @59062 has 92 MA's), (47, 59002), (51, 58963), (53, 58942), (57, 58921), (71, 58810), (76, 58789), (78, 58783), (80, 58777),

Gene: SDcharge11_83 Start: 62515, Stop: 62213, Start Num: 35
Candidate Starts for SDcharge11_83:
(20, 62596), (Start: 35 @62515 has 259 MA's), (51, 62398), (53, 62377), (62, 62338),

Gene: Sabella_70 Start: 58897, Stop: 58595, Start Num: 40
Candidate Starts for Sabella_70:
(Start: 40 @58897 has 92 MA's), (51, 58798), (53, 58777), (57, 58756), (71, 58645), (76, 58624), (78, 58618), (80, 58612),

Gene: Salazzle_82 Start: 63041, Stop: 62739, Start Num: 35
Candidate Starts for Salazzle_82:
(20, 63122), (Start: 35 @63041 has 259 MA's), (51, 62924), (53, 62903), (62, 62864),

Gene: SallyH_87 Start: 63122, Stop: 62820, Start Num: 35
Candidate Starts for SallyH_87:
(20, 63203), (Start: 35 @63122 has 259 MA's), (51, 63005), (53, 62984), (62, 62945),

Gene: Samaymay_84 Start: 63182, Stop: 62880, Start Num: 35
Candidate Starts for Samaymay_84:
(20, 63263), (Start: 35 @63182 has 259 MA's), (45, 63113), (51, 63065), (53, 63044), (62, 63005),

Gene: SassyCat97_82 Start: 62849, Stop: 62547, Start Num: 35
Candidate Starts for SassyCat97_82:
(20, 62930), (Start: 35 @62849 has 259 MA's), (51, 62732), (53, 62711), (62, 62672),

Gene: Schadenfreude_84 Start: 62740, Stop: 62438, Start Num: 35

Candidate Starts for Schadenfreude_84:

(20, 62821), (Start: 35 @62740 has 259 MA's), (51, 62623), (53, 62602), (62, 62563),

Gene: Schueller_82 Start: 63123, Stop: 62821, Start Num: 35

Candidate Starts for Schueller_82:

(20, 63204), (Start: 35 @63123 has 259 MA's), (45, 63054), (51, 63006), (53, 62985), (62, 62946),

Gene: Scoot17C_85 Start: 62962, Stop: 62660, Start Num: 35

Candidate Starts for Scoot17C_85:

(20, 63043), (Start: 35 @62962 has 259 MA's), (51, 62845), (53, 62824), (62, 62785),

Gene: Scrick_83 Start: 62863, Stop: 62561, Start Num: 35

Candidate Starts for Scrick_83:

(20, 62944), (Start: 35 @62863 has 259 MA's), (51, 62746), (53, 62725), (62, 62686),

Gene: Selr12_85 Start: 62905, Stop: 62603, Start Num: 35

Candidate Starts for Selr12_85:

(20, 62986), (Start: 35 @62905 has 259 MA's), (51, 62788), (53, 62767), (62, 62728),

Gene: Serpentine_0085 Start: 63416, Stop: 63114, Start Num: 35

Candidate Starts for Serpentine_0085:

(20, 63497), (Start: 35 @63416 has 259 MA's), (51, 63299), (53, 63278), (62, 63239),

Gene: ShadowBud_84 Start: 63189, Stop: 62887, Start Num: 35

Candidate Starts for ShadowBud_84:

(20, 63270), (Start: 35 @63189 has 259 MA's), (51, 63072), (53, 63051), (62, 63012),

Gene: Sheila_80 Start: 62428, Stop: 62126, Start Num: 35

Candidate Starts for Sheila_80:

(20, 62509), (Start: 35 @62428 has 259 MA's), (51, 62311), (53, 62290), (62, 62251),

Gene: Shenandoah_79 Start: 60887, Stop: 60558, Start Num: 40

Candidate Starts for Shenandoah_79:

(Start: 40 @60887 has 92 MA's), (51, 60788), (53, 60767), (57, 60746),

Gene: ShiVal_82 Start: 62887, Stop: 62585, Start Num: 35

Candidate Starts for ShiVal_82:

(20, 62968), (Start: 35 @62887 has 259 MA's), (51, 62770), (53, 62749), (62, 62710),

Gene: Simielle_83 Start: 62829, Stop: 62527, Start Num: 35

Candidate Starts for Simielle_83:

(20, 62910), (Start: 35 @62829 has 259 MA's), (51, 62712), (53, 62691), (62, 62652),

Gene: SirBeauregard_85 Start: 63409, Stop: 63107, Start Num: 35

Candidate Starts for SirBeauregard_85:

(20, 63490), (Start: 35 @63409 has 259 MA's), (45, 63340), (51, 63292), (53, 63271), (62, 63232),

Gene: Skippy_85 Start: 63257, Stop: 62955, Start Num: 35

Candidate Starts for Skippy_85:

(20, 63338), (Start: 35 @63257 has 259 MA's), (51, 63140), (53, 63119), (62, 63080),

Gene: Slatt_84 Start: 63144, Stop: 62842, Start Num: 35

Candidate Starts for Slatt_84:

(20, 63225), (Start: 35 @63144 has 259 MA's), (51, 63027), (53, 63006), (62, 62967),

Gene: SlippinJimmy_83 Start: 62651, Stop: 62322, Start Num: 40

Candidate Starts for SlippinJimmy_83:

(Start: 40 @62651 has 92 MA's), (51, 62552), (53, 62531), (57, 62510),

Gene: Soile_85 Start: 63382, Stop: 63080, Start Num: 35

Candidate Starts for Soile_85:

(20, 63463), (Start: 35 @63382 has 259 MA's), (51, 63265), (53, 63244), (62, 63205),

Gene: Solosis_82 Start: 62850, Stop: 62548, Start Num: 35

Candidate Starts for Solosis_82:

(20, 62931), (Start: 35 @62850 has 259 MA's), (51, 62733), (53, 62712),

Gene: Sophia_82 Start: 62839, Stop: 62537, Start Num: 35

Candidate Starts for Sophia_82:

(20, 62920), (Start: 35 @62839 has 259 MA's), (53, 62701), (62, 62662),

Gene: Soto_81 Start: 62555, Stop: 62253, Start Num: 35

Candidate Starts for Soto_81:

(20, 62636), (Start: 35 @62555 has 259 MA's), (51, 62438), (53, 62417), (62, 62378),

Gene: Spartan300_83 Start: 63100, Stop: 62798, Start Num: 35

Candidate Starts for Spartan300_83:

(20, 63181), (Start: 35 @63100 has 259 MA's), (51, 62983), (53, 62962), (62, 62923),

Gene: Spiderpig_53 Start: 36999, Stop: 36685, Start Num: 37

Candidate Starts for Spiderpig_53:

(Start: 30 @37029 has 11 MA's), (Start: 37 @36999 has 1 MA's), (46, 36930), (54, 36876), (68, 36756),
(75, 36732), (82, 36708),

Gene: Squid_83 Start: 63129, Stop: 62827, Start Num: 35

Candidate Starts for Squid_83:

(20, 63210), (Start: 35 @63129 has 259 MA's), (51, 63012), (53, 62991), (62, 62952),

Gene: Squiggle_83 Start: 62857, Stop: 62555, Start Num: 35

Candidate Starts for Squiggle_83:

(20, 62938), (Start: 35 @62857 has 259 MA's), (51, 62740), (53, 62719), (62, 62680),

Gene: StinkyVeggy_75 Start: 62138, Stop: 61818, Start Num: 36

Candidate Starts for StinkyVeggy_75:

(23, 62207), (24, 62204), (31, 62162), (36, 62138), (51, 62021), (54, 61997), (59, 61979), (61, 61973),
(62, 61961), (71, 61871), (83, 61829),

Gene: Struggle_84 Start: 62955, Stop: 62653, Start Num: 35

Candidate Starts for Struggle_84:

(20, 63036), (Start: 35 @62955 has 259 MA's), (51, 62838), (53, 62817), (62, 62778),

Gene: Surely_84 Start: 63420, Stop: 63118, Start Num: 35

Candidate Starts for Surely_84:

(20, 63501), (Start: 35 @63420 has 259 MA's), (51, 63303), (53, 63282), (62, 63243),

Gene: SwainyDoc_81 Start: 61650, Stop: 61321, Start Num: 40
Candidate Starts for SwainyDoc_81:
(Start: 40 @61650 has 92 MA's), (51, 61551), (53, 61530), (57, 61509),

Gene: Sweetums_35 Start: 22539, Stop: 22141, Start Num: 21
Candidate Starts for Sweetums_35:
(13, 22596), (Start: 21 @22539 has 4 MA's), (47, 22383), (58, 22317), (59, 22314), (72, 22203), (75, 22188),

Gene: Swiphy_86 Start: 63405, Stop: 63103, Start Num: 35
Candidate Starts for Swiphy_86:
(20, 63486), (Start: 35 @63405 has 259 MA's), (51, 63288), (53, 63267), (62, 63228),

Gene: Swish_85 Start: 63266, Stop: 62964, Start Num: 35
Candidate Starts for Swish_85:
(20, 63347), (Start: 35 @63266 has 259 MA's), (51, 63149), (53, 63128), (62, 63089),

Gene: SynergyX_80 Start: 61278, Stop: 60949, Start Num: 40
Candidate Starts for SynergyX_80:
(Start: 40 @61278 has 92 MA's), (51, 61179), (53, 61158), (57, 61137),

Gene: TA17A_73 Start: 58905, Stop: 58603, Start Num: 40
Candidate Starts for TA17A_73:
(Start: 40 @58905 has 92 MA's), (51, 58806), (53, 58785), (57, 58764), (71, 58653), (76, 58632), (78, 58626),

Gene: TPA2_75 Start: 59427, Stop: 59762, Start Num: 33
Candidate Starts for TPA2_75:
(33, 59427), (55, 59565), (59, 59580), (62, 59601), (75, 59709), (84, 59751),

Gene: TallGrassMM_83 Start: 62915, Stop: 62613, Start Num: 35
Candidate Starts for TallGrassMM_83:
(20, 62996), (Start: 35 @62915 has 259 MA's), (51, 62798), (53, 62777),

Gene: Taptic_67 Start: 49153, Stop: 49491, Start Num: 40
Candidate Starts for Taptic_67:
(Start: 25 @49072 has 4 MA's), (Start: 40 @49153 has 92 MA's), (51, 49252), (53, 49273), (60, 49303), (63, 49360), (71, 49411), (83, 49453),

Gene: Taraxa_84 Start: 62746, Stop: 62444, Start Num: 35
Candidate Starts for Taraxa_84:
(20, 62827), (Start: 35 @62746 has 259 MA's), (51, 62629), (53, 62608), (62, 62569),

Gene: Telesworld_82 Start: 62993, Stop: 62691, Start Num: 35
Candidate Starts for Telesworld_82:
(20, 63074), (Start: 35 @62993 has 259 MA's), (45, 62924), (51, 62876), (53, 62855), (62, 62816),

Gene: Tempo_53 Start: 37160, Stop: 36816, Start Num: 30
Candidate Starts for Tempo_53:
(Start: 30 @37160 has 11 MA's), (46, 37061), (54, 37007), (68, 36887), (75, 36863), (82, 36839),

Gene: Teng_35 Start: 22456, Stop: 22058, Start Num: 21

Candidate Starts for Teng_35:

(13, 22513), (Start: 21 @22456 has 4 MA's), (47, 22300), (58, 22234), (59, 22231), (72, 22120), (75, 22105),

Gene: Thonko_87 Start: 63460, Stop: 63152, Start Num: 35

Candidate Starts for Thonko_87:

(1, 63853), (2, 63850), (3, 63805), (4, 63748), (5, 63745), (11, 63604), (14, 63583), (Start: 35 @63460 has 259 MA's), (47, 63382), (51, 63343), (53, 63322), (66, 63226), (73, 63184),

Gene: Thora_83 Start: 63370, Stop: 63068, Start Num: 35

Candidate Starts for Thora_83:

(20, 63451), (Start: 35 @63370 has 259 MA's), (51, 63253), (53, 63232), (62, 63193),

Gene: ThreeOh3D2_86 Start: 63523, Stop: 63221, Start Num: 35

Candidate Starts for ThreeOh3D2_86:

(20, 63604), (Start: 35 @63523 has 259 MA's), (51, 63406), (53, 63385), (62, 63346),

Gene: Thunderbird_84 Start: 63112, Stop: 62810, Start Num: 35

Candidate Starts for Thunderbird_84:

(20, 63193), (Start: 35 @63112 has 259 MA's), (51, 62995), (53, 62974), (62, 62935),

Gene: Timmi_83 Start: 62886, Stop: 62584, Start Num: 35

Candidate Starts for Timmi_83:

(20, 62967), (Start: 35 @62886 has 259 MA's), (51, 62769), (53, 62748), (62, 62709),

Gene: Tinciduntolum_71 Start: 59064, Stop: 58762, Start Num: 40

Candidate Starts for Tinciduntolum_71:

(Start: 40 @59064 has 92 MA's), (47, 59004), (51, 58965), (53, 58944), (57, 58923), (71, 58812), (76, 58791), (78, 58785), (80, 58779),

Gene: TinyTerror_81 Start: 61701, Stop: 61372, Start Num: 40

Candidate Starts for TinyTerror_81:

(Start: 40 @61701 has 92 MA's), (51, 61602), (53, 61581), (57, 61560),

Gene: TomBombadil_84 Start: 63413, Stop: 63111, Start Num: 35

Candidate Starts for TomBombadil_84:

(20, 63494), (Start: 35 @63413 has 259 MA's), (51, 63296), (53, 63275), (62, 63236),

Gene: Tomlarah_85 Start: 63720, Stop: 63418, Start Num: 35

Candidate Starts for Tomlarah_85:

(Start: 35 @63720 has 259 MA's), (45, 63651), (51, 63603), (53, 63582), (62, 63543),

Gene: TooFast2Furius_83 Start: 63277, Stop: 62975, Start Num: 35

Candidate Starts for TooFast2Furius_83:

(20, 63358), (Start: 35 @63277 has 259 MA's), (51, 63160), (53, 63139), (62, 63100),

Gene: Tooj_81 Start: 62529, Stop: 62227, Start Num: 35

Candidate Starts for Tooj_81:

(20, 62610), (Start: 35 @62529 has 259 MA's), (45, 62460), (51, 62412), (53, 62391), (62, 62352),

Gene: Tres_70 Start: 58918, Stop: 58616, Start Num: 40

Candidate Starts for Tres_70:

(Start: 40 @58918 has 92 MA's), (47, 58858), (51, 58819), (53, 58798), (57, 58777), (71, 58666), (76, 58645), (78, 58639), (80, 58633),

Gene: Triad_86 Start: 62711, Stop: 62409, Start Num: 35

Candidate Starts for Triad_86:

(20, 62792), (Start: 35 @62711 has 259 MA's), (51, 62594), (53, 62573), (62, 62534),

Gene: True_82 Start: 62862, Stop: 62560, Start Num: 35

Candidate Starts for True_82:

(20, 62943), (Start: 35 @62862 has 259 MA's), (51, 62745), (53, 62724), (62, 62685),

Gene: Tydolla_76 Start: 61257, Stop: 60928, Start Num: 40

Candidate Starts for Tydolla_76:

(Start: 40 @61257 has 92 MA's), (51, 61158), (53, 61137), (57, 61116),

Gene: TyrionL_84 Start: 62946, Stop: 62644, Start Num: 35

Candidate Starts for TyrionL_84:

(20, 63027), (Start: 35 @62946 has 259 MA's), (51, 62829), (53, 62808), (62, 62769),

Gene: UAch1_85 Start: 63213, Stop: 62911, Start Num: 35

Candidate Starts for UAch1_85:

(20, 63294), (Start: 35 @63213 has 259 MA's), (51, 63096), (53, 63075), (62, 63036),

Gene: Usavi_85 Start: 63710, Stop: 63408, Start Num: 35

Candidate Starts for Usavi_85:

(20, 63791), (Start: 35 @63710 has 259 MA's), (51, 63593), (53, 63572), (62, 63533),

Gene: Vaishali24_85 Start: 63319, Stop: 63017, Start Num: 35

Candidate Starts for Vaishali24_85:

(20, 63400), (Start: 35 @63319 has 259 MA's), (51, 63202), (53, 63181), (62, 63142),

Gene: Valjean_83 Start: 63104, Stop: 62802, Start Num: 35

Candidate Starts for Valjean_83:

(20, 63185), (Start: 35 @63104 has 259 MA's), (51, 62987), (53, 62966), (62, 62927),

Gene: Vaticameos_81 Start: 61419, Stop: 61117, Start Num: 35

Candidate Starts for Vaticameos_81:

(20, 61500), (Start: 35 @61419 has 259 MA's), (51, 61302), (53, 61281), (62, 61242),

Gene: Veritas_83 Start: 63027, Stop: 62725, Start Num: 35

Candidate Starts for Veritas_83:

(20, 63108), (Start: 35 @63027 has 259 MA's), (45, 62958), (51, 62910), (53, 62889), (62, 62850),

Gene: Vic9_00070 Start: 59761, Stop: 59459, Start Num: 40

Candidate Starts for Vic9_00070:

(Start: 40 @59761 has 92 MA's), (47, 59701), (51, 59662), (53, 59641), (57, 59620), (71, 59509), (76, 59488), (78, 59482), (80, 59476),

Gene: Virapocalypse_85 Start: 63212, Stop: 62910, Start Num: 35

Candidate Starts for Virapocalypse_85:

(20, 63293), (Start: 35 @63212 has 259 MA's), (51, 63095), (53, 63074), (62, 63035),

Gene: Virgeve_82 Start: 62832, Stop: 62530, Start Num: 35

Candidate Starts for Virgeve_82:

(20, 62913), (Start: 35 @62832 has 259 MA's), (51, 62715), (53, 62694), (62, 62655),

Gene: Vista_83 Start: 63026, Stop: 62724, Start Num: 35

Candidate Starts for Vista_83:

(20, 63107), (Start: 35 @63026 has 259 MA's), (45, 62957), (51, 62909), (53, 62888), (62, 62849),

Gene: Vivaldi_84 Start: 63291, Stop: 62989, Start Num: 35

Candidate Starts for Vivaldi_84:

(20, 63372), (Start: 35 @63291 has 259 MA's), (45, 63222), (51, 63174), (53, 63153), (62, 63114),

Gene: WaddleDee_185 Start: 139500, Stop: 139844, Start Num: 25

Candidate Starts for WaddleDee_185:

(Start: 25 @139500 has 4 MA's), (64, 139770),

Gene: Wallhey_85 Start: 63133, Stop: 62831, Start Num: 35

Candidate Starts for Wallhey_85:

(20, 63214), (Start: 35 @63133 has 259 MA's), (51, 63016), (53, 62995), (62, 62956),

Gene: Waterdiva_85 Start: 63400, Stop: 63098, Start Num: 35

Candidate Starts for Waterdiva_85:

(20, 63481), (Start: 35 @63400 has 259 MA's), (51, 63283), (53, 63262), (62, 63223),

Gene: Weher20_81 Start: 63470, Stop: 63168, Start Num: 35

Candidate Starts for Weher20_81:

(20, 63551), (Start: 35 @63470 has 259 MA's), (51, 63353), (53, 63332), (62, 63293),

Gene: West99_70 Start: 59095, Stop: 58793, Start Num: 40

Candidate Starts for West99_70:

(Start: 40 @59095 has 92 MA's), (47, 59035), (51, 58996), (53, 58975), (57, 58954), (71, 58843), (76, 58822), (78, 58816), (80, 58810),

Gene: Wilca_53 Start: 37040, Stop: 36696, Start Num: 30

Candidate Starts for Wilca_53:

(Start: 30 @37040 has 11 MA's), (Start: 37 @37010 has 1 MA's), (46, 36941), (54, 36887), (68, 36767), (75, 36743), (82, 36719),

Gene: Windsor_84 Start: 63415, Stop: 63113, Start Num: 35

Candidate Starts for Windsor_84:

(20, 63496), (Start: 35 @63415 has 259 MA's), (51, 63298), (53, 63277), (62, 63238),

Gene: Wrackline_39 Start: 23464, Stop: 23033, Start Num: 17

Candidate Starts for Wrackline_39:

(6, 23548), (7, 23545), (10, 23509), (15, 23473), (Start: 17 @23464 has 1 MA's), (22, 23425), (27, 23392), (52, 23245), (54, 23224), (67, 23116), (82, 23056),

Gene: Yahalom_78 Start: 61084, Stop: 60755, Start Num: 40

Candidate Starts for Yahalom_78:

(Start: 40 @61084 has 92 MA's), (51, 60985), (53, 60964), (57, 60943),

Gene: Yeshua_78 Start: 57669, Stop: 57370, Start Num: 34

Candidate Starts for Yeshua_78:

(Start: 34 @57669 has 7 MA's), (54, 57537), (59, 57519), (71, 57408),

Gene: Yinz_80 Start: 61149, Stop: 60820, Start Num: 40

Candidate Starts for Yinz_80:

(Start: 40 @61149 has 92 MA's), (51, 61050), (53, 61029), (57, 61008),

Gene: Yoshand_85 Start: 63250, Stop: 62948, Start Num: 35

Candidate Starts for Yoshand_85:

(20, 63331), (Start: 35 @63250 has 259 MA's), (51, 63133), (53, 63112), (62, 63073),

Gene: YouGoGlencoco_84 Start: 63140, Stop: 62838, Start Num: 35

Candidate Starts for YouGoGlencoco_84:

(20, 63221), (Start: 35 @63140 has 259 MA's), (51, 63023), (53, 63002), (62, 62963),

Gene: Zaider_85 Start: 63514, Stop: 63212, Start Num: 35

Candidate Starts for Zaider_85:

(20, 63595), (Start: 35 @63514 has 259 MA's), (51, 63397), (53, 63376), (62, 63337),

Gene: Zelda_84 Start: 63471, Stop: 63169, Start Num: 35

Candidate Starts for Zelda_84:

(20, 63552), (Start: 35 @63471 has 259 MA's), (51, 63354), (53, 63333), (62, 63294),

Gene: phiAsp2_75 Start: 57707, Stop: 58057, Start Num: 21

Candidate Starts for phiAsp2_75:

(Start: 21 @57707 has 4 MA's), (38, 57806), (41, 57827), (42, 57833), (43, 57836), (53, 57920), (56, 57932), (59, 57941), (61, 57947),