

Pham 304695



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 304695 Report

This analysis was run 06/08/26 on database version 649.

Pham number 304695 has 232 members, 42 are drafts.

Phages represented in each track:

- Track 1 : Severus_65, KittenMittens_64
- Track 2 : Rowdy_69, Shapes_69, DustyMartin_69
- Track 3 : Eaglepride_69
- Track 4 : Chupacabra_65, Goose_68
- Track 5 : Rebeuca_68, Kristoff_66
- Track 6 : Trike_64, Poompha_64, Drake94_65, PeaceMeal1_65
- Track 7 : Pharaoh_73
- Track 8 : Refuge_76
- Track 9 : Anthony_58
- Track 10 : Garak_81, Indra_83, BlessJoy_80, Temprado_81, Tucker_80, Roksolana_80, ToneTone_77, BennyP_80, Koko_81, WunderPhul_80, Helmet_82, Lilbunny_79, Wiks_79
- Track 11 : Cookiedough_80, DelvinSonDorr_76
- Track 12 : Zaka_80, Yokurt_79, Zulu_81, Blue7_81, Artemis2UCLA_79
- Track 13 : DaVinci_78, Kazan_81, Candra_78, SuperCallie99_77, Hoot_75, VohminGhazi_80, BABullseye_73
- Track 14 : Rifter_80
- Track 15 : Hexamo_79, CloudWang3_80
- Track 16 : Neeharika16_79, Pmask_79, SuperAwesome_80
- Track 17 : Jordennis_78
- Track 18 : EricB_79, SmellyB_80, GreedyLawyer_75, Kipper29_80, Dorothea_80, Chartreuse_79
- Track 19 : Isiphiwo_77
- Track 20 : Newrala_79
- Track 21 : Charm_74, DreamTeam1_74
- Track 22 : MegTheThird_75
- Track 23 : Celestialunch_75
- Track 24 : Klodlith_75
- Track 25 : SheaKeira_74
- Track 26 : Settecandela_209
- Track 27 : Phrappuccino_184
- Track 28 : PitaDog_56, Christian_56, Pterodactyl_56
- Track 29 : Litotes_57, CallieOMalley_58, Suppi_58, Canowicakte_58, PartyCup_59, Wayne_60
- Track 30 : DreamTeam_55, Gisselle_55
- Track 31 : Bodacious_56, Lucy_55, Lennox_56, ChewChew_56, CristinaYang_56, Lasagna_54, LilStuart_55, Nancia_56

- Track 32 : Temper16_55, Maria1952_54, Daiboju_55, Sergei_55, Herb_55, KingBob_55
- Track 33 : DrRobert_54, Makoto_55
- Track 34 : Moki_55, HeadNerd_55, Huckleberry_55
- Track 35 : AppleCider_57
- Track 36 : MeganNoll_58, RAP15_59
- Track 37 : Oxynfrius_58
- Track 38 : MrGloopy_58
- Track 39 : BigMack_56
- Track 40 : Carpal_57
- Track 41 : Preamble_57
- Track 42 : Graynor_61
- Track 43 : MrBoss_60
- Track 44 : Urla_56
- Track 45 : Korra_59, Fluke_58, Glenn_59
- Track 46 : Bennie_56
- Track 47 : OurGirlNessie_54
- Track 48 : Scuttle_57
- Track 49 : ThursdayNight_67
- Track 50 : Tbone_63, Eraser_63, Flutur_63, Skelbel_64, Asa16_63, London_63, AGrandiflora_65, Niobe_63, Tutumahutu_65, Powerpuff_65, YesChef_63, Warda_64
- Track 51 : MissSwiss_64, PandaPo_64
- Track 52 : Adumb2043_62, AEgle_61, Amploria_63, Turab_62, Elezi_62, Subaru_63, Jstan_64
- Track 53 : Iter_64, Ascela_65
- Track 54 : ObiToo_68, Crewmate_68
- Track 55 : Community_63, Tuck_63, Phives_64
- Track 56 : IttyBittyPiggy_64
- Track 57 : Janeemi_62
- Track 58 : VResidence_64
- Track 59 : Berrie_63
- Track 60 : DrManhattan_66, Adolin_65
- Track 61 : Lego_63, Kaylissa_65
- Track 62 : Tallboi_63, JohnDoe_64
- Track 63 : Sue2_61
- Track 64 : Mudpuppy_62
- Track 65 : Joemato_65, Simpson_69
- Track 66 : Wildwest_59
- Track 67 : Cyan_64
- Track 68 : DrSierra_60
- Track 69 : Lizalica_63
- Track 70 : Nitro_64
- Track 71 : Tweety19_64, Snek_63
- Track 72 : Exile_58
- Track 73 : Soondubu_60
- Track 74 : Dubu_29
- Track 75 : Rowa_48
- Track 76 : AbbeyMikolon_49
- Track 77 : Nesbitt_47
- Track 78 : Greenbelt_58
- Track 79 : Rooney_61, Gibson_61
- Track 80 : PHTowN_61, Lizz_61, ShakeNBake_61
- Track 81 : SassyC_66

- Track 82 : Yara_56
- Track 83 : Dryad_65
- Track 84 : Virizion_66
- Track 85 : Wentworth_61
- Track 86 : Wilkos_63
- Track 87 : Gagieri_74
- Track 88 : Maselep_76, CoffeeBean_76, Braxoaddie_76
- Track 89 : Apiary_76
- Track 90 : Polyuki_76
- Track 91 : Jacko_98
- Track 92 : HollowPurple_104, Welcome_105, ASegato_101, Necrophoxinus_105, StevieWelch_103, Fork_99, Erenyeager_103, SteakFry_102, Issa7_102
- Track 93 : Shroomer_106
- Track 94 : Mistmere_97
- Track 95 : Elfy_75
- Track 96 : ChipsNGuac_59, Neuville_58, Gerri43_58, CardboardBox_59, AnnabelLee_60, Roberts_59, ChamoyPickle_60
- Track 97 : Ezurina_58
- Track 98 : Studio_60
- Track 99 : PegLeg_41, LilhomieP_40, Diminimus_42, IPhane7_41, Bongo_41, Izel_42, SlimJimmy_40, Auspice_41, Dulcita_42, FreakyGoo_42, TpudiCK_43, TyDawg_41, Skinny_42, KleverKiS_42, Bricole_41, Glaske16_42
- Track 100 : RoseMarie_47
- Track 101 : Reindeer_42
- Track 102 : Nanosmite_47
- Track 103 : Lukepolitites_35
- Track 104 : TPA2_52
- Track 105 : Finch_218

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

The start number called the most often in the published annotations is 42, it was called in 34 of the 190 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AppleCider_57, Auspice_41, Bongo_41, Bricole_41, CallieOMalley_58, Canowicakte_58, Carpal_57, Daiboku_55, Diminimus_42, Dulcita_42, FreakyGoo_42, Glaske16_42, Graynor_61, Herb_55, IPhane7_41, Izel_42, KingBob_55, KleverKiS_42, LilhomieP_40, Litotes_57, Maria1952_54, MeganNoll_58, MrBoss_60, MrGloopy_58, Nanosmite_47, PartyCup_59, PegLeg_41, RAP15_59, Reindeer_42, RoseMarie_47, Scuttle_57, Sergei_55, Skinny_42, SlimJimmy_40, Suppi_58, Temper16_55, TpudiCK_43, TyDawg_41, Wayne_60,

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

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

- AEgle_61, AGrandiflora_65, ASegato_101, AbbeyMikolon_49, Adolin_65, Adumb2043_62, Amploria_63, AnnabelLee_60, Anthony_58, Apiary_76, Artemis2UCLA_79, Asa16_63, Ascela_65, BABullseye_73, Bennie_56, BennyP_80,

Berrie_63, BigMack_56, BlessJoy_80, Blue7_81, Bodacious_56, Braxoaddie_76, Candra_78, CardboardBox_59, Celestiallunch_75, ChamoyPickle_60, Charm_74, Chartreuse_79, ChewChew_56, ChipsNGuac_59, Christian_56, Chupacabra_65, CloudWang3_80, CoffeeBean_76, Community_63, Cookiedough_80, Crewmate_68, CristinaYang_56, Cyan_64, DaVinci_78, DelvinSonDorr_76, Dorothea_80, DrManhattan_66, DrRobert_54, DrSierra_60, Drake94_65, DreamTeam1_74, DreamTeam_55, Dryad_65, Dubu_29, DustyMartin_69, Eaglepride_69, Elezi_62, Elfy_75, Eraser_63, Erenyeager_103, EricB_79, Exile_58, Ezurina_58, Finch_218, Fluke_58, Flutur_63, Fork_99, Gagieri_74, Garak_81, Gerri43_58, Gibson_61, Gisselle_55, Glenn_59, Goose_68, GreedyLawyer_75, Greenbelt_58, HeadNerd_55, Helmet_82, Hexamo_79, HollowPurple_104, Hoot_75, Huckleberry_55, Indra_83, Isiphiwo_77, Issa7_102, Iter_64, IttyBittyPiggy_64, Jacko_98, Janeemi_62, Joemato_65, JohnDoe_64, Jordennis_78, Jstan_64, Kaylissa_65, Kazan_81, Kipper29_80, KittenMittens_64, Klodlith_75, Koko_81, Korra_59, Kristoff_66, Lasagna_54, Lego_63, Lennox_56, LilStuart_55, Lilbunny_79, Lizalica_63, Lizz_61, London_63, Lucy_55, Lukepolites_35, Makoto_55, Maselop_76, MegTheThird_75, MissSwiss_64, Mistmere_97, Moki_55, Mudpuppy_62, Nancia_56, Necrophoxinus_105, Neeharika16_79, Nesbitt_47, Neuville_58, Newrala_79, Niobe_63, Nitro_64, ObiToo_68, OurGirlNessie_54, Oxynfrius_58, PHTowN_61, PandaPo_64, PeaceMeal1_65, Pharaoh_73, Phives_64, Phrappuccino_184, PitaDog_56, Pmask_79, Polyuyuki_76, Poompha_64, Powerpuff_65, Preamble_57, Pterodactyl_56, Rebeuca_68, Refuge_76, Rifter_80, Roberts_59, Roksolana_80, Rooney_61, Rowa_48, Rowdy_69, SassyC_66, Settecandela_209, Severus_65, ShakeNBake_61, Shapes_69, SheaKeira_74, Shroomer_106, Simpson_69, Skelbel_64, SmellyB_80, Snek_63, Soondubu_60, SteakFry_102, StevieWelch_103, Studio_60, Subaru_63, Sue2_61, SuperAwesome_80, SuperCallie99_77, TPA2_52, Tallboi_63, Tbone_63, Temprado_81, ThursdayNight_67, ToneTone_77, Trike_64, Tuck_63, Tucker_80, Turab_62, Tutumahutu_65, Tweety19_64, Urla_56, VResidence_64, Virizion_66, VohminGhazi_80, Warda_64, Welcome_105, Wentworth_61, Wiks_79, Wildwest_59, Wilkos_63, WunderPhul_80, Yara_56, YesChef_63, Yokurt_79, Zaka_80, Zulu_81,

Summary by start number:

Start 11:

- Found in 4 of 232 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Bennie_56 (AK),

Start 19:

- Found in 12 of 232 (5.2%) of genes in pham
- Manual Annotations of this start: 4 of 190
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Drake94_65 (A10), PeaceMeal1_65 (A10), Poompha_64 (A10), Trike_64 (A10),

Start 22:

- Found in 1 of 232 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nesbitt_47 (BL),

Start 23:

- Found in 2 of 232 (0.9%) of genes in pham
- Manual Annotations of this start: 2 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_49 (BL), Finch_218 (singleton),

Start 25:

- Found in 9 of 232 (3.9%) of genes in pham
- Manual Annotations of this start: 4 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_60 (FR), CardboardBox_59 (FR), ChamoyPickle_60 (FR), ChipsNGuac_59 (FR), Ezurina_58 (FR), Gerri43_58 (FR), Neuville_58 (FR), Roberts_59 (FR), Studio_60 (FR),

Start 26:

- Found in 1 of 232 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA2_52 (singleton),

Start 30:

- Found in 12 of 232 (5.2%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Eaglepride_69 (A10),

Start 31:

- Found in 1 of 232 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jacko_98 (ED1),

Start 32:

- Found in 10 of 232 (4.3%) of genes in pham
- Manual Annotations of this start: 8 of 190
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Adolin_65 (AZ1), Berrie_63 (AZ1), Cyan_64 (AZ1), DrManhattan_66 (AZ1), MissSwiss_64 (AZ1), PandaPo_64 (AZ1), Sue2_61 (AZ1), VResidence_64 (AZ1), Wildwest_59 (AZ1),

Start 33:

- Found in 41 of 232 (17.7%) of genes in pham
- Manual Annotations of this start: 30 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AEgle_61 (AZ1), AGrandiflora_65 (AZ1), Adumb2043_62 (AZ1), Amploria_63 (AZ1), Asa16_63 (AZ1), Ascela_65 (AZ1), Community_63 (AZ1), Crewmate_68 (AZ1), DrSierra_60 (AZ1), Elezi_62 (AZ1), Eraser_63 (AZ1), Flutur_63 (AZ), Iter_64 (AZ1), IttyBittyPiggy_64 (AZ1), Janeemi_62 (AZ1), Joemato_65 (AZ1), JohnDoe_64 (AZ1), Jstan_64 (AZ1), Kaylissa_65 (AZ1), Lego_63 (AZ1), Lizalica_63 (AZ1), London_63 (AZ1), Mudpuppy_62 (AZ1), Niobe_63 (AZ1), Nitro_64 (AZ1), ObiToo_68 (AZ1), Phives_64 (AZ1), Powerpuff_65 (AZ1), Simpson_69 (AZ1), Skelbel_64 (AZ1), Snek_63 (AZ3), Subaru_63 (AZ1), Tallboi_63

(AZ1), Tbone_63 (AZ1), ThursdayNight_67 (AZ), Tuck_63 (AZ1), Turab_62 (AZ1), Tutumahutu_65 (AZ1), Tweety19_64 (AZ3), Warda_64 (AZ1), YesChef_63 (AZ1),

Start 34:

- Found in 19 of 232 (8.2%) of genes in pham
- Manual Annotations of this start: 18 of 190
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Bodacious_56 (AK), Charm_74 (A9), ChewChew_56 (AK), Christian_56 (AK), CristinaYang_56 (AK), DreamTeam1_74 (A9), HeadNerd_55 (AK), Huckleberry_55 (AK), Lasagna_54 (AK), Lennox_56 (AK), LilStuart_55 (AK), Lucy_55 (AK), Moki_55 (AK), Nancia_56 (AK), OurGirlNessie_54 (AK), PitaDog_56 (AK), Pterodactyl_56 (AK), Urla_56 (AK),

Start 35:

- Found in 2 of 232 (0.9%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Exile_58 (AZ6), Soondubu_60 (AZ6),

Start 36:

- Found in 4 of 232 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Celestiallunch_75 (A9), Klodlith_75 (A9), MegTheThird_75 (A9), SheaKeira_74 (A9),

Start 37:

- Found in 27 of 232 (11.6%) of genes in pham
- Manual Annotations of this start: 24 of 190
- Called 92.6% of time when present
- Phage (with cluster) where this start called: Apiary_76 (CR6), BigMack_56 (AK), Braxoaddie_76 (CR6), CoffeeBean_76 (CR6), DrRobert_54 (AK), DreamTeam_55 (AK), Dryad_65 (BN), Dubu_29 (BJ), Fluke_58 (AK), Gagieri_74 (CR6), Gibson_61 (BN), Gisselle_55 (AK), Glenn_59 (AK), Greenbelt_58 (BN), Korra_59 (AK), Lizz_61 (BN), Makoto_55 (AK), Maselop_76 (CR6), Oxyfrus_58 (AK), PHTown_61 (BN), Polyuyki_76 (CR6), Rooney_61 (BN), ShakeNBake_61 (BN), Virizion_66 (BN), Yara_56 (BN),

Start 38:

- Found in 3 of 232 (1.3%) of genes in pham
- Manual Annotations of this start: 3 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pharaoh_73 (A12), Preamble_57 (AK), Refuge_76 (A12),

Start 40:

- Found in 4 of 232 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elfy_75 (FP), SassyC_66 (BN), Wentworth_61 (BN), Wilkos_63 (BN),

Start 41:

- Found in 10 of 232 (4.3%) of genes in pham
- Manual Annotations of this start: 7 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASegato_101 (ED2), Erenyeager_103 (ED2), Fork_99 (ED2), HollowPurple_104 (ED2), Issa7_102 (ED2), Necrophoxinus_105 (ED2), Shroomer_106 (ED2), SteakFry_102 (ED2), StevieWelch_103 (ED2), Welcome_105 (ED2),

Start 42:

- Found in 39 of 232 (16.8%) of genes in pham
- Manual Annotations of this start: 34 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AppleCider_57 (AK), Auspice_41 (M1), Bongo_41 (M1), Bricole_41 (M1), CallieOMalley_58 (AK), Canowicakte_58 (AK), Carpal_57 (AK), Daiboju_55 (AK), Diminimus_42 (M1), Dulcita_42 (M1), FreakyGoo_42 (M1), Glaske16_42 (M1), Graynor_61 (AK), Herb_55 (AK), IPhane7_41 (M1), Izel_42 (M1), KingBob_55 (AK), KleverKiS_42 (M1), LilhomieP_40 (M1), Litotes_57 (AK), Maria1952_54 (AK), MeganNoll_58 (AK), MrBoss_60 (AK), MrGloopy_58 (AK), Nanosmite_47 (M3), PartyCup_59 (AK), PegLeg_41 (M1), RAP15_59 (AK), Reindeer_42 (M1), RoseMarie_47 (M1), Scuttle_57 (AK), Sergei_55 (AK), Skinny_42 (M1), SlimJimmy_40 (M1), Suppi_58 (AK), Temper16_55 (AK), TpudiCK_43 (M1), TyDawg_41 (M1), Wayne_60 (AK),

Start 43:

- Found in 1 of 232 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mistmere_97 (ED3),

Start 44:

- Found in 3 of 232 (1.3%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Settecandela_209 (AA),

Start 45:

- Found in 21 of 232 (9.1%) of genes in pham
- Manual Annotations of this start: 7 of 190
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_79 (A6), Blue7_81 (A6), CloudWang3_80 (A6), Hexamo_79 (A6), Yokurt_79 (A6), Zaka_80 (A6), Zulu_81 (A6),

Start 46:

- Found in 58 of 232 (25.0%) of genes in pham
- Manual Annotations of this start: 32 of 190
- Called 63.8% of time when present
- Phage (with cluster) where this start called: Anthony_58 (A20), BABullseye_73 (A6), BennyP_80 (A6), BlessJoy_80 (A6), Candra_78 (A6), Chupacabra_65 (A10), DaVinci_78 (A6), DustyMartin_69 (A10), Garak_81 (A6), Goose_68 (A10), Helmet_82 (A6), Hoot_75 (A6), Indra_83 (A6), Jordennis_78 (A6), Kazan_81 (A6), KittenMittens_64 (A10), Koko_81 (A6), Kristoff_66 (A10), Lilbunny_79 (A6), Neeharika16_79 (A6), Newrala_79 (A6), Pmask_79 (A6), Rebeuca_68 (A10),

Rifter_80 (A6), Roksolana_80 (A6), Rowa_48 (BL), Rowdy_69 (A10), Severus_65 (A10), Shapes_69 (A10), SuperAwesome_80 (A6), SuperCallie99_77 (A6), Temprado_81 (A6), ToneTone_77 (A6), Tucker_80 (A6), VohminGhazi_80 (A6), Wiks_79 (A6), WunderPhul_80 (A6),

Start 47:

- Found in 21 of 232 (9.1%) of genes in pham
- Manual Annotations of this start: 8 of 190
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Chartreuse_79 (A6), Cookiedough_80 (A6), DelvinSonDorr_76 (A6), Dorothea_80 (A6), EricB_79 (A6), GreedyLawyer_75 (A6), Isiphiwo_77 (A6), Kipper29_80 (A6), SmellyB_80 (A6),

Start 51:

- Found in 1 of 232 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 190
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phrappuccino_184 (AA),

Start 54:

- Found in 1 of 232 (0.4%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Lukepolites_35 (singleton),

Summary by clusters:

There are 23 clusters represented in this pham: FP, FR, BL, BN, singleton, BJ, ED2, ED3, ED1, M1, M3, A10, A12, A6, A9, AA, AK, AZ, A20, CR6, AZ1, AZ3, AZ6,

Info for manual annotations of cluster A10:

- Start number 19 was manually annotated 4 times for cluster A10.
- Start number 30 was manually annotated 1 time for cluster A10.
- Start number 46 was manually annotated 6 times for cluster A10.

Info for manual annotations of cluster A12:

- Start number 38 was manually annotated 2 times for cluster A12.

Info for manual annotations of cluster A20:

- Start number 46 was manually annotated 1 time for cluster A20.

Info for manual annotations of cluster A6:

- Start number 45 was manually annotated 7 times for cluster A6.
- Start number 46 was manually annotated 24 times for cluster A6.
- Start number 47 was manually annotated 8 times for cluster A6.

Info for manual annotations of cluster A9:

- Start number 34 was manually annotated 2 times for cluster A9.
- Start number 36 was manually annotated 1 time for cluster A9.

Info for manual annotations of cluster AA:

- Start number 44 was manually annotated 1 time for cluster AA.
- Start number 51 was manually annotated 1 time for cluster AA.

Info for manual annotations of cluster AK:

- Start number 11 was manually annotated 1 time for cluster AK.
- Start number 34 was manually annotated 16 times for cluster AK.
- Start number 37 was manually annotated 9 times for cluster AK.
- Start number 38 was manually annotated 1 time for cluster AK.
- Start number 42 was manually annotated 18 times for cluster AK.

Info for manual annotations of cluster AZ1:

- Start number 32 was manually annotated 8 times for cluster AZ1.
- Start number 33 was manually annotated 28 times for cluster AZ1.

Info for manual annotations of cluster AZ3:

- Start number 33 was manually annotated 2 times for cluster AZ3.

Info for manual annotations of cluster AZ6:

- Start number 35 was manually annotated 1 time for cluster AZ6.

Info for manual annotations of cluster BJ:

- Start number 37 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster BL:

- Start number 22 was manually annotated 1 time for cluster BL.
- Start number 23 was manually annotated 1 time for cluster BL.
- Start number 46 was manually annotated 1 time for cluster BL.

Info for manual annotations of cluster BN:

- Start number 37 was manually annotated 8 times for cluster BN.
- Start number 40 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster CR6:

- Start number 37 was manually annotated 6 times for cluster CR6.

Info for manual annotations of cluster ED1:

- Start number 31 was manually annotated 1 time for cluster ED1.

Info for manual annotations of cluster ED2:

- Start number 41 was manually annotated 7 times for cluster ED2.

Info for manual annotations of cluster FR:

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

Info for manual annotations of cluster M1:

- Start number 42 was manually annotated 15 times for cluster M1.

Info for manual annotations of cluster M3:

- Start number 42 was manually annotated 1 time for cluster M3.

Gene Information:

Gene: AEgle_61 Start: 41138, Stop: 41494, Start Num: 33

Candidate Starts for AEgle_61:

(Start: 33 @41138 has 30 MA's), (76, 41288), (119, 41441), (129, 41480),

Gene: AGrandiflora_65 Start: 42034, Stop: 42390, Start Num: 33

Candidate Starts for AGrandiflora_65:

(Start: 33 @42034 has 30 MA's), (119, 42337), (129, 42376),

Gene: ASegato_101 Start: 54171, Stop: 53848, Start Num: 41

Candidate Starts for ASegato_101:

(Start: 41 @54171 has 7 MA's), (50, 54156), (64, 54102), (83, 54030), (87, 54009), (102, 53952), (109, 53931), (115, 53916), (124, 53886), (126, 53874), (127, 53868), (129, 53862),

Gene: AbbeyMikolon_49 Start: 34450, Stop: 34821, Start Num: 23

Candidate Starts for AbbeyMikolon_49:

(Start: 23 @34450 has 2 MA's), (59, 34528), (73, 34591), (79, 34615), (89, 34648), (103, 34711), (107, 34720),

Gene: Adolin_65 Start: 40925, Stop: 41284, Start Num: 32

Candidate Starts for Adolin_65:

(Start: 32 @40925 has 8 MA's), (55, 40982), (119, 41231), (129, 41270),

Gene: Adumb2043_62 Start: 41162, Stop: 41518, Start Num: 33

Candidate Starts for Adumb2043_62:

(Start: 33 @41162 has 30 MA's), (76, 41312), (119, 41465), (129, 41504),

Gene: Amploria_63 Start: 41342, Stop: 41698, Start Num: 33

Candidate Starts for Amploria_63:

(Start: 33 @41342 has 30 MA's), (76, 41492), (119, 41645), (129, 41684),

Gene: AnnabelLee_60 Start: 35355, Stop: 34978, Start Num: 25

Candidate Starts for AnnabelLee_60:

(Start: 25 @35355 has 4 MA's), (101, 35091), (111, 35058),

Gene: Anthony_58 Start: 37628, Stop: 37296, Start Num: 46

Candidate Starts for Anthony_58:

(Start: 46 @37628 has 32 MA's), (95, 37430), (123, 37334), (124, 37331), (126, 37319),

Gene: Apiary_76 Start: 55270, Stop: 54890, Start Num: 37

Candidate Starts for Apiary_76:

(3, 55618), (5, 55567), (7, 55504), (8, 55444), (10, 55408), (21, 55306), (Start: 37 @55270 has 24 MA's), (81, 55120),

Gene: AppleCider_57 Start: 41677, Stop: 42012, Start Num: 42

Candidate Starts for AppleCider_57:

(Start: 42 @41677 has 34 MA's), (88, 41845), (101, 41905), (110, 41935), (119, 41965), (127, 41998),

Gene: Artemis2UCLA_79 Start: 44616, Stop: 44272, Start Num: 45

Candidate Starts for Artemis2UCLA_79:

(Start: 45 @44616 has 7 MA's), (Start: 46 @44613 has 32 MA's), (105, 44376), (111, 44355), (125, 44301),

Gene: Asa16_63 Start: 41723, Stop: 42079, Start Num: 33
Candidate Starts for Asa16_63:
(Start: 33 @41723 has 30 MA's), (119, 42026), (129, 42065),

Gene: Ascela_65 Start: 42214, Stop: 42570, Start Num: 33
Candidate Starts for Ascela_65:
(Start: 33 @42214 has 30 MA's), (76, 42364), (129, 42556),

Gene: Auspice_41 Start: 33797, Stop: 33453, Start Num: 42
Candidate Starts for Auspice_41:
(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: BABullseye_73 Start: 43259, Stop: 42921, Start Num: 46
Candidate Starts for BABullseye_73:
(20, 43304), (Start: 46 @43259 has 32 MA's), (Start: 47 @43256 has 8 MA's), (85, 43100), (111, 43001),

Gene: Bennie_56 Start: 40399, Stop: 40872, Start Num: 11
Candidate Starts for Bennie_56:
(Start: 11 @40399 has 1 MA's), (18, 40474), (Start: 34 @40522 has 18 MA's), (86, 40699), (88, 40702), (121, 40828),

Gene: BennyP_80 Start: 44778, Stop: 44437, Start Num: 46
Candidate Starts for BennyP_80:
(Start: 45 @44781 has 7 MA's), (Start: 46 @44778 has 32 MA's), (105, 44541), (111, 44520), (125, 44466),

Gene: Berrie_63 Start: 41818, Stop: 42174, Start Num: 32
Candidate Starts for Berrie_63:
(Start: 32 @41818 has 8 MA's), (101, 42064), (129, 42160),

Gene: BigMack_56 Start: 40973, Stop: 41317, Start Num: 37
Candidate Starts for BigMack_56:
(Start: 37 @40973 has 24 MA's), (52, 40997), (82, 41123), (88, 41150), (91, 41168), (101, 41210), (107, 41225), (110, 41240), (118, 41267), (119, 41270),

Gene: BlessJoy_80 Start: 45134, Stop: 44793, Start Num: 46
Candidate Starts for BlessJoy_80:
(Start: 45 @45137 has 7 MA's), (Start: 46 @45134 has 32 MA's), (105, 44897), (111, 44876), (125, 44822),

Gene: Blue7_81 Start: 44835, Stop: 44491, Start Num: 45
Candidate Starts for Blue7_81:
(Start: 45 @44835 has 7 MA's), (Start: 46 @44832 has 32 MA's), (105, 44595), (111, 44574), (125, 44520),

Gene: Bodacious_56 Start: 40944, Stop: 41294, Start Num: 34
Candidate Starts for Bodacious_56:
(Start: 34 @40944 has 18 MA's), (56, 40992), (86, 41121), (88, 41124), (121, 41250),

Gene: Bongo_41 Start: 33797, Stop: 33453, Start Num: 42
Candidate Starts for Bongo_41:

(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: Braxoaddie_76 Start: 55255, Stop: 54875, Start Num: 37

Candidate Starts for Braxoaddie_76:

(5, 55552), (7, 55489), (8, 55429), (10, 55393), (21, 55291), (Start: 37 @55255 has 24 MA's), (81, 55105),

Gene: Bricole_41 Start: 33783, Stop: 33439, Start Num: 42

Candidate Starts for Bricole_41:

(Start: 42 @33783 has 34 MA's), (73, 33666), (92, 33591), (105, 33537),

Gene: CallieOMalley_58 Start: 41865, Stop: 42200, Start Num: 42

Candidate Starts for CallieOMalley_58:

(Start: 42 @41865 has 34 MA's), (88, 42033), (101, 42093), (110, 42123), (118, 42150), (119, 42153), (127, 42186),

Gene: Candra_78 Start: 44954, Stop: 44616, Start Num: 46

Candidate Starts for Candra_78:

(20, 44999), (Start: 46 @44954 has 32 MA's), (Start: 47 @44951 has 8 MA's), (85, 44795), (111, 44696),

Gene: Canowicakte_58 Start: 41917, Stop: 42252, Start Num: 42

Candidate Starts for Canowicakte_58:

(Start: 42 @41917 has 34 MA's), (88, 42085), (101, 42145), (110, 42175), (118, 42202), (119, 42205), (127, 42238),

Gene: CardboardBox_59 Start: 35358, Stop: 34981, Start Num: 25

Candidate Starts for CardboardBox_59:

(Start: 25 @35358 has 4 MA's), (101, 35094), (111, 35061),

Gene: Carpal_57 Start: 41744, Stop: 42079, Start Num: 42

Candidate Starts for Carpal_57:

(Start: 42 @41744 has 34 MA's), (62, 41801), (66, 41819), (88, 41912), (101, 41972), (107, 41987), (110, 42002), (118, 42029), (119, 42032),

Gene: Celestiallunch_75 Start: 44883, Stop: 44533, Start Num: 36

Candidate Starts for Celestiallunch_75:

(Start: 36 @44883 has 1 MA's), (70, 44772), (77, 44748), (105, 44634), (113, 44607), (118, 44589), (124, 44571), (125, 44562),

Gene: ChamoyPickle_60 Start: 35898, Stop: 35521, Start Num: 25

Candidate Starts for ChamoyPickle_60:

(Start: 25 @35898 has 4 MA's), (101, 35634), (111, 35601),

Gene: Charm_74 Start: 44815, Stop: 44462, Start Num: 34

Candidate Starts for Charm_74:

(6, 45040), (Start: 34 @44815 has 18 MA's), (77, 44677), (105, 44563), (113, 44536), (118, 44518), (124, 44500), (125, 44491),

Gene: Chartreuse_79 Start: 44262, Stop: 43927, Start Num: 47

Candidate Starts for Chartreuse_79:

(20, 44310), (Start: 46 @44265 has 32 MA's), (Start: 47 @44262 has 8 MA's), (85, 44106), (111, 44007),

Gene: ChewChew_56 Start: 41074, Stop: 41424, Start Num: 34
Candidate Starts for ChewChew_56:
(Start: 34 @41074 has 18 MA's), (56, 41122), (86, 41251), (88, 41254), (121, 41380),

Gene: ChipsNGuac_59 Start: 35358, Stop: 34981, Start Num: 25
Candidate Starts for ChipsNGuac_59:
(Start: 25 @35358 has 4 MA's), (101, 35094), (111, 35061),

Gene: Christian_56 Start: 40786, Stop: 41136, Start Num: 34
Candidate Starts for Christian_56:
(Start: 34 @40786 has 18 MA's), (86, 40963), (88, 40966), (121, 41092),

Gene: Chupacabra_65 Start: 42016, Stop: 41687, Start Num: 46
Candidate Starts for Chupacabra_65:
(Start: 46 @42016 has 32 MA's), (98, 41803), (122, 41728),

Gene: CloudWang3_80 Start: 45127, Stop: 44783, Start Num: 45
Candidate Starts for CloudWang3_80:
(27, 45151), (Start: 45 @45127 has 7 MA's), (Start: 46 @45124 has 32 MA's), (105, 44887), (111, 44866), (125, 44812),

Gene: CoffeeBean_76 Start: 55213, Stop: 54833, Start Num: 37
Candidate Starts for CoffeeBean_76:
(5, 55510), (7, 55447), (8, 55387), (10, 55351), (21, 55249), (Start: 37 @55213 has 24 MA's), (81, 55063),

Gene: Community_63 Start: 42094, Stop: 42450, Start Num: 33
Candidate Starts for Community_63:
(Start: 33 @42094 has 30 MA's), (39, 42106), (105, 42349), (129, 42436),

Gene: Cookiedough_80 Start: 45569, Stop: 45231, Start Num: 47
Candidate Starts for Cookiedough_80:
(20, 45617), (Start: 46 @45572 has 32 MA's), (Start: 47 @45569 has 8 MA's), (103, 45338),

Gene: Crewmate_68 Start: 42445, Stop: 42801, Start Num: 33
Candidate Starts for Crewmate_68:
(Start: 33 @42445 has 30 MA's), (76, 42595), (101, 42691), (121, 42754), (129, 42787),

Gene: CristinaYang_56 Start: 41071, Stop: 41421, Start Num: 34
Candidate Starts for CristinaYang_56:
(Start: 34 @41071 has 18 MA's), (56, 41119), (86, 41248), (88, 41251), (121, 41377),

Gene: Cyan_64 Start: 41775, Stop: 42134, Start Num: 32
Candidate Starts for Cyan_64:
(Start: 32 @41775 has 8 MA's), (119, 42081), (129, 42120),

Gene: DaVinci_78 Start: 44319, Stop: 43981, Start Num: 46
Candidate Starts for DaVinci_78:
(20, 44364), (Start: 46 @44319 has 32 MA's), (Start: 47 @44316 has 8 MA's), (85, 44160), (111, 44061),

Gene: Daiboju_55 Start: 41677, Stop: 42018, Start Num: 42

Candidate Starts for Daiboju_55:

(Start: 42 @41677 has 34 MA's), (88, 41848), (92, 41869), (101, 41902), (119, 41965), (123, 41977),

Gene: DelvinSonDorr_76 Start: 44974, Stop: 44636, Start Num: 47

Candidate Starts for DelvinSonDorr_76:

(20, 45022), (Start: 46 @44977 has 32 MA's), (Start: 47 @44974 has 8 MA's), (103, 44743),

Gene: Diminimus_42 Start: 33796, Stop: 33452, Start Num: 42

Candidate Starts for Diminimus_42:

(Start: 42 @33796 has 34 MA's), (73, 33679), (92, 33604), (105, 33550),

Gene: Dorothea_80 Start: 45562, Stop: 45227, Start Num: 47

Candidate Starts for Dorothea_80:

(20, 45610), (Start: 46 @45565 has 32 MA's), (Start: 47 @45562 has 8 MA's), (85, 45406), (111, 45307),

Gene: DrManhattan_66 Start: 40479, Stop: 40838, Start Num: 32

Candidate Starts for DrManhattan_66:

(Start: 32 @40479 has 8 MA's), (55, 40536), (119, 40785), (129, 40824),

Gene: DrRobert_54 Start: 40308, Stop: 40655, Start Num: 37

Candidate Starts for DrRobert_54:

(Start: 37 @40308 has 24 MA's), (52, 40332), (86, 40482), (88, 40485), (121, 40611),

Gene: DrSierra_60 Start: 40611, Stop: 40967, Start Num: 33

Candidate Starts for DrSierra_60:

(Start: 33 @40611 has 30 MA's), (64, 40704), (129, 40953),

Gene: Drake94_65 Start: 41184, Stop: 40807, Start Num: 19

Candidate Starts for Drake94_65:

(Start: 19 @41184 has 4 MA's), (Start: 30 @41151 has 1 MA's), (Start: 46 @41133 has 32 MA's), (66, 41061), (98, 40923), (122, 40848), (127, 40824),

Gene: DreamTeam_55 Start: 40683, Stop: 41033, Start Num: 37

Candidate Starts for DreamTeam_55:

(Start: 37 @40683 has 24 MA's), (52, 40713), (56, 40734), (62, 40755), (82, 40839), (88, 40866), (101, 40926), (107, 40941), (110, 40956), (118, 40983), (119, 40986),

Gene: DreamTeam1_74 Start: 44663, Stop: 44310, Start Num: 34

Candidate Starts for DreamTeam1_74:

(6, 44888), (Start: 34 @44663 has 18 MA's), (77, 44525), (105, 44411), (113, 44384), (118, 44366), (124, 44348), (125, 44339),

Gene: Dryad_65 Start: 44270, Stop: 43926, Start Num: 37

Candidate Starts for Dryad_65:

(16, 44351), (Start: 37 @44270 has 24 MA's), (64, 44198), (69, 44177), (74, 44153), (107, 44033), (113, 44006), (118, 43988), (129, 43946),

Gene: Dubu_29 Start: 22724, Stop: 23071, Start Num: 37

Candidate Starts for Dubu_29:

(8, 22547), (12, 22595), (14, 22625), (24, 22697), (Start: 37 @22724 has 24 MA's), (Start: 44 @22727 has 1 MA's), (93, 22922), (94, 22925),

Gene: Dulcita_42 Start: 33797, Stop: 33453, Start Num: 42
Candidate Starts for Dulcita_42:
(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: DustyMartin_69 Start: 42169, Stop: 41843, Start Num: 46
Candidate Starts for DustyMartin_69:
(Start: 19 @42220 has 4 MA's), (Start: 30 @42187 has 1 MA's), (Start: 46 @42169 has 32 MA's), (66, 42097), (98, 41959), (122, 41884),

Gene: Eaglepride_69 Start: 42138, Stop: 41791, Start Num: 30
Candidate Starts for Eaglepride_69:
(Start: 19 @42171 has 4 MA's), (Start: 30 @42138 has 1 MA's), (Start: 46 @42120 has 32 MA's), (73, 42009), (122, 41832),

Gene: Elezi_62 Start: 41480, Stop: 41836, Start Num: 33
Candidate Starts for Elezi_62:
(Start: 33 @41480 has 30 MA's), (76, 41630), (119, 41783), (129, 41822),

Gene: Elfy_75 Start: 42768, Stop: 43112, Start Num: 40
Candidate Starts for Elfy_75:
(Start: 40 @42768 has 1 MA's), (67, 42855), (70, 42879), (80, 42918), (86, 42945), (92, 42969), (95, 42981), (118, 43056),

Gene: Eraser_63 Start: 41730, Stop: 42086, Start Num: 33
Candidate Starts for Eraser_63:
(Start: 33 @41730 has 30 MA's), (119, 42033), (129, 42072),

Gene: Erenyeager_103 Start: 54096, Stop: 53773, Start Num: 41
Candidate Starts for Erenyeager_103:
(Start: 41 @54096 has 7 MA's), (50, 54081), (64, 54027), (83, 53955), (87, 53934), (102, 53877), (109, 53856), (115, 53841), (124, 53811), (126, 53799), (127, 53793), (129, 53787),

Gene: EricB_79 Start: 44908, Stop: 44573, Start Num: 47
Candidate Starts for EricB_79:
(20, 44956), (Start: 46 @44911 has 32 MA's), (Start: 47 @44908 has 8 MA's), (85, 44752), (111, 44653),

Gene: Exile_58 Start: 42771, Stop: 43118, Start Num: 35
Candidate Starts for Exile_58:
(Start: 35 @42771 has 1 MA's), (55, 42819), (114, 43050), (127, 43101),

Gene: Ezurina_58 Start: 36258, Stop: 35881, Start Num: 25
Candidate Starts for Ezurina_58:
(Start: 25 @36258 has 4 MA's), (39, 36237), (60, 36174), (111, 35961),

Gene: Finch_218 Start: 126837, Stop: 127232, Start Num: 23
Candidate Starts for Finch_218:
(Start: 23 @126837 has 2 MA's), (77, 127002), (81, 127017), (104, 127122), (106, 127128), (117, 127167), (118, 127176),

Gene: Fluke_58 Start: 42001, Stop: 42345, Start Num: 37
Candidate Starts for Fluke_58:
(Start: 37 @42001 has 24 MA's), (52, 42025), (88, 42178), (101, 42238), (110, 42268), (118, 42295),

Gene: Flutur_63 Start: 42059, Stop: 42415, Start Num: 33
Candidate Starts for Flutur_63:
(Start: 33 @42059 has 30 MA's), (119, 42362), (129, 42401),

Gene: Fork_99 Start: 54049, Stop: 53726, Start Num: 41
Candidate Starts for Fork_99:
(Start: 41 @54049 has 7 MA's), (50, 54034), (64, 53980), (83, 53908), (87, 53887), (102, 53830), (109, 53809), (115, 53794), (124, 53764), (126, 53752), (127, 53746), (129, 53740),

Gene: FreakyGoo_42 Start: 33797, Stop: 33453, Start Num: 42
Candidate Starts for FreakyGoo_42:
(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: Gagieri_74 Start: 55043, Stop: 54696, Start Num: 37
Candidate Starts for Gagieri_74:
(Start: 37 @55043 has 24 MA's), (81, 54893), (113, 54776), (118, 54752),

Gene: Garak_81 Start: 45075, Stop: 44734, Start Num: 46
Candidate Starts for Garak_81:
(Start: 45 @45078 has 7 MA's), (Start: 46 @45075 has 32 MA's), (105, 44838), (111, 44817), (125, 44763),

Gene: Gerri43_58 Start: 35358, Stop: 34981, Start Num: 25
Candidate Starts for Gerri43_58:
(Start: 25 @35358 has 4 MA's), (101, 35094), (111, 35061),

Gene: Gibson_61 Start: 43510, Stop: 43169, Start Num: 37
Candidate Starts for Gibson_61:
(Start: 37 @43510 has 24 MA's), (64, 43438), (69, 43417), (118, 43228), (129, 43186),

Gene: Gisselle_55 Start: 40683, Stop: 41033, Start Num: 37
Candidate Starts for Gisselle_55:
(Start: 37 @40683 has 24 MA's), (52, 40713), (56, 40734), (62, 40755), (82, 40839), (88, 40866), (101, 40926), (107, 40941), (110, 40956), (118, 40983), (119, 40986),

Gene: Glaske16_42 Start: 33796, Stop: 33452, Start Num: 42
Candidate Starts for Glaske16_42:
(Start: 42 @33796 has 34 MA's), (73, 33679), (92, 33604), (105, 33550),

Gene: Glenn_59 Start: 42462, Stop: 42806, Start Num: 37
Candidate Starts for Glenn_59:
(Start: 37 @42462 has 24 MA's), (52, 42486), (88, 42639), (101, 42699), (110, 42729), (118, 42756),

Gene: Goose_68 Start: 41832, Stop: 41503, Start Num: 46
Candidate Starts for Goose_68:
(Start: 46 @41832 has 32 MA's), (98, 41619), (122, 41544),

Gene: Graynor_61 Start: 41502, Stop: 41837, Start Num: 42
Candidate Starts for Graynor_61:
(Start: 42 @41502 has 34 MA's), (88, 41670), (101, 41730), (110, 41760), (118, 41787), (119, 41790),

Gene: GreedyLawyer_75 Start: 44881, Stop: 44546, Start Num: 47

Candidate Starts for GreedyLawyer_75:

(20, 44929), (Start: 46 @44884 has 32 MA's), (Start: 47 @44881 has 8 MA's), (85, 44725), (111, 44626),

Gene: Greenbelt_58 Start: 39592, Stop: 39260, Start Num: 37

Candidate Starts for Greenbelt_58:

(Start: 37 @39592 has 24 MA's), (94, 39394), (120, 39307), (127, 39277), (129, 39271),

Gene: HeadNerd_55 Start: 40416, Stop: 40766, Start Num: 34

Candidate Starts for HeadNerd_55:

(Start: 11 @40293 has 1 MA's), (18, 40368), (Start: 34 @40416 has 18 MA's), (86, 40593), (88, 40596), (121, 40722),

Gene: Helmet_82 Start: 45075, Stop: 44734, Start Num: 46

Candidate Starts for Helmet_82:

(Start: 45 @45078 has 7 MA's), (Start: 46 @45075 has 32 MA's), (105, 44838), (111, 44817), (125, 44763),

Gene: Herb_55 Start: 41676, Stop: 42017, Start Num: 42

Candidate Starts for Herb_55:

(Start: 42 @41676 has 34 MA's), (88, 41847), (92, 41868), (101, 41901), (119, 41964), (123, 41976),

Gene: Hexamo_79 Start: 44613, Stop: 44269, Start Num: 45

Candidate Starts for Hexamo_79:

(27, 44637), (Start: 45 @44613 has 7 MA's), (Start: 46 @44610 has 32 MA's), (105, 44373), (111, 44352), (125, 44298),

Gene: HollowPurple_104 Start: 54710, Stop: 54387, Start Num: 41

Candidate Starts for HollowPurple_104:

(Start: 41 @54710 has 7 MA's), (50, 54695), (64, 54641), (83, 54569), (87, 54548), (102, 54491), (109, 54470), (115, 54455), (124, 54425), (126, 54413), (127, 54407), (129, 54401),

Gene: Hoot_75 Start: 42769, Stop: 42431, Start Num: 46

Candidate Starts for Hoot_75:

(20, 42814), (Start: 46 @42769 has 32 MA's), (Start: 47 @42766 has 8 MA's), (85, 42610), (111, 42511),

Gene: Huckleberry_55 Start: 40420, Stop: 40770, Start Num: 34

Candidate Starts for Huckleberry_55:

(Start: 11 @40297 has 1 MA's), (18, 40372), (Start: 34 @40420 has 18 MA's), (86, 40597), (88, 40600), (121, 40726),

Gene: IPhone7_41 Start: 33797, Stop: 33453, Start Num: 42

Candidate Starts for IPhone7_41:

(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: Indra_83 Start: 45076, Stop: 44735, Start Num: 46

Candidate Starts for Indra_83:

(Start: 45 @45079 has 7 MA's), (Start: 46 @45076 has 32 MA's), (105, 44839), (111, 44818), (125, 44764),

Gene: Isiphiwo_77 Start: 44936, Stop: 44598, Start Num: 47

Candidate Starts for Isiphiwo_77:

(20, 44984), (Start: 46 @44939 has 32 MA's), (Start: 47 @44936 has 8 MA's), (63, 44873), (103, 44705),

Gene: Issa7_102 Start: 54064, Stop: 53741, Start Num: 41

Candidate Starts for Issa7_102:

(Start: 41 @54064 has 7 MA's), (50, 54049), (64, 53995), (83, 53923), (87, 53902), (102, 53845), (109, 53824), (115, 53809), (124, 53779), (126, 53767), (127, 53761), (129, 53755),

Gene: Iter_64 Start: 41985, Stop: 42341, Start Num: 33

Candidate Starts for Iter_64:

(Start: 33 @41985 has 30 MA's), (76, 42135), (129, 42327),

Gene: IttyBittyPiggy_64 Start: 40207, Stop: 40560, Start Num: 33

Candidate Starts for IttyBittyPiggy_64:

(Start: 33 @40207 has 30 MA's), (101, 40450), (119, 40507), (129, 40546),

Gene: Izel_42 Start: 33796, Stop: 33452, Start Num: 42

Candidate Starts for Izel_42:

(Start: 42 @33796 has 34 MA's), (73, 33679), (92, 33604), (105, 33550),

Gene: Jacko_98 Start: 53745, Stop: 53389, Start Num: 31

Candidate Starts for Jacko_98:

(Start: 31 @53745 has 1 MA's), (Start: 44 @53721 has 1 MA's), (56, 53685), (69, 53631), (72, 53622), (83, 53583), (84, 53571), (87, 53559), (99, 53505), (102, 53499), (110, 53472), (128, 53406),

Gene: Janeemi_62 Start: 41595, Stop: 41951, Start Num: 33

Candidate Starts for Janeemi_62:

(Start: 33 @41595 has 30 MA's), (39, 41607), (129, 41937),

Gene: Joemato_65 Start: 41955, Stop: 42311, Start Num: 33

Candidate Starts for Joemato_65:

(Start: 33 @41955 has 30 MA's), (101, 42201), (119, 42258), (129, 42297),

Gene: JohnDoe_64 Start: 41872, Stop: 42228, Start Num: 33

Candidate Starts for JohnDoe_64:

(Start: 33 @41872 has 30 MA's), (101, 42118), (119, 42175), (129, 42214),

Gene: Jordennis_78 Start: 45151, Stop: 44813, Start Num: 46

Candidate Starts for Jordennis_78:

(20, 45196), (Start: 46 @45151 has 32 MA's), (Start: 47 @45148 has 8 MA's), (57, 45109), (68, 45064), (103, 44917),

Gene: Jstan_64 Start: 41484, Stop: 41840, Start Num: 33

Candidate Starts for Jstan_64:

(Start: 33 @41484 has 30 MA's), (76, 41634), (119, 41787), (129, 41826),

Gene: Kaylissa_65 Start: 42234, Stop: 42590, Start Num: 33

Candidate Starts for Kaylissa_65:

(Start: 33 @42234 has 30 MA's), (48, 42264), (119, 42537), (129, 42576),

Gene: Kazan_81 Start: 44924, Stop: 44586, Start Num: 46

Candidate Starts for Kazan_81:

(20, 44969), (Start: 46 @44924 has 32 MA's), (Start: 47 @44921 has 8 MA's), (85, 44765), (111, 44666),

Gene: KingBob_55 Start: 41677, Stop: 42018, Start Num: 42

Candidate Starts for KingBob_55:

(Start: 42 @41677 has 34 MA's), (88, 41848), (92, 41869), (101, 41902), (119, 41965), (123, 41977),

Gene: Kipper29_80 Start: 44934, Stop: 44599, Start Num: 47

Candidate Starts for Kipper29_80:

(20, 44982), (Start: 46 @44937 has 32 MA's), (Start: 47 @44934 has 8 MA's), (85, 44778), (111, 44679),

Gene: KittenMittens_64 Start: 41141, Stop: 40815, Start Num: 46

Candidate Starts for KittenMittens_64:

(Start: 19 @41192 has 4 MA's), (Start: 30 @41159 has 1 MA's), (Start: 46 @41141 has 32 MA's), (66, 41069), (98, 40931), (122, 40856), (127, 40832),

Gene: KleverKiS_42 Start: 33777, Stop: 33433, Start Num: 42

Candidate Starts for KleverKiS_42:

(Start: 42 @33777 has 34 MA's), (73, 33660), (92, 33585), (105, 33531),

Gene: Klodlith_75 Start: 44882, Stop: 44529, Start Num: 36

Candidate Starts for Klodlith_75:

(6, 45110), (Start: 36 @44882 has 1 MA's), (77, 44744), (105, 44630), (113, 44603), (118, 44585), (124, 44567), (125, 44558),

Gene: Koko_81 Start: 45465, Stop: 45124, Start Num: 46

Candidate Starts for Koko_81:

(Start: 45 @45468 has 7 MA's), (Start: 46 @45465 has 32 MA's), (105, 45228), (111, 45207), (125, 45153),

Gene: Korra_59 Start: 41736, Stop: 42080, Start Num: 37

Candidate Starts for Korra_59:

(Start: 37 @41736 has 24 MA's), (52, 41760), (88, 41913), (101, 41973), (110, 42003), (118, 42030),

Gene: Kristoff_66 Start: 42458, Stop: 42129, Start Num: 46

Candidate Starts for Kristoff_66:

(Start: 19 @42509 has 4 MA's), (Start: 30 @42476 has 1 MA's), (Start: 46 @42458 has 32 MA's), (98, 42245), (122, 42170),

Gene: Lasagna_54 Start: 40307, Stop: 40657, Start Num: 34

Candidate Starts for Lasagna_54:

(Start: 34 @40307 has 18 MA's), (56, 40355), (86, 40484), (88, 40487), (121, 40613),

Gene: Lego_63 Start: 41553, Stop: 41909, Start Num: 33

Candidate Starts for Lego_63:

(Start: 33 @41553 has 30 MA's), (48, 41583), (119, 41856), (129, 41895),

Gene: Lennox_56 Start: 40792, Stop: 41142, Start Num: 34

Candidate Starts for Lennox_56:

(Start: 34 @40792 has 18 MA's), (56, 40840), (86, 40969), (88, 40972), (121, 41098),

Gene: LilStuart_55 Start: 40655, Stop: 41005, Start Num: 34

Candidate Starts for LilStuart_55:

(Start: 34 @40655 has 18 MA's), (56, 40703), (86, 40832), (88, 40835), (121, 40961),

Gene: Lilbunny_79 Start: 44707, Stop: 44366, Start Num: 46

Candidate Starts for Lilbunny_79:

(Start: 45 @44710 has 7 MA's), (Start: 46 @44707 has 32 MA's), (105, 44470), (111, 44449), (125, 44395),

Gene: LilhomieP_40 Start: 33797, Stop: 33453, Start Num: 42

Candidate Starts for LilhomieP_40:

(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: Litotes_57 Start: 41464, Stop: 41799, Start Num: 42

Candidate Starts for Litotes_57:

(Start: 42 @41464 has 34 MA's), (88, 41632), (101, 41692), (110, 41722), (118, 41749), (119, 41752), (127, 41785),

Gene: Lizalica_63 Start: 41149, Stop: 41505, Start Num: 33

Candidate Starts for Lizalica_63:

(Start: 33 @41149 has 30 MA's), (119, 41452), (129, 41491),

Gene: Lizz_61 Start: 43350, Stop: 43009, Start Num: 37

Candidate Starts for Lizz_61:

(16, 43431), (Start: 37 @43350 has 24 MA's), (64, 43278), (69, 43257), (107, 43113), (118, 43068), (129, 43026),

Gene: London_63 Start: 41721, Stop: 42077, Start Num: 33

Candidate Starts for London_63:

(Start: 33 @41721 has 30 MA's), (119, 42024), (129, 42063),

Gene: Lucy_55 Start: 40650, Stop: 41000, Start Num: 34

Candidate Starts for Lucy_55:

(Start: 34 @40650 has 18 MA's), (56, 40698), (86, 40827), (88, 40830), (121, 40956),

Gene: Lukepolites_35 Start: 27976, Stop: 28326, Start Num: 54

Candidate Starts for Lukepolites_35:

(1, 27541), (9, 27766), (15, 27841), (49, 27958), (54, 27976), (61, 28003), (78, 28087), (108, 28225), (109, 28231),

Gene: Makoto_55 Start: 40551, Stop: 40898, Start Num: 37

Candidate Starts for Makoto_55:

(Start: 37 @40551 has 24 MA's), (52, 40575), (86, 40725), (88, 40728), (121, 40854),

Gene: Maria1952_54 Start: 41676, Stop: 42017, Start Num: 42

Candidate Starts for Maria1952_54:

(Start: 42 @41676 has 34 MA's), (88, 41847), (92, 41868), (101, 41901), (119, 41964), (123, 41976),

Gene: Maselop_76 Start: 55289, Stop: 54909, Start Num: 37

Candidate Starts for Maselop_76:

(5, 55586), (7, 55523), (8, 55463), (10, 55427), (21, 55325), (Start: 37 @55289 has 24 MA's), (81, 55139),

Gene: MegTheThird_75 Start: 44883, Stop: 44533, Start Num: 36

Candidate Starts for MegTheThird_75:

(6, 45111), (Start: 36 @44883 has 1 MA's), (70, 44772), (77, 44748), (105, 44634), (113, 44607), (118, 44589), (124, 44571), (125, 44562),

Gene: MeganNoll_58 Start: 42247, Stop: 42582, Start Num: 42

Candidate Starts for MeganNoll_58:

(Start: 42 @42247 has 34 MA's), (62, 42304), (88, 42415), (101, 42475), (110, 42505), (118, 42532),

Gene: MissSwiss_64 Start: 40483, Stop: 40842, Start Num: 32

Candidate Starts for MissSwiss_64:

(Start: 32 @40483 has 8 MA's), (129, 40828),

Gene: Mistmere_97 Start: 52832, Stop: 52509, Start Num: 43

Candidate Starts for Mistmere_97:

(43, 52832), (83, 52691), (98, 52622), (115, 52577), (124, 52547), (129, 52523),

Gene: Moki_55 Start: 40609, Stop: 40959, Start Num: 34

Candidate Starts for Moki_55:

(Start: 11 @40486 has 1 MA's), (18, 40561), (Start: 34 @40609 has 18 MA's), (86, 40786), (88, 40789), (121, 40915),

Gene: MrBoss_60 Start: 41258, Stop: 41593, Start Num: 42

Candidate Starts for MrBoss_60:

(Start: 42 @41258 has 34 MA's), (88, 41426), (101, 41486), (110, 41516), (118, 41543), (119, 41546), (127, 41579),

Gene: MrGloopy_58 Start: 41899, Stop: 42234, Start Num: 42

Candidate Starts for MrGloopy_58:

(Start: 42 @41899 has 34 MA's), (62, 41956), (88, 42067), (89, 42070), (101, 42127), (110, 42157), (118, 42184),

Gene: Mudpuppy_62 Start: 41921, Stop: 42277, Start Num: 33

Candidate Starts for Mudpuppy_62:

(Start: 33 @41921 has 30 MA's), (119, 42224), (129, 42263),

Gene: Nancia_56 Start: 40943, Stop: 41293, Start Num: 34

Candidate Starts for Nancia_56:

(Start: 34 @40943 has 18 MA's), (56, 40991), (86, 41120), (88, 41123), (121, 41249),

Gene: Nanosmite_47 Start: 34908, Stop: 34564, Start Num: 42

Candidate Starts for Nanosmite_47:

(Start: 42 @34908 has 34 MA's), (53, 34878), (85, 34743), (92, 34716), (105, 34662),

Gene: Necrophoxinus_105 Start: 54949, Stop: 54626, Start Num: 41

Candidate Starts for Necrophoxinus_105:

(Start: 41 @54949 has 7 MA's), (50, 54934), (64, 54880), (83, 54808), (87, 54787), (102, 54730), (109, 54709), (115, 54694), (124, 54664), (126, 54652), (127, 54646), (129, 54640),

Gene: Neeharika16_79 Start: 45023, Stop: 44682, Start Num: 46

Candidate Starts for Neeharika16_79:

(20, 45068), (Start: 46 @45023 has 32 MA's), (Start: 47 @45020 has 8 MA's), (103, 44789),

Gene: Nesbitt_47 Start: 34330, Stop: 34704, Start Num: 22

Candidate Starts for Nesbitt_47:

(Start: 22 @34330 has 1 MA's), (79, 34498), (103, 34594), (107, 34603), (113, 34627),

Gene: Neuville_58 Start: 35358, Stop: 34981, Start Num: 25

Candidate Starts for Neuville_58:

(Start: 25 @35358 has 4 MA's), (101, 35094), (111, 35061),

Gene: Newrala_79 Start: 45359, Stop: 45021, Start Num: 46

Candidate Starts for Newrala_79:

(20, 45404), (Start: 46 @45359 has 32 MA's), (Start: 47 @45356 has 8 MA's), (63, 45293), (111, 45101),

Gene: Niobe_63 Start: 41724, Stop: 42080, Start Num: 33

Candidate Starts for Niobe_63:

(Start: 33 @41724 has 30 MA's), (119, 42027), (129, 42066),

Gene: Nitro_64 Start: 42421, Stop: 42777, Start Num: 33

Candidate Starts for Nitro_64:

(Start: 33 @42421 has 30 MA's), (101, 42667), (119, 42724), (129, 42763),

Gene: ObiToo_68 Start: 42061, Stop: 42417, Start Num: 33

Candidate Starts for ObiToo_68:

(Start: 33 @42061 has 30 MA's), (76, 42211), (101, 42307), (121, 42370), (129, 42403),

Gene: OurGirlNessie_54 Start: 40272, Stop: 40622, Start Num: 34

Candidate Starts for OurGirlNessie_54:

(Start: 34 @40272 has 18 MA's), (86, 40449), (88, 40452), (119, 40572),

Gene: Oxynfrius_58 Start: 42154, Stop: 42504, Start Num: 37

Candidate Starts for Oxynfrius_58:

(Start: 37 @42154 has 24 MA's), (52, 42184), (56, 42205), (82, 42310), (88, 42337), (101, 42397), (107, 42412), (110, 42427), (118, 42454), (119, 42457),

Gene: PHTowN_61 Start: 43348, Stop: 43007, Start Num: 37

Candidate Starts for PHTowN_61:

(16, 43429), (Start: 37 @43348 has 24 MA's), (64, 43276), (69, 43255), (107, 43111), (118, 43066), (129, 43024),

Gene: PandaPo_64 Start: 40490, Stop: 40849, Start Num: 32

Candidate Starts for PandaPo_64:

(Start: 32 @40490 has 8 MA's), (129, 40835),

Gene: PartyCup_59 Start: 42112, Stop: 42447, Start Num: 42

Candidate Starts for PartyCup_59:

(Start: 42 @42112 has 34 MA's), (88, 42280), (101, 42340), (110, 42370), (118, 42397), (119, 42400), (127, 42433),

Gene: PeaceMeal1_65 Start: 41193, Stop: 40816, Start Num: 19

Candidate Starts for PeaceMeal1_65:

(Start: 19 @41193 has 4 MA's), (Start: 30 @41160 has 1 MA's), (Start: 46 @41142 has 32 MA's), (66, 41070), (98, 40932), (122, 40857), (127, 40833),

Gene: PegLeg_41 Start: 33796, Stop: 33452, Start Num: 42

Candidate Starts for PegLeg_41:

(Start: 42 @33796 has 34 MA's), (73, 33679), (92, 33604), (105, 33550),

Gene: Pharaoh_73 Start: 45524, Stop: 45174, Start Num: 38

Candidate Starts for Pharaoh_73:

(Start: 38 @45524 has 3 MA's), (73, 45404), (93, 45323), (95, 45317), (105, 45275), (119, 45227),

Gene: Phives_64 Start: 42209, Stop: 42565, Start Num: 33

Candidate Starts for Phives_64:

(Start: 33 @42209 has 30 MA's), (39, 42221), (105, 42464), (129, 42551),

Gene: Phrappuccino_184 Start: 119829, Stop: 120152, Start Num: 51

Candidate Starts for Phrappuccino_184:

(13, 119691), (Start: 51 @119829 has 1 MA's), (73, 119928), (85, 119976), (92, 119997), (122, 120105),

Gene: PitaDog_56 Start: 40668, Stop: 41018, Start Num: 34

Candidate Starts for PitaDog_56:

(Start: 34 @40668 has 18 MA's), (86, 40845), (88, 40848), (121, 40974),

Gene: Pmask_79 Start: 45560, Stop: 45219, Start Num: 46

Candidate Starts for Pmask_79:

(20, 45605), (Start: 46 @45560 has 32 MA's), (Start: 47 @45557 has 8 MA's), (103, 45326),

Gene: Polyzuki_76 Start: 55281, Stop: 54901, Start Num: 37

Candidate Starts for Polyzuki_76:

(Start: 37 @55281 has 24 MA's), (81, 55131),

Gene: Poompha_64 Start: 41191, Stop: 40814, Start Num: 19

Candidate Starts for Poompha_64:

(Start: 19 @41191 has 4 MA's), (Start: 30 @41158 has 1 MA's), (Start: 46 @41140 has 32 MA's), (66, 41068), (98, 40930), (122, 40855), (127, 40831),

Gene: Powerpuff_65 Start: 42757, Stop: 43113, Start Num: 33

Candidate Starts for Powerpuff_65:

(Start: 33 @42757 has 30 MA's), (119, 43060), (129, 43099),

Gene: Preamble_57 Start: 40868, Stop: 41209, Start Num: 38

Candidate Starts for Preamble_57:

(Start: 38 @40868 has 3 MA's), (86, 41039), (107, 41114), (118, 41156), (119, 41159),

Gene: Pterodactyl_56 Start: 40909, Stop: 41259, Start Num: 34

Candidate Starts for Pterodactyl_56:

(Start: 34 @40909 has 18 MA's), (86, 41086), (88, 41089), (121, 41215),

Gene: RAP15_59 Start: 42248, Stop: 42583, Start Num: 42

Candidate Starts for RAP15_59:

(Start: 42 @42248 has 34 MA's), (62, 42305), (88, 42416), (101, 42476), (110, 42506), (118, 42533),

Gene: Rebeuca_68 Start: 42459, Stop: 42130, Start Num: 46

Candidate Starts for Rebeuca_68:

(Start: 19 @42510 has 4 MA's), (Start: 30 @42477 has 1 MA's), (Start: 46 @42459 has 32 MA's), (98, 42246), (122, 42171),

Gene: Refuge_76 Start: 46852, Stop: 46505, Start Num: 38

Candidate Starts for Refuge_76:

(2, 47230), (4, 47179), (Start: 38 @46852 has 3 MA's), (58, 46795), (96, 46639), (98, 46624), (113, 46579), (118, 46561), (129, 46519),

Gene: Reindeer_42 Start: 34429, Stop: 34085, Start Num: 42

Candidate Starts for Reindeer_42:

(29, 34447), (Start: 42 @34429 has 34 MA's), (92, 34237), (105, 34183),

Gene: Rifter_80 Start: 44237, Stop: 43896, Start Num: 46

Candidate Starts for Rifter_80:

(27, 44264), (Start: 45 @44240 has 7 MA's), (Start: 46 @44237 has 32 MA's), (105, 44000), (111, 43979), (125, 43925),

Gene: Roberts_59 Start: 35358, Stop: 34981, Start Num: 25

Candidate Starts for Roberts_59:

(Start: 25 @35358 has 4 MA's), (101, 35094), (111, 35061),

Gene: Roksolana_80 Start: 44971, Stop: 44630, Start Num: 46

Candidate Starts for Roksolana_80:

(Start: 45 @44974 has 7 MA's), (Start: 46 @44971 has 32 MA's), (105, 44734), (111, 44713), (125, 44659),

Gene: Rooney_61 Start: 43507, Stop: 43166, Start Num: 37

Candidate Starts for Rooney_61:

(Start: 37 @43507 has 24 MA's), (64, 43435), (69, 43414), (118, 43225), (129, 43183),

Gene: RoseMarie_47 Start: 37465, Stop: 37121, Start Num: 42

Candidate Starts for RoseMarie_47:

(17, 37519), (Start: 42 @37465 has 34 MA's), (92, 37273), (105, 37219),

Gene: Rowa_48 Start: 34719, Stop: 35042, Start Num: 46

Candidate Starts for Rowa_48:

(Start: 32 @34692 has 8 MA's), (Start: 46 @34719 has 32 MA's), (53, 34743), (65, 34788), (74, 34830), (82, 34851), (107, 34941), (127, 35022), (129, 35028),

Gene: Rowdy_69 Start: 42169, Stop: 41843, Start Num: 46

Candidate Starts for Rowdy_69:

(Start: 19 @42220 has 4 MA's), (Start: 30 @42187 has 1 MA's), (Start: 46 @42169 has 32 MA's), (66, 42097), (98, 41959), (122, 41884),

Gene: SassyC_66 Start: 44485, Stop: 44150, Start Num: 40

Candidate Starts for SassyC_66:

(28, 44500), (Start: 37 @44491 has 24 MA's), (Start: 40 @44485 has 1 MA's), (69, 44398), (74, 44374), (107, 44254), (118, 44209), (129, 44167),

Gene: Scuttle_57 Start: 41927, Stop: 42262, Start Num: 42

Candidate Starts for Scuttle_57:

(Start: 42 @41927 has 34 MA's), (62, 41984), (66, 42002), (88, 42095), (89, 42098), (101, 42155), (107, 42170), (118, 42212),

Gene: Sergei_55 Start: 41677, Stop: 42018, Start Num: 42

Candidate Starts for Sergei_55:

(Start: 42 @41677 has 34 MA's), (88, 41848), (92, 41869), (101, 41902), (119, 41965), (123, 41977),

Gene: Settecandela_209 Start: 128664, Stop: 128999, Start Num: 44

Candidate Starts for Settecandela_209:

(Start: 44 @128664 has 1 MA's), (73, 128775), (85, 128823), (92, 128844), (122, 128952),

Gene: Severus_65 Start: 41140, Stop: 40814, Start Num: 46

Candidate Starts for Severus_65:

(Start: 19 @41191 has 4 MA's), (Start: 30 @41158 has 1 MA's), (Start: 46 @41140 has 32 MA's), (66, 41068), (98, 40930), (122, 40855), (127, 40831),

Gene: ShakeNBake_61 Start: 43366, Stop: 43025, Start Num: 37

Candidate Starts for ShakeNBake_61:

(16, 43447), (Start: 37 @43366 has 24 MA's), (64, 43294), (69, 43273), (107, 43129), (118, 43084), (129, 43042),

Gene: Shapes_69 Start: 42169, Stop: 41843, Start Num: 46

Candidate Starts for Shapes_69:

(Start: 19 @42220 has 4 MA's), (Start: 30 @42187 has 1 MA's), (Start: 46 @42169 has 32 MA's), (66, 42097), (98, 41959), (122, 41884),

Gene: SheaKeira_74 Start: 44691, Stop: 44347, Start Num: 36

Candidate Starts for SheaKeira_74:

(Start: 36 @44691 has 1 MA's), (98, 44463),

Gene: Shroomer_106 Start: 54550, Stop: 54227, Start Num: 41

Candidate Starts for Shroomer_106:

(Start: 41 @54550 has 7 MA's), (50, 54535), (64, 54481), (83, 54409), (87, 54388), (101, 54334), (109, 54310), (115, 54295), (124, 54265), (127, 54247), (129, 54241),

Gene: Simpson_69 Start: 41959, Stop: 42315, Start Num: 33

Candidate Starts for Simpson_69:

(Start: 33 @41959 has 30 MA's), (101, 42205), (119, 42262), (129, 42301),

Gene: Skelbel_64 Start: 41724, Stop: 42080, Start Num: 33

Candidate Starts for Skelbel_64:

(Start: 33 @41724 has 30 MA's), (119, 42027), (129, 42066),

Gene: Skinny_42 Start: 34226, Stop: 33882, Start Num: 42

Candidate Starts for Skinny_42:

(Start: 42 @34226 has 34 MA's), (73, 34109), (92, 34034), (105, 33980),

Gene: SlimJimmy_40 Start: 33780, Stop: 33436, Start Num: 42

Candidate Starts for SlimJimmy_40:

(Start: 42 @33780 has 34 MA's), (73, 33663), (92, 33588), (105, 33534),

Gene: SmellyB_80 Start: 44915, Stop: 44580, Start Num: 47

Candidate Starts for SmellyB_80:

(20, 44963), (Start: 46 @44918 has 32 MA's), (Start: 47 @44915 has 8 MA's), (85, 44759), (111, 44660),

Gene: Snek_63 Start: 39170, Stop: 39511, Start Num: 33

Candidate Starts for Snek_63:
(Start: 33 @39170 has 30 MA's), (124, 39473),

Gene: Soondubu_60 Start: 43780, Stop: 44127, Start Num: 35
Candidate Starts for Soondubu_60:
(Start: 35 @43780 has 1 MA's), (114, 44059), (127, 44110),

Gene: SteakFry_102 Start: 54710, Stop: 54387, Start Num: 41
Candidate Starts for SteakFry_102:
(Start: 41 @54710 has 7 MA's), (50, 54695), (64, 54641), (83, 54569), (87, 54548), (102, 54491), (109, 54470), (115, 54455), (124, 54425), (126, 54413), (127, 54407), (129, 54401),

Gene: StevieWelch_103 Start: 54233, Stop: 53910, Start Num: 41
Candidate Starts for StevieWelch_103:
(Start: 41 @54233 has 7 MA's), (50, 54218), (64, 54164), (83, 54092), (87, 54071), (102, 54014), (109, 53993), (115, 53978), (124, 53948), (126, 53936), (127, 53930), (129, 53924),

Gene: Studio_60 Start: 36548, Stop: 36171, Start Num: 25
Candidate Starts for Studio_60:
(Start: 25 @36548 has 4 MA's), (67, 36437), (71, 36410), (75, 36392), (80, 36377), (97, 36299), (101, 36284), (111, 36251),

Gene: Subaru_63 Start: 41480, Stop: 41836, Start Num: 33
Candidate Starts for Subaru_63:
(Start: 33 @41480 has 30 MA's), (76, 41630), (119, 41783), (129, 41822),

Gene: Sue2_61 Start: 40180, Stop: 40542, Start Num: 32
Candidate Starts for Sue2_61:
(Start: 32 @40180 has 8 MA's), (48, 40213), (101, 40429), (113, 40465),

Gene: SuperAwesome_80 Start: 45599, Stop: 45258, Start Num: 46
Candidate Starts for SuperAwesome_80:
(20, 45644), (Start: 46 @45599 has 32 MA's), (Start: 47 @45596 has 8 MA's), (103, 45365),

Gene: SuperCallie99_77 Start: 45440, Stop: 45102, Start Num: 46
Candidate Starts for SuperCallie99_77:
(20, 45485), (Start: 46 @45440 has 32 MA's), (Start: 47 @45437 has 8 MA's), (85, 45281), (111, 45182),

Gene: Suppi_58 Start: 41917, Stop: 42252, Start Num: 42
Candidate Starts for Suppi_58:
(Start: 42 @41917 has 34 MA's), (88, 42085), (101, 42145), (110, 42175), (118, 42202), (119, 42205), (127, 42238),

Gene: TPA2_52 Start: 39328, Stop: 38936, Start Num: 26
Candidate Starts for TPA2_52:
(26, 39328), (77, 39178), (90, 39118), (100, 39067), (116, 39013),

Gene: Tallboi_63 Start: 41726, Stop: 42082, Start Num: 33
Candidate Starts for Tallboi_63:
(Start: 33 @41726 has 30 MA's), (101, 41972), (119, 42029), (129, 42068),

Gene: Tbone_63 Start: 42208, Stop: 42564, Start Num: 33

Candidate Starts for Tbone_63:
(Start: 33 @42208 has 30 MA's), (119, 42511), (129, 42550),

Gene: Temper16_55 Start: 41677, Stop: 42018, Start Num: 42
Candidate Starts for Temper16_55:
(Start: 42 @41677 has 34 MA's), (88, 41848), (92, 41869), (101, 41902), (119, 41965), (123, 41977),

Gene: Temprado_81 Start: 45075, Stop: 44734, Start Num: 46
Candidate Starts for Temprado_81:
(Start: 45 @45078 has 7 MA's), (Start: 46 @45075 has 32 MA's), (105, 44838), (111, 44817), (125, 44763),

Gene: ThursdayNight_67 Start: 43091, Stop: 43429, Start Num: 33
Candidate Starts for ThursdayNight_67:
(Start: 33 @43091 has 30 MA's), (110, 43349),

Gene: ToneTone_77 Start: 44635, Stop: 44294, Start Num: 46
Candidate Starts for ToneTone_77:
(Start: 45 @44638 has 7 MA's), (Start: 46 @44635 has 32 MA's), (105, 44398), (111, 44377), (125, 44323),

Gene: TpudiCK_43 Start: 33796, Stop: 33452, Start Num: 42
Candidate Starts for TpudiCK_43:
(Start: 42 @33796 has 34 MA's), (73, 33679), (92, 33604), (105, 33550),

Gene: Trike_64 Start: 41195, Stop: 40818, Start Num: 19
Candidate Starts for Trike_64:
(Start: 19 @41195 has 4 MA's), (Start: 30 @41162 has 1 MA's), (Start: 46 @41144 has 32 MA's), (66, 41072), (98, 40934), (122, 40859), (127, 40835),

Gene: Tuck_63 Start: 41997, Stop: 42353, Start Num: 33
Candidate Starts for Tuck_63:
(Start: 33 @41997 has 30 MA's), (39, 42009), (105, 42252), (129, 42339),

Gene: Tucker_80 Start: 44838, Stop: 44497, Start Num: 46
Candidate Starts for Tucker_80:
(Start: 45 @44841 has 7 MA's), (Start: 46 @44838 has 32 MA's), (105, 44601), (111, 44580), (125, 44526),

Gene: Turab_62 Start: 41182, Stop: 41538, Start Num: 33
Candidate Starts for Turab_62:
(Start: 33 @41182 has 30 MA's), (76, 41332), (119, 41485), (129, 41524),

Gene: Tutumahutu_65 Start: 41800, Stop: 42156, Start Num: 33
Candidate Starts for Tutumahutu_65:
(Start: 33 @41800 has 30 MA's), (119, 42103), (129, 42142),

Gene: Tweety19_64 Start: 39171, Stop: 39512, Start Num: 33
Candidate Starts for Tweety19_64:
(Start: 33 @39171 has 30 MA's), (124, 39474),

Gene: TyDawg_41 Start: 33797, Stop: 33453, Start Num: 42
Candidate Starts for TyDawg_41:

(Start: 42 @33797 has 34 MA's), (73, 33680), (92, 33605), (105, 33551),

Gene: Urla_56 Start: 41609, Stop: 41959, Start Num: 34

Candidate Starts for Urla_56:

(Start: 34 @41609 has 18 MA's), (56, 41657), (86, 41786), (88, 41789), (121, 41915),

Gene: VResidence_64 Start: 39888, Stop: 40247, Start Num: 32

Candidate Starts for VResidence_64:

(Start: 32 @39888 has 8 MA's), (76, 40041),

Gene: Virizion_66 Start: 43706, Stop: 43365, Start Num: 37

Candidate Starts for Virizion_66:

(Start: 37 @43706 has 24 MA's), (64, 43634), (69, 43613), (112, 43448), (118, 43424), (129, 43382),

Gene: VohminGhazi_80 Start: 44919, Stop: 44581, Start Num: 46

Candidate Starts for VohminGhazi_80:

(20, 44964), (Start: 46 @44919 has 32 MA's), (Start: 47 @44916 has 8 MA's), (85, 44760), (111, 44661),

Gene: Warda_64 Start: 41934, Stop: 42290, Start Num: 33

Candidate Starts for Warda_64:

(Start: 33 @41934 has 30 MA's), (119, 42237), (129, 42276),

Gene: Wayne_60 Start: 42374, Stop: 42709, Start Num: 42

Candidate Starts for Wayne_60:

(Start: 42 @42374 has 34 MA's), (88, 42542), (101, 42602), (110, 42632), (118, 42659), (119, 42662), (127, 42695),

Gene: Welcome_105 Start: 54864, Stop: 54541, Start Num: 41

Candidate Starts for Welcome_105:

(Start: 41 @54864 has 7 MA's), (50, 54849), (64, 54795), (83, 54723), (87, 54702), (102, 54645), (109, 54624), (115, 54609), (124, 54579), (126, 54567), (127, 54561), (129, 54555),

Gene: Wentworth_61 Start: 43514, Stop: 43179, Start Num: 40

Candidate Starts for Wentworth_61:

(28, 43529), (Start: 37 @43520 has 24 MA's), (Start: 40 @43514 has 1 MA's), (69, 43427), (74, 43403), (107, 43283), (113, 43256), (118, 43238), (129, 43196),

Gene: Wiks_79 Start: 44706, Stop: 44365, Start Num: 46

Candidate Starts for Wiks_79:

(Start: 45 @44709 has 7 MA's), (Start: 46 @44706 has 32 MA's), (105, 44469), (111, 44448), (125, 44394),

Gene: Wildwest_59 Start: 41597, Stop: 41956, Start Num: 32

Candidate Starts for Wildwest_59:

(Start: 32 @41597 has 8 MA's), (48, 41630), (119, 41903), (129, 41942),

Gene: Wilkos_63 Start: 43658, Stop: 43323, Start Num: 40

Candidate Starts for Wilkos_63:

(Start: 40 @43658 has 1 MA's), (59, 43601), (64, 43592), (69, 43571), (74, 43547), (95, 43463), (107, 43427), (113, 43400), (120, 43376), (129, 43340),

Gene: WunderPhul_80 Start: 44704, Stop: 44363, Start Num: 46

Candidate Starts for WunderPhul_80:

(Start: 45 @44707 has 7 MA's), (Start: 46 @44704 has 32 MA's), (105, 44467), (111, 44446), (125, 44392),

Gene: Yara_56 Start: 41985, Stop: 41650, Start Num: 37

Candidate Starts for Yara_56:

(Start: 37 @41985 has 24 MA's), (94, 41787), (107, 41751), (111, 41733), (129, 41664),

Gene: YesChef_63 Start: 41616, Stop: 41972, Start Num: 33

Candidate Starts for YesChef_63:

(Start: 33 @41616 has 30 MA's), (119, 41919), (129, 41958),

Gene: Yokurt_79 Start: 44709, Stop: 44365, Start Num: 45

Candidate Starts for Yokurt_79:

(Start: 45 @44709 has 7 MA's), (Start: 46 @44706 has 32 MA's), (105, 44469), (111, 44448), (125, 44394),

Gene: Zaka_80 Start: 44709, Stop: 44365, Start Num: 45

Candidate Starts for Zaka_80:

(Start: 45 @44709 has 7 MA's), (Start: 46 @44706 has 32 MA's), (105, 44469), (111, 44448), (125, 44394),

Gene: Zulu_81 Start: 45087, Stop: 44743, Start Num: 45

Candidate Starts for Zulu_81:

(Start: 45 @45087 has 7 MA's), (Start: 46 @45084 has 32 MA's), (105, 44847), (111, 44826), (125, 44772),