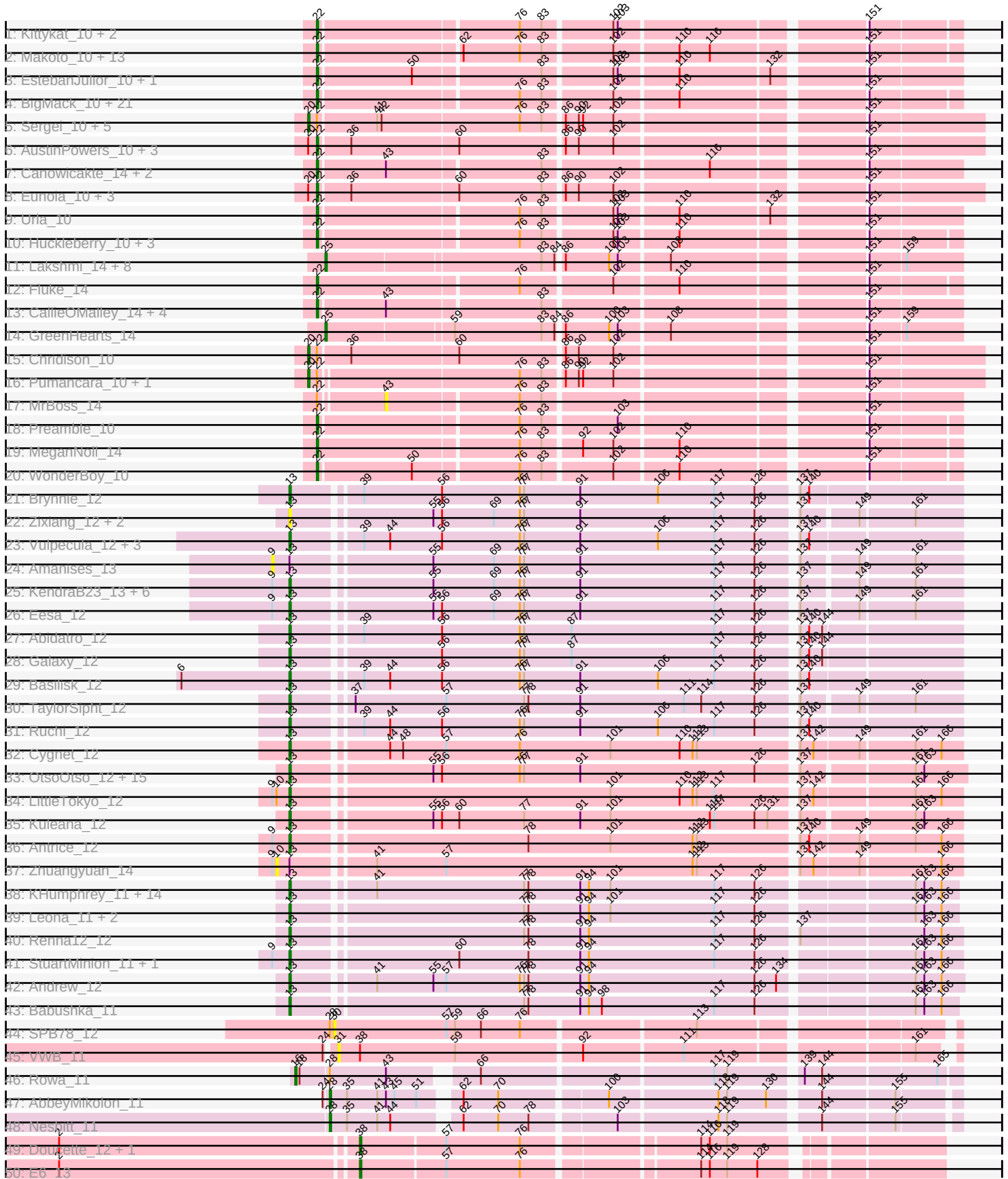
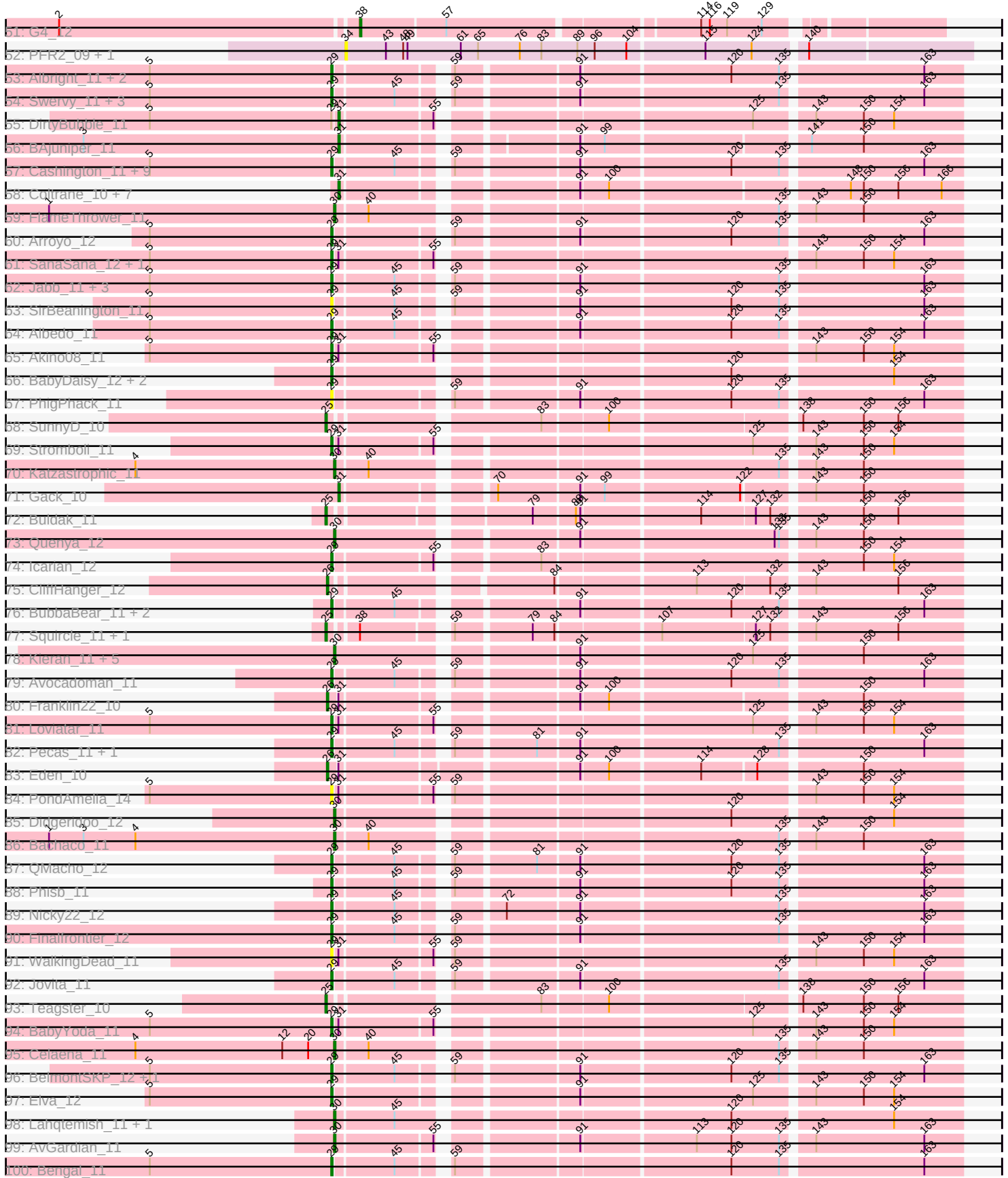


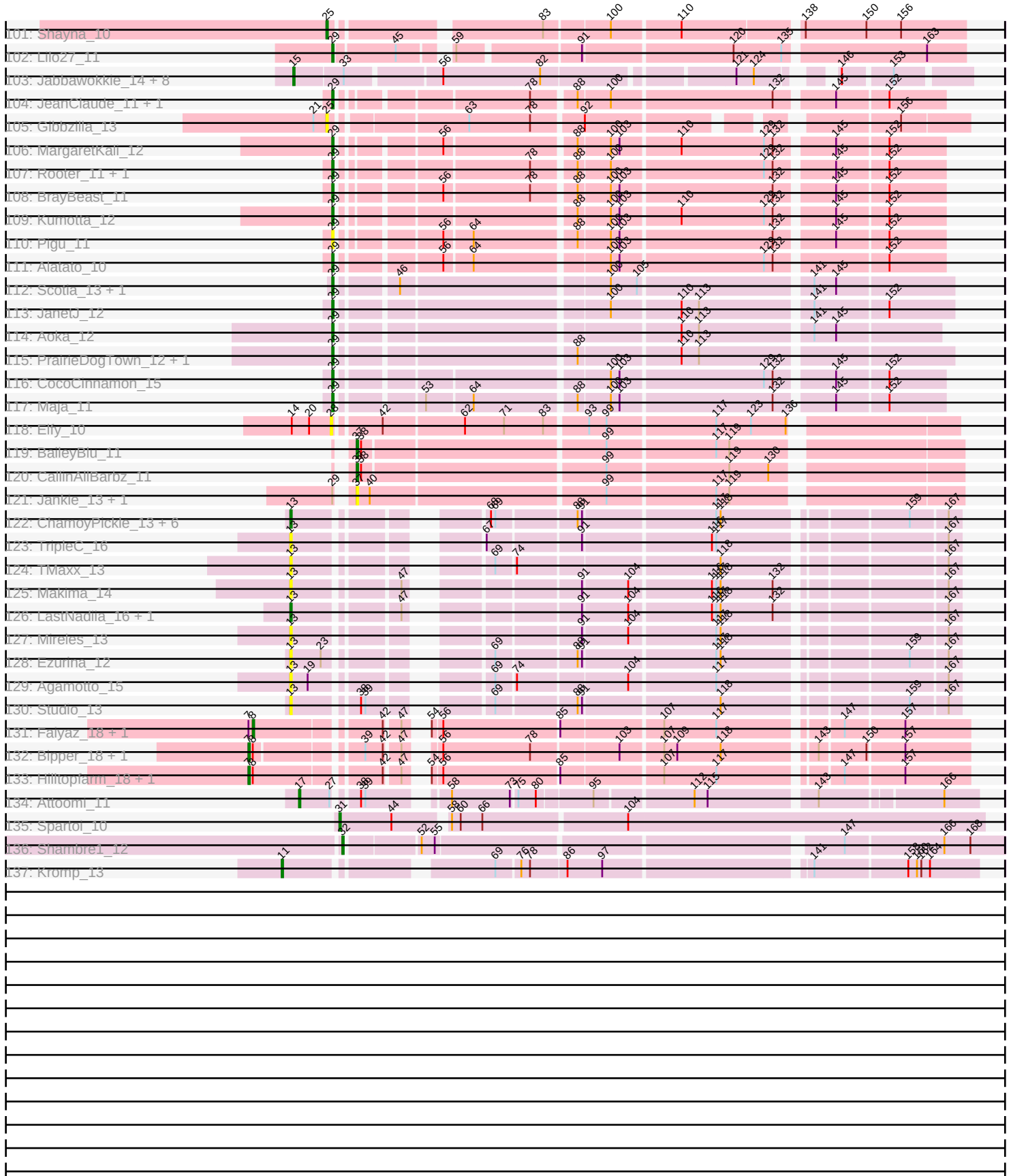
Pham 280020



Pham 280020



Pham 280020



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 280020 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 280020 has 309 members, 66 are drafts.

Phages represented in each track:

- Track 1 : Kittykat_10, DreamTeam_10, Gisselle_10
- Track 2 : Makoto_10, CristinaYang_10, PitaDog_10, Lasagna_10, Christian_10, LilStuart_10, OurGirlNessie_10, DrRobert_10, Bodacious_10, Lucy_10, ChewChew_10, Nancia_10, Lennox_10, Pterodactyl_10
- Track 3 : EstebanJulior_10, MamaPearl_10
- Track 4 : BigMack_10, Scuttle_14, Carpal_14, RAP15_14, Potatoes_14, Cholula_14, Korra_14, Dino_14, Glenn_14, Vallejo_14, TattModd_14, Rozby_14, Savage2526_14, Jumboset_14, MrGloopy_14, Riverdale_14, BrotherBLo_14, Immaculata_14, Wawa_14, Beethoven_14, Kalizoi_14, Zorro_14
- Track 5 : Sergei_10, KingBob_10, Daiboju_10, Herb_10, Temper16_10, Maria1952_10
- Track 6 : AustinPowers_10, HunterDalle_10, Vulture_10, Supakev_10
- Track 7 : Canowicakte_14, Wayne_14, Suppi_14
- Track 8 : Eunoia_10, Aledel_10, OMalley_10, Riovina_10
- Track 9 : Urla_10
- Track 10 : Huckleberry_10, HeadNerd_10, Bennie_10, Moki_10
- Track 11 : Lakshmi_14, Albanese_14, Greenhouse_14, RcigaStruga_14, Huntingdon_14, Oxyfnrius_14, Joann_14, Nubia_14, Misaeng_14
- Track 12 : Fluke_14
- Track 13 : CallieOMalley_14, Litotes_14, PartyCup_14, Graynor_14, AppleCider_14
- Track 14 : GreenHearts_14
- Track 15 : Chridison_10
- Track 16 : Pumancara_10, PinkFriday_10
- Track 17 : MrBoss_14
- Track 18 : Preamble_10
- Track 19 : MeganNoll_14
- Track 20 : WonderBoy_10
- Track 21 : Brynnie_12
- Track 22 : Zixiang_12, Niblet_12, Chicken_12
- Track 23 : Vulpecula_12, Jamun_12, Chickaboom_11, WileyE_11
- Track 24 : Amanises_13
- Track 25 : KendraB23_13, Pelletreau_13, Gravel_13, Toad24_13, Westrich_13, Shen_13, Orcanus_12

- Track 26 : Eesa_12
- Track 27 : Abidatro_12
- Track 28 : Galaxy_12
- Track 29 : Basilisk_12
- Track 30 : TaylorSipht_12
- Track 31 : Ruchi_12
- Track 32 : Cygnet_12
- Track 33 : OtsoOtso_12, Melons_13, Pineda_13, Cote_13, Polka_12, Bibble12_13, Bedetta_13, PhirstandPhine_13, Lunar_13, Daob_13, Coral_12, Colusalem_12, Jerole_13, Kepler_12, HannahPhantana_13, Amelia_13
- Track 34 : LittleTokyo_12
- Track 35 : Kuleana_12
- Track 36 : Antrice_12
- Track 37 : Zhuangyuan_14
- Track 38 : KHumphrey_11, Amphitrite_11, HamCheese_11, Glotell_11, Fingolfin_11, Oppalora_11, AmiCi24_11, Laphuphu24k_11, DanHam62_11, Juno112_11, PhluffyCoco_11, AdoptaAdorbs_11, Atlantica_11, RedFox_11, Camara_11
- Track 39 : Leona_11, Azaz_11, Rattail_11
- Track 40 : Renna12_12
- Track 41 : StuartMinion_11, AlexMinion_11
- Track 42 : Andrew_12
- Track 43 : Babushka_11
- Track 44 : SPB78_12
- Track 45 : VWB_11
- Track 46 : Rowa_11
- Track 47 : AbbeyMikolon_11
- Track 48 : Nesbitt_11
- Track 49 : Doucette_12, B22_12
- Track 50 : E6_13
- Track 51 : G4_12
- Track 52 : PFR2_09, PFR1_09
- Track 53 : Albright_11, CroZenni_11, Doobus_11
- Track 54 : Swervy_11, AylexOG_12, Slay_11, SarBear_11
- Track 55 : DirtyBubble_11
- Track 56 : BAJuniper_11
- Track 57 : Cashington_11, Abigail_11, Burritobowl_11, DickRichards_11, Softsoap_11, Johnathan_11, SansAfet_11, LimaBean_11, Solea_12, Milomuff_12
- Track 58 : Coltrane_10, Armstrong_10, Clayda5_10, Rollins_10, Bernstein_10, Vitas_10, Brahms_10, Skylord_10
- Track 59 : FlameThrower_11
- Track 60 : Arroyo_12
- Track 61 : SanaSana_12, Stoor_11
- Track 62 : Jabb_11, CupcakePrincess_11, MsUbiquitous_11, TukTuk_11
- Track 63 : SirBeanington_11
- Track 64 : Albedo_11
- Track 65 : Akino08_11
- Track 66 : BabyDaisy_12, Kate33_11, IndyLu_11
- Track 67 : PhigPhack_11
- Track 68 : SunnyD_10
- Track 69 : Stromboli_11
- Track 70 : Katzastrophic_11
- Track 71 : Gack_10

- Track 72 : Buldak_11
- Track 73 : Quenya_12
- Track 74 : Icarian_12
- Track 75 : CliffHanger_12
- Track 76 : BubbaBear_11, Kenzers_11, Lynlen_11
- Track 77 : Squircle_11, Olliecat_11
- Track 78 : Kieran_11, Rona_11, Kamdara_11, ChiliPepper_11, Dismas_11, Sharkboy_11
- Track 79 : Avocadoman_11
- Track 80 : Franklin22_10
- Track 81 : Loviatar_11
- Track 82 : Pecas_11, Eula_11
- Track 83 : Eden_10
- Track 84 : PondAmelia_14
- Track 85 : Didgeridoo_12
- Track 86 : Bachaco_11
- Track 87 : QMacho_12
- Track 88 : Phisb_11
- Track 89 : Nicky22_12
- Track 90 : Finalfrontier_12
- Track 91 : WalkingDead_11
- Track 92 : Jovita_11
- Track 93 : Teagster_10
- Track 94 : BabyYoda_11
- Track 95 : Celaena_11
- Track 96 : BelmontSKP_12, AnnaLie_12
- Track 97 : Elva_12
- Track 98 : Lahqtemish_11, PastaFagioli_11
- Track 99 : AvGardian_11
- Track 100 : Bengal_11
- Track 101 : Shayna_10
- Track 102 : Lilo27_11
- Track 103 : Jabbawokkie_14, Avani_13, SilverChicken_13, Yoshi_13, Demsculpinboyz_13, Che9d_13, Blarby_14, Zapner_14, Soul22_13
- Track 104 : JeanClaude_11, Shoya_10
- Track 105 : Gibbzilla_13
- Track 106 : MargaretKali_12
- Track 107 : Rooter_11, Sarge_11
- Track 108 : BrayBeast_11
- Track 109 : Kumotta_12
- Track 110 : Pigu_11
- Track 111 : Alatato_10
- Track 112 : Scotia_13, NoSwimming_13
- Track 113 : JanetJ_12
- Track 114 : Aoka_12
- Track 115 : PrairieDogTown_12, EvenBluerMoon_12
- Track 116 : CocoCinnamon_15
- Track 117 : Maja_11
- Track 118 : Elfy_10
- Track 119 : BaileyBlu_11
- Track 120 : CallinAllBarbz_11
- Track 121 : Jankie_13, GrimEater_12

- Track 122 : ChamoyPickle_13, AnnabelLee_13, ChipsNGuac_13, Gerri43_13, Neuville_13, CardboardBox_13, Roberts_13
- Track 123 : TripleC_16
- Track 124 : TMaxx_13
- Track 125 : Makima_14
- Track 126 : LastNadia_16, Audell_16
- Track 127 : Mireles_13
- Track 128 : Ezurina_12
- Track 129 : Agamoto_15
- Track 130 : Studio_13
- Track 131 : Faiyaz_18, AuntGwenStacy_18
- Track 132 : Bipper_18, Cracklewink_18
- Track 133 : Hilltopfarm_18, Typha_18
- Track 134 : Attoomi_11
- Track 135 : Spatoi_10
- Track 136 : Shambre1_12
- Track 137 : Kromp_13

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

The start number called the most often in the published annotations is 22, it was called in 65 of the 243 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aledel_10, AppleCider_14, AustinPowers_10, Beethoven_14, Bennie_10, BigMack_10, Bodacious_10, BrotherBLo_14, CallieOMalley_14, Canowicakte_14, Carpal_14, ChewChew_10, Cholula_14, Christian_10, CristinaYang_10, Dino_14, DrRobert_10, DreamTeam_10, EstebanJulior_10, Eunoia_10, Fluke_14, Gisselle_10, Glenn_14, Graynor_14, HeadNerd_10, Huckleberry_10, HunterDalle_10, Immaculata_14, Jumboset_14, Kalizoi_14, Kittykat_10, Korra_14, Lasagna_10, Lennox_10, LilStuart_10, Litotes_14, Lucy_10, Makoto_10, MamaPearl_10, MeganNoll_14, Moki_10, MrGloopy_14, Nancia_10, OMalley_10, OurGirlNessie_10, PartyCup_14, PitaDog_10, Potatoes_14, Preamble_10, Pterodactyl_10, RAP15_14, Rivovina_10, Riverdale_14, Rozby_14, Savage2526_14, Scuttle_14, Supakev_10, Suppi_14, TattModd_14, Urla_10, Vallejo_14, Vulture_10, Wawa_14, Wayne_14, WonderBoy_10, Zorro_14,

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

- Chridison_10, Daiboju_10, Herb_10, KingBob_10, Maria1952_10, MrBoss_14, PinkFriday_10, Pumancara_10, Sergei_10, Temper16_10,

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

- AbbeyMikolon_11, Abidatro_12, Abigail_11, AdoptaAdorbs_11, Agamoto_15, Akino08_11, Alatato_10, Albanese_14, Albedo_11, Albright_11, AlexMinion_11, Amanises_13, Amelia_13, AmiCi24_11, Amphitrite_11, Andrew_12, AnnaLie_12, AnnabelLee_13, Antrice_12, Aoka_12, Armstrong_10, Arroyo_12, Atlantica_11, Attoomi_11, Audell_16, AuntGwenStacy_18, AvGardian_11, Avani_13, Avacadoman_11, AylexOG_12, Azaz_11, B22_12, BAjuniper_11, Babushka_11, BabyDaisy_12, BabyYoda_11, Bachaco_11, BaileyBlu_11, Basilisk_12, Bedetta_13, BelmontSKP_12, Bengal_11, Bernstein_10, Bibble12_13, Bipper_18, Blarby_14,

Brahms_10, BrayBeast_11, Brynnie_12, BubbaBear_11, Buldak_11, Burritobowl_11, CallinAllBarbz_11, Camara_11, CardboardBox_13, Cashington_11, Celaena_11, ChamoyPickle_13, Che9d_13, Chickaboom_11, Chicken_12, ChiliPepper_11, ChipsNGuac_13, Clayda5_10, CliffHanger_12, CocoCinnamon_15, Coltrane_10, Colusalem_12, Coral_12, Cote_13, Cracklewink_18, CroZenni_11, CupcakePrincess_11, Cygnet_12, DanHam62_11, Daob_13, Demsculpinboyz_13, DickRichards_11, Didgeridoo_12, DirtyBubble_11, Dismas_11, Doobus_11, Doucette_12, E6_13, Eden_10, Eesa_12, Elf_10, Elva_12, Eula_11, EvenBluerMoon_12, Ezurina_12, Faiyaz_18, Finalfrontier_12, Fingolfin_11, FlameThrower_11, Franklin22_10, G4_12, Gack_10, Galaxy_12, Gerri43_13, Gibbzilla_13, Glotell_11, Gravel_13, GreenHearts_14, Greenhouse_14, GrimEater_12, HamCheese_11, HannahPhantana_13, Hilltopfarm_18, Huntingdon_14, Icarian_12, IndyLu_11, Jabb_11, Jabbawokkie_14, Jamun_12, JanetJ_12, Jankie_13, JeanClaude_11, Jerole_13, Joann_14, Johnathan_11, Jovita_11, Juno112_11, KHumphrey_11, Kamdara_11, Kate33_11, Katzastrophic_11, KendraB23_13, Kenzers_11, Kepler_12, Kieran_11, Kromp_13, Kuleana_12, Kumotta_12, Lahqtemish_11, Lakshmi_14, Laphuphu24k_11, LastNadia_16, Leona_11, Lilo27_11, LimaBean_11, LittleTokyo_12, Loviatar_11, Lunar_13, Lynlen_11, Maja_11, Makima_14, MargaretKali_12, Melons_13, Milomuff_12, Mireles_13, Misaeng_14, MsUbiquitous_11, Nesbitt_11, Neuville_13, Niblet_12, Nicky22_12, NoSwimming_13, Nubia_14, Olliecat_11, Oppalora_11, Orcanus_12, OtsoOtso_12, Oxyfrieus_14, PFR1_09, PFR2_09, PastaFagioli_11, Pecas_11, Pelletreau_13, PhigPhack_11, PhirstandPhine_13, Phisb_11, PhluffyCoco_11, Pigu_11, Pineda_13, Polka_12, PondAmelia_14, PrairieDogTown_12, QMacho_12, Quenya_12, Rattail_11, RcigaStruga_14, RedFox_11, Renna12_12, Roberts_13, Rollins_10, Rona_11, Rooter_11, Rowa_11, Ruchi_12, SPB78_12, SanaSana_12, SansAfet_11, SarBear_11, Sarge_11, Scotia_13, Shambre1_12, Sharkboy_11, Shayna_10, Shen_13, Shoya_10, SilverChicken_13, SirBeanington_11, Skylord_10, Slay_11, Softsoap_11, Solea_12, Soul22_13, Spartoi_10, Squircle_11, Stoor_11, Stromboli_11, StuartMinion_11, Studio_13, SunnyD_10, Swervy_11, TMaxx_13, TaylorSipht_12, Teagster_10, Toad24_13, TripleC_16, TukTuk_11, Typha_18, VWB_11, Vitas_10, Vulpecula_12, WalkingDead_11, Westrich_13, WileyE_11, Yoshi_13, Zapner_14, Zhuangyuan_14, Zixiang_12,

Summary by start number:

Start 7:

- Found in 6 of 309 (1.9%) of genes in pham
- Manual Annotations of this start: 4 of 243
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Bipper_18 (Y), Cracklewink_18 (Y), Hilltopfarm_18 (Y), Typha_18 (Y),

Start 8:

- Found in 6 of 309 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 33.3% of time when present
- Phage (with cluster) where this start called: AuntGwenStacy_18 (Y), Faiyaz_18 (Y),

Start 9:

- Found in 14 of 309 (4.5%) of genes in pham
- No Manual Annotations of this start.

- Called 7.1% of time when present
- Phage (with cluster) where this start called: Amanises_13 (AS1),

Start 10:

- Found in 2 of 309 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Zhuangyuan_14 (AS2),

Start 11:

- Found in 1 of 309 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kromp_13 (singleton),

Start 13:

- Found in 82 of 309 (26.5%) of genes in pham
- Manual Annotations of this start: 43 of 243
- Called 97.6% of time when present
- Phage (with cluster) where this start called: Abidatro_12 (AS1), AdoptaAdorbs_11 (AS3), Agamotto_15 (FR), AlexMinion_11 (AS3), Amelia_13 (AS2), AmiCi24_11 (AS3), Amphitrite_11 (AS3), Andrew_12 (AS3), AnnabelLee_13 (FR), Antrice_12 (AS2), Atlantica_11 (AS3), Audell_16 (FR), Azaz_11 (AS3), Babushka_11 (AS3), Basilisk_12 (AS1), Bedetta_13 (AS2), Bibble12_13 (AS2), Brynnie_12 (AS1), Camara_11 (AS3), CardboardBox_13 (FR), ChamoyPickle_13 (FR), Chickaboom_11 (AS1), Chicken_12 (AS1), ChipsNGuac_13 (FR), Colusalem_12 (AS2), Coral_12 (AS2), Cote_13 (AS2), Cygnet_12 (AS2), DanHam62_11 (AS3), Daob_13 (AS2), Eesa_12 (AS1), Ezurina_12 (FR), Fingolfin_11 (AS3), Galaxy_12 (AS1), Gerri43_13 (FR), Glotell_11 (AS3), Gravel_13 (AS1), HamCheese_11 (AS3), HannahPhantana_13 (AS2), Jamun_12 (AS1), Jerole_13 (AS2), Juno112_11 (AS3), KHumphrey_11 (AS3), KendraB23_13 (AS1), Kepler_12 (AS2), Kuleana_12 (AS2), Laphuphu24k_11 (AS3), LastNadiia_16 (FR), Leona_11 (AS3), LittleTokyo_12 (AS2), Lunar_13 (AS2), Makima_14 (FR), Melons_13 (AS2), Mireles_13 (FR), Neuville_13 (FR), Niblet_12 (AS1), Oppalora_11 (AS3), Orcanus_12 (AS1), OtsoOtso_12 (AS2), Pelletreau_13 (AS1), PhirstandPhine_13 (AS2), PhluffyCoco_11 (AS3), Pineda_13 (AS2), Polka_12 (AS2), Rattail_11 (AS3), RedFox_11 (AS3), Renna12_12 (AS3), Roberts_13 (FR), Ruchi_12 (AS1), Shen_13 (AS1), StuartMinion_11 (AS3), Studio_13 (FR), TMaxx_13 (FR), TaylorSipht_12 (AS1), Toad24_13 (AS1), TripleC_16 (FR), Vulpecula_12 (AS1), Westrich_13 (AS1), WileyE_11 (AS1), Zixiang_12 (AS1),

Start 15:

- Found in 9 of 309 (2.9%) of genes in pham
- Manual Annotations of this start: 7 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avani_13 (F2), Blarby_14 (F), Che9d_13 (F2), Demsculpinboyz_13 (F2), Jabbawokkie_14 (F2), SilverChicken_13 (F2), Soul22_13 (F2), Yoshi_13 (F2), Zapner_14 (F2),

Start 16:

- Found in 1 of 309 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Rowa_11 (BL),

Start 17:

- Found in 1 of 309 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Attoomi_11 (singleton),

Start 20:

- Found in 19 of 309 (6.1%) of genes in pham
- Manual Annotations of this start: 9 of 243
- Called 47.4% of time when present
- Phage (with cluster) where this start called: Chridison_10 (AK), Daiboju_10 (AK), Herb_10 (AK), KingBob_10 (AK), Maria1952_10 (AK), PinkFriday_10 (AK), Pumancara_10 (AK), Sergei_10 (AK), Temper16_10 (AK),

Start 22:

- Found in 76 of 309 (24.6%) of genes in pham
- Manual Annotations of this start: 65 of 243
- Called 86.8% of time when present
- Phage (with cluster) where this start called: Aledel_10 (AK), AppleCider_14 (AK), AustinPowers_10 (AK), Beethoven_14 (AK), Bennie_10 (AK), BigMack_10 (AK), Bodacious_10 (AK), BrotherBLo_14 (AK), CallieOMalley_14 (AK), Canowicakte_14 (AK), Carpal_14 (AK), ChewChew_10 (AK), Cholula_14 (AK), Christian_10 (AK), CristinaYang_10 (AK), Dino_14 (AK), DrRobert_10 (AK), DreamTeam_10 (AK), EstebanJulior_10 (AK), Eunoia_10 (AK), Fluke_14 (AK), Gisselle_10 (AK), Glenn_14 (AK), Graynor_14 (AK), HeadNerd_10 (AK), Huckleberry_10 (AK), HunterDalle_10 (AK), Immaculata_14 (AK), Jumboset_14 (AK), Kalizoi_14 (AK), Kittykat_10 (AK), Korra_14 (AK), Lasagna_10 (AK), Lennox_10 (AK), LilStuart_10 (AK), Litotes_14 (AK), Lucy_10 (AK), Makoto_10 (AK), MamaPearl_10 (AK), MeganNoll_14 (AK), Moki_10 (AK), MrGloopy_14 (AK), Nancia_10 (AK), OMalley_10 (AK), OurGirlNessie_10 (AK), PartyCup_14 (AK), PitaDog_10 (AK), Potatoes_14 (AK), Preamble_10 (AK), Pterodactyl_10 (AK), RAP15_14 (AK), Rivovina_10 (AK), Riverdale_14 (AK), Rozby_14 (AK), Savage2526_14 (AK), Scuttle_14 (AK), Supakev_10 (AK), Suppi_14 (AK), TattModd_14 (AK), Urla_10 (AK), Vallejo_14 (AK), Vulture_10 (AK), Wawa_14 (AK), Wayne_14 (AK), WonderBoy_10 (AK), Zorro_14 (AK),

Start 25:

- Found in 17 of 309 (5.5%) of genes in pham
- Manual Annotations of this start: 16 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Albanese_14 (AK), Buldak_11 (EB), Gibbzilla_13 (FB), GreenHearts_14 (AK), Greenhouse_14 (AK), Huntingdon_14 (AK), Joann_14 (AK), Lakshmi_14 (AK), Misaeng_14 (AK), Nubia_14 (AK), Olliecat_11 (EB), Oxynfrius_14 (AK), RcigaStruga_14 (AK), Shayna_10 (EB), Squiracle_11 (EB), SunnyD_10 (EB), Teagster_10 (EB),

Start 26:

- Found in 3 of 309 (1.0%) of genes in pham
- Manual Annotations of this start: 3 of 243
- Called 100.0% of time when present

- Phage (with cluster) where this start called: CliffHanger_12 (EB), Eden_10 (EB), Franklin22_10 (EB),

Start 28:

- Found in 5 of 309 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 243
- Called 60.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_11 (BL), Elfy_10 (FP), Nesbitt_11 (BL),

Start 29:

- Found in 73 of 309 (23.6%) of genes in pham
- Manual Annotations of this start: 57 of 243
- Called 95.9% of time when present
- Phage (with cluster) where this start called: Abigail_11 (EB), Akino08_11 (EB), Alata_10 (FB), Albedo_11 (EB), Albright_11 (EB), AnnaLie_12 (EB), Aoka_12 (FO), Arroyo_12 (EB), Avocadoman_11 (EB), AylexOG_12 (EB), BabyDaisy_12 (EB), BabyYoda_11 (EB), BelmontSKP_12 (EB), Bengal_11 (EB), BrayBeast_11 (FB), BubbaBear_11 (EB), Burritobowl_11 (EB), Cashington_11 (EB), CocoCinnamon_15 (FO), CroZenni_11 (EB), CupcakePrincess_11 (EB), DickRichards_11 (EB), Doobus_11 (EB), Elva_12 (EB), Eula_11 (EB), EvenBluerMoon_12 (FO), Finalfrontier_12 (EB), Icarian_12 (EB), IndyLu_11 (EB), Jabb_11 (EB), JanetJ_12 (FO), JeanClaude_11 (FB), Johnathan_11 (EB), Jovita_11 (EB), Kate33_11 (EB), Kenzers_11 (EB), Kumotta_12 (FB), Lilo27_11 (EB), LimaBean_11 (EB), Loviatar_11 (EB), Lynlen_11 (EB), Maja_11 (FO), MargaretKali_12 (FB), Milomuff_12 (EB), MsUbiquitous_11 (EB), Nicky22_12 (EB), NoSwimming_13 (FO), Pecas_11 (EB), PhigPhack_11 (EB), Phisb_11 (EB), Pigu_11 (FB), PondAmelia_14 (EB), PrairieDogTown_12 (FO), QMacho_12 (EB), Rooter_11 (FB), SanaSana_12 (EB), SansAfet_11 (EB), SarBear_11 (EB), Sarge_11 (FB), Scotia_13 (FO), Shoya_10 (FB), SirBeanington_11 (EB), Slay_11 (EB), Softsoap_11 (EB), Solea_12 (EB), Stoor_11 (EB), Stromboli_11 (EB), Swervy_11 (EB), TukTuk_11 (EB), WalkingDead_11 (EB),

Start 30:

- Found in 16 of 309 (5.2%) of genes in pham
- Manual Annotations of this start: 14 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AvGardian_11 (EB), Bachaco_11 (EB), Celaena_11 (EB), ChiliPepper_11 (EB), Didgeridoo_12 (EB), Dismas_11 (EB), FlameThrower_11 (EB), Kamdara_11 (EB), Katzastrophic_11 (EB), Kieran_11 (EB), Lahqtemish_11 (EB), PastaFagioli_11 (EB), Quenya_12 (EB), Rona_11 (EB), SPB78_12 (BA), Sharkboy_11 (EB),

Start 31:

- Found in 23 of 309 (7.4%) of genes in pham
- Manual Annotations of this start: 12 of 243
- Called 56.5% of time when present
- Phage (with cluster) where this start called: Armstrong_10 (EB), BAjuniper_11 (EB), Bernstein_10 (EB), Brahms_10 (EB), Clayda5_10 (EB), Coltrane_10 (EB), DirtyBubble_11 (EB), Gack_10 (EB), Rollins_10 (EB), Skylord_10 (EB), Spartoi_10 (singleton), VWB_11 (BA), Vitas_10 (EB),

Start 32:

- Found in 1 of 309 (0.3%) of genes in pham
- Manual Annotations of this start: 1 of 243
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Shambre1_12 (singleton),

Start 34:

- Found in 2 of 309 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PFR1_09 (BX), PFR2_09 (BX),

Start 37:

- Found in 5 of 309 (1.6%) of genes in pham
- Manual Annotations of this start: 2 of 243
- Called 80.0% of time when present
- Phage (with cluster) where this start called: BaileyBlu_11 (FP), CallinAllBarbz_11 (FP), GrimEater_12 (FP), Jankie_13 (FP),

Start 38:

- Found in 11 of 309 (3.6%) of genes in pham
- Manual Annotations of this start: 4 of 243
- Called 36.4% of time when present
- Phage (with cluster) where this start called: B22_12 (BW), Doucette_12 (BW), E6_13 (BW), G4_12 (BW),

Start 43:

- Found in 13 of 309 (4.2%) of genes in pham
- No Manual Annotations of this start.
- Called 7.7% of time when present
- Phage (with cluster) where this start called: MrBoss_14 (AK),

Summary by clusters:

There are 17 clusters represented in this pham: AS3, AS2, FR, BA, F, BL, AK, AS1, FP, EB, Y, FB, BW, F2, singleton, BX, FO,

Info for manual annotations of cluster AK:

- Start number 20 was manually annotated 9 times for cluster AK.
- Start number 22 was manually annotated 65 times for cluster AK.
- Start number 25 was manually annotated 10 times for cluster AK.

Info for manual annotations of cluster AS1:

- Start number 13 was manually annotated 12 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 13 was manually annotated 16 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 13 was manually annotated 13 times for cluster AS3.

Info for manual annotations of cluster BL:

- Start number 16 was manually annotated 1 time for cluster BL.

- Start number 28 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster BW:

- Start number 38 was manually annotated 4 times for cluster BW.

Info for manual annotations of cluster EB:

- Start number 25 was manually annotated 6 times for cluster EB.
- Start number 26 was manually annotated 3 times for cluster EB.
- Start number 29 was manually annotated 43 times for cluster EB.
- Start number 30 was manually annotated 14 times for cluster EB.
- Start number 31 was manually annotated 11 times for cluster EB.

Info for manual annotations of cluster F2:

- Start number 15 was manually annotated 7 times for cluster F2.

Info for manual annotations of cluster FB:

- Start number 29 was manually annotated 6 times for cluster FB.

Info for manual annotations of cluster FO:

- Start number 29 was manually annotated 8 times for cluster FO.

Info for manual annotations of cluster FP:

- Start number 37 was manually annotated 2 times for cluster FP.

Info for manual annotations of cluster FR:

- Start number 13 was manually annotated 2 times for cluster FR.

Info for manual annotations of cluster Y:

- Start number 7 was manually annotated 4 times for cluster Y.
- Start number 8 was manually annotated 1 time for cluster Y.

Gene Information:

Gene: AbbeyMikolon_11 Start: 7783, Stop: 8178, Start Num: 28

Candidate Starts for AbbeyMikolon_11:

(24, 7780), (Start: 28 @7783 has 2 MA's), (35, 7795), (41, 7816), (43, 7822), (45, 7828), (51, 7843), (62, 7864), (70, 7888), (100, 7957), (118, 8029), (119, 8035), (130, 8062), (144, 8092), (155, 8140),

Gene: Abidatro_12 Start: 8321, Stop: 8764, Start Num: 13

Candidate Starts for Abidatro_12:

(Start: 13 @8321 has 43 MA's), (39, 8363), (56, 8417), (76, 8471), (77, 8474), (87, 8507), (117, 8606), (126, 8633), (137, 8657), (140, 8663), (144, 8672),

Gene: Abigail_11 Start: 8030, Stop: 8425, Start Num: 29

Candidate Starts for Abigail_11:

(5, 7904), (Start: 29 @8030 has 57 MA's), (45, 8069), (59, 8096), (91, 8174), (120, 8273), (135, 8306), (163, 8399),

Gene: AdoptaAdorbs_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for AdoptaAdorbs_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Agamotto_15 Start: 10788, Stop: 11180, Start Num: 13

Candidate Starts for Agamotto_15:

(Start: 13 @10788 has 43 MA's), (19, 10800), (69, 10890), (74, 10902), (104, 10974), (117, 11031), (167, 11172),

Gene: Akino08_11 Start: 8216, Stop: 8611, Start Num: 29

Candidate Starts for Akino08_11:

(5, 8090), (Start: 29 @8216 has 57 MA's), (Start: 31 @8219 has 12 MA's), (55, 8279), (143, 8510), (150, 8543), (154, 8564),

Gene: Alatato_10 Start: 7192, Stop: 7572, Start Num: 29

Candidate Starts for Alatato_10:

(Start: 29 @7192 has 57 MA's), (56, 7252), (64, 7270), (100, 7357), (103, 7363), (129, 7459), (132, 7465), (152, 7534),

Gene: Albanese_14 Start: 10476, Stop: 10886, Start Num: 25

Candidate Starts for Albanese_14:

(Start: 25 @10476 has 16 MA's), (83, 10620), (84, 10629), (86, 10632), (100, 10662), (103, 10668), (108, 10701), (151, 10824), (159, 10848),

Gene: Albedo_11 Start: 7905, Stop: 8300, Start Num: 29

Candidate Starts for Albedo_11:

(5, 7779), (Start: 29 @7905 has 57 MA's), (45, 7944), (91, 8049), (120, 8148), (135, 8181), (163, 8274),

Gene: Albright_11 Start: 7911, Stop: 8306, Start Num: 29

Candidate Starts for Albright_11:

(5, 7785), (Start: 29 @7911 has 57 MA's), (59, 7977), (91, 8055), (120, 8154), (135, 8187), (163, 8280),

Gene: Aledel_10 Start: 7551, Stop: 7982, Start Num: 22

Candidate Starts for Aledel_10:

(Start: 20 @7545 has 9 MA's), (Start: 22 @7551 has 65 MA's), (36, 7572), (60, 7644), (83, 7701), (86, 7713), (90, 7722), (102, 7746), (151, 7905),

Gene: AlexMinion_11 Start: 7928, Stop: 8371, Start Num: 13

Candidate Starts for AlexMinion_11:

(9, 7916), (Start: 13 @7928 has 43 MA's), (60, 8036), (78, 8084), (91, 8120), (94, 8126), (117, 8213), (126, 8240), (161, 8339), (163, 8345), (166, 8357),

Gene: Amanises_13 Start: 8480, Stop: 8932, Start Num: 9

Candidate Starts for Amanises_13:

(9, 8480), (Start: 13 @8492 has 43 MA's), (55, 8582), (69, 8624), (76, 8642), (77, 8645), (91, 8684), (117, 8777), (126, 8804), (137, 8828), (149, 8864), (161, 8900),

Gene: Amelia_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Amelia_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: AmiCi24_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for AmiCi24_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Amphitrite_11 Start: 7900, Stop: 8340, Start Num: 13

Candidate Starts for Amphitrite_11:

(Start: 13 @7900 has 43 MA's), (41, 7951), (77, 8053), (78, 8056), (91, 8092), (94, 8098), (101, 8113), (117, 8185), (126, 8212), (161, 8311), (163, 8317), (166, 8329),

Gene: Andrew_12 Start: 8281, Stop: 8724, Start Num: 13

Candidate Starts for Andrew_12:

(Start: 13 @8281 has 43 MA's), (41, 8332), (55, 8371), (57, 8380), (76, 8431), (77, 8434), (78, 8437), (91, 8473), (94, 8479), (126, 8593), (134, 8608), (161, 8692), (163, 8698), (166, 8710),

Gene: AnnaLie_12 Start: 8320, Stop: 8715, Start Num: 29

Candidate Starts for AnnaLie_12:

(5, 8194), (Start: 29 @8320 has 57 MA's), (45, 8359), (59, 8386), (91, 8464), (120, 8563), (135, 8596), (163, 8689),

Gene: AnnabelLee_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for AnnabelLee_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Antrice_12 Start: 8237, Stop: 8680, Start Num: 13

Candidate Starts for Antrice_12:

(9, 8225), (Start: 13 @8237 has 43 MA's), (78, 8393), (101, 8450), (112, 8507), (113, 8510), (137, 8573), (140, 8579), (149, 8612), (161, 8648), (166, 8666),

Gene: Aoka_12 Start: 8710, Stop: 9090, Start Num: 29

Candidate Starts for Aoka_12:

(Start: 29 @8710 has 57 MA's), (110, 8923), (113, 8935), (141, 9007), (145, 9022),

Gene: AppleCider_14 Start: 10411, Stop: 10824, Start Num: 22

Candidate Starts for AppleCider_14:

(Start: 22 @10411 has 65 MA's), (43, 10456), (83, 10558), (151, 10762),

Gene: Armstrong_10 Start: 7692, Stop: 8081, Start Num: 31

Candidate Starts for Armstrong_10:

(Start: 31 @7692 has 12 MA's), (91, 7833), (100, 7851), (148, 8004), (150, 8013), (156, 8037), (166, 8067),

Gene: Arroyo_12 Start: 8381, Stop: 8776, Start Num: 29

Candidate Starts for Arroyo_12:

(5, 8255), (Start: 29 @8381 has 57 MA's), (59, 8447), (91, 8525), (120, 8624), (135, 8657), (163, 8750),

Gene: Atlantica_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for Atlantica_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Attoomi_11 Start: 7560, Stop: 7970, Start Num: 17

Candidate Starts for Attoomi_11:

(Start: 17 @7560 has 1 MA's), (27, 7581), (Start: 38 @7593 has 4 MA's), (39, 7596), (58, 7638), (73, 7677), (75, 7680), (80, 7692), (95, 7728), (112, 7791), (115, 7800), (143, 7869), (166, 7947),

Gene: Audell_16 Start: 11067, Stop: 11459, Start Num: 13

Candidate Starts for Audell_16:

(Start: 13 @11067 has 43 MA's), (47, 11130), (91, 11223), (104, 11253), (116, 11307), (117, 11310), (118, 11313), (132, 11349), (167, 11451),

Gene: AuntGwenStacy_18 Start: 11997, Stop: 12434, Start Num: 8

Candidate Starts for AuntGwenStacy_18:

(Start: 7 @11994 has 4 MA's), (Start: 8 @11997 has 1 MA's), (42, 12075), (47, 12084), (54, 12090), (56, 12096), (85, 12174), (107, 12240), (117, 12276), (147, 12351), (157, 12390),

Gene: AustinPowers_10 Start: 7552, Stop: 7983, Start Num: 22

Candidate Starts for AustinPowers_10:

(Start: 20 @7546 has 9 MA's), (Start: 22 @7552 has 65 MA's), (36, 7573), (60, 7645), (86, 7714), (90, 7723), (102, 7747), (151, 7906),

Gene: AvGardian_11 Start: 7970, Stop: 8365, Start Num: 30

Candidate Starts for AvGardian_11:

(Start: 30 @7970 has 14 MA's), (55, 8033), (91, 8114), (113, 8189), (120, 8213), (135, 8246), (143, 8264), (163, 8339),

Gene: Avani_13 Start: 7213, Stop: 7617, Start Num: 15

Candidate Starts for Avani_13:

(Start: 15 @7213 has 7 MA's), (33, 7246), (56, 7306), (82, 7372), (121, 7492), (124, 7504), (146, 7540), (153, 7570),

Gene: Avocadoman_11 Start: 7969, Stop: 8364, Start Num: 29

Candidate Starts for Avocadoman_11:

(Start: 29 @7969 has 57 MA's), (45, 8008), (59, 8035), (91, 8113), (120, 8212), (135, 8245), (163, 8338),

Gene: AylexOG_12 Start: 8256, Stop: 8651, Start Num: 29

Candidate Starts for AylexOG_12:

(5, 8130), (Start: 29 @8256 has 57 MA's), (45, 8295), (59, 8322), (91, 8400), (135, 8532), (163, 8625),

Gene: Azaz_11 Start: 7953, Stop: 8393, Start Num: 13

Candidate Starts for Azaz_11:

(Start: 13 @7953 has 43 MA's), (77, 8106), (78, 8109), (91, 8145), (94, 8151), (101, 8166), (117, 8238), (126, 8265), (161, 8364), (163, 8370), (166, 8382),

Gene: B22_12 Start: 7687, Stop: 8055, Start Num: 38

Candidate Starts for B22_12:

(2, 7486), (Start: 38 @7687 has 4 MA's), (57, 7744), (76, 7795), (114, 7906), (116, 7912), (119, 7924),

Gene: BAjuniper_11 Start: 7857, Stop: 8243, Start Num: 31

Candidate Starts for BAjuniper_11:

(3, 7680), (Start: 31 @7857 has 12 MA's), (91, 7995), (99, 8010), (141, 8139), (150, 8175),

Gene: Babushka_11 Start: 7950, Stop: 8390, Start Num: 13

Candidate Starts for Babushka_11:

(Start: 13 @7950 has 43 MA's), (77, 8103), (78, 8106), (91, 8142), (94, 8148), (98, 8157), (117, 8235), (126, 8262), (161, 8361), (163, 8367), (166, 8379),

Gene: BabyDaisy_12 Start: 8133, Stop: 8531, Start Num: 29

Candidate Starts for BabyDaisy_12:

(Start: 29 @8133 has 57 MA's), (120, 8379), (154, 8484),

Gene: BabyYoda_11 Start: 8162, Stop: 8557, Start Num: 29

Candidate Starts for BabyYoda_11:

(5, 8036), (Start: 29 @8162 has 57 MA's), (Start: 31 @8165 has 12 MA's), (55, 8225), (125, 8420), (143, 8456), (150, 8489), (154, 8510),

Gene: Bachaco_11 Start: 8051, Stop: 8449, Start Num: 30

Candidate Starts for Bachaco_11:

(1, 7853), (3, 7877), (4, 7913), (Start: 30 @8051 has 14 MA's), (40, 8072), (135, 8330), (143, 8348), (150, 8381),

Gene: BaileyBlu_11 Start: 6789, Stop: 7178, Start Num: 37

Candidate Starts for BaileyBlu_11:

(Start: 37 @6789 has 2 MA's), (Start: 38 @6792 has 4 MA's), (99, 6951), (117, 7023), (119, 7032),

Gene: Basilisk_12 Start: 8645, Stop: 9088, Start Num: 13

Candidate Starts for Basilisk_12:

(6, 8570), (Start: 13 @8645 has 43 MA's), (39, 8687), (44, 8705), (56, 8741), (76, 8795), (77, 8798), (91, 8837), (106, 8891), (117, 8930), (126, 8957), (137, 8981), (140, 8987),

Gene: Bedetta_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Bedetta_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: Beethoven_14 Start: 10371, Stop: 10784, Start Num: 22

Candidate Starts for Beethoven_14:

(Start: 22 @10371 has 65 MA's), (76, 10506), (83, 10521), (102, 10566), (110, 10608), (151, 10725),

Gene: BelmontSKP_12 Start: 8320, Stop: 8715, Start Num: 29

Candidate Starts for BelmontSKP_12:

(5, 8194), (Start: 29 @8320 has 57 MA's), (45, 8359), (59, 8386), (91, 8464), (120, 8563), (135, 8596), (163, 8689),

Gene: Bengal_11 Start: 7911, Stop: 8306, Start Num: 29

Candidate Starts for Bengal_11:

(5, 7785), (Start: 29 @7911 has 57 MA's), (45, 7950), (59, 7977), (120, 8154), (135, 8187), (163, 8280),

Gene: Bennie_10 Start: 7516, Stop: 7926, Start Num: 22

Candidate Starts for Bennie_10:

(Start: 22 @7516 has 65 MA's), (76, 7648), (83, 7663), (102, 7708), (103, 7711), (110, 7750), (151, 7867),

Gene: Bernstein_10 Start: 7752, Stop: 8141, Start Num: 31

Candidate Starts for Bernstein_10:

(Start: 31 @7752 has 12 MA's), (91, 7893), (100, 7911), (148, 8064), (150, 8073), (156, 8097), (166, 8127),

Gene: Bibble12_13 Start: 8500, Stop: 8943, Start Num: 13

Candidate Starts for Bibble12_13:

(Start: 13 @8500 has 43 MA's), (55, 8590), (56, 8596), (76, 8650), (77, 8653), (91, 8692), (126, 8812), (137, 8836), (161, 8908), (163, 8914),

Gene: BigMack_10 Start: 7516, Stop: 7926, Start Num: 22

Candidate Starts for BigMack_10:

(Start: 22 @7516 has 65 MA's), (76, 7648), (83, 7663), (102, 7708), (110, 7750), (151, 7867),

Gene: Bipper_18 Start: 12080, Stop: 12517, Start Num: 7

Candidate Starts for Bipper_18:

(Start: 7 @12080 has 4 MA's), (Start: 8 @12083 has 1 MA's), (39, 12146), (42, 12158), (47, 12167), (56, 12179), (78, 12239), (103, 12296), (107, 12323), (109, 12332), (118, 12362), (143, 12419), (150, 12449), (157, 12473),

Gene: Blarby_14 Start: 7737, Stop: 8141, Start Num: 15

Candidate Starts for Blarby_14:

(Start: 15 @7737 has 7 MA's), (33, 7770), (56, 7830), (82, 7896), (121, 8016), (124, 8028), (146, 8064), (153, 8094),

Gene: Bodacious_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for Bodacious_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: Brahms_10 Start: 7692, Stop: 8081, Start Num: 31

Candidate Starts for Brahms_10:

(Start: 31 @7692 has 12 MA's), (91, 7833), (100, 7851), (148, 8004), (150, 8013), (156, 8037), (166, 8067),

Gene: BrayBeast_11 Start: 7602, Stop: 7979, Start Num: 29

Candidate Starts for BrayBeast_11:

(Start: 29 @7602 has 57 MA's), (56, 7659), (78, 7716), (88, 7743), (100, 7764), (103, 7770), (132, 7872), (145, 7908), (152, 7941),

Gene: BrotherBLo_14 Start: 10378, Stop: 10791, Start Num: 22

Candidate Starts for BrotherBLo_14:

(Start: 22 @10378 has 65 MA's), (76, 10513), (83, 10528), (102, 10573), (110, 10615), (151, 10732),

Gene: Brynnie_12 Start: 8457, Stop: 8900, Start Num: 13

Candidate Starts for Brynnie_12:

(Start: 13 @8457 has 43 MA's), (39, 8499), (56, 8553), (76, 8607), (77, 8610), (91, 8649), (106, 8703), (117, 8742), (126, 8769), (137, 8793), (140, 8799),

Gene: BubbaBear_11 Start: 7905, Stop: 8300, Start Num: 29

Candidate Starts for BubbaBear_11:

(Start: 29 @7905 has 57 MA's), (45, 7944), (91, 8049), (120, 8148), (135, 8181), (163, 8274),

Gene: Buldak_11 Start: 8189, Stop: 8584, Start Num: 25

Candidate Starts for Buldak_11:

(Start: 25 @8189 has 16 MA's), (79, 8306), (88, 8333), (91, 8336), (114, 8414), (127, 8450), (132, 8459), (150, 8516), (156, 8540),

Gene: Burritobowl_11 Start: 7938, Stop: 8333, Start Num: 29

Candidate Starts for Burritobowl_11:

(5, 7812), (Start: 29 @7938 has 57 MA's), (45, 7977), (59, 8004), (91, 8082), (120, 8181), (135, 8214), (163, 8307),

Gene: CallieOMalley_14 Start: 10411, Stop: 10824, Start Num: 22

Candidate Starts for CallieOMalley_14:

(Start: 22 @10411 has 65 MA's), (43, 10456), (83, 10558), (151, 10762),

Gene: CallinAllBarbz_11 Start: 6799, Stop: 7188, Start Num: 37

Candidate Starts for CallinAllBarbz_11:

(Start: 37 @6799 has 2 MA's), (Start: 38 @6802 has 4 MA's), (99, 6961), (119, 7042), (130, 7069),

Gene: Camara_11 Start: 7903, Stop: 8343, Start Num: 13

Candidate Starts for Camara_11:

(Start: 13 @7903 has 43 MA's), (41, 7954), (77, 8056), (78, 8059), (91, 8095), (94, 8101), (101, 8116), (117, 8188), (126, 8215), (161, 8314), (163, 8320), (166, 8332),

Gene: Canowicakte_14 Start: 10446, Stop: 10859, Start Num: 22

Candidate Starts for Canowicakte_14:

(Start: 22 @10446 has 65 MA's), (43, 10491), (83, 10593), (116, 10701), (151, 10797),

Gene: CardboardBox_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for CardboardBox_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Carpal_14 Start: 10378, Stop: 10791, Start Num: 22

Candidate Starts for Carpal_14:

(Start: 22 @10378 has 65 MA's), (76, 10513), (83, 10528), (102, 10573), (110, 10615), (151, 10732),

Gene: Cashington_11 Start: 7928, Stop: 8323, Start Num: 29

Candidate Starts for Cashington_11:

(5, 7802), (Start: 29 @7928 has 57 MA's), (45, 7967), (59, 7994), (91, 8072), (120, 8171), (135, 8204), (163, 8297),

Gene: Celaena_11 Start: 7988, Stop: 8386, Start Num: 30

Candidate Starts for Celaena_11:

(4, 7850), (12, 7952), (Start: 20 @7970 has 9 MA's), (Start: 30 @7988 has 14 MA's), (40, 8009), (135, 8267), (143, 8285), (150, 8318),

Gene: ChamoyPickle_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for ChamoyPickle_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Che9d_13 Start: 7222, Stop: 7626, Start Num: 15

Candidate Starts for Che9d_13:

(Start: 15 @7222 has 7 MA's), (33, 7255), (56, 7315), (82, 7381), (121, 7501), (124, 7513), (146, 7549), (153, 7579),

Gene: ChewChew_10 Start: 7513, Stop: 7923, Start Num: 22

Candidate Starts for ChewChew_10:

(Start: 22 @7513 has 65 MA's), (62, 7606), (76, 7645), (83, 7660), (102, 7705), (110, 7747), (116, 7768), (151, 7864),

Gene: Chickaboom_11 Start: 8002, Stop: 8445, Start Num: 13

Candidate Starts for Chickaboom_11:

(Start: 13 @8002 has 43 MA's), (39, 8044), (44, 8062), (56, 8098), (76, 8152), (77, 8155), (91, 8194), (106, 8248), (117, 8287), (126, 8314), (137, 8338), (140, 8344),

Gene: Chicken_12 Start: 8281, Stop: 8721, Start Num: 13

Candidate Starts for Chicken_12:

(Start: 13 @8281 has 43 MA's), (55, 8371), (56, 8377), (69, 8413), (76, 8431), (77, 8434), (91, 8473), (117, 8566), (126, 8593), (137, 8617), (149, 8653), (161, 8689),

Gene: ChiliPepper_11 Start: 8141, Stop: 8542, Start Num: 30

Candidate Starts for ChiliPepper_11:

(Start: 30 @8141 has 14 MA's), (91, 8291), (125, 8405), (150, 8474),

Gene: ChipsNGuac_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for ChipsNGuac_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Cholula_14 Start: 10423, Stop: 10836, Start Num: 22

Candidate Starts for Cholula_14:

(Start: 22 @10423 has 65 MA's), (76, 10558), (83, 10573), (102, 10618), (110, 10660), (151, 10777),

Gene: Chridison_10 Start: 7546, Stop: 7983, Start Num: 20

Candidate Starts for Chridison_10:

(Start: 20 @7546 has 9 MA's), (Start: 22 @7552 has 65 MA's), (36, 7573), (60, 7645), (86, 7714), (90, 7723), (102, 7747), (151, 7906),

Gene: Christian_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for Christian_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: Clayda5_10 Start: 7692, Stop: 8081, Start Num: 31

Candidate Starts for Clayda5_10:

(Start: 31 @7692 has 12 MA's), (91, 7833), (100, 7851), (148, 8004), (150, 8013), (156, 8037), (166, 8067),

Gene: CliffHanger_12 Start: 7883, Stop: 8278, Start Num: 26

Candidate Starts for CliffHanger_12:

(Start: 26 @7883 has 3 MA's), (84, 8015), (113, 8105), (132, 8153), (143, 8177), (156, 8234),

Gene: CocoCinnamon_15 Start: 8936, Stop: 9316, Start Num: 29

Candidate Starts for CocoCinnamon_15:

(Start: 29 @8936 has 57 MA's), (100, 9101), (103, 9107), (129, 9203), (132, 9209), (145, 9245), (152, 9278),

Gene: Coltrane_10 Start: 7692, Stop: 8081, Start Num: 31

Candidate Starts for Coltrane_10:

(Start: 31 @7692 has 12 MA's), (91, 7833), (100, 7851), (148, 8004), (150, 8013), (156, 8037), (166, 8067),

Gene: Colusalem_12 Start: 8336, Stop: 8779, Start Num: 13

Candidate Starts for Colusalem_12:

(Start: 13 @8336 has 43 MA's), (55, 8426), (56, 8432), (76, 8486), (77, 8489), (91, 8528), (126, 8648), (137, 8672), (161, 8744), (163, 8750),

Gene: Coral_12 Start: 8336, Stop: 8779, Start Num: 13

Candidate Starts for Coral_12:

(Start: 13 @8336 has 43 MA's), (55, 8426), (56, 8432), (76, 8486), (77, 8489), (91, 8528), (126, 8648), (137, 8672), (161, 8744), (163, 8750),

Gene: Cote_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Cote_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: Cracklewink_18 Start: 12080, Stop: 12517, Start Num: 7

Candidate Starts for Cracklewink_18:

(Start: 7 @12080 has 4 MA's), (Start: 8 @12083 has 1 MA's), (39, 12146), (42, 12158), (47, 12167), (56, 12179), (78, 12239), (103, 12296), (107, 12323), (109, 12332), (118, 12362), (143, 12419), (150, 12449), (157, 12473),

Gene: CristinaYang_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for CristinaYang_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: CroZenni_11 Start: 7911, Stop: 8306, Start Num: 29

Candidate Starts for CroZenni_11:

(5, 7785), (Start: 29 @7911 has 57 MA's), (59, 7977), (91, 8055), (120, 8154), (135, 8187), (163, 8280),

Gene: CupcakePrincess_11 Start: 7951, Stop: 8346, Start Num: 29

Candidate Starts for CupcakePrincess_11:

(5, 7825), (Start: 29 @7951 has 57 MA's), (45, 7990), (59, 8017), (91, 8095), (135, 8227), (163, 8320),

Gene: Cygnet_12 Start: 8279, Stop: 8722, Start Num: 13

Candidate Starts for Cygnet_12:

(Start: 13 @8279 has 43 MA's), (44, 8339), (48, 8348), (57, 8378), (76, 8429), (101, 8492), (110, 8540), (112, 8549), (113, 8552), (137, 8615), (142, 8624), (149, 8654), (161, 8690), (166, 8708),

Gene: Daiboju_10 Start: 7547, Stop: 7984, Start Num: 20

Candidate Starts for Daiboju_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (41, 7592), (42, 7595), (76, 7688), (83, 7703), (86, 7715), (90, 7724), (92, 7727), (102, 7748), (151, 7907),

Gene: DanHam62_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for DanHam62_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Daob_13 Start: 8500, Stop: 8943, Start Num: 13

Candidate Starts for Daob_13:

(Start: 13 @8500 has 43 MA's), (55, 8590), (56, 8596), (76, 8650), (77, 8653), (91, 8692), (126, 8812), (137, 8836), (161, 8908), (163, 8914),

Gene: Demsculpinboyz_13 Start: 7213, Stop: 7617, Start Num: 15

Candidate Starts for Demsculpinboyz_13:

(Start: 15 @7213 has 7 MA's), (33, 7246), (56, 7306), (82, 7372), (121, 7492), (124, 7504), (146, 7540), (153, 7570),

Gene: DickRichards_11 Start: 8405, Stop: 8800, Start Num: 29

Candidate Starts for DickRichards_11:

(5, 8279), (Start: 29 @8405 has 57 MA's), (45, 8444), (59, 8471), (91, 8549), (120, 8648), (135, 8681), (163, 8774),

Gene: Didgeridoo_12 Start: 8135, Stop: 8533, Start Num: 30

Candidate Starts for Didgeridoo_12:

(Start: 30 @8135 has 14 MA's), (120, 8381), (154, 8486),

Gene: Dino_14 Start: 10377, Stop: 10790, Start Num: 22

Candidate Starts for Dino_14:

(Start: 22 @10377 has 65 MA's), (76, 10512), (83, 10527), (102, 10572), (110, 10614), (151, 10731),

Gene: DirtyBubble_11 Start: 8173, Stop: 8565, Start Num: 31

Candidate Starts for DirtyBubble_11:

(5, 8044), (Start: 29 @8170 has 57 MA's), (Start: 31 @8173 has 12 MA's), (55, 8233), (125, 8428), (143, 8464), (150, 8497), (154, 8518),

Gene: Dismas_11 Start: 8141, Stop: 8542, Start Num: 30

Candidate Starts for Dismas_11:

(Start: 30 @8141 has 14 MA's), (91, 8291), (125, 8405), (150, 8474),

Gene: Doobus_11 Start: 8142, Stop: 8537, Start Num: 29

Candidate Starts for Doobus_11:

(5, 8016), (Start: 29 @8142 has 57 MA's), (59, 8208), (91, 8286), (120, 8385), (135, 8418), (163, 8511),

Gene: Doucette_12 Start: 7747, Stop: 8115, Start Num: 38

Candidate Starts for Doucette_12:

(2, 7546), (Start: 38 @7747 has 4 MA's), (57, 7804), (76, 7855), (114, 7966), (116, 7972), (119, 7984),

Gene: DrRobert_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for DrRobert_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: DreamTeam_10 Start: 7581, Stop: 7991, Start Num: 22

Candidate Starts for DreamTeam_10:

(Start: 22 @7581 has 65 MA's), (76, 7713), (83, 7728), (102, 7773), (103, 7776), (151, 7932),

Gene: E6_13 Start: 7798, Stop: 8166, Start Num: 38

Candidate Starts for E6_13:

(2, 7597), (Start: 38 @7798 has 4 MA's), (57, 7855), (76, 7906), (114, 8017), (116, 8023), (119, 8035), (128, 8056),

Gene: Eden_10 Start: 7777, Stop: 8181, Start Num: 26

Candidate Starts for Eden_10:

(Start: 26 @7777 has 3 MA's), (Start: 31 @7783 has 12 MA's), (91, 7933), (100, 7951), (114, 8011), (128, 8047), (150, 8113),

Gene: Eesa_12 Start: 8495, Stop: 8935, Start Num: 13

Candidate Starts for Eesa_12:

(9, 8483), (Start: 13 @8495 has 43 MA's), (55, 8585), (56, 8591), (69, 8627), (76, 8645), (77, 8648), (91, 8687), (117, 8780), (126, 8807), (137, 8831), (149, 8867), (161, 8903),

Gene: Elfy_10 Start: 6715, Stop: 7113, Start Num: 28

Candidate Starts for Elfy_10:

(14, 6688), (Start: 20 @6700 has 9 MA's), (Start: 28 @6715 has 2 MA's), (42, 6742), (62, 6796), (71, 6823), (83, 6850), (93, 6877), (99, 6889), (117, 6961), (123, 6985), (136, 7009),

Gene: Elva_12 Start: 8225, Stop: 8620, Start Num: 29

Candidate Starts for Elva_12:

(5, 8099), (Start: 29 @8225 has 57 MA's), (91, 8369), (125, 8483), (143, 8519), (150, 8552), (154, 8573),

Gene: EstebanJulior_10 Start: 7558, Stop: 7971, Start Num: 22

Candidate Starts for EstebanJulior_10:

(Start: 22 @7558 has 65 MA's), (50, 7621), (83, 7705), (102, 7750), (103, 7753), (110, 7792), (132, 7852), (151, 7909),

Gene: Eula_11 Start: 7912, Stop: 8307, Start Num: 29

Candidate Starts for Eula_11:

(Start: 29 @7912 has 57 MA's), (45, 7951), (59, 7978), (81, 8029), (91, 8056), (135, 8188), (163, 8281),

Gene: Eunoia_10 Start: 7551, Stop: 7982, Start Num: 22

Candidate Starts for Eunoia_10:

(Start: 20 @7545 has 9 MA's), (Start: 22 @7551 has 65 MA's), (36, 7572), (60, 7644), (83, 7701), (86, 7713), (90, 7722), (102, 7746), (151, 7905),

Gene: EvenBluerMoon_12 Start: 8744, Stop: 9133, Start Num: 29

Candidate Starts for EvenBluerMoon_12:

(Start: 29 @8744 has 57 MA's), (88, 8891), (110, 8957), (113, 8969),

Gene: Ezurina_12 Start: 7295, Stop: 7687, Start Num: 13

Candidate Starts for Ezurina_12:

(Start: 13 @7295 has 43 MA's), (23, 7316), (69, 7397), (88, 7448), (91, 7451), (117, 7538), (118, 7541), (159, 7655), (167, 7679),

Gene: Faiyaz_18 Start: 11997, Stop: 12434, Start Num: 8

Candidate Starts for Faiyaz_18:

(Start: 7 @11994 has 4 MA's), (Start: 8 @11997 has 1 MA's), (42, 12075), (47, 12084), (54, 12090), (56, 12096), (85, 12174), (107, 12240), (117, 12276), (147, 12351), (157, 12390),

Gene: Finalfrontier_12 Start: 8424, Stop: 8819, Start Num: 29

Candidate Starts for Finalfrontier_12:

(Start: 29 @8424 has 57 MA's), (45, 8463), (59, 8490), (91, 8568), (135, 8700), (163, 8793),

Gene: Fingolfin_11 Start: 7903, Stop: 8343, Start Num: 13

Candidate Starts for Fingolfin_11:

(Start: 13 @7903 has 43 MA's), (41, 7954), (77, 8056), (78, 8059), (91, 8095), (94, 8101), (101, 8116), (117, 8188), (126, 8215), (161, 8314), (163, 8320), (166, 8332),

Gene: FlameThrower_11 Start: 7876, Stop: 8274, Start Num: 30

Candidate Starts for FlameThrower_11:

(1, 7678), (Start: 30 @7876 has 14 MA's), (40, 7897), (135, 8155), (143, 8173), (150, 8206),

Gene: Fluke_14 Start: 10419, Stop: 10832, Start Num: 22

Candidate Starts for Fluke_14:

(Start: 22 @10419 has 65 MA's), (76, 10554), (102, 10614), (110, 10656), (151, 10773),

Gene: Franklin22_10 Start: 7758, Stop: 8153, Start Num: 26

Candidate Starts for Franklin22_10:

(Start: 26 @7758 has 3 MA's), (Start: 31 @7764 has 12 MA's), (91, 7905), (100, 7923), (150, 8085),

Gene: G4_12 Start: 7735, Stop: 8103, Start Num: 38

Candidate Starts for G4_12:

(2, 7534), (Start: 38 @7735 has 4 MA's), (57, 7792), (114, 7954), (116, 7960), (119, 7972), (129, 7996),

Gene: Gack_10 Start: 7830, Stop: 8219, Start Num: 31

Candidate Starts for Gack_10:

(Start: 31 @7830 has 12 MA's), (70, 7917), (91, 7971), (99, 7986), (122, 8076), (143, 8118), (150, 8151),

Gene: Galaxy_12 Start: 8328, Stop: 8771, Start Num: 13

Candidate Starts for Galaxy_12:

(Start: 13 @8328 has 43 MA's), (56, 8424), (76, 8478), (77, 8481), (87, 8514), (117, 8613), (126, 8640), (137, 8664), (140, 8670), (144, 8679),

Gene: Gerri43_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for Gerri43_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Gibbzilla_13 Start: 7779, Stop: 8162, Start Num: 25

Candidate Starts for Gibbzilla_13:

(21, 7770), (Start: 25 @7779 has 16 MA's), (63, 7863), (78, 7905), (92, 7938), (156, 8118),

Gene: Gisselle_10 Start: 7581, Stop: 7991, Start Num: 22

Candidate Starts for Gisselle_10:

(Start: 22 @7581 has 65 MA's), (76, 7713), (83, 7728), (102, 7773), (103, 7776), (151, 7932),

Gene: Glenn_14 Start: 10429, Stop: 10842, Start Num: 22

Candidate Starts for Glenn_14:

(Start: 22 @10429 has 65 MA's), (76, 10564), (83, 10579), (102, 10624), (110, 10666), (151, 10783),

Gene: Glotell_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for Glotell_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Gravel_13 Start: 8491, Stop: 8931, Start Num: 13

Candidate Starts for Gravel_13:

(9, 8479), (Start: 13 @8491 has 43 MA's), (55, 8581), (69, 8623), (76, 8641), (77, 8644), (91, 8683), (117, 8776), (126, 8803), (137, 8827), (149, 8863), (161, 8899),

Gene: Graynor_14 Start: 10435, Stop: 10845, Start Num: 22

Candidate Starts for Graynor_14:

(Start: 22 @10435 has 65 MA's), (43, 10477), (83, 10579), (151, 10783),

Gene: GreenHearts_14 Start: 10522, Stop: 10932, Start Num: 25

Candidate Starts for GreenHearts_14:

(Start: 25 @10522 has 16 MA's), (59, 10606), (83, 10666), (84, 10675), (86, 10678), (100, 10708), (103, 10714), (108, 10747), (151, 10870), (159, 10894),

Gene: Greenhouse_14 Start: 10447, Stop: 10857, Start Num: 25

Candidate Starts for Greenhouse_14:

(Start: 25 @10447 has 16 MA's), (83, 10591), (84, 10600), (86, 10603), (100, 10633), (103, 10639), (108, 10672), (151, 10795), (159, 10819),

Gene: GrimEater_12 Start: 6797, Stop: 7189, Start Num: 37

Candidate Starts for GrimEater_12:

(Start: 29 @6791 has 57 MA's), (Start: 37 @6797 has 2 MA's), (40, 6806), (99, 6962), (117, 7034), (119, 7043),

Gene: HamCheese_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for HamCheese_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: HannahPhantana_13 Start: 8500, Stop: 8943, Start Num: 13

Candidate Starts for HannahPhantana_13:

(Start: 13 @8500 has 43 MA's), (55, 8590), (56, 8596), (76, 8650), (77, 8653), (91, 8692), (126, 8812), (137, 8836), (161, 8908), (163, 8914),

Gene: HeadNerd_10 Start: 7516, Stop: 7926, Start Num: 22

Candidate Starts for HeadNerd_10:

(Start: 22 @7516 has 65 MA's), (76, 7648), (83, 7663), (102, 7708), (103, 7711), (110, 7750), (151, 7867),

Gene: Herb_10 Start: 7547, Stop: 7984, Start Num: 20

Candidate Starts for Herb_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (41, 7592), (42, 7595), (76, 7688), (83, 7703), (86, 7715), (90, 7724), (92, 7727), (102, 7748), (151, 7907),

Gene: Hilltopfarm_18 Start: 12024, Stop: 12464, Start Num: 7

Candidate Starts for Hilltopfarm_18:

(Start: 7 @12024 has 4 MA's), (Start: 8 @12027 has 1 MA's), (42, 12105), (47, 12114), (54, 12120), (56, 12126), (85, 12204), (107, 12270), (117, 12306), (147, 12381), (157, 12420),

Gene: Huckleberry_10 Start: 7516, Stop: 7926, Start Num: 22

Candidate Starts for Huckleberry_10:

(Start: 22 @7516 has 65 MA's), (76, 7648), (83, 7663), (102, 7708), (103, 7711), (110, 7750), (151, 7867),

Gene: HunterDalle_10 Start: 7551, Stop: 7982, Start Num: 22

Candidate Starts for HunterDalle_10:

(Start: 20 @7545 has 9 MA's), (Start: 22 @7551 has 65 MA's), (36, 7572), (60, 7644), (86, 7713), (90, 7722), (102, 7746), (151, 7905),

Gene: Huntingdon_14 Start: 10433, Stop: 10843, Start Num: 25

Candidate Starts for Huntingdon_14:

(Start: 25 @10433 has 16 MA's), (83, 10577), (84, 10586), (86, 10589), (100, 10619), (103, 10625), (108, 10658), (151, 10781), (159, 10805),

Gene: Icarian_12 Start: 8152, Stop: 8547, Start Num: 29

Candidate Starts for Icarian_12:

(Start: 29 @8152 has 57 MA's), (55, 8215), (83, 8272), (150, 8479), (154, 8500),

Gene: Immaculata_14 Start: 10423, Stop: 10836, Start Num: 22

Candidate Starts for Immaculata_14:

(Start: 22 @10423 has 65 MA's), (76, 10558), (83, 10573), (102, 10618), (110, 10660), (151, 10777),

Gene: IndyLu_11 Start: 7957, Stop: 8355, Start Num: 29

Candidate Starts for IndyLu_11:

(Start: 29 @7957 has 57 MA's), (120, 8203), (154, 8308),

Gene: Jabb_11 Start: 7951, Stop: 8346, Start Num: 29

Candidate Starts for Jabb_11:

(5, 7825), (Start: 29 @7951 has 57 MA's), (45, 7990), (59, 8017), (91, 8095), (135, 8227), (163, 8320),

Gene: Jabbawokkie_14 Start: 7736, Stop: 8140, Start Num: 15

Candidate Starts for Jabbawokkie_14:

(Start: 15 @7736 has 7 MA's), (33, 7769), (56, 7829), (82, 7895), (121, 8015), (124, 8027), (146, 8063), (153, 8093),

Gene: Jamun_12 Start: 8669, Stop: 9112, Start Num: 13

Candidate Starts for Jamun_12:

(Start: 13 @8669 has 43 MA's), (39, 8711), (44, 8729), (56, 8765), (76, 8819), (77, 8822), (91, 8861), (106, 8915), (117, 8954), (126, 8981), (137, 9005), (140, 9011),

Gene: JanetJ_12 Start: 8526, Stop: 8915, Start Num: 29

Candidate Starts for JanetJ_12:

(Start: 29 @8526 has 57 MA's), (100, 8694), (110, 8739), (113, 8751), (141, 8823), (152, 8871),

Gene: Jankie_13 Start: 6796, Stop: 7188, Start Num: 37

Candidate Starts for Jankie_13:

(Start: 29 @6790 has 57 MA's), (Start: 37 @6796 has 2 MA's), (40, 6805), (99, 6961), (117, 7033), (119, 7042),

Gene: JeanClaude_11 Start: 7509, Stop: 7886, Start Num: 29

Candidate Starts for JeanClaude_11:

(Start: 29 @7509 has 57 MA's), (78, 7623), (88, 7650), (100, 7671), (132, 7779), (145, 7815), (152, 7848),

Gene: Jerole_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Jerole_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: Joann_14 Start: 10425, Stop: 10835, Start Num: 25

Candidate Starts for Joann_14:

(Start: 25 @10425 has 16 MA's), (83, 10569), (84, 10578), (86, 10581), (100, 10611), (103, 10617), (108, 10650), (151, 10773), (159, 10797),

Gene: Johnathan_11 Start: 7911, Stop: 8306, Start Num: 29

Candidate Starts for Johnathan_11:

(5, 7785), (Start: 29 @7911 has 57 MA's), (45, 7950), (59, 7977), (91, 8055), (120, 8154), (135, 8187), (163, 8280),

Gene: Jovita_11 Start: 8013, Stop: 8408, Start Num: 29

Candidate Starts for Jovita_11:

(Start: 29 @8013 has 57 MA's), (45, 8052), (59, 8079), (91, 8157), (135, 8289), (163, 8382),

Gene: Jumboset_14 Start: 10372, Stop: 10785, Start Num: 22

Candidate Starts for Jumboset_14:

(Start: 22 @10372 has 65 MA's), (76, 10507), (83, 10522), (102, 10567), (110, 10609), (151, 10726),

Gene: Juno112_11 Start: 7903, Stop: 8343, Start Num: 13

Candidate Starts for Juno112_11:

(Start: 13 @7903 has 43 MA's), (41, 7954), (77, 8056), (78, 8059), (91, 8095), (94, 8101), (101, 8116), (117, 8188), (126, 8215), (161, 8314), (163, 8320), (166, 8332),

Gene: KHumphrey_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for KHumphrey_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Kalizoi_14 Start: 10371, Stop: 10784, Start Num: 22

Candidate Starts for Kalizoi_14:

(Start: 22 @10371 has 65 MA's), (76, 10506), (83, 10521), (102, 10566), (110, 10608), (151, 10725),

Gene: Kamdara_11 Start: 8140, Stop: 8541, Start Num: 30

Candidate Starts for Kamdara_11:

(Start: 30 @8140 has 14 MA's), (91, 8290), (125, 8404), (150, 8473),

Gene: Kate33_11 Start: 7956, Stop: 8354, Start Num: 29

Candidate Starts for Kate33_11:

(Start: 29 @7956 has 57 MA's), (120, 8202), (154, 8307),

Gene: Katzastrophic_11 Start: 8051, Stop: 8449, Start Num: 30

Candidate Starts for Katzastrophic_11:

(4, 7913), (Start: 30 @8051 has 14 MA's), (40, 8072), (135, 8330), (143, 8348), (150, 8381),

Gene: KendraB23_13 Start: 8492, Stop: 8932, Start Num: 13

Candidate Starts for KendraB23_13:

(9, 8480), (Start: 13 @8492 has 43 MA's), (55, 8582), (69, 8624), (76, 8642), (77, 8645), (91, 8684), (117, 8777), (126, 8804), (137, 8828), (149, 8864), (161, 8900),

Gene: Kenzers_11 Start: 7928, Stop: 8323, Start Num: 29

Candidate Starts for Kenzers_11:

(Start: 29 @7928 has 57 MA's), (45, 7967), (91, 8072), (120, 8171), (135, 8204), (163, 8297),

Gene: Kepler_12 Start: 8335, Stop: 8778, Start Num: 13

Candidate Starts for Kepler_12:

(Start: 13 @8335 has 43 MA's), (55, 8425), (56, 8431), (76, 8485), (77, 8488), (91, 8527), (126, 8647), (137, 8671), (161, 8743), (163, 8749),

Gene: Kieran_11 Start: 8144, Stop: 8545, Start Num: 30

Candidate Starts for Kieran_11:

(Start: 30 @8144 has 14 MA's), (91, 8294), (125, 8408), (150, 8477),

Gene: KingBob_10 Start: 7547, Stop: 7984, Start Num: 20

Candidate Starts for KingBob_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (41, 7592), (42, 7595), (76, 7688), (83, 7703), (86, 7715), (90, 7724), (92, 7727), (102, 7748), (151, 7907),

Gene: Kittykat_10 Start: 7557, Stop: 7967, Start Num: 22

Candidate Starts for Kittykat_10:

(Start: 22 @7557 has 65 MA's), (76, 7689), (83, 7704), (102, 7749), (103, 7752), (151, 7908),

Gene: Korra_14 Start: 10377, Stop: 10790, Start Num: 22

Candidate Starts for Korra_14:

(Start: 22 @10377 has 65 MA's), (76, 10512), (83, 10527), (102, 10572), (110, 10614), (151, 10731),

Gene: Kromp_13 Start: 9303, Stop: 9734, Start Num: 11

Candidate Starts for Kromp_13:

(Start: 11 @9303 has 1 MA's), (69, 9426), (76, 9441), (78, 9447), (86, 9471), (97, 9495), (141, 9627), (158, 9687), (160, 9693), (162, 9696), (164, 9702),

Gene: Kuleana_12 Start: 8295, Stop: 8735, Start Num: 13

Candidate Starts for Kuleana_12:

(Start: 13 @8295 has 43 MA's), (55, 8385), (56, 8391), (60, 8403), (77, 8448), (91, 8487), (101, 8508), (116, 8577), (117, 8580), (126, 8607), (131, 8616), (137, 8631), (161, 8703), (163, 8709),

Gene: Kumotta_12 Start: 8443, Stop: 8820, Start Num: 29

Candidate Starts for Kumotta_12:

(Start: 29 @8443 has 57 MA's), (88, 8584), (100, 8605), (103, 8611), (110, 8650), (129, 8707), (132, 8713), (145, 8749), (152, 8782),

Gene: Lahqtemish_11 Start: 8003, Stop: 8401, Start Num: 30

Candidate Starts for Lahqtemish_11:

(Start: 30 @8003 has 14 MA's), (45, 8042), (120, 8249), (154, 8354),

Gene: Lakshmi_14 Start: 10452, Stop: 10862, Start Num: 25

Candidate Starts for Lakshmi_14:

(Start: 25 @10452 has 16 MA's), (83, 10596), (84, 10605), (86, 10608), (100, 10638), (103, 10644), (108, 10677), (151, 10800), (159, 10824),

Gene: Laphuphu24k_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for Laphuphu24k_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Lasagna_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for Lasagna_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: LastNadiia_16 Start: 10019, Stop: 10411, Start Num: 13

Candidate Starts for LastNadiia_16:

(Start: 13 @10019 has 43 MA's), (47, 10082), (91, 10175), (104, 10205), (116, 10259), (117, 10262), (118, 10265), (132, 10301), (167, 10403),

Gene: Lennox_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for Lennox_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: Leona_11 Start: 7953, Stop: 8393, Start Num: 13

Candidate Starts for Leona_11:

(Start: 13 @7953 has 43 MA's), (77, 8106), (78, 8109), (91, 8145), (94, 8151), (101, 8166), (117, 8238), (126, 8265), (161, 8364), (163, 8370), (166, 8382),

Gene: LilStuart_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for LilStuart_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: Lilo27_11 Start: 7888, Stop: 8283, Start Num: 29

Candidate Starts for Lilo27_11:

(Start: 29 @7888 has 57 MA's), (45, 7927), (59, 7954), (91, 8032), (120, 8131), (135, 8164), (163, 8257),

Gene: LimaBean_11 Start: 7911, Stop: 8306, Start Num: 29

Candidate Starts for LimaBean_11:

(5, 7785), (Start: 29 @7911 has 57 MA's), (45, 7950), (59, 7977), (91, 8055), (120, 8154), (135, 8187), (163, 8280),

Gene: Litotes_14 Start: 10399, Stop: 10809, Start Num: 22

Candidate Starts for Litotes_14:

(Start: 22 @10399 has 65 MA's), (43, 10441), (83, 10543), (151, 10747),

Gene: LittleTokyo_12 Start: 8235, Stop: 8678, Start Num: 13

Candidate Starts for LittleTokyo_12:

(9, 8223), (10, 8226), (Start: 13 @8235 has 43 MA's), (101, 8448), (110, 8496), (112, 8505), (113, 8508), (117, 8520), (137, 8571), (142, 8580), (161, 8646), (166, 8664),

Gene: Loviatar_11 Start: 8231, Stop: 8626, Start Num: 29

Candidate Starts for Loviatar_11:

(5, 8105), (Start: 29 @8231 has 57 MA's), (Start: 31 @8234 has 12 MA's), (55, 8294), (125, 8489), (143, 8525), (150, 8558), (154, 8579),

Gene: Lucy_10 Start: 7505, Stop: 7915, Start Num: 22

Candidate Starts for Lucy_10:

(Start: 22 @7505 has 65 MA's), (62, 7598), (76, 7637), (83, 7652), (102, 7697), (110, 7739), (116, 7760), (151, 7856),

Gene: Lunar_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Lunar_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: Lynlen_11 Start: 7928, Stop: 8323, Start Num: 29

Candidate Starts for Lynlen_11:

(Start: 29 @7928 has 57 MA's), (45, 7967), (91, 8072), (120, 8171), (135, 8204), (163, 8297),

Gene: Maja_11 Start: 8064, Stop: 8444, Start Num: 29

Candidate Starts for Maja_11:

(Start: 29 @8064 has 57 MA's), (53, 8112), (64, 8142), (88, 8208), (100, 8229), (103, 8235), (132, 8337), (145, 8373), (152, 8406),

Gene: Makima_14 Start: 9103, Stop: 9495, Start Num: 13

Candidate Starts for Makima_14:

(Start: 13 @9103 has 43 MA's), (47, 9166), (91, 9259), (104, 9289), (116, 9343), (117, 9346), (118, 9349), (132, 9385), (167, 9487),

Gene: Makoto_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for Makoto_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: MamaPearl_10 Start: 7558, Stop: 7971, Start Num: 22

Candidate Starts for MamaPearl_10:

(Start: 22 @7558 has 65 MA's), (50, 7621), (83, 7705), (102, 7750), (103, 7753), (110, 7792), (132, 7852), (151, 7909),

Gene: MargaretKali_12 Start: 8078, Stop: 8455, Start Num: 29

Candidate Starts for MargaretKali_12:

(Start: 29 @8078 has 57 MA's), (56, 8135), (88, 8219), (100, 8240), (103, 8246), (110, 8285), (129, 8342), (132, 8348), (145, 8384), (152, 8417),

Gene: Maria1952_10 Start: 7547, Stop: 7984, Start Num: 20

Candidate Starts for Maria1952_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (41, 7592), (42, 7595), (76, 7688), (83, 7703), (86, 7715), (90, 7724), (92, 7727), (102, 7748), (151, 7907),

Gene: MeganNoll_14 Start: 10429, Stop: 10842, Start Num: 22

Candidate Starts for MeganNoll_14:

(Start: 22 @10429 has 65 MA's), (76, 10564), (83, 10579), (92, 10603), (102, 10624), (110, 10666), (151, 10783),

Gene: Melons_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Melons_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: Milomuff_12 Start: 8297, Stop: 8692, Start Num: 29

Candidate Starts for Milomuff_12:

(5, 8171), (Start: 29 @8297 has 57 MA's), (45, 8336), (59, 8363), (91, 8441), (120, 8540), (135, 8573), (163, 8666),

Gene: Mireles_13 Start: 7499, Stop: 7891, Start Num: 13

Candidate Starts for Mireles_13:

(Start: 13 @7499 has 43 MA's), (91, 7655), (104, 7685), (117, 7742), (118, 7745), (167, 7883),

Gene: Misaeng_14 Start: 10498, Stop: 10908, Start Num: 25

Candidate Starts for Misaeng_14:

(Start: 25 @10498 has 16 MA's), (83, 10642), (84, 10651), (86, 10654), (100, 10684), (103, 10690), (108, 10723), (151, 10846), (159, 10870),

Gene: Moki_10 Start: 7516, Stop: 7926, Start Num: 22

Candidate Starts for Moki_10:

(Start: 22 @7516 has 65 MA's), (76, 7648), (83, 7663), (102, 7708), (103, 7711), (110, 7750), (151, 7867),

Gene: MrBoss_14 Start: 10441, Stop: 10809, Start Num: 43

Candidate Starts for MrBoss_14:

(Start: 22 @10399 has 65 MA's), (43, 10441), (76, 10528), (83, 10543), (151, 10747),

Gene: MrGloopy_14 Start: 10362, Stop: 10775, Start Num: 22

Candidate Starts for MrGloopy_14:

(Start: 22 @10362 has 65 MA's), (76, 10497), (83, 10512), (102, 10557), (110, 10599), (151, 10716),

Gene: MsUbiquitous_11 Start: 7951, Stop: 8346, Start Num: 29

Candidate Starts for MsUbiquitous_11:

(5, 7825), (Start: 29 @7951 has 57 MA's), (45, 7990), (59, 8017), (91, 8095), (135, 8227), (163, 8320),

Gene: Nancia_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for Nancia_10:

(Start: 22 @7514 has 65 MA's), (62, 7607), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (116, 7769), (151, 7865),

Gene: Nesbitt_11 Start: 7855, Stop: 8250, Start Num: 28

Candidate Starts for Nesbitt_11:

(Start: 28 @7855 has 2 MA's), (35, 7867), (41, 7888), (44, 7897), (62, 7936), (70, 7960), (78, 7981), (103, 8035), (118, 8101), (119, 8107), (144, 8164), (155, 8212),

Gene: Neuville_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for Neuville_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Niblet_12 Start: 8281, Stop: 8721, Start Num: 13

Candidate Starts for Niblet_12:

(Start: 13 @8281 has 43 MA's), (55, 8371), (56, 8377), (69, 8413), (76, 8431), (77, 8434), (91, 8473), (117, 8566), (126, 8593), (137, 8617), (149, 8653), (161, 8689),

Gene: Nicky22_12 Start: 8359, Stop: 8754, Start Num: 29

Candidate Starts for Nicky22_12:

(Start: 29 @8359 has 57 MA's), (45, 8398), (72, 8455), (91, 8503), (135, 8635), (163, 8728),

Gene: NoSwimming_13 Start: 9693, Stop: 10082, Start Num: 29

Candidate Starts for NoSwimming_13:

(Start: 29 @9693 has 57 MA's), (46, 9726), (100, 9861), (105, 9879), (141, 9990), (145, 10005),

Gene: Nubia_14 Start: 10412, Stop: 10822, Start Num: 25

Candidate Starts for Nubia_14:

(Start: 25 @10412 has 16 MA's), (83, 10556), (84, 10565), (86, 10568), (100, 10598), (103, 10604), (108, 10637), (151, 10760), (159, 10784),

Gene: OMalley_10 Start: 7551, Stop: 7982, Start Num: 22

Candidate Starts for OMalley_10:

(Start: 20 @7545 has 9 MA's), (Start: 22 @7551 has 65 MA's), (36, 7572), (60, 7644), (83, 7701), (86, 7713), (90, 7722), (102, 7746), (151, 7905),

Gene: Olliecat_11 Start: 8144, Stop: 8536, Start Num: 25

Candidate Starts for Olliecat_11:

(Start: 25 @8144 has 16 MA's), (Start: 38 @8159 has 4 MA's), (59, 8210), (79, 8258), (84, 8273), (107, 8339), (127, 8402), (132, 8411), (143, 8435), (156, 8492),

Gene: Oppalora_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for Oppalora_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Orcanus_12 Start: 8285, Stop: 8725, Start Num: 13

Candidate Starts for Orcanus_12:

(9, 8273), (Start: 13 @8285 has 43 MA's), (55, 8375), (69, 8417), (76, 8435), (77, 8438), (91, 8477), (117, 8570), (126, 8597), (137, 8621), (149, 8657), (161, 8693),

Gene: OtsoOtso_12 Start: 8336, Stop: 8779, Start Num: 13

Candidate Starts for OtsoOtso_12:

(Start: 13 @8336 has 43 MA's), (55, 8426), (56, 8432), (76, 8486), (77, 8489), (91, 8528), (126, 8648), (137, 8672), (161, 8744), (163, 8750),

Gene: OurGirlNessie_10 Start: 7505, Stop: 7915, Start Num: 22

Candidate Starts for OurGirlNessie_10:

(Start: 22 @7505 has 65 MA's), (62, 7598), (76, 7637), (83, 7652), (102, 7697), (110, 7739), (116, 7760), (151, 7856),

Gene: Oxynfrius_14 Start: 10425, Stop: 10835, Start Num: 25

Candidate Starts for Oxynfrius_14:

(Start: 25 @10425 has 16 MA's), (83, 10569), (84, 10578), (86, 10581), (100, 10611), (103, 10617), (108, 10650), (151, 10773), (159, 10797),

Gene: PFR1_09 Start: 7693, Stop: 8106, Start Num: 34

Candidate Starts for PFR1_09:

(34, 7693), (43, 7720), (48, 7732), (49, 7735), (61, 7771), (65, 7783), (76, 7810), (83, 7825), (89, 7849), (96, 7861), (104, 7882), (115, 7933), (124, 7963), (140, 7996),

Gene: PFR2_09 Start: 7693, Stop: 8106, Start Num: 34

Candidate Starts for PFR2_09:

(34, 7693), (43, 7720), (48, 7732), (49, 7735), (61, 7771), (65, 7783), (76, 7810), (83, 7825), (89, 7849), (96, 7861), (104, 7882), (115, 7933), (124, 7963), (140, 7996),

Gene: PartyCup_14 Start: 10446, Stop: 10856, Start Num: 22

Candidate Starts for PartyCup_14:

(Start: 22 @10446 has 65 MA's), (43, 10488), (83, 10590), (151, 10794),

Gene: PastaFagioli_11 Start: 7991, Stop: 8389, Start Num: 30

Candidate Starts for PastaFagioli_11:

(Start: 30 @7991 has 14 MA's), (45, 8030), (120, 8237), (154, 8342),

Gene: Pecas_11 Start: 7912, Stop: 8307, Start Num: 29

Candidate Starts for Pecas_11:

(Start: 29 @7912 has 57 MA's), (45, 7951), (59, 7978), (81, 8029), (91, 8056), (135, 8188), (163, 8281),

Gene: Pelletreau_13 Start: 8491, Stop: 8931, Start Num: 13

Candidate Starts for Pelletreau_13:

(9, 8479), (Start: 13 @8491 has 43 MA's), (55, 8581), (69, 8623), (76, 8641), (77, 8644), (91, 8683), (117, 8776), (126, 8803), (137, 8827), (149, 8863), (161, 8899),

Gene: PhigPhack_11 Start: 7940, Stop: 8335, Start Num: 29

Candidate Starts for PhigPhack_11:

(Start: 29 @7940 has 57 MA's), (59, 8006), (91, 8084), (120, 8183), (135, 8216), (163, 8309),

Gene: PhirstandPhine_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for PhirstandPhine_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: Phisb_11 Start: 7905, Stop: 8300, Start Num: 29

Candidate Starts for Phisb_11:

(Start: 29 @7905 has 57 MA's), (45, 7944), (59, 7971), (91, 8049), (120, 8148), (135, 8181), (163, 8274),

Gene: PhluffyCoco_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for PhluffyCoco_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Pigu_11 Start: 7154, Stop: 7531, Start Num: 29

Candidate Starts for Pigu_11:

(Start: 29 @7154 has 57 MA's), (56, 7211), (64, 7229), (88, 7295), (100, 7316), (103, 7322), (132, 7424), (145, 7460), (152, 7493),

Gene: Pineda_13 Start: 8497, Stop: 8940, Start Num: 13

Candidate Starts for Pineda_13:

(Start: 13 @8497 has 43 MA's), (55, 8587), (56, 8593), (76, 8647), (77, 8650), (91, 8689), (126, 8809), (137, 8833), (161, 8905), (163, 8911),

Gene: PinkFriday_10 Start: 7548, Stop: 7982, Start Num: 20

Candidate Starts for PinkFriday_10:

(Start: 20 @7548 has 9 MA's), (Start: 22 @7554 has 65 MA's), (76, 7686), (83, 7701), (86, 7713), (90, 7722), (92, 7725), (102, 7746), (151, 7905),

Gene: PitaDog_10 Start: 7505, Stop: 7915, Start Num: 22

Candidate Starts for PitaDog_10:

(Start: 22 @7505 has 65 MA's), (62, 7598), (76, 7637), (83, 7652), (102, 7697), (110, 7739), (116, 7760), (151, 7856),

Gene: Polka_12 Start: 8336, Stop: 8779, Start Num: 13

Candidate Starts for Polka_12:

(Start: 13 @8336 has 43 MA's), (55, 8426), (56, 8432), (76, 8486), (77, 8489), (91, 8528), (126, 8648), (137, 8672), (161, 8744), (163, 8750),

Gene: PondAmelia_14 Start: 8160, Stop: 8555, Start Num: 29

Candidate Starts for PondAmelia_14:

(5, 8034), (Start: 29 @8160 has 57 MA's), (Start: 31 @8163 has 12 MA's), (55, 8223), (59, 8226), (143, 8454), (150, 8487), (154, 8508),

Gene: Potatoes_14 Start: 10423, Stop: 10836, Start Num: 22

Candidate Starts for Potatoes_14:

(Start: 22 @10423 has 65 MA's), (76, 10558), (83, 10573), (102, 10618), (110, 10660), (151, 10777),

Gene: PrairieDogTown_12 Start: 8746, Stop: 9135, Start Num: 29

Candidate Starts for PrairieDogTown_12:

(Start: 29 @8746 has 57 MA's), (88, 8893), (110, 8959), (113, 8971),

Gene: Preamble_10 Start: 7515, Stop: 7925, Start Num: 22

Candidate Starts for Preamble_10:

(Start: 22 @7515 has 65 MA's), (76, 7647), (83, 7662), (103, 7710), (151, 7866),

Gene: Pterodactyl_10 Start: 7506, Stop: 7916, Start Num: 22

Candidate Starts for Pterodactyl_10:

(Start: 22 @7506 has 65 MA's), (62, 7599), (76, 7638), (83, 7653), (102, 7698), (110, 7740), (116, 7761), (151, 7857),

Gene: Pumancara_10 Start: 7547, Stop: 7981, Start Num: 20

Candidate Starts for Pumancara_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (76, 7685), (83, 7700), (86, 7712), (90, 7721), (92, 7724), (102, 7745), (151, 7904),

Gene: QMacho_12 Start: 8395, Stop: 8790, Start Num: 29

Candidate Starts for QMacho_12:

(Start: 29 @8395 has 57 MA's), (45, 8434), (59, 8461), (81, 8512), (91, 8539), (120, 8638), (135, 8671), (163, 8764),

Gene: Quenya_12 Start: 8046, Stop: 8447, Start Num: 30

Candidate Starts for Quenya_12:

(Start: 30 @8046 has 14 MA's), (91, 8196), (133, 8325), (135, 8328), (143, 8346), (150, 8379),

Gene: RAP15_14 Start: 10429, Stop: 10842, Start Num: 22

Candidate Starts for RAP15_14:

(Start: 22 @10429 has 65 MA's), (76, 10564), (83, 10579), (102, 10624), (110, 10666), (151, 10783),

Gene: Rattail_11 Start: 7953, Stop: 8393, Start Num: 13

Candidate Starts for Rattail_11:

(Start: 13 @7953 has 43 MA's), (77, 8106), (78, 8109), (91, 8145), (94, 8151), (101, 8166), (117, 8238), (126, 8265), (161, 8364), (163, 8370), (166, 8382),

Gene: RcigaStruga_14 Start: 10433, Stop: 10843, Start Num: 25

Candidate Starts for RcigaStruga_14:

(Start: 25 @10433 has 16 MA's), (83, 10577), (84, 10586), (86, 10589), (100, 10619), (103, 10625), (108, 10658), (151, 10781), (159, 10805),

Gene: RedFox_11 Start: 7902, Stop: 8342, Start Num: 13

Candidate Starts for RedFox_11:

(Start: 13 @7902 has 43 MA's), (41, 7953), (77, 8055), (78, 8058), (91, 8094), (94, 8100), (101, 8115), (117, 8187), (126, 8214), (161, 8313), (163, 8319), (166, 8331),

Gene: Renna12_12 Start: 8102, Stop: 8545, Start Num: 13

Candidate Starts for Renna12_12:

(Start: 13 @8102 has 43 MA's), (77, 8255), (78, 8258), (91, 8294), (94, 8300), (117, 8387), (126, 8414), (137, 8438), (163, 8519), (166, 8531),

Gene: Riovina_10 Start: 7551, Stop: 7982, Start Num: 22

Candidate Starts for Riovina_10:

(Start: 20 @7545 has 9 MA's), (Start: 22 @7551 has 65 MA's), (36, 7572), (60, 7644), (83, 7701), (86, 7713), (90, 7722), (102, 7746), (151, 7905),

Gene: Riverdale_14 Start: 10360, Stop: 10773, Start Num: 22

Candidate Starts for Riverdale_14:

(Start: 22 @10360 has 65 MA's), (76, 10495), (83, 10510), (102, 10555), (110, 10597), (151, 10714),

Gene: Roberts_13 Start: 7727, Stop: 8119, Start Num: 13

Candidate Starts for Roberts_13:

(Start: 13 @7727 has 43 MA's), (68, 7826), (69, 7829), (88, 7880), (91, 7883), (117, 7970), (118, 7973), (159, 8087), (167, 8111),

Gene: Rollins_10 Start: 7752, Stop: 8141, Start Num: 31

Candidate Starts for Rollins_10:

(Start: 31 @7752 has 12 MA's), (91, 7893), (100, 7911), (148, 8064), (150, 8073), (156, 8097), (166, 8127),

Gene: Rona_11 Start: 8141, Stop: 8542, Start Num: 30

Candidate Starts for Rona_11:

(Start: 30 @8141 has 14 MA's), (91, 8291), (125, 8405), (150, 8474),

Gene: Rooter_11 Start: 7146, Stop: 7523, Start Num: 29

Candidate Starts for Rooter_11:

(Start: 29 @7146 has 57 MA's), (78, 7260), (88, 7287), (100, 7308), (129, 7410), (132, 7416), (145, 7452), (152, 7485),

Gene: Rowa_11 Start: 7599, Stop: 8018, Start Num: 16

Candidate Starts for Rowa_11:

(Start: 16 @7599 has 1 MA's), (18, 7602), (Start: 28 @7620 has 2 MA's), (43, 7659), (66, 7710), (117, 7863), (119, 7872), (139, 7917), (144, 7929), (165, 8004),

Gene: Rozby_14 Start: 10360, Stop: 10773, Start Num: 22

Candidate Starts for Rozby_14:

(Start: 22 @10360 has 65 MA's), (76, 10495), (83, 10510), (102, 10555), (110, 10597), (151, 10714),

Gene: Ruchi_12 Start: 8591, Stop: 9034, Start Num: 13

Candidate Starts for Ruchi_12:

(Start: 13 @8591 has 43 MA's), (39, 8633), (44, 8651), (56, 8687), (76, 8741), (77, 8744), (91, 8783), (106, 8837), (117, 8876), (126, 8903), (137, 8927), (140, 8933),

Gene: SPB78_12 Start: 8026, Stop: 8427, Start Num: 30

Candidate Starts for SPB78_12:

(Start: 28 @8023 has 2 MA's), (Start: 30 @8026 has 14 MA's), (57, 8104), (59, 8110), (66, 8128), (76, 8155), (113, 8269),

Gene: SanaSana_12 Start: 8160, Stop: 8555, Start Num: 29

Candidate Starts for SanaSana_12:

(5, 8034), (Start: 29 @8160 has 57 MA's), (Start: 31 @8163 has 12 MA's), (55, 8223), (143, 8454), (150, 8487), (154, 8508),

Gene: SansAfet_11 Start: 7922, Stop: 8317, Start Num: 29

Candidate Starts for SansAfet_11:

(5, 7796), (Start: 29 @7922 has 57 MA's), (45, 7961), (59, 7988), (91, 8066), (120, 8165), (135, 8198), (163, 8291),

Gene: SarBear_11 Start: 7888, Stop: 8283, Start Num: 29

Candidate Starts for SarBear_11:

(5, 7762), (Start: 29 @7888 has 57 MA's), (45, 7927), (59, 7954), (91, 8032), (135, 8164), (163, 8257),

Gene: Sarge_11 Start: 7513, Stop: 7890, Start Num: 29

Candidate Starts for Sarge_11:

(Start: 29 @7513 has 57 MA's), (78, 7627), (88, 7654), (100, 7675), (129, 7777), (132, 7783), (145, 7819), (152, 7852),

Gene: Savage2526_14 Start: 10423, Stop: 10836, Start Num: 22

Candidate Starts for Savage2526_14:

(Start: 22 @10423 has 65 MA's), (76, 10558), (83, 10573), (102, 10618), (110, 10660), (151, 10777),

Gene: Scotia_13 Start: 9699, Stop: 10088, Start Num: 29

Candidate Starts for Scotia_13:

(Start: 29 @9699 has 57 MA's), (46, 9732), (100, 9867), (105, 9885), (141, 9996), (145, 10011),

Gene: Scuttle_14 Start: 10429, Stop: 10842, Start Num: 22

Candidate Starts for Scuttle_14:

(Start: 22 @10429 has 65 MA's), (76, 10564), (83, 10579), (102, 10624), (110, 10666), (151, 10783),

Gene: Sergei_10 Start: 7547, Stop: 7984, Start Num: 20

Candidate Starts for Sergei_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (41, 7592), (42, 7595), (76, 7688), (83, 7703), (86, 7715), (90, 7724), (92, 7727), (102, 7748), (151, 7907),

Gene: Shambre1_12 Start: 8782, Stop: 9204, Start Num: 32

Candidate Starts for Shambre1_12:

(Start: 32 @8782 has 1 MA's), (52, 8827), (55, 8836), (147, 9097), (166, 9163), (168, 9181),

Gene: Sharkboy_11 Start: 8140, Stop: 8541, Start Num: 30

Candidate Starts for Sharkboy_11:

(Start: 30 @8140 has 14 MA's), (91, 8290), (125, 8404), (150, 8473),

Gene: Shayna_10 Start: 7746, Stop: 8147, Start Num: 25

Candidate Starts for Shayna_10:

(Start: 25 @7746 has 16 MA's), (83, 7875), (100, 7917), (110, 7962), (138, 8037), (150, 8079), (156, 8103),

Gene: Shen_13 Start: 8492, Stop: 8932, Start Num: 13

Candidate Starts for Shen_13:

(9, 8480), (Start: 13 @8492 has 43 MA's), (55, 8582), (69, 8624), (76, 8642), (77, 8645), (91, 8684), (117, 8777), (126, 8804), (137, 8828), (149, 8864), (161, 8900),

Gene: Shoya_10 Start: 7149, Stop: 7526, Start Num: 29

Candidate Starts for Shoya_10:

(Start: 29 @7149 has 57 MA's), (78, 7263), (88, 7290), (100, 7311), (132, 7419), (145, 7455), (152, 7488),

Gene: SilverChicken_13 Start: 7213, Stop: 7617, Start Num: 15

Candidate Starts for SilverChicken_13:

(Start: 15 @7213 has 7 MA's), (33, 7246), (56, 7306), (82, 7372), (121, 7492), (124, 7504), (146, 7540), (153, 7570),

Gene: SirBeanington_11 Start: 7914, Stop: 8309, Start Num: 29

Candidate Starts for SirBeanington_11:

(5, 7788), (Start: 29 @7914 has 57 MA's), (45, 7953), (59, 7980), (91, 8058), (120, 8157), (135, 8190), (163, 8283),

Gene: Skylord_10 Start: 7692, Stop: 8081, Start Num: 31

Candidate Starts for Skylord_10:

(Start: 31 @7692 has 12 MA's), (91, 7833), (100, 7851), (148, 8004), (150, 8013), (156, 8037), (166, 8067),

Gene: Slay_11 Start: 8364, Stop: 8759, Start Num: 29

Candidate Starts for Slay_11:

(5, 8238), (Start: 29 @8364 has 57 MA's), (45, 8403), (59, 8430), (91, 8508), (135, 8640), (163, 8733),

Gene: Softsoap_11 Start: 7911, Stop: 8306, Start Num: 29

Candidate Starts for Softsoap_11:

(5, 7785), (Start: 29 @7911 has 57 MA's), (45, 7950), (59, 7977), (91, 8055), (120, 8154), (135, 8187), (163, 8280),

Gene: Solea_12 Start: 8297, Stop: 8692, Start Num: 29

Candidate Starts for Solea_12:

(5, 8171), (Start: 29 @8297 has 57 MA's), (45, 8336), (59, 8363), (91, 8441), (120, 8540), (135, 8573), (163, 8666),

Gene: Soul22_13 Start: 7212, Stop: 7616, Start Num: 15

Candidate Starts for Soul22_13:

(Start: 15 @7212 has 7 MA's), (33, 7245), (56, 7305), (82, 7371), (121, 7491), (124, 7503), (146, 7539), (153, 7569),

Gene: Spartoi_10 Start: 6599, Stop: 7030, Start Num: 31

Candidate Starts for Spartoi_10:

(Start: 31 @6599 has 12 MA's), (44, 6635), (58, 6668), (60, 6674), (66, 6689), (104, 6785),

Gene: Squirrel_11 Start: 8143, Stop: 8535, Start Num: 25

Candidate Starts for Squirrel_11:

(Start: 25 @8143 has 16 MA's), (Start: 38 @8158 has 4 MA's), (59, 8209), (79, 8257), (84, 8272), (107, 8338), (127, 8401), (132, 8410), (143, 8434), (156, 8491),

Gene: Stoor_11 Start: 8157, Stop: 8552, Start Num: 29

Candidate Starts for Stoor_11:

(5, 8031), (Start: 29 @8157 has 57 MA's), (Start: 31 @8160 has 12 MA's), (55, 8220), (143, 8451), (150, 8484), (154, 8505),

Gene: Stromboli_11 Start: 8161, Stop: 8556, Start Num: 29

Candidate Starts for Stromboli_11:

(Start: 29 @8161 has 57 MA's), (Start: 31 @8164 has 12 MA's), (55, 8224), (125, 8419), (143, 8455), (150, 8488), (154, 8509),

Gene: StuartMinion_11 Start: 7928, Stop: 8371, Start Num: 13

Candidate Starts for StuartMinion_11:

(9, 7916), (Start: 13 @7928 has 43 MA's), (60, 8036), (78, 8084), (91, 8120), (94, 8126), (117, 8213), (126, 8240), (161, 8339), (163, 8345), (166, 8357),

Gene: Studio_13 Start: 7486, Stop: 7878, Start Num: 13

Candidate Starts for Studio_13:

(Start: 13 @7486 has 43 MA's), (Start: 38 @7525 has 4 MA's), (39, 7528), (69, 7588), (88, 7639), (91, 7642), (118, 7732), (159, 7846), (167, 7870),

Gene: SunnyD_10 Start: 7746, Stop: 8147, Start Num: 25

Candidate Starts for SunnyD_10:

(Start: 25 @7746 has 16 MA's), (83, 7875), (100, 7917), (138, 8037), (150, 8079), (156, 8103),

Gene: Supakev_10 Start: 7553, Stop: 7984, Start Num: 22

Candidate Starts for Supakev_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (36, 7574), (60, 7646), (86, 7715), (90, 7724), (102, 7748), (151, 7907),

Gene: Suppi_14 Start: 10446, Stop: 10859, Start Num: 22

Candidate Starts for Suppi_14:

(Start: 22 @10446 has 65 MA's), (43, 10491), (83, 10593), (116, 10701), (151, 10797),

Gene: Swervy_11 Start: 7888, Stop: 8283, Start Num: 29

Candidate Starts for Swervy_11:

(5, 7762), (Start: 29 @7888 has 57 MA's), (45, 7927), (59, 7954), (91, 8032), (135, 8164), (163, 8257),

Gene: TMaxx_13 Start: 7597, Stop: 7989, Start Num: 13

Candidate Starts for TMaxx_13:

(Start: 13 @7597 has 43 MA's), (69, 7699), (74, 7711), (118, 7843), (167, 7981),

Gene: TattModd_14 Start: 10423, Stop: 10836, Start Num: 22

Candidate Starts for TattModd_14:

(Start: 22 @10423 has 65 MA's), (76, 10558), (83, 10573), (102, 10618), (110, 10660), (151, 10777),

Gene: TaylorSipht_12 Start: 8370, Stop: 8810, Start Num: 13

Candidate Starts for TaylorSipht_12:

(Start: 13 @8370 has 43 MA's), (Start: 37 @8406 has 2 MA's), (57, 8469), (77, 8523), (78, 8526), (91, 8562), (111, 8634), (114, 8646), (126, 8682), (137, 8706), (149, 8742), (161, 8778),

Gene: Teagster_10 Start: 7746, Stop: 8147, Start Num: 25

Candidate Starts for Teagster_10:

(Start: 25 @7746 has 16 MA's), (83, 7875), (100, 7917), (138, 8037), (150, 8079), (156, 8103),

Gene: Temper16_10 Start: 7547, Stop: 7984, Start Num: 20

Candidate Starts for Temper16_10:

(Start: 20 @7547 has 9 MA's), (Start: 22 @7553 has 65 MA's), (41, 7592), (42, 7595), (76, 7688), (83, 7703), (86, 7715), (90, 7724), (92, 7727), (102, 7748), (151, 7907),

Gene: Toad24_13 Start: 8492, Stop: 8932, Start Num: 13

Candidate Starts for Toad24_13:

(9, 8480), (Start: 13 @8492 has 43 MA's), (55, 8582), (69, 8624), (76, 8642), (77, 8645), (91, 8684), (117, 8777), (126, 8804), (137, 8828), (149, 8864), (161, 8900),

Gene: TripleC_16 Start: 11103, Stop: 11495, Start Num: 13

Candidate Starts for TripleC_16:

(Start: 13 @11103 has 43 MA's), (67, 11199), (91, 11259), (116, 11343), (117, 11346), (167, 11487),

Gene: TukTuk_11 Start: 7948, Stop: 8343, Start Num: 29

Candidate Starts for TukTuk_11:

(5, 7822), (Start: 29 @7948 has 57 MA's), (45, 7987), (59, 8014), (91, 8092), (135, 8224), (163, 8317),

Gene: Typha_18 Start: 11994, Stop: 12434, Start Num: 7

Candidate Starts for Typha_18:

(Start: 7 @11994 has 4 MA's), (Start: 8 @11997 has 1 MA's), (42, 12075), (47, 12084), (54, 12090), (56, 12096), (85, 12174), (107, 12240), (117, 12276), (147, 12351), (157, 12390),

Gene: Urla_10 Start: 7561, Stop: 7974, Start Num: 22

Candidate Starts for Urla_10:

(Start: 22 @7561 has 65 MA's), (76, 7693), (83, 7708), (102, 7753), (103, 7756), (110, 7795), (132, 7855), (151, 7912),

Gene: VWB_11 Start: 8079, Stop: 8474, Start Num: 31

Candidate Starts for VWB_11:

(24, 8073), (Start: 31 @8079 has 12 MA's), (Start: 38 @8094 has 4 MA's), (59, 8160), (92, 8244), (111, 8310), (161, 8454),

Gene: Vallejo_14 Start: 10361, Stop: 10774, Start Num: 22

Candidate Starts for Vallejo_14:

(Start: 22 @10361 has 65 MA's), (76, 10496), (83, 10511), (102, 10556), (110, 10598), (151, 10715),

Gene: Vitas_10 Start: 7692, Stop: 8081, Start Num: 31

Candidate Starts for Vitas_10:

(Start: 31 @7692 has 12 MA's), (91, 7833), (100, 7851), (148, 8004), (150, 8013), (156, 8037), (166, 8067),

Gene: Vulpecula_12 Start: 8667, Stop: 9110, Start Num: 13

Candidate Starts for Vulpecula_12:

(Start: 13 @8667 has 43 MA's), (39, 8709), (44, 8727), (56, 8763), (76, 8817), (77, 8820), (91, 8859), (106, 8913), (117, 8952), (126, 8979), (137, 9003), (140, 9009),

Gene: Vulture_10 Start: 7551, Stop: 7982, Start Num: 22

Candidate Starts for Vulture_10:

(Start: 20 @7545 has 9 MA's), (Start: 22 @7551 has 65 MA's), (36, 7572), (60, 7644), (86, 7713), (90, 7722), (102, 7746), (151, 7905),

Gene: WalkingDead_11 Start: 8148, Stop: 8543, Start Num: 29

Candidate Starts for WalkingDead_11:

(Start: 29 @8148 has 57 MA's), (Start: 31 @8151 has 12 MA's), (55, 8211), (59, 8214), (143, 8442), (150, 8475), (154, 8496),

Gene: Wawa_14 Start: 10398, Stop: 10811, Start Num: 22

Candidate Starts for Wawa_14:

(Start: 22 @10398 has 65 MA's), (76, 10533), (83, 10548), (102, 10593), (110, 10635), (151, 10752),

Gene: Wayne_14 Start: 10492, Stop: 10905, Start Num: 22

Candidate Starts for Wayne_14:

(Start: 22 @10492 has 65 MA's), (43, 10537), (83, 10639), (116, 10747), (151, 10843),

Gene: Westrich_13 Start: 8480, Stop: 8920, Start Num: 13

Candidate Starts for Westrich_13:

(9, 8468), (Start: 13 @8480 has 43 MA's), (55, 8570), (69, 8612), (76, 8630), (77, 8633), (91, 8672), (117, 8765), (126, 8792), (137, 8816), (149, 8852), (161, 8888),

Gene: WileyE_11 Start: 8002, Stop: 8445, Start Num: 13

Candidate Starts for WileyE_11:

(Start: 13 @8002 has 43 MA's), (39, 8044), (44, 8062), (56, 8098), (76, 8152), (77, 8155), (91, 8194), (106, 8248), (117, 8287), (126, 8314), (137, 8338), (140, 8344),

Gene: WonderBoy_10 Start: 7514, Stop: 7924, Start Num: 22

Candidate Starts for WonderBoy_10:

(Start: 22 @7514 has 65 MA's), (50, 7577), (76, 7646), (83, 7661), (102, 7706), (110, 7748), (151, 7865),

Gene: Yoshi_13 Start: 7212, Stop: 7616, Start Num: 15

Candidate Starts for Yoshi_13:

(Start: 15 @7212 has 7 MA's), (33, 7245), (56, 7305), (82, 7371), (121, 7491), (124, 7503), (146, 7539), (153, 7569),

Gene: Zapner_14 Start: 7737, Stop: 8141, Start Num: 15

Candidate Starts for Zapner_14:

(Start: 15 @7737 has 7 MA's), (33, 7770), (56, 7830), (82, 7896), (121, 8016), (124, 8028), (146, 8064), (153, 8094),

Gene: Zhuangyuan_14 Start: 8650, Stop: 9102, Start Num: 10

Candidate Starts for Zhuangyuan_14:

(9, 8647), (10, 8650), (Start: 13 @8659 has 43 MA's), (41, 8710), (57, 8758), (112, 8929), (113, 8932), (137, 8995), (142, 9004), (149, 9034), (166, 9088),

Gene: Zixiang_12 Start: 8281, Stop: 8721, Start Num: 13

Candidate Starts for Zixiang_12:

(Start: 13 @8281 has 43 MA's), (55, 8371), (56, 8377), (69, 8413), (76, 8431), (77, 8434), (91, 8473), (117, 8566), (126, 8593), (137, 8617), (149, 8653), (161, 8689),

Gene: Zorro_14 Start: 10377, Stop: 10790, Start Num: 22

Candidate Starts for Zorro_14:

(Start: 22 @10377 has 65 MA's), (76, 10512), (83, 10527), (102, 10572), (110, 10614), (151, 10731),