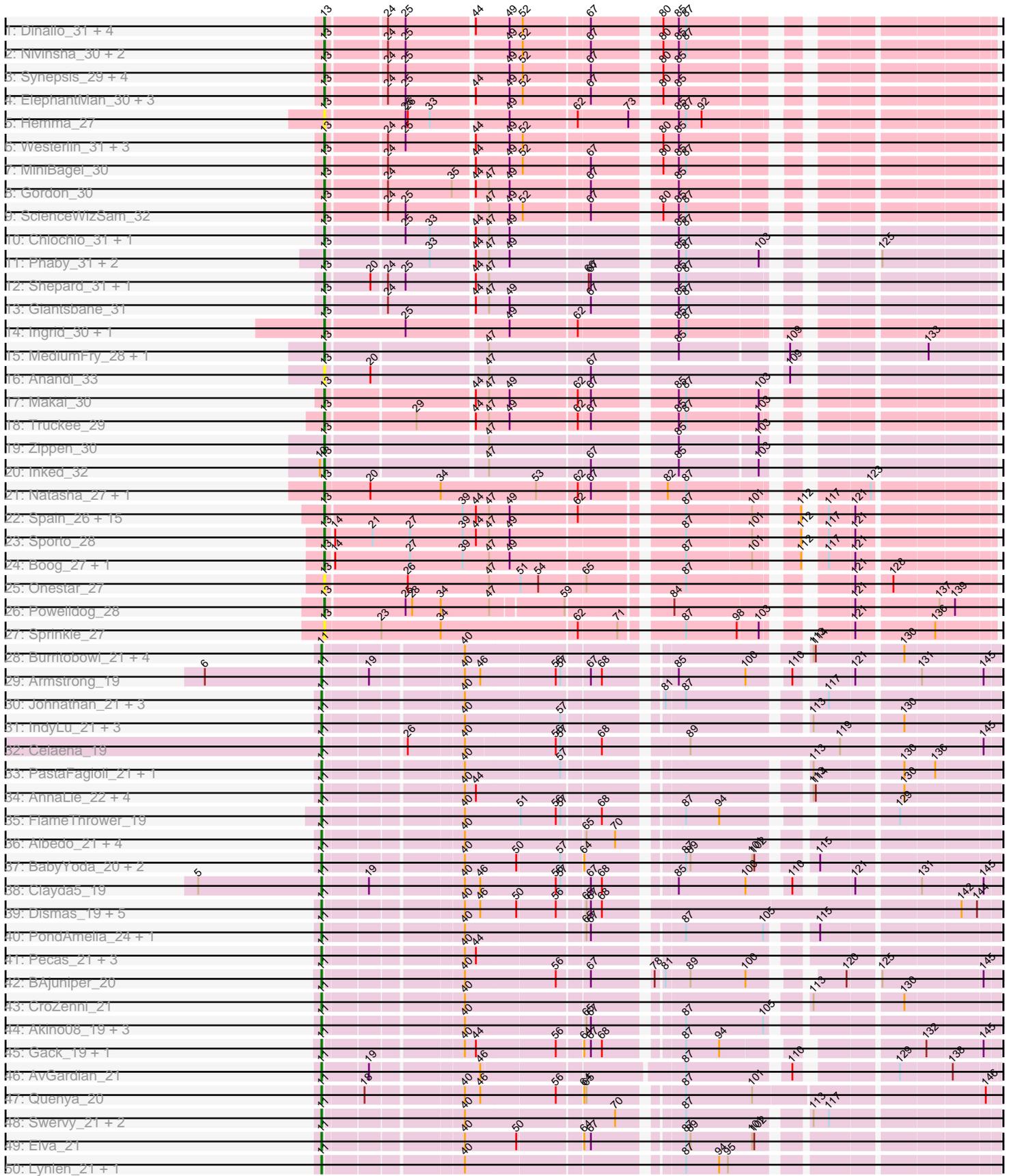
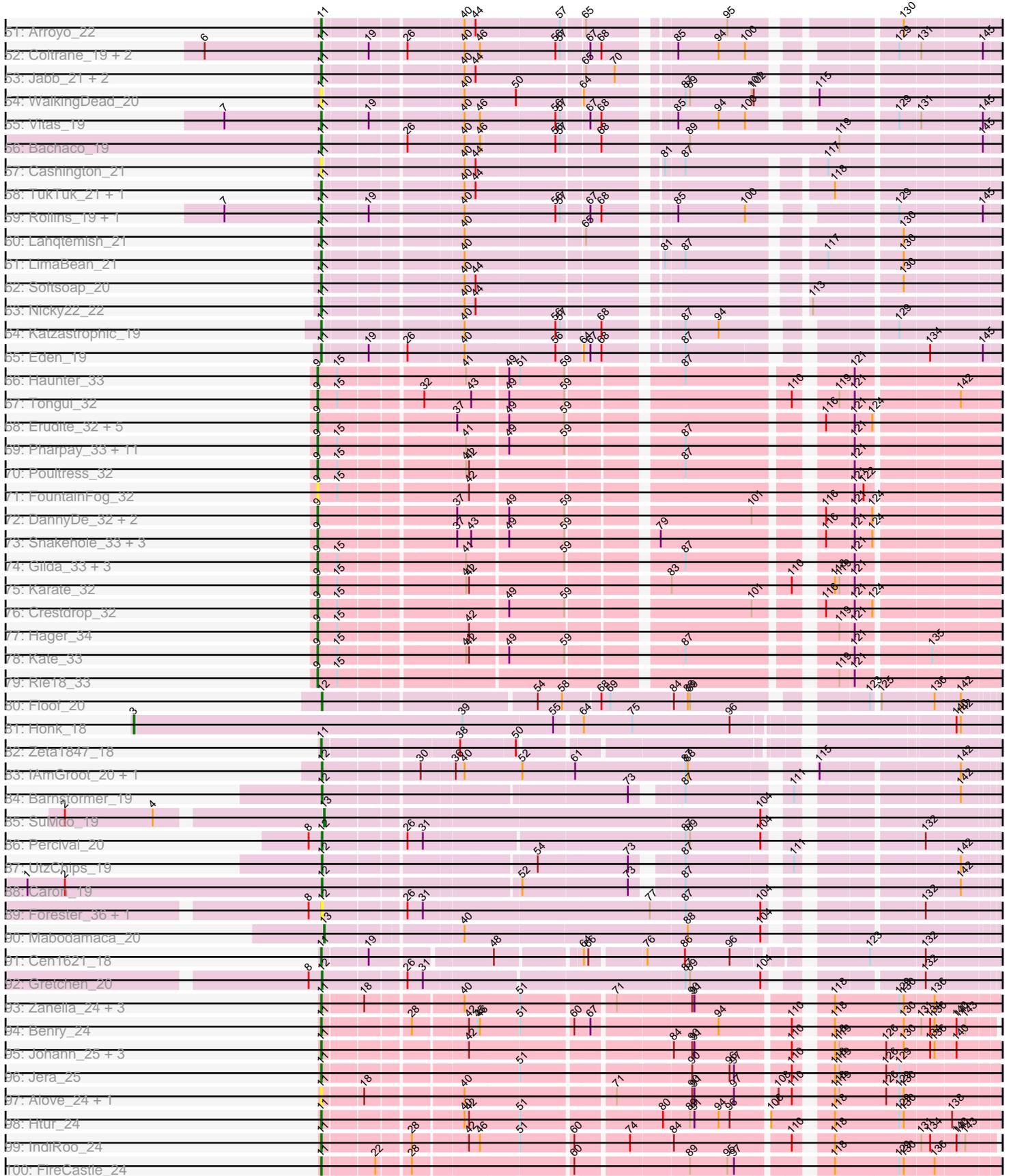


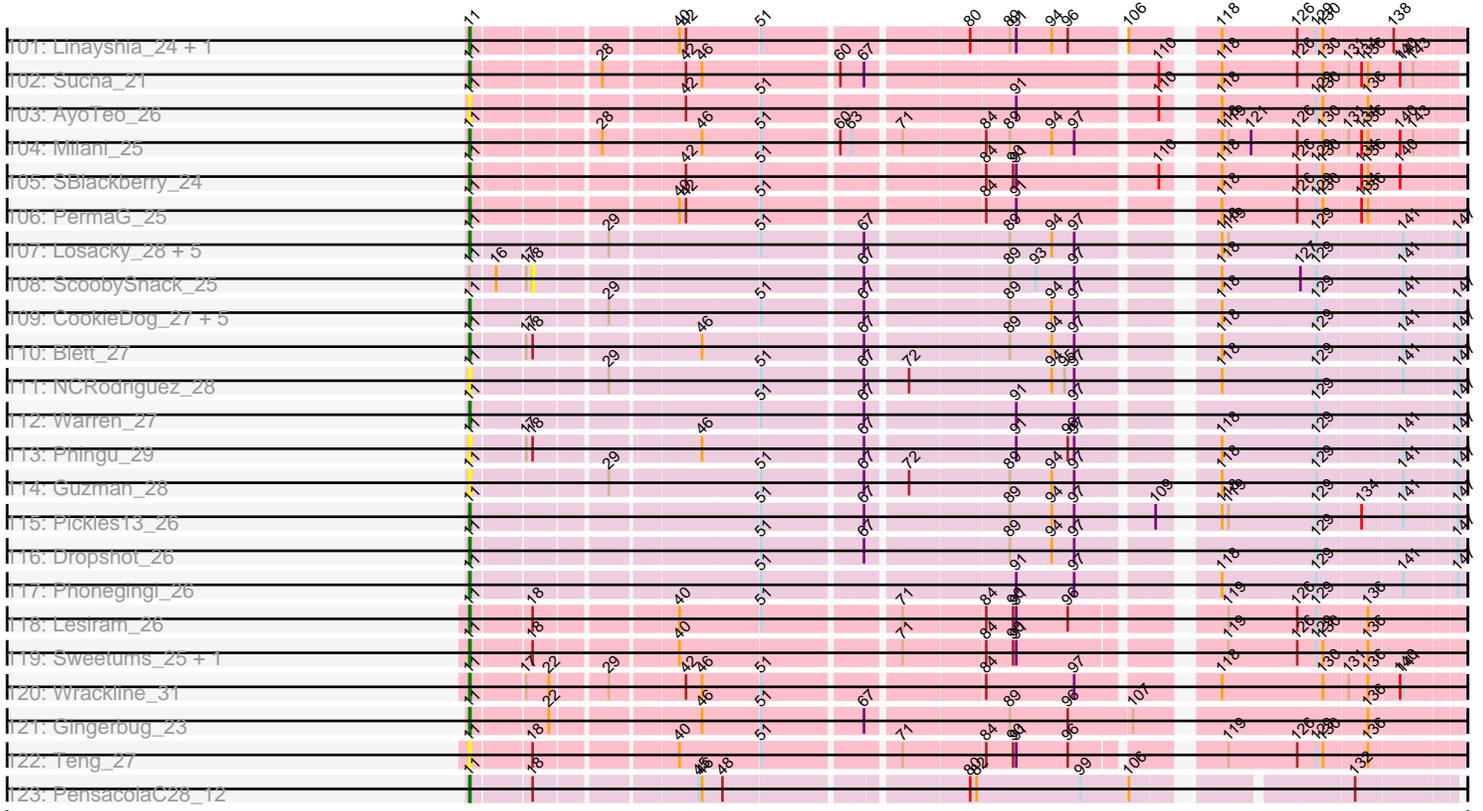
Pham 290806



Pham 290806



Pham 290806



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 290806 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290806 has 250 members, 44 are drafts.

Phages represented in each track:

- Track 1 : Dinallo_31, LucySwiss_30, CapnMurica_30, Acai_30, Tenno_31
- Track 2 : Nivinsha_30, Tatanka_30, AreFloNak_30
- Track 3 : Synepsis_29, CastorTray_32, Trustiboi_31, Breylor17_31, Darby_30
- Track 4 : ElephantMan_30, Brunswick_30, Niktson_30, Teacup_30
- Track 5 : Hemma_27
- Track 6 : Westerlin_31, Issa_30, DevitoJr_30, Nightmare_31
- Track 7 : MiniBagel_30
- Track 8 : Gordon_30
- Track 9 : ScienceWizSam_32
- Track 10 : Chlochlo_31, Tipton_31
- Track 11 : Phaby_31, Tokki_31, Bouchard_31
- Track 12 : Shepard_31, LilHuddy_31
- Track 13 : Giantsbane_31
- Track 14 : Ingrid_30, Loretta_30
- Track 15 : MediumFry_28, Caterpillar_28
- Track 16 : Anandi_33
- Track 17 : Makai_30
- Track 18 : Truckee_29
- Track 19 : Zippen_30
- Track 20 : Inked_32
- Track 21 : Natasha_27, RustyBoy_27
- Track 22 : Spain_26, ProfFrink_27, Raunak_27, Egad_27, Stayer_27, StarLord_27, Salk_27, Djungelskog_27, BronxBay_27, Shiba_27, MrAaronian_27, DoctorPepper_27, Jeremy4pt0_26, Michelle_27, Sloopyjoe_27, Linda_27
- Track 23 : Sporto_28
- Track 24 : Boog_27, HerbBucket_26
- Track 25 : Onestar_27
- Track 26 : Powelldog_28
- Track 27 : Sprinkle_27
- Track 28 : Burritobowl_21, DickRichards_21, PhigPhack_22, Bengal_21, Abigail_21
- Track 29 : Armstrong_19
- Track 30 : Johnathan_21, Avocadoman_21, Albright_21, Doobus_21
- Track 31 : IndyLu_21, Finalfrontier_22, Kate33_21, BabyDaisy_22
- Track 32 : Celaena_19
- Track 33 : PastaFagioli_21, Didgeridoo_22
- Track 34 : AnnaLie_22, SansAfet_21, BelmontSKP_22, Solea_23, Milomuff_22
- Track 35 : FlameThrower_19

- Track 36 : Albedo_21, SirBeanington_21, Phisb_21, BubbaBear_21, Lilo27_21
- Track 37 : BabyYoda_20, DirtyBubble_20, Stromboli_20
- Track 38 : Clayda5_19
- Track 39 : Dismas_19, Kieran_19, Rona_19, ChiliPepper_19, Kamdara_19, Sharkboy_19
- Track 40 : PondAmelia_24, Icarian_21
- Track 41 : Pecas_21, AylexOG_22, Eula_21, QMacho_22
- Track 42 : BAjuniper_20
- Track 43 : CroZenni_21
- Track 44 : Akino08_19, Stoor_20, Loviatar_20, SanaSana_21
- Track 45 : Gack_19, Franklin22_20
- Track 46 : AvGardian_21
- Track 47 : Quenya_20
- Track 48 : Swervy_21, Slay_21, SarBear_21
- Track 49 : Elva_21
- Track 50 : Lynlen_21, Kenzers_21
- Track 51 : Arroyo_22
- Track 52 : Coltrane_19, Brahms_19, Skylord_19
- Track 53 : Jabb_21, MsUbiquitous_21, CupcakePrincess_21
- Track 54 : WalkingDead_20
- Track 55 : Vitas_19
- Track 56 : Bachaco_19
- Track 57 : Cashington_21
- Track 58 : TukTuk_21, Jovita_21
- Track 59 : Rollins_19, Bernstein_19
- Track 60 : Lahqtemish_21
- Track 61 : LimaBean_21
- Track 62 : Softsoap_20
- Track 63 : Nicky22_22
- Track 64 : Katzastrophic_19
- Track 65 : Eden_19
- Track 66 : Haunter_33
- Track 67 : Tongui_32
- Track 68 : Erudite_32, MortySmith_31, JingleBells_32, Dauntless_32, Aesir_32, JDawG_32
- Track 69 : Pharpay_33, Artiphact_33, CoolCookie_33, Neptune_33, AnnaSerena_33, OhDear_33, PhunaPhoke_33, OverHedge_33, Rachella_33, Krampus_33, Potty_33, Cybele_33
- Track 70 : Poultruss_32
- Track 71 : FountainFog_32
- Track 72 : DannyDe_32, Annapurna_32, SilentWarrior_32
- Track 73 : Snakehole_33, Hiddenleaf_32, FreddieHg_32, Chivey_32
- Track 74 : Gilda_33, Anakin_33, Tedro_33, NarutoRun_33
- Track 75 : Karate_32
- Track 76 : Crestdrop_32
- Track 77 : Hager_34
- Track 78 : Kate_33
- Track 79 : Rie18_33
- Track 80 : Floof_20
- Track 81 : Honk_18
- Track 82 : Zeta1847_18
- Track 83 : IAmGroot_20, GardenState_20
- Track 84 : Barnstormer_19

- Track 85 : SuMoo_19
- Track 86 : Percival_20
- Track 87 : UtzChips_19
- Track 88 : Caron_19
- Track 89 : Forester_36, SuperHands_21
- Track 90 : Mabodamaca_20
- Track 91 : Cen1621_18
- Track 92 : Gretchen_20
- Track 93 : Zanella_24, Labela_26, TurboVicky_24, Typher_26
- Track 94 : Benry_24
- Track 95 : Johann_25, Cicada_26, Olympi_26, Goodman_25
- Track 96 : Jera_25
- Track 97 : Alove_24, Rootkit7_24
- Track 98 : Htur_24
- Track 99 : IndiRoo_24
- Track 100 : FireCastle_24
- Track 101 : Linayshia_24, Rasovi_24
- Track 102 : Sucha_21
- Track 103 : AyoTeo_26
- Track 104 : Milani_25
- Track 105 : SBlackberry_24
- Track 106 : PermaG_25
- Track 107 : Losacky_28, Bush_27, Antuna_27, Violeta_28, MenE_27, Appa_26
- Track 108 : ScoobySnack_25
- Track 109 : CookieDog_27, Carrillo_28, Jakelyne_29, PhillyJawn_27, Mariel_30, Winchester007_42
- Track 110 : Blett_27
- Track 111 : NCRodriguez_28
- Track 112 : Warren_27
- Track 113 : Phingu_29
- Track 114 : Guzman_28
- Track 115 : Pickles13_26
- Track 116 : Dropshot_26
- Track 117 : Phonegingi_26
- Track 118 : Lesiram_26
- Track 119 : Sweetums_25, DelaGarza_25
- Track 120 : Wrackline_31
- Track 121 : Gingerbug_23
- Track 122 : Teng_27
- Track 123 : PensacolaC28_12

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

The start number called the most often in the published annotations is 11, it was called in 109 of the 206 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abigail_21, Akino08_19, Albedo_21, Albright_21, Alove_24, AnnaLie_22, Antuna_27, Appa_26, Armstrong_19, Arroyo_22, AvGuardian_21, Avocadoman_21, AylexOG_22, AyoTeo_26, BAjuniper_20, BabyDaisy_22, BabyYoda_20,

Bachaco_19, BelmontSKP_22, Bengal_21, Benry_24, Bernstein_19, Blett_27, Brahms_19, BubbaBear_21, Burritobowl_21, Bush_27, Carrillo_28, Cashington_21, Celaena_19, Cen1621_18, ChiliPepper_19, Cicada_26, Clayda5_19, Coltrane_19, CookieDog_27, CroZenni_21, CupcakePrincess_21, DelaGarza_25, DickRichards_21, Didgeridoo_22, DirtyBubble_20, Dismas_19, Doobus_21, Dropshot_26, Eden_19, Elva_21, Eula_21, Finalfrontier_22, FireCastle_24, FlameThrower_19, Franklin22_20, Gack_19, Gingerbug_23, Goodman_25, Guzman_28, Htur_24, Icarian_21, IndiRoo_24, IndyLu_21, Jabb_21, Jakelyne_29, Jera_25, Johann_25, Johnathan_21, Jovita_21, Kamdara_19, Kate33_21, Katzastrophic_19, Kenzers_21, Kieran_19, Labella_26, Lahqtemish_21, Lesiram_26, Lilo27_21, LimaBean_21, Linayshia_24, Losacky_28, Loviatar_20, Lynlen_21, Mariel_30, MenE_27, Milani_25, Milomuff_22, MsUbiquitous_21, NCRodriguez_28, Nicky22_22, Olympi_26, PastaFagioli_21, Pecas_21, PensacolaC28_12, PermaG_25, PhigPhack_22, PhillyJawn_27, Phingu_29, Phisb_21, Phonegingi_26, Pickles13_26, PondAmelia_24, QMacho_22, Quenya_20, Rasovi_24, Rollins_19, Rona_19, Rootkit7_24, SBlackberry_24, SanaSana_21, SansAfet_21, SarBear_21, Sharkboy_19, SirBeanington_21, Skylord_19, Slay_21, Softsoap_20, Solea_23, Stoor_20, Stromboli_20, Sucha_21, Sweetums_25, Swervy_21, Teng_27, TukTuk_21, TurboVicky_24, Typher_26, Violeta_28, Vitas_19, WalkingDead_20, Warren_27, Winchester007_42, Wrackline_31, Zanella_24, Zeta1847_18,

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

- ScoobySnack_25,

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

- Acai_30, Aesir_32, Anakin_33, Anandi_33, AnnaSerena_33, Annapurna_32, AreFloNak_30, Artiphact_33, Barnstormer_19, Boog_27, Bouchard_31, Breylor17_31, BronxBay_27, Brunswick_30, CapnMurica_30, Caron_19, CastorTray_32, Caterpillar_28, Chivey_32, Chlochlo_31, CoolCookie_33, Crestdrop_32, Cybele_33, DannyDe_32, Darby_30, Dauntless_32, DevitoJr_30, Dinallo_31, Djungelskog_27, DoctorPepper_27, Egad_27, ElephantMan_30, Erudite_32, Floof_20, Forester_36, FountainFog_32, FreddieHg_32, GardenState_20, Giantsbane_31, Gilda_33, Gordon_30, Gretchen_20, Hager_34, Haunter_33, Hemma_27, HerbBucket_26, Hiddenleaf_32, Honk_18, IAmGroot_20, Ingrid_30, Inked_32, Issa_30, JDawG_32, Jeremy4pt0_26, JingleBells_32, Karate_32, Kate_33, Krampus_33, LilHuddy_31, Linda_27, Loretta_30, LucySwiss_30, Mabodamaca_20, Makai_30, MediumFry_28, Michelle_27, MiniBagel_30, MortySmith_31, MrAaronian_27, NarutoRun_33, Natasha_27, Neptune_33, Nightmare_31, Niktson_30, Nivinsha_30, OhDear_33, Onestar_27, OverHedge_33, Percival_20, Phaby_31, Pharpay_33, PhunaPhoke_33, Potty_33, Poultruss_32, Powelldog_28, ProfFrink_27, Rachella_33, Raunak_27, Rie18_33, RustyBoy_27, Salk_27, ScienceWizSam_32, Shepard_31, Shiba_27, SilentWarrior_32, Sloopyjoe_27, Snakehole_33, Spain_26, Sporto_28, Sprinkle_27, StarLord_27, Stayer_27, SuMoo_19, SuperHands_21, Synopsis_29, Tatanka_30, Teacup_30, Tedro_33, Tenno_31, Tipton_31, Tokki_31, Tongui_32, Truckee_29, Trustiboi_31, UtzChips_19, Westerlin_31, Zippen_30,

Summary by start number:

Start 3:

- Found in 1 of 250 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 206
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Honk_18 (EH),

Start 9:

- Found in 38 of 250 (15.2%) of genes in pham
- Manual Annotations of this start: 34 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aesir_32 (EF), Anakin_33 (EF), AnnaSerena_33 (EF), Annapurna_32 (EF), Artiphact_33 (EF), Chivey_32 (EF), CoolCookie_33 (EF), Crestdrop_32 (EF), Cybele_33 (EF), DannyDe_32 (EF), Dauntless_32 (EF), Erudite_32 (EF), FountainFog_32 (EF), FreddieHg_32 (EF), Gilda_33 (EF), Hager_34 (EF), Haunter_33 (EF), Hiddenleaf_32 (EF), JDawG_32 (EF), JingleBells_32 (EF), Karate_32 (EF), Kate_33 (EF), Krampus_33 (EF), MortySmith_31 (EF), NarutoRun_33 (EF), Neptune_33 (EF), OhDear_33 (EF), OverHedge_33 (EF), Pharpay_33 (EF), PhunaPhoke_33 (EF), Potty_33 (EF), Poultruss_32 (EF), Rachella_33 (EF), Rie18_33 (EF), SilentWarrior_32 (EF), Snakehole_33 (EF), Tedro_33 (EF), Tongui_32 (EF),

Start 11:

- Found in 133 of 250 (53.2%) of genes in pham
- Manual Annotations of this start: 109 of 206
- Called 99.2% of time when present
- Phage (with cluster) where this start called: Abigail_21 (EB), Akino08_19 (EB), Albedo_21 (EB), Albright_21 (EB), Alove_24 (EJ), AnnaLie_22 (EB), Antuna_27 (GA), Appa_26 (GA), Armstrong_19 (EB), Arroyo_22 (EB), AvGardian_21 (EB), Avocadoman_21 (EB), AylexOG_22 (EB), AyoTeo_26 (EJ), BAjuniper_20 (EB), BabyDaisy_22 (EB), BabyYoda_20 (EB), Bachaco_19 (EB), BelmontSKP_22 (EB), Bengal_21 (EB), Benry_24 (EJ), Bernstein_19 (EB), Blett_27 (GA), Brahms_19 (EB), BubbaBear_21 (EB), Burritobowl_21 (EB), Bush_27 (GA), Carrillo_28 (GA), Cashington_21 (EB), Celaena_19 (EB), Cen1621_18 (EH), ChiliPepper_19 (EB), Cicada_26 (EJ), Clayda5_19 (EB), Coltrane_19 (EB), CookieDog_27 (GA), CroZenni_21 (EB), CupcakePrincess_21 (EB), DelaGarza_25 (GF), DickRichards_21 (EB), Didgeridoo_22 (EB), DirtyBubble_20 (EB), Dismas_19 (EB), Doobus_21 (EB), Dropshot_26 (GA), Eden_19 (EB), Elva_21 (EB), Eula_21 (EB), Finalfrontier_22 (EB), FireCastle_24 (EJ), FlameThrower_19 (EB), Franklin22_20 (EB), Gack_19 (EB), Gingerbug_23 (GF), Goodman_25 (EJ), Guzman_28 (GA), Htur_24 (EJ), Icarian_21 (EB), IndiRoo_24 (EJ), IndyLu_21 (EB), Jabb_21 (EB), Jakelyne_29 (GA), Jera_25 (EJ), Johann_25 (EJ), Johnathan_21 (EB), Jovita_21 (EB), Kamdara_19 (EB), Kate33_21 (EB), Katzastrophic_19 (EB), Kenzers_21 (EB), Kieran_19 (EB), Labella_26 (EJ), Lahqtemish_21 (EB), Lesiram_26 (GF), Lilo27_21 (EB), LimaBean_21 (EB), Linayshia_24 (EJ), Losacky_28 (GA), Loviatar_20 (EB), Lynlen_21 (EB), Mariel_30 (GA), MenE_27 (GA), Milani_25 (EJ), Milomuff_22 (EB), MsUbiquitous_21 (EB), NCRodriguez_28 (GA), Nicky22_22 (EB), Olympi_26 (EJ), PastaFagioli_21 (EB), Pecas_21 (EB), PensacolaC28_12 (singleton), PermaG_25 (EJ), PhigPhack_22 (EB), PhillyJawn_27 (GA), Phingu_29 (GA), Phisb_21 (EB), Phonegingi_26 (GA), Pickles13_26 (GA), PondAmelia_24 (EB), QMacho_22 (EB), Quenya_20 (EB), Rasovi_24 (EJ), Rollins_19 (EB), Rona_19 (EB), Rootkit7_24 (EJ), SBlackberry_24 (EJ), SanaSana_21 (EB), SansAfet_21 (EB), SarBear_21 (EB), Sharkboy_19 (EB), SirBeanington_21 (EB), Skylord_19 (EB), Slay_21 (EB), Softsoap_20 (EB), Solea_23 (EB), Stoor_20 (EB), Stromboli_20 (EB), Sucha_21 (EJ), Sweetums_25 (GF), Swervy_21 (EB), Teng_27 (GF), TukTuk_21 (EB), TurboVicky_24 (EJ), Typher_26 (EJ), Violeta_28 (GA), Vitas_19 (EB), WalkingDead_20 (EB), Warren_27 (GA), Winchester007_42 (GA), Wrackline_31 (GF), Zanella_24 (EJ), Zeta1847_18 (EH),

Start 12:

- Found in 10 of 250 (4.0%) of genes in pham
- Manual Annotations of this start: 8 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barnstormer_19 (EH), Caron_19 (EH), Floof_20 (EH), Forester_36 (EH), GardenState_20 (EH), Gretchen_20 (EH), IAmGroot_20 (EH), Percival_20 (EH), SuperHands_21 (EH), UtzChips_19 (EH),

Start 13:

- Found in 68 of 250 (27.2%) of genes in pham
- Manual Annotations of this start: 54 of 206
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acai_30 (AU1), Anandi_33 (AU4), AreFloNak_30 (AU1), Boog_27 (AW), Bouchard_31 (AU2), Breylor17_31 (AU1), BronxBay_27 (AW), Brunswick_30 (AU1), CapnMurica_30 (AU1), CastorTray_32 (AU1), Caterpillar_28 (AU4), Chlochlo_31 (AU2), Darby_30 (AU1), DevitoJr_30 (AU1), Dinallo_31 (AU1), Djungelskog_27 (AW), DoctorPepper_27 (AW), Egad_27 (AW), ElephantMan_30 (AU1), Giantsbane_31 (AU2), Gordon_30 (AU1), Hemma_27 (AU1), HerbBucket_26 (AW), Ingrid_30 (AU3), Inked_32 (AU7), Issa_30 (AU1), Jeremy4pt0_26 (AW), LilHuddy_31 (AU2), Linda_27 (AW), Loretta_30 (AU3), LucySwiss_30 (AU1), Mabodamaca_20 (EH), Makai_30 (AU5), MediumFry_28 (AU4), Michelle_27 (AW), MiniBagel_30 (AU1), MrAaronian_27 (AW), Natasha_27 (AW), Nightmare_31 (AU1), Niktson_30 (AU1), Nivinsha_30 (AU1), Onestar_27 (AW), Phaby_31 (AU2), Powelldog_28 (AW), ProfFrink_27 (AW), Raunak_27 (AW), RustyBoy_27 (AW), Salk_27 (AW), ScienceWizSam_32 (AU1), Shepard_31 (AU2), Shiba_27 (AW), Sloopyjoe_27 (AW), Spain_26 (AW), Sporto_28 (AW), Sprinkle_27 (AW), StarLord_27 (AW), Stayer_27 (AW), SuMoo_19 (EH), Synepsis_29 (AU1), Tatanka_30 (AU1), Teacup_30 (AU1), Tenno_31 (AU1), Tipton_31 (AU2), Tokki_31 (AU2), Truckee_29 (AU5), Trustiboi_31 (AU1), Westerlin_31 (AU1), Zippen_30 (AU7),

Start 18:

- Found in 15 of 250 (6.0%) of genes in pham
- No Manual Annotations of this start.
- Called 6.7% of time when present
- Phage (with cluster) where this start called: ScoobySnack_25 (GA),

Summary by clusters:

There are 14 clusters represented in this pham: singleton, AU7, GA, EJ, EF, EB, AU1, GF, AU3, AU2, AU5, AU4, AW, EH,

Info for manual annotations of cluster AU1:

- Start number 13 was manually annotated 19 times for cluster AU1.

Info for manual annotations of cluster AU2:

- Start number 13 was manually annotated 7 times for cluster AU2.

Info for manual annotations of cluster AU3:

- Start number 13 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 13 was manually annotated 2 times for cluster AU4.

Info for manual annotations of cluster AU5:

- Start number 13 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU7:

- Start number 13 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 13 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster EB:

- Start number 11 was manually annotated 73 times for cluster EB.

Info for manual annotations of cluster EF:

- Start number 9 was manually annotated 34 times for cluster EF.

Info for manual annotations of cluster EH:

- Start number 3 was manually annotated 1 time for cluster EH.
- Start number 11 was manually annotated 2 times for cluster EH.
- Start number 12 was manually annotated 8 times for cluster EH.
- Start number 13 was manually annotated 2 times for cluster EH.

Info for manual annotations of cluster EJ:

- Start number 11 was manually annotated 18 times for cluster EJ.

Info for manual annotations of cluster GA:

- Start number 11 was manually annotated 11 times for cluster GA.

Info for manual annotations of cluster GF:

- Start number 11 was manually annotated 4 times for cluster GF.

Gene Information:

Gene: Abigail_21 Start: 17351, Stop: 18154, Start Num: 11

Candidate Starts for Abigail_21:

(Start: 11 @17351 has 109 MA's), (40, 17519), (113, 17924), (114, 17927), (130, 18035),

Gene: Acai_30 Start: 26931, Stop: 27719, Start Num: 13

Candidate Starts for Acai_30:

(Start: 13 @26931 has 54 MA's), (24, 27006), (25, 27030), (44, 27117), (49, 27162), (52, 27180), (67, 27264), (80, 27345), (85, 27366), (87, 27375),

Gene: Aesir_32 Start: 21196, Stop: 22008, Start Num: 9

Candidate Starts for Aesir_32:

(Start: 9 @21196 has 34 MA's), (37, 21367), (49, 21430), (59, 21505), (116, 21796), (121, 21832), (124, 21856),

Gene: Akino08_19 Start: 16890, Stop: 17693, Start Num: 11

Candidate Starts for Akino08_19:

(Start: 11 @16890 has 109 MA's), (40, 17058), (65, 17211), (67, 17217), (87, 17319), (105, 17424),

Gene: Albedo_21 Start: 17222, Stop: 18025, Start Num: 11
Candidate Starts for Albedo_21:
(Start: 11 @17222 has 109 MA's), (40, 17390), (65, 17543), (70, 17582),

Gene: Albright_21 Start: 17109, Stop: 17912, Start Num: 11
Candidate Starts for Albright_21:
(Start: 11 @17109 has 109 MA's), (40, 17277), (81, 17514), (87, 17538), (117, 17703),

Gene: Alove_24 Start: 19193, Stop: 20014, Start Num: 11
Candidate Starts for Alove_24:
(Start: 11 @19193 has 109 MA's), (18, 19244), (40, 19361), (71, 19547), (90, 19643), (91, 19646), (97, 19700), (108, 19748), (110, 19766), (118, 19802), (119, 19808), (126, 19871), (129, 19889), (130, 19895),

Gene: Anakin_33 Start: 21454, Stop: 22266, Start Num: 9
Candidate Starts for Anakin_33:
(Start: 9 @21454 has 34 MA's), (15, 21481), (41, 21637), (59, 21763), (87, 21898), (121, 22090),

Gene: Anandi_33 Start: 27487, Stop: 28284, Start Num: 13
Candidate Starts for Anandi_33:
(Start: 13 @27487 has 54 MA's), (20, 27544), (47, 27691), (67, 27820), (109, 28051),

Gene: AnnaLie_22 Start: 17538, Stop: 18341, Start Num: 11
Candidate Starts for AnnaLie_22:
(Start: 11 @17538 has 109 MA's), (40, 17706), (44, 17721), (113, 18111), (114, 18114), (130, 18222),

Gene: AnnaSerena_33 Start: 21465, Stop: 22277, Start Num: 9
Candidate Starts for AnnaSerena_33:
(Start: 9 @21465 has 34 MA's), (15, 21492), (41, 21648), (49, 21699), (59, 21774), (87, 21909), (121, 22101),

Gene: Annapurna_32 Start: 20658, Stop: 21470, Start Num: 9
Candidate Starts for Annapurna_32:
(Start: 9 @20658 has 34 MA's), (37, 20829), (49, 20892), (59, 20967), (101, 21192), (116, 21258), (121, 21294), (124, 21318),

Gene: Antuna_27 Start: 17508, Stop: 18329, Start Num: 11
Candidate Starts for Antuna_27:
(Start: 11 @17508 has 109 MA's), (29, 17619), (51, 17748), (67, 17835), (89, 17955), (94, 17994), (97, 18015), (118, 18117), (119, 18123), (129, 18204), (141, 18279), (147, 18324),

Gene: Appa_26 Start: 17370, Stop: 18191, Start Num: 11
Candidate Starts for Appa_26:
(Start: 11 @17370 has 109 MA's), (29, 17481), (51, 17610), (67, 17697), (89, 17817), (94, 17856), (97, 17877), (118, 17979), (119, 17985), (129, 18066), (141, 18141), (147, 18186),

Gene: AreFloNak_30 Start: 26892, Stop: 27680, Start Num: 13
Candidate Starts for AreFloNak_30:
(Start: 13 @26892 has 54 MA's), (24, 26967), (25, 26991), (49, 27123), (52, 27141), (67, 27225), (80, 27306), (85, 27327), (87, 27336),

Gene: Armstrong_19 Start: 15059, Stop: 15847, Start Num: 11
Candidate Starts for Armstrong_19:

(6, 14900), (Start: 11 @15059 has 109 MA's), (19, 15113), (40, 15227), (46, 15248), (56, 15347), (57, 15353), (67, 15386), (68, 15401), (85, 15479), (100, 15569), (110, 15611), (121, 15671), (131, 15749), (145, 15827),

Gene: Arroyo_22 Start: 17739, Stop: 18542, Start Num: 11

Candidate Starts for Arroyo_22:

(Start: 11 @17739 has 109 MA's), (40, 17907), (44, 17922), (57, 18033), (65, 18060), (95, 18225), (130, 18423),

Gene: Artiphact_33 Start: 21455, Stop: 22267, Start Num: 9

Candidate Starts for Artiphact_33:

(Start: 9 @21455 has 34 MA's), (15, 21482), (41, 21638), (49, 21689), (59, 21764), (87, 21899), (121, 22091),

Gene: AvGardian_21 Start: 16503, Stop: 17306, Start Num: 11

Candidate Starts for AvGardian_21:

(Start: 11 @16503 has 109 MA's), (19, 16560), (46, 16695), (87, 16947), (110, 17073), (129, 17184), (138, 17250),

Gene: Avocadoman_21 Start: 17294, Stop: 18097, Start Num: 11

Candidate Starts for Avocadoman_21:

(Start: 11 @17294 has 109 MA's), (40, 17462), (81, 17699), (87, 17723), (117, 17888),

Gene: AylexOG_22 Start: 17559, Stop: 18362, Start Num: 11

Candidate Starts for AylexOG_22:

(Start: 11 @17559 has 109 MA's), (40, 17727), (44, 17742),

Gene: AyoTeo_26 Start: 19322, Stop: 20143, Start Num: 11

Candidate Starts for AyoTeo_26:

(Start: 11 @19322 has 109 MA's), (42, 19496), (51, 19562), (91, 19775), (110, 19895), (118, 19931), (129, 20018), (130, 20024), (136, 20063),

Gene: BAjuniper_20 Start: 16995, Stop: 17786, Start Num: 11

Candidate Starts for BAjuniper_20:

(Start: 11 @16995 has 109 MA's), (40, 17163), (56, 17283), (67, 17322), (78, 17391), (81, 17400), (89, 17430), (100, 17505), (120, 17598), (125, 17634), (145, 17766),

Gene: BabyDaisy_22 Start: 17351, Stop: 18157, Start Num: 11

Candidate Starts for BabyDaisy_22:

(Start: 11 @17351 has 109 MA's), (40, 17519), (57, 17645), (113, 17924), (130, 18035),

Gene: BabyYoda_20 Start: 16979, Stop: 17782, Start Num: 11

Candidate Starts for BabyYoda_20:

(Start: 11 @16979 has 109 MA's), (40, 17147), (50, 17216), (57, 17273), (64, 17297), (87, 17408), (89, 17414), (101, 17498), (102, 17501), (115, 17561),

Gene: Bachaco_19 Start: 16998, Stop: 17840, Start Num: 11

Candidate Starts for Bachaco_19:

(Start: 11 @16998 has 109 MA's), (26, 17094), (40, 17166), (46, 17187), (56, 17283), (57, 17289), (68, 17337), (89, 17436), (119, 17640), (145, 17817),

Gene: Barnstormer_19 Start: 16890, Stop: 17669, Start Num: 12

Candidate Starts for Barnstormer_19:

(Start: 12 @16890 has 8 MA's), (73, 17268), (87, 17319), (111, 17442), (142, 17628),

Gene: BelmontSKP_22 Start: 17538, Stop: 18341, Start Num: 11

Candidate Starts for BelmontSKP_22:

(Start: 11 @17538 has 109 MA's), (40, 17706), (44, 17721), (113, 18111), (114, 18114), (130, 18222),

Gene: Bengal_21 Start: 17126, Stop: 17929, Start Num: 11

Candidate Starts for Bengal_21:

(Start: 11 @17126 has 109 MA's), (40, 17294), (113, 17699), (114, 17702), (130, 17810),

Gene: Benry_24 Start: 17906, Stop: 18721, Start Num: 11

Candidate Starts for Benry_24:

(Start: 11 @17906 has 109 MA's), (28, 18011), (42, 18080), (45, 18092), (46, 18095), (51, 18146), (60, 18212), (67, 18233), (94, 18392), (110, 18479), (118, 18515), (130, 18608), (131, 18629), (134, 18641), (136, 18647), (140, 18674), (141, 18677), (143, 18686),

Gene: Bernstein_19 Start: 15090, Stop: 15878, Start Num: 11

Candidate Starts for Bernstein_19:

(7, 14958), (Start: 11 @15090 has 109 MA's), (19, 15144), (40, 15258), (56, 15378), (57, 15384), (67, 15417), (68, 15432), (85, 15510), (100, 15600), (129, 15753), (145, 15858),

Gene: Blett_27 Start: 17523, Stop: 18341, Start Num: 11

Candidate Starts for Blett_27:

(Start: 11 @17523 has 109 MA's), (17, 17568), (18, 17574), (46, 17709), (67, 17847), (89, 17967), (94, 18006), (97, 18027), (118, 18129), (129, 18216), (141, 18291), (147, 18336),

Gene: Boog_27 Start: 24030, Stop: 24830, Start Num: 13

Candidate Starts for Boog_27:

(Start: 13 @24030 has 54 MA's), (14, 24039), (27, 24141), (39, 24213), (47, 24249), (49, 24276), (87, 24483), (101, 24570), (112, 24612), (117, 24627), (121, 24660),

Gene: Bouchard_31 Start: 27071, Stop: 27862, Start Num: 13

Candidate Starts for Bouchard_31:

(Start: 13 @27071 has 54 MA's), (33, 27203), (44, 27257), (47, 27275), (49, 27302), (85, 27506), (87, 27515), (103, 27611), (125, 27719),

Gene: Brahms_19 Start: 15035, Stop: 15823, Start Num: 11

Candidate Starts for Brahms_19:

(6, 14876), (Start: 11 @15035 has 109 MA's), (19, 15089), (26, 15131), (40, 15203), (46, 15224), (56, 15323), (57, 15329), (67, 15362), (68, 15377), (85, 15455), (94, 15509), (100, 15545), (129, 15698), (131, 15725), (145, 15803),

Gene: Breylor17_31 Start: 27498, Stop: 28286, Start Num: 13

Candidate Starts for Breylor17_31:

(Start: 13 @27498 has 54 MA's), (24, 27573), (25, 27597), (49, 27729), (52, 27747), (67, 27831), (80, 27912), (85, 27933),

Gene: BronxBay_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for BronxBay_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Brunswick_30 Start: 26964, Stop: 27752, Start Num: 13

Candidate Starts for Brunswick_30:

(Start: 13 @26964 has 54 MA's), (24, 27039), (25, 27063), (44, 27150), (49, 27195), (52, 27213), (67, 27297), (80, 27378), (85, 27399),

Gene: BubbaBear_21 Start: 17222, Stop: 18025, Start Num: 11

Candidate Starts for BubbaBear_21:

(Start: 11 @17222 has 109 MA's), (40, 17390), (65, 17543), (70, 17582),

Gene: Burritobowl_21 Start: 17294, Stop: 18097, Start Num: 11

Candidate Starts for Burritobowl_21:

(Start: 11 @17294 has 109 MA's), (40, 17462), (113, 17867), (114, 17870), (130, 17978),

Gene: Bush_27 Start: 17498, Stop: 18319, Start Num: 11

Candidate Starts for Bush_27:

(Start: 11 @17498 has 109 MA's), (29, 17609), (51, 17738), (67, 17825), (89, 17945), (94, 17984), (97, 18005), (118, 18107), (119, 18113), (129, 18194), (141, 18269), (147, 18314),

Gene: CapnMurica_30 Start: 28050, Stop: 28838, Start Num: 13

Candidate Starts for CapnMurica_30:

(Start: 13 @28050 has 54 MA's), (24, 28125), (25, 28149), (44, 28236), (49, 28281), (52, 28299), (67, 28383), (80, 28464), (85, 28485), (87, 28494),

Gene: Caron_19 Start: 16273, Stop: 17052, Start Num: 12

Candidate Starts for Caron_19:

(1, 15871), (2, 15922), (Start: 12 @16273 has 8 MA's), (52, 16513), (73, 16651), (87, 16702), (142, 17011),

Gene: Carrillo_28 Start: 17477, Stop: 18298, Start Num: 11

Candidate Starts for Carrillo_28:

(Start: 11 @17477 has 109 MA's), (29, 17588), (51, 17717), (67, 17804), (89, 17924), (94, 17963), (97, 17984), (118, 18086), (129, 18173), (141, 18248), (147, 18293),

Gene: Cashington_21 Start: 17143, Stop: 17946, Start Num: 11

Candidate Starts for Cashington_21:

(Start: 11 @17143 has 109 MA's), (40, 17311), (44, 17326), (81, 17548), (87, 17572), (117, 17737),

Gene: CastorTray_32 Start: 27356, Stop: 28144, Start Num: 13

Candidate Starts for CastorTray_32:

(Start: 13 @27356 has 54 MA's), (24, 27431), (25, 27455), (49, 27587), (52, 27605), (67, 27689), (80, 27770), (85, 27791),

Gene: Caterpillar_28 Start: 26130, Stop: 26918, Start Num: 13

Candidate Starts for Caterpillar_28:

(Start: 13 @26130 has 54 MA's), (47, 26334), (85, 26565), (109, 26685), (133, 26835),

Gene: Celaena_19 Start: 16946, Stop: 17788, Start Num: 11

Candidate Starts for Celaena_19:

(Start: 11 @16946 has 109 MA's), (26, 17042), (40, 17114), (56, 17231), (57, 17237), (68, 17285), (89, 17384), (119, 17588), (145, 17765),

Gene: Cen1621_18 Start: 15461, Stop: 16270, Start Num: 11

Candidate Starts for Cen1621_18:

(Start: 11 @15461 has 109 MA's), (19, 15518), (48, 15668), (64, 15770), (66, 15776), (76, 15845), (86, 15896), (96, 15956), (123, 16103), (132, 16175),

Gene: ChiliPepper_19 Start: 16530, Stop: 17369, Start Num: 11

Candidate Starts for ChiliPepper_19:

(Start: 11 @16530 has 109 MA's), (40, 16698), (46, 16719), (50, 16767), (56, 16818), (65, 16851), (67, 16857), (68, 16872), (142, 17322), (144, 17343),

Gene: Chivey_32 Start: 20607, Stop: 21419, Start Num: 9

Candidate Starts for Chivey_32:

(Start: 9 @20607 has 34 MA's), (37, 20778), (43, 20796), (49, 20841), (59, 20916), (79, 21018), (116, 21207), (121, 21243), (124, 21267),

Gene: Chlochlo_31 Start: 27107, Stop: 27898, Start Num: 13

Candidate Starts for Chlochlo_31:

(Start: 13 @27107 has 54 MA's), (25, 27206), (33, 27239), (44, 27293), (47, 27311), (49, 27338), (85, 27542), (87, 27551),

Gene: Cicada_26 Start: 19415, Stop: 20236, Start Num: 11

Candidate Starts for Cicada_26:

(Start: 11 @19415 has 109 MA's), (42, 19589), (84, 19841), (90, 19865), (91, 19868), (110, 19988), (118, 20024), (119, 20030), (126, 20093), (130, 20117), (134, 20150), (136, 20156), (140, 20183),

Gene: Clayda5_19 Start: 15065, Stop: 15853, Start Num: 11

Candidate Starts for Clayda5_19:

(5, 14897), (Start: 11 @15065 has 109 MA's), (19, 15119), (40, 15233), (46, 15254), (56, 15353), (57, 15359), (67, 15392), (68, 15407), (85, 15485), (100, 15575), (110, 15617), (121, 15677), (131, 15755), (145, 15833),

Gene: Coltrane_19 Start: 15035, Stop: 15823, Start Num: 11

Candidate Starts for Coltrane_19:

(6, 14876), (Start: 11 @15035 has 109 MA's), (19, 15089), (26, 15131), (40, 15203), (46, 15224), (56, 15323), (57, 15329), (67, 15362), (68, 15377), (85, 15455), (94, 15509), (100, 15545), (129, 15698), (131, 15725), (145, 15803),

Gene: CookieDog_27 Start: 17498, Stop: 18319, Start Num: 11

Candidate Starts for CookieDog_27:

(Start: 11 @17498 has 109 MA's), (29, 17609), (51, 17738), (67, 17825), (89, 17945), (94, 17984), (97, 18005), (118, 18107), (129, 18194), (141, 18269), (147, 18314),

Gene: CoolCookie_33 Start: 21461, Stop: 22273, Start Num: 9

Candidate Starts for CoolCookie_33:

(Start: 9 @21461 has 34 MA's), (15, 21488), (41, 21644), (49, 21695), (59, 21770), (87, 21905), (121, 22097),

Gene: Crestdrop_32 Start: 20521, Stop: 21333, Start Num: 9

Candidate Starts for Crestdrop_32:

(Start: 9 @20521 has 34 MA's), (15, 20548), (49, 20755), (59, 20830), (101, 21055), (116, 21121), (121, 21157), (124, 21181),

Gene: CroZenni_21 Start: 17129, Stop: 17932, Start Num: 11

Candidate Starts for CroZenni_21:

(Start: 11 @17129 has 109 MA's), (40, 17297), (113, 17702), (130, 17813),

Gene: CupcakePrincess_21 Start: 17249, Stop: 18052, Start Num: 11

Candidate Starts for CupcakePrincess_21:

(Start: 11 @17249 has 109 MA's), (40, 17417), (44, 17432), (65, 17570), (70, 17609),

Gene: Cybele_33 Start: 21431, Stop: 22243, Start Num: 9

Candidate Starts for Cybele_33:

(Start: 9 @21431 has 34 MA's), (15, 21458), (41, 21614), (49, 21665), (59, 21740), (87, 21875), (121, 22067),

Gene: DannyDe_32 Start: 20604, Stop: 21416, Start Num: 9

Candidate Starts for DannyDe_32:

(Start: 9 @20604 has 34 MA's), (37, 20775), (49, 20838), (59, 20913), (101, 21138), (116, 21204), (121, 21240), (124, 21264),

Gene: Darby_30 Start: 26802, Stop: 27590, Start Num: 13

Candidate Starts for Darby_30:

(Start: 13 @26802 has 54 MA's), (24, 26877), (25, 26901), (49, 27033), (52, 27051), (67, 27135), (80, 27216), (85, 27237),

Gene: Dauntless_32 Start: 21164, Stop: 21976, Start Num: 9

Candidate Starts for Dauntless_32:

(Start: 9 @21164 has 34 MA's), (37, 21335), (49, 21398), (59, 21473), (116, 21764), (121, 21800), (124, 21824),

Gene: DelaGarza_25 Start: 17845, Stop: 18663, Start Num: 11

Candidate Starts for DelaGarza_25:

(Start: 11 @17845 has 109 MA's), (18, 17896), (40, 18013), (71, 18199), (84, 18271), (90, 18295), (91, 18298), (119, 18457), (126, 18520), (129, 18538), (130, 18544), (136, 18583),

Gene: DevitoJr_30 Start: 26973, Stop: 27761, Start Num: 13

Candidate Starts for DevitoJr_30:

(Start: 13 @26973 has 54 MA's), (24, 27048), (25, 27072), (44, 27159), (49, 27204), (52, 27222), (80, 27387), (85, 27408),

Gene: DickRichards_21 Start: 17624, Stop: 18427, Start Num: 11

Candidate Starts for DickRichards_21:

(Start: 11 @17624 has 109 MA's), (40, 17792), (113, 18197), (114, 18200), (130, 18308),

Gene: Didgeridoo_22 Start: 17353, Stop: 18159, Start Num: 11

Candidate Starts for Didgeridoo_22:

(Start: 11 @17353 has 109 MA's), (40, 17521), (57, 17647), (113, 17926), (130, 18037), (136, 18076),

Gene: Dinallo_31 Start: 28038, Stop: 28826, Start Num: 13

Candidate Starts for Dinallo_31:

(Start: 13 @28038 has 54 MA's), (24, 28113), (25, 28137), (44, 28224), (49, 28269), (52, 28287), (67, 28371), (80, 28452), (85, 28473), (87, 28482),

Gene: DirtyBubble_20 Start: 16937, Stop: 17740, Start Num: 11

Candidate Starts for DirtyBubble_20:

(Start: 11 @16937 has 109 MA's), (40, 17105), (50, 17174), (57, 17231), (64, 17255), (87, 17366), (89, 17372), (101, 17456), (102, 17459), (115, 17519),

Gene: Dismas_19 Start: 16530, Stop: 17369, Start Num: 11

Candidate Starts for Dismas_19:

(Start: 11 @16530 has 109 MA's), (40, 16698), (46, 16719), (50, 16767), (56, 16818), (65, 16851), (67, 16857), (68, 16872), (142, 17322), (144, 17343),

Gene: Djungelskog_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Djungelskog_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: DoctorPepper_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for DoctorPepper_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Doobus_21 Start: 17460, Stop: 18263, Start Num: 11

Candidate Starts for Doobus_21:

(Start: 11 @17460 has 109 MA's), (40, 17628), (81, 17865), (87, 17889), (117, 18054),

Gene: Dropshot_26 Start: 17370, Stop: 18191, Start Num: 11

Candidate Starts for Dropshot_26:

(Start: 11 @17370 has 109 MA's), (51, 17610), (67, 17697), (89, 17817), (94, 17856), (97, 17877), (129, 18066), (147, 18186),

Gene: Eden_19 Start: 15433, Stop: 16218, Start Num: 11

Candidate Starts for Eden_19:

(Start: 11 @15433 has 109 MA's), (19, 15487), (26, 15529), (40, 15601), (56, 15721), (64, 15751), (67, 15760), (68, 15775), (87, 15862), (134, 16132), (145, 16198),

Gene: Egad_27 Start: 24030, Stop: 24830, Start Num: 13

Candidate Starts for Egad_27:

(Start: 13 @24030 has 54 MA's), (39, 24213), (44, 24231), (47, 24249), (49, 24276), (62, 24363), (87, 24483), (101, 24570), (112, 24612), (117, 24627), (121, 24660),

Gene: ElephantMan_30 Start: 27504, Stop: 28292, Start Num: 13

Candidate Starts for ElephantMan_30:

(Start: 13 @27504 has 54 MA's), (24, 27579), (25, 27603), (44, 27690), (49, 27735), (52, 27753), (67, 27837), (80, 27918), (85, 27939),

Gene: Elva_21 Start: 16898, Stop: 17701, Start Num: 11

Candidate Starts for Elva_21:

(Start: 11 @16898 has 109 MA's), (40, 17066), (50, 17135), (64, 17216), (67, 17225), (87, 17327), (89, 17333), (101, 17417), (102, 17420),

Gene: Erudite_32 Start: 21164, Stop: 21976, Start Num: 9

Candidate Starts for Erudite_32:

(Start: 9 @21164 has 34 MA's), (37, 21335), (49, 21398), (59, 21473), (116, 21764), (121, 21800), (124, 21824),

Gene: Eula_21 Start: 17210, Stop: 18013, Start Num: 11

Candidate Starts for Eula_21:

(Start: 11 @17210 has 109 MA's), (40, 17378), (44, 17393),

Gene: Finalfrontier_22 Start: 17720, Stop: 18526, Start Num: 11
Candidate Starts for Finalfrontier_22:
(Start: 11 @17720 has 109 MA's), (40, 17888), (57, 18014), (113, 18293), (130, 18404),

Gene: FireCastle_24 Start: 19486, Stop: 20307, Start Num: 11
Candidate Starts for FireCastle_24:
(Start: 11 @19486 has 109 MA's), (22, 19552), (28, 19591), (60, 19792), (89, 19933), (95, 19984), (97, 19993), (118, 20095), (129, 20182), (130, 20188), (136, 20227),

Gene: FlameThrower_19 Start: 16517, Stop: 17305, Start Num: 11
Candidate Starts for FlameThrower_19:
(Start: 11 @16517 has 109 MA's), (40, 16685), (51, 16757), (56, 16805), (57, 16811), (68, 16859), (87, 16946), (94, 16991), (129, 17180),

Gene: Floof_20 Start: 17012, Stop: 17818, Start Num: 12
Candidate Starts for Floof_20:
(Start: 12 @17012 has 8 MA's), (54, 17276), (58, 17309), (68, 17354), (69, 17366), (84, 17450), (88, 17468), (89, 17471), (123, 17669), (125, 17675), (136, 17744), (142, 17777),

Gene: Forester_36 Start: 18762, Stop: 19580, Start Num: 12
Candidate Starts for Forester_36:
(8, 18744), (Start: 12 @18762 has 8 MA's), (26, 18861), (31, 18882), (77, 19179), (87, 19224), (104, 19326), (132, 19491),

Gene: FountainFog_32 Start: 20764, Stop: 21576, Start Num: 9
Candidate Starts for FountainFog_32:
(Start: 9 @20764 has 34 MA's), (15, 20791), (42, 20950), (121, 21400), (122, 21412),

Gene: Franklin22_20 Start: 15619, Stop: 16404, Start Num: 11
Candidate Starts for Franklin22_20:
(Start: 11 @15619 has 109 MA's), (40, 15787), (44, 15802), (56, 15907), (64, 15937), (67, 15946), (68, 15961), (87, 16048), (94, 16093), (132, 16312), (145, 16384),

Gene: FreddieHg_32 Start: 20623, Stop: 21435, Start Num: 9
Candidate Starts for FreddieHg_32:
(Start: 9 @20623 has 34 MA's), (37, 20794), (43, 20812), (49, 20857), (59, 20932), (79, 21034), (116, 21223), (121, 21259), (124, 21283),

Gene: Gack_19 Start: 15505, Stop: 16290, Start Num: 11
Candidate Starts for Gack_19:
(Start: 11 @15505 has 109 MA's), (40, 15673), (44, 15688), (56, 15793), (64, 15823), (67, 15832), (68, 15847), (87, 15934), (94, 15979), (132, 16198), (145, 16270),

Gene: GardenState_20 Start: 17271, Stop: 18089, Start Num: 12
Candidate Starts for GardenState_20:
(Start: 12 @17271 has 8 MA's), (30, 17388), (36, 17430), (40, 17442), (52, 17520), (61, 17589), (87, 17736), (88, 17739), (115, 17871), (142, 18045),

Gene: Giantsbane_31 Start: 25967, Stop: 26758, Start Num: 13
Candidate Starts for Giantsbane_31:
(Start: 13 @25967 has 54 MA's), (24, 26042), (44, 26153), (47, 26171), (49, 26198), (67, 26300), (85, 26402), (87, 26411),

Gene: Gilda_33 Start: 21455, Stop: 22267, Start Num: 9

Candidate Starts for Gilda_33:

(Start: 9 @21455 has 34 MA's), (15, 21482), (41, 21638), (59, 21764), (87, 21899), (121, 22091),

Gene: Gingerbug_23 Start: 17888, Stop: 18721, Start Num: 11

Candidate Starts for Gingerbug_23:

(Start: 11 @17888 has 109 MA's), (22, 17954), (46, 18077), (51, 18128), (67, 18215), (89, 18338), (96, 18392), (107, 18449), (136, 18641),

Gene: Goodman_25 Start: 19328, Stop: 20149, Start Num: 11

Candidate Starts for Goodman_25:

(Start: 11 @19328 has 109 MA's), (42, 19502), (84, 19754), (90, 19778), (91, 19781), (110, 19901), (118, 19937), (119, 19943), (126, 20006), (130, 20030), (134, 20063), (136, 20069), (140, 20096),

Gene: Gordon_30 Start: 28078, Stop: 28866, Start Num: 13

Candidate Starts for Gordon_30:

(Start: 13 @28078 has 54 MA's), (24, 28153), (35, 28240), (44, 28264), (47, 28282), (49, 28309), (67, 28411), (85, 28513),

Gene: Gretchen_20 Start: 18050, Stop: 18859, Start Num: 12

Candidate Starts for Gretchen_20:

(8, 18032), (Start: 12 @18050 has 8 MA's), (26, 18149), (31, 18170), (87, 18503), (89, 18509), (104, 18605), (132, 18770),

Gene: Guzman_28 Start: 17779, Stop: 18600, Start Num: 11

Candidate Starts for Guzman_28:

(Start: 11 @17779 has 109 MA's), (29, 17890), (51, 18019), (67, 18106), (72, 18139), (89, 18226), (94, 18265), (97, 18286), (118, 18388), (129, 18475), (141, 18550), (147, 18595),

Gene: Hager_34 Start: 21017, Stop: 21829, Start Num: 9

Candidate Starts for Hager_34:

(Start: 9 @21017 has 34 MA's), (15, 21044), (42, 21203), (119, 21635), (121, 21653),

Gene: Haunter_33 Start: 20868, Stop: 21680, Start Num: 9

Candidate Starts for Haunter_33:

(Start: 9 @20868 has 34 MA's), (15, 20895), (41, 21051), (49, 21102), (51, 21117), (59, 21177), (87, 21312), (121, 21504),

Gene: Hemma_27 Start: 23412, Stop: 24209, Start Num: 13

Candidate Starts for Hemma_27:

(Start: 13 @23412 has 54 MA's), (25, 23517), (26, 23520), (33, 23550), (49, 23649), (62, 23736), (73, 23802), (85, 23853), (87, 23862), (92, 23883),

Gene: HerbBucket_26 Start: 24030, Stop: 24830, Start Num: 13

Candidate Starts for HerbBucket_26:

(Start: 13 @24030 has 54 MA's), (14, 24039), (27, 24141), (39, 24213), (47, 24249), (49, 24276), (87, 24483), (101, 24570), (112, 24612), (117, 24627), (121, 24660),

Gene: Hiddenleaf_32 Start: 20607, Stop: 21419, Start Num: 9

Candidate Starts for Hiddenleaf_32:

(Start: 9 @20607 has 34 MA's), (37, 20778), (43, 20796), (49, 20841), (59, 20916), (79, 21018), (116, 21207), (121, 21243), (124, 21267),

Gene: Honk_18 Start: 15028, Stop: 16131, Start Num: 3

Candidate Starts for Honk_18:

(Start: 3 @15028 has 1 MA's), (39, 15472), (55, 15592), (64, 15625), (75, 15691), (96, 15820), (140, 16078), (142, 16084),

Gene: Htur_24 Start: 19383, Stop: 20204, Start Num: 11

Candidate Starts for Htur_24:

(Start: 11 @19383 has 109 MA's), (40, 19551), (42, 19557), (51, 19623), (80, 19797), (89, 19830), (91, 19836), (94, 19869), (96, 19884), (106, 19929), (118, 19992), (129, 20079), (130, 20085), (138, 20145),

Gene: IAmGroot_20 Start: 17933, Stop: 18751, Start Num: 12

Candidate Starts for IAmGroot_20:

(Start: 12 @17933 has 8 MA's), (30, 18050), (36, 18092), (40, 18104), (52, 18182), (61, 18251), (87, 18398), (88, 18401), (115, 18533), (142, 18707),

Gene: Icarian_21 Start: 16815, Stop: 17618, Start Num: 11

Candidate Starts for Icarian_21:

(Start: 11 @16815 has 109 MA's), (40, 16983), (65, 17136), (67, 17142), (87, 17244), (105, 17349), (115, 17397),

Gene: IndiRoo_24 Start: 17916, Stop: 18731, Start Num: 11

Candidate Starts for IndiRoo_24:

(Start: 11 @17916 has 109 MA's), (28, 18021), (42, 18090), (46, 18105), (51, 18156), (60, 18222), (74, 18288), (84, 18342), (110, 18489), (118, 18525), (131, 18639), (134, 18651), (140, 18684), (141, 18687), (143, 18696),

Gene: IndyLu_21 Start: 17175, Stop: 17981, Start Num: 11

Candidate Starts for IndyLu_21:

(Start: 11 @17175 has 109 MA's), (40, 17343), (57, 17469), (113, 17748), (130, 17859),

Gene: Ingrid_30 Start: 26692, Stop: 27489, Start Num: 13

Candidate Starts for Ingrid_30:

(Start: 13 @26692 has 54 MA's), (25, 26797), (49, 26929), (62, 27016), (85, 27133), (87, 27142),

Gene: Inked_32 Start: 27706, Stop: 28497, Start Num: 13

Candidate Starts for Inked_32:

(10, 27703), (Start: 13 @27706 has 54 MA's), (47, 27910), (67, 28039), (85, 28141), (103, 28243),

Gene: Issa_30 Start: 26782, Stop: 27570, Start Num: 13

Candidate Starts for Issa_30:

(Start: 13 @26782 has 54 MA's), (24, 26857), (25, 26881), (44, 26968), (49, 27013), (52, 27031), (80, 27196), (85, 27217),

Gene: JDawG_32 Start: 21191, Stop: 22003, Start Num: 9

Candidate Starts for JDawG_32:

(Start: 9 @21191 has 34 MA's), (37, 21362), (49, 21425), (59, 21500), (116, 21791), (121, 21827), (124, 21851),

Gene: Jabb_21 Start: 17249, Stop: 18052, Start Num: 11

Candidate Starts for Jabb_21:

(Start: 11 @17249 has 109 MA's), (40, 17417), (44, 17432), (65, 17570), (70, 17609),

Gene: Jakelyne_29 Start: 17586, Stop: 18407, Start Num: 11

Candidate Starts for Jakelyne_29:

(Start: 11 @17586 has 109 MA's), (29, 17697), (51, 17826), (67, 17913), (89, 18033), (94, 18072), (97, 18093), (118, 18195), (129, 18282), (141, 18357), (147, 18402),

Gene: Jera_25 Start: 18440, Stop: 19261, Start Num: 11

Candidate Starts for Jera_25:

(Start: 11 @18440 has 109 MA's), (51, 18680), (90, 18890), (96, 18941), (97, 18947), (110, 19013), (118, 19049), (119, 19055), (126, 19118), (129, 19136),

Gene: Jeremy4pt0_26 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Jeremy4pt0_26:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: JingleBells_32 Start: 20728, Stop: 21540, Start Num: 9

Candidate Starts for JingleBells_32:

(Start: 9 @20728 has 34 MA's), (37, 20899), (49, 20962), (59, 21037), (116, 21328), (121, 21364), (124, 21388),

Gene: Johann_25 Start: 19328, Stop: 20149, Start Num: 11

Candidate Starts for Johann_25:

(Start: 11 @19328 has 109 MA's), (42, 19502), (84, 19754), (90, 19778), (91, 19781), (110, 19901), (118, 19937), (119, 19943), (126, 20006), (130, 20030), (134, 20063), (136, 20069), (140, 20096),

Gene: Johnathan_21 Start: 17233, Stop: 18036, Start Num: 11

Candidate Starts for Johnathan_21:

(Start: 11 @17233 has 109 MA's), (40, 17401), (81, 17638), (87, 17662), (117, 17827),

Gene: Jovita_21 Start: 17314, Stop: 18117, Start Num: 11

Candidate Starts for Jovita_21:

(Start: 11 @17314 has 109 MA's), (40, 17482), (44, 17497), (118, 17917),

Gene: Kamdara_19 Start: 16529, Stop: 17368, Start Num: 11

Candidate Starts for Kamdara_19:

(Start: 11 @16529 has 109 MA's), (40, 16697), (46, 16718), (50, 16766), (56, 16817), (65, 16850), (67, 16856), (68, 16871), (142, 17321), (144, 17342),

Gene: Karate_32 Start: 21484, Stop: 22296, Start Num: 9

Candidate Starts for Karate_32:

(Start: 9 @21484 has 34 MA's), (15, 21511), (41, 21667), (42, 21670), (83, 21910), (110, 22060), (118, 22096), (119, 22102), (121, 22120),

Gene: Kate_33 Start: 21463, Stop: 22275, Start Num: 9

Candidate Starts for Kate_33:

(Start: 9 @21463 has 34 MA's), (15, 21490), (41, 21646), (42, 21649), (49, 21697), (59, 21772), (87, 21907), (121, 22099), (135, 22192),

Gene: Kate33_21 Start: 17177, Stop: 17983, Start Num: 11

Candidate Starts for Kate33_21:

(Start: 11 @17177 has 109 MA's), (40, 17345), (57, 17471), (113, 17750), (130, 17861),

Gene: Katzastrophic_19 Start: 16659, Stop: 17447, Start Num: 11

Candidate Starts for Katzastrophic_19:

(Start: 11 @16659 has 109 MA's), (40, 16827), (56, 16947), (57, 16953), (68, 17001), (87, 17088), (94, 17133), (129, 17322),

Gene: Kenzers_21 Start: 17197, Stop: 18000, Start Num: 11

Candidate Starts for Kenzers_21:

(Start: 11 @17197 has 109 MA's), (40, 17365), (87, 17626), (94, 17671), (95, 17683),

Gene: Kieran_19 Start: 16533, Stop: 17372, Start Num: 11

Candidate Starts for Kieran_19:

(Start: 11 @16533 has 109 MA's), (40, 16701), (46, 16722), (50, 16770), (56, 16821), (65, 16854), (67, 16860), (68, 16875), (142, 17325), (144, 17346),

Gene: Krampus_33 Start: 21463, Stop: 22275, Start Num: 9

Candidate Starts for Krampus_33:

(Start: 9 @21463 has 34 MA's), (15, 21490), (41, 21646), (49, 21697), (59, 21772), (87, 21907), (121, 22099),

Gene: Labella_26 Start: 19321, Stop: 20142, Start Num: 11

Candidate Starts for Labella_26:

(Start: 11 @19321 has 109 MA's), (18, 19372), (40, 19489), (51, 19561), (71, 19675), (90, 19771), (91, 19774), (118, 19930), (129, 20017), (130, 20023), (136, 20062),

Gene: Lahqtemish_21 Start: 17223, Stop: 18029, Start Num: 11

Candidate Starts for Lahqtemish_21:

(Start: 11 @17223 has 109 MA's), (40, 17391), (65, 17544), (130, 17907),

Gene: Lesiram_26 Start: 17814, Stop: 18632, Start Num: 11

Candidate Starts for Lesiram_26:

(Start: 11 @17814 has 109 MA's), (18, 17865), (40, 17982), (51, 18054), (71, 18168), (84, 18240), (90, 18264), (91, 18267), (96, 18315), (119, 18426), (126, 18489), (129, 18507), (136, 18552),

Gene: LilHuddy_31 Start: 27150, Stop: 27941, Start Num: 13

Candidate Starts for LilHuddy_31:

(Start: 13 @27150 has 54 MA's), (20, 27207), (24, 27225), (25, 27249), (44, 27336), (47, 27354), (66, 27480), (67, 27483), (85, 27585), (87, 27594),

Gene: Lilo27_21 Start: 17186, Stop: 17989, Start Num: 11

Candidate Starts for Lilo27_21:

(Start: 11 @17186 has 109 MA's), (40, 17354), (65, 17507), (70, 17546),

Gene: LimaBean_21 Start: 17229, Stop: 18032, Start Num: 11

Candidate Starts for LimaBean_21:

(Start: 11 @17229 has 109 MA's), (40, 17397), (81, 17634), (87, 17658), (117, 17823), (130, 17913),

Gene: Linayshia_24 Start: 19375, Stop: 20196, Start Num: 11

Candidate Starts for Linayshia_24:

(Start: 11 @19375 has 109 MA's), (40, 19543), (42, 19549), (51, 19615), (80, 19789), (89, 19822), (91, 19828), (94, 19861), (96, 19876), (106, 19921), (118, 19984), (126, 20053), (129, 20071), (130, 20077), (138, 20137),

Gene: Linda_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Linda_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Loretta_30 Start: 26692, Stop: 27489, Start Num: 13

Candidate Starts for Loretta_30:

(Start: 13 @26692 has 54 MA's), (25, 26797), (49, 26929), (62, 27016), (85, 27133), (87, 27142),

Gene: Losacky_28 Start: 17650, Stop: 18471, Start Num: 11

Candidate Starts for Losacky_28:

(Start: 11 @17650 has 109 MA's), (29, 17761), (51, 17890), (67, 17977), (89, 18097), (94, 18136), (97, 18157), (118, 18259), (119, 18265), (129, 18346), (141, 18421), (147, 18466),

Gene: Loviatar_20 Start: 16905, Stop: 17708, Start Num: 11

Candidate Starts for Loviatar_20:

(Start: 11 @16905 has 109 MA's), (40, 17073), (65, 17226), (67, 17232), (87, 17334), (105, 17439),

Gene: LucySwiss_30 Start: 26807, Stop: 27595, Start Num: 13

Candidate Starts for LucySwiss_30:

(Start: 13 @26807 has 54 MA's), (24, 26882), (25, 26906), (44, 26993), (49, 27038), (52, 27056), (67, 27140), (80, 27221), (85, 27242), (87, 27251),

Gene: Lynlen_21 Start: 17197, Stop: 18000, Start Num: 11

Candidate Starts for Lynlen_21:

(Start: 11 @17197 has 109 MA's), (40, 17365), (87, 17626), (94, 17671), (95, 17683),

Gene: Mabodamaca_20 Start: 17290, Stop: 18099, Start Num: 13

Candidate Starts for Mabodamaca_20:

(Start: 13 @17290 has 54 MA's), (40, 17458), (88, 17749), (104, 17848),

Gene: Makai_30 Start: 26936, Stop: 27727, Start Num: 13

Candidate Starts for Makai_30:

(Start: 13 @26936 has 54 MA's), (44, 27122), (47, 27140), (49, 27167), (62, 27254), (67, 27269), (85, 27371), (87, 27380), (103, 27476),

Gene: Mariel_30 Start: 17942, Stop: 18763, Start Num: 11

Candidate Starts for Mariel_30:

(Start: 11 @17942 has 109 MA's), (29, 18053), (51, 18182), (67, 18269), (89, 18389), (94, 18428), (97, 18449), (118, 18551), (129, 18638), (141, 18713), (147, 18758),

Gene: MediumFry_28 Start: 26132, Stop: 26920, Start Num: 13

Candidate Starts for MediumFry_28:

(Start: 13 @26132 has 54 MA's), (47, 26336), (85, 26567), (109, 26687), (133, 26837),

Gene: MenE_27 Start: 17638, Stop: 18459, Start Num: 11

Candidate Starts for MenE_27:

(Start: 11 @17638 has 109 MA's), (29, 17749), (51, 17878), (67, 17965), (89, 18085), (94, 18124), (97, 18145), (118, 18247), (119, 18253), (129, 18334), (141, 18409), (147, 18454),

Gene: Michelle_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Michelle_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Milani_25 Start: 18546, Stop: 19361, Start Num: 11

Candidate Starts for Milani_25:

(Start: 11 @18546 has 109 MA's), (28, 18651), (46, 18735), (51, 18786), (60, 18852), (63, 18861), (71, 18900), (84, 18972), (89, 18993), (94, 19032), (97, 19053), (118, 19155), (119, 19161), (121, 19182), (126, 19224), (130, 19248), (131, 19269), (134, 19281), (136, 19287), (140, 19314), (143, 19326),

Gene: Milomuff_22 Start: 17593, Stop: 18396, Start Num: 11

Candidate Starts for Milomuff_22:

(Start: 11 @17593 has 109 MA's), (40, 17761), (44, 17776), (113, 18166), (114, 18169), (130, 18277),

Gene: MiniBagel_30 Start: 28029, Stop: 28817, Start Num: 13

Candidate Starts for MiniBagel_30:

(Start: 13 @28029 has 54 MA's), (24, 28104), (44, 28215), (49, 28260), (52, 28278), (67, 28362), (80, 28443), (85, 28464), (87, 28473),

Gene: MortySmith_31 Start: 20579, Stop: 21391, Start Num: 9

Candidate Starts for MortySmith_31:

(Start: 9 @20579 has 34 MA's), (37, 20750), (49, 20813), (59, 20888), (116, 21179), (121, 21215), (124, 21239),

Gene: MrAaronian_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for MrAaronian_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: MsUbiquitous_21 Start: 17249, Stop: 18052, Start Num: 11

Candidate Starts for MsUbiquitous_21:

(Start: 11 @17249 has 109 MA's), (40, 17417), (44, 17432), (65, 17570), (70, 17609),

Gene: NCRodriguez_28 Start: 17690, Stop: 18511, Start Num: 11

Candidate Starts for NCRodriguez_28:

(Start: 11 @17690 has 109 MA's), (29, 17801), (51, 17930), (67, 18017), (72, 18050), (94, 18176), (95, 18188), (97, 18197), (118, 18299), (129, 18386), (141, 18461), (147, 18506),

Gene: NarutoRun_33 Start: 21454, Stop: 22266, Start Num: 9

Candidate Starts for NarutoRun_33:

(Start: 9 @21454 has 34 MA's), (15, 21481), (41, 21637), (59, 21763), (87, 21898), (121, 22090),

Gene: Natasha_27 Start: 23449, Stop: 24252, Start Num: 13

Candidate Starts for Natasha_27:

(Start: 13 @23449 has 54 MA's), (20, 23509), (34, 23605), (53, 23734), (62, 23785), (67, 23800), (82, 23881), (87, 23905), (123, 24103),

Gene: Neptune_33 Start: 21431, Stop: 22243, Start Num: 9

Candidate Starts for Neptune_33:

(Start: 9 @21431 has 34 MA's), (15, 21458), (41, 21614), (49, 21665), (59, 21740), (87, 21875), (121, 22067),

Gene: Nicky22_22 Start: 17657, Stop: 18460, Start Num: 11

Candidate Starts for Nicky22_22:

(Start: 11 @17657 has 109 MA's), (40, 17825), (44, 17840), (113, 18230),

Gene: Nightmare_31 Start: 27342, Stop: 28130, Start Num: 13

Candidate Starts for Nightmare_31:

(Start: 13 @27342 has 54 MA's), (24, 27417), (25, 27441), (44, 27528), (49, 27573), (52, 27591), (80, 27756), (85, 27777),

Gene: Niktson_30 Start: 27504, Stop: 28292, Start Num: 13

Candidate Starts for Niktson_30:

(Start: 13 @27504 has 54 MA's), (24, 27579), (25, 27603), (44, 27690), (49, 27735), (52, 27753), (67, 27837), (80, 27918), (85, 27939),

Gene: Nivinsha_30 Start: 26892, Stop: 27680, Start Num: 13

Candidate Starts for Nivinsha_30:

(Start: 13 @26892 has 54 MA's), (24, 26967), (25, 26991), (49, 27123), (52, 27141), (67, 27225), (80, 27306), (85, 27327), (87, 27336),

Gene: OhDear_33 Start: 21460, Stop: 22272, Start Num: 9

Candidate Starts for OhDear_33:

(Start: 9 @21460 has 34 MA's), (15, 21487), (41, 21643), (49, 21694), (59, 21769), (87, 21904), (121, 22096),

Gene: Olympi_26 Start: 19315, Stop: 20136, Start Num: 11

Candidate Starts for Olympi_26:

(Start: 11 @19315 has 109 MA's), (42, 19489), (84, 19741), (90, 19765), (91, 19768), (110, 19888), (118, 19924), (119, 19930), (126, 19993), (130, 20017), (134, 20050), (136, 20056), (140, 20083),

Gene: Onestar_27 Start: 23812, Stop: 24612, Start Num: 13

Candidate Starts for Onestar_27:

(Start: 13 @23812 has 54 MA's), (26, 23920), (47, 24031), (51, 24073), (54, 24097), (65, 24154), (87, 24265), (121, 24442), (128, 24484),

Gene: OverHedge_33 Start: 21421, Stop: 22233, Start Num: 9

Candidate Starts for OverHedge_33:

(Start: 9 @21421 has 34 MA's), (15, 21448), (41, 21604), (49, 21655), (59, 21730), (87, 21865), (121, 22057),

Gene: PastaFagioli_21 Start: 17211, Stop: 18017, Start Num: 11

Candidate Starts for PastaFagioli_21:

(Start: 11 @17211 has 109 MA's), (40, 17379), (57, 17505), (113, 17784), (130, 17895), (136, 17934),

Gene: Pecas_21 Start: 17210, Stop: 18013, Start Num: 11

Candidate Starts for Pecas_21:

(Start: 11 @17210 has 109 MA's), (40, 17378), (44, 17393),

Gene: PensacolaC28_12 Start: 10504, Stop: 11313, Start Num: 11

Candidate Starts for PensacolaC28_12:

(Start: 11 @10504 has 109 MA's), (18, 10555), (45, 10690), (46, 10693), (48, 10711), (80, 10915), (82, 10921), (99, 11017), (106, 11059), (132, 11227),

Gene: Percival_20 Start: 17884, Stop: 18693, Start Num: 12

Candidate Starts for Percival_20:

(8, 17866), (Start: 12 @17884 has 8 MA's), (26, 17983), (31, 18004), (87, 18337), (89, 18343), (104, 18439), (132, 18604),

Gene: PermaG_25 Start: 19393, Stop: 20214, Start Num: 11

Candidate Starts for PermaG_25:

(Start: 11 @19393 has 109 MA's), (40, 19561), (42, 19567), (51, 19633), (84, 19819), (91, 19846), (118, 20002), (126, 20071), (129, 20089), (130, 20095), (134, 20128), (136, 20134),

Gene: Phaby_31 Start: 27082, Stop: 27873, Start Num: 13

Candidate Starts for Phaby_31:

(Start: 13 @27082 has 54 MA's), (33, 27214), (44, 27268), (47, 27286), (49, 27313), (85, 27517), (87, 27526), (103, 27622), (125, 27730),

Gene: Pharpay_33 Start: 21476, Stop: 22288, Start Num: 9

Candidate Starts for Pharpay_33:

(Start: 9 @21476 has 34 MA's), (15, 21503), (41, 21659), (49, 21710), (59, 21785), (87, 21920), (121, 22112),

Gene: PhigPhack_22 Start: 17206, Stop: 18009, Start Num: 11

Candidate Starts for PhigPhack_22:

(Start: 11 @17206 has 109 MA's), (40, 17374), (113, 17779), (114, 17782), (130, 17890),

Gene: PhillyJawn_27 Start: 17370, Stop: 18191, Start Num: 11

Candidate Starts for PhillyJawn_27:

(Start: 11 @17370 has 109 MA's), (29, 17481), (51, 17610), (67, 17697), (89, 17817), (94, 17856), (97, 17877), (118, 17979), (129, 18066), (141, 18141), (147, 18186),

Gene: Phingu_29 Start: 17589, Stop: 18407, Start Num: 11

Candidate Starts for Phingu_29:

(Start: 11 @17589 has 109 MA's), (17, 17634), (18, 17640), (46, 17775), (67, 17913), (91, 18039), (96, 18087), (97, 18093), (118, 18195), (129, 18282), (141, 18357), (147, 18402),

Gene: Phisb_21 Start: 17223, Stop: 18026, Start Num: 11

Candidate Starts for Phisb_21:

(Start: 11 @17223 has 109 MA's), (40, 17391), (65, 17544), (70, 17583),

Gene: Phonegingi_26 Start: 17413, Stop: 18234, Start Num: 11

Candidate Starts for Phonegingi_26:

(Start: 11 @17413 has 109 MA's), (51, 17653), (91, 17866), (97, 17920), (118, 18022), (129, 18109), (141, 18184), (147, 18229),

Gene: PhunaPhoke_33 Start: 21449, Stop: 22261, Start Num: 9

Candidate Starts for PhunaPhoke_33:

(Start: 9 @21449 has 34 MA's), (15, 21476), (41, 21632), (49, 21683), (59, 21758), (87, 21893), (121, 22085),

Gene: Pickles13_26 Start: 17801, Stop: 18622, Start Num: 11

Candidate Starts for Pickles13_26:

(Start: 11 @17801 has 109 MA's), (51, 18041), (67, 18128), (89, 18248), (94, 18287), (97, 18308), (109, 18371), (118, 18410), (119, 18416), (129, 18497), (134, 18536), (141, 18572), (147, 18617),

Gene: PondAmelia_24 Start: 16957, Stop: 17760, Start Num: 11

Candidate Starts for PondAmelia_24:

(Start: 11 @16957 has 109 MA's), (40, 17125), (65, 17278), (67, 17284), (87, 17386), (105, 17491), (115, 17539),

Gene: Potty_33 Start: 21454, Stop: 22266, Start Num: 9

Candidate Starts for Potty_33:

(Start: 9 @21454 has 34 MA's), (15, 21481), (41, 21637), (49, 21688), (59, 21763), (87, 21898), (121, 22090),

Gene: Poultruss_32 Start: 21823, Stop: 22635, Start Num: 9

Candidate Starts for Poultruss_32:

(Start: 9 @21823 has 34 MA's), (15, 21850), (41, 22006), (42, 22009), (87, 22267), (121, 22459),

Gene: Powelldog_28 Start: 23735, Stop: 24526, Start Num: 13

Candidate Starts for Powelldog_28:

(Start: 13 @23735 has 54 MA's), (25, 23840), (28, 23849), (34, 23888), (47, 23954), (59, 24047), (84, 24164), (121, 24356), (137, 24458), (139, 24476),

Gene: ProfFrink_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for ProfFrink_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: QMacho_22 Start: 17693, Stop: 18496, Start Num: 11

Candidate Starts for QMacho_22:

(Start: 11 @17693 has 109 MA's), (40, 17861), (44, 17876),

Gene: Quenya_20 Start: 16489, Stop: 17313, Start Num: 11

Candidate Starts for Quenya_20:

(Start: 11 @16489 has 109 MA's), (18, 16537), (40, 16657), (46, 16678), (56, 16777), (64, 16807), (65, 16810), (87, 16918), (101, 17008), (146, 17296),

Gene: Rachella_33 Start: 21457, Stop: 22269, Start Num: 9

Candidate Starts for Rachella_33:

(Start: 9 @21457 has 34 MA's), (15, 21484), (41, 21640), (49, 21691), (59, 21766), (87, 21901), (121, 22093),

Gene: Rasovi_24 Start: 19383, Stop: 20204, Start Num: 11

Candidate Starts for Rasovi_24:

(Start: 11 @19383 has 109 MA's), (40, 19551), (42, 19557), (51, 19623), (80, 19797), (89, 19830), (91, 19836), (94, 19869), (96, 19884), (106, 19929), (118, 19992), (126, 20061), (129, 20079), (130, 20085), (138, 20145),

Gene: Raunak_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Raunak_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Rie18_33 Start: 20970, Stop: 21782, Start Num: 9

Candidate Starts for Rie18_33:

(Start: 9 @20970 has 34 MA's), (15, 20997), (119, 21588), (121, 21606),

Gene: Rollins_19 Start: 15090, Stop: 15878, Start Num: 11

Candidate Starts for Rollins_19:

(7, 14958), (Start: 11 @15090 has 109 MA's), (19, 15144), (40, 15258), (56, 15378), (57, 15384), (67, 15417), (68, 15432), (85, 15510), (100, 15600), (129, 15753), (145, 15858),

Gene: Rona_19 Start: 16530, Stop: 17369, Start Num: 11

Candidate Starts for Rona_19:

(Start: 11 @16530 has 109 MA's), (40, 16698), (46, 16719), (50, 16767), (56, 16818), (65, 16851), (67, 16857), (68, 16872), (142, 17322), (144, 17343),

Gene: Rootkit7_24 Start: 19193, Stop: 20014, Start Num: 11

Candidate Starts for Rootkit7_24:

(Start: 11 @19193 has 109 MA's), (18, 19244), (40, 19361), (71, 19547), (90, 19643), (91, 19646), (97, 19700), (108, 19748), (110, 19766), (118, 19802), (119, 19808), (126, 19871), (129, 19889), (130, 19895),

Gene: RustyBoy_27 Start: 23431, Stop: 24234, Start Num: 13

Candidate Starts for RustyBoy_27:

(Start: 13 @23431 has 54 MA's), (20, 23491), (34, 23587), (53, 23716), (62, 23767), (67, 23782), (82, 23863), (87, 23887), (123, 24085),

Gene: SBlackberry_24 Start: 19193, Stop: 20014, Start Num: 11

Candidate Starts for SBlackberry_24:

(Start: 11 @19193 has 109 MA's), (42, 19367), (51, 19433), (84, 19619), (90, 19643), (91, 19646), (110, 19766), (118, 19802), (126, 19871), (129, 19889), (130, 19895), (134, 19928), (136, 19934), (140, 19961),

Gene: Salk_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Salk_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: SanaSana_21 Start: 16844, Stop: 17647, Start Num: 11

Candidate Starts for SanaSana_21:

(Start: 11 @16844 has 109 MA's), (40, 17012), (65, 17165), (67, 17171), (87, 17273), (105, 17378),

Gene: SansAfet_21 Start: 17140, Stop: 17943, Start Num: 11

Candidate Starts for SansAfet_21:

(Start: 11 @17140 has 109 MA's), (40, 17308), (44, 17323), (113, 17713), (114, 17716), (130, 17824),

Gene: SarBear_21 Start: 17191, Stop: 17994, Start Num: 11

Candidate Starts for SarBear_21:

(Start: 11 @17191 has 109 MA's), (40, 17359), (70, 17551), (87, 17620), (113, 17764), (117, 17785),

Gene: ScienceWizSam_32 Start: 27293, Stop: 28081, Start Num: 13

Candidate Starts for ScienceWizSam_32:

(Start: 13 @27293 has 54 MA's), (24, 27368), (25, 27392), (47, 27497), (49, 27524), (52, 27542), (67, 27626), (80, 27707), (85, 27728), (87, 27737),

Gene: ScoobySnack_25 Start: 17550, Stop: 18320, Start Num: 18

Candidate Starts for ScoobySnack_25:

(Start: 11 @17499 has 109 MA's), (16, 17520), (17, 17544), (18, 17550), (67, 17823), (89, 17943), (93, 17967), (97, 18003), (118, 18105), (127, 18177), (129, 18192), (141, 18270),

Gene: Sharkboy_19 Start: 16517, Stop: 17356, Start Num: 11

Candidate Starts for Sharkboy_19:

(Start: 11 @16517 has 109 MA's), (40, 16685), (46, 16706), (50, 16754), (56, 16805), (65, 16838), (67, 16844), (68, 16859), (142, 17309), (144, 17330),

Gene: Shepard_31 Start: 27147, Stop: 27938, Start Num: 13

Candidate Starts for Shepard_31:

(Start: 13 @27147 has 54 MA's), (20, 27204), (24, 27222), (25, 27246), (44, 27333), (47, 27351), (66, 27477), (67, 27480), (85, 27582), (87, 27591),

Gene: Shiba_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Shiba_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: SilentWarrior_32 Start: 20620, Stop: 21432, Start Num: 9

Candidate Starts for SilentWarrior_32:

(Start: 9 @20620 has 34 MA's), (37, 20791), (49, 20854), (59, 20929), (101, 21154), (116, 21220), (121, 21256), (124, 21280),

Gene: SirBeanington_21 Start: 17230, Stop: 18033, Start Num: 11

Candidate Starts for SirBeanington_21:

(Start: 11 @17230 has 109 MA's), (40, 17398), (65, 17551), (70, 17590),

Gene: Skylord_19 Start: 15035, Stop: 15823, Start Num: 11

Candidate Starts for Skylord_19:

(6, 14876), (Start: 11 @15035 has 109 MA's), (19, 15089), (26, 15131), (40, 15203), (46, 15224), (56, 15323), (57, 15329), (67, 15362), (68, 15377), (85, 15455), (94, 15509), (100, 15545), (129, 15698), (131, 15725), (145, 15803),

Gene: Slay_21 Start: 17733, Stop: 18536, Start Num: 11

Candidate Starts for Slay_21:

(Start: 11 @17733 has 109 MA's), (40, 17901), (70, 18093), (87, 18162), (113, 18306), (117, 18327),

Gene: Sloopyjoe_27 Start: 24030, Stop: 24830, Start Num: 13

Candidate Starts for Sloopyjoe_27:

(Start: 13 @24030 has 54 MA's), (39, 24213), (44, 24231), (47, 24249), (49, 24276), (62, 24363), (87, 24483), (101, 24570), (112, 24612), (117, 24627), (121, 24660),

Gene: Snakehole_33 Start: 20704, Stop: 21516, Start Num: 9

Candidate Starts for Snakehole_33:

(Start: 9 @20704 has 34 MA's), (37, 20875), (43, 20893), (49, 20938), (59, 21013), (79, 21115), (116, 21304), (121, 21340), (124, 21364),

Gene: Softsoap_20 Start: 16964, Stop: 17767, Start Num: 11

Candidate Starts for Softsoap_20:

(Start: 11 @16964 has 109 MA's), (40, 17132), (44, 17147), (130, 17648),

Gene: Solea_23 Start: 17593, Stop: 18396, Start Num: 11

Candidate Starts for Solea_23:

(Start: 11 @17593 has 109 MA's), (40, 17761), (44, 17776), (113, 18166), (114, 18169), (130, 18277),

Gene: Spain_26 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Spain_26:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Sporto_28 Start: 25240, Stop: 26040, Start Num: 13

Candidate Starts for Sporto_28:

(Start: 13 @25240 has 54 MA's), (14, 25249), (21, 25300), (27, 25351), (39, 25423), (44, 25441), (47, 25459), (49, 25486), (87, 25693), (101, 25780), (112, 25822), (117, 25837), (121, 25870),

Gene: Sprinkle_27 Start: 24153, Stop: 24956, Start Num: 13

Candidate Starts for Sprinkle_27:

(Start: 13 @24153 has 54 MA's), (23, 24228), (34, 24309), (62, 24489), (71, 24540), (87, 24609), (98, 24678), (103, 24705), (121, 24786), (136, 24882),

Gene: StarLord_27 Start: 24030, Stop: 24830, Start Num: 13

Candidate Starts for StarLord_27:

(Start: 13 @24030 has 54 MA's), (39, 24213), (44, 24231), (47, 24249), (49, 24276), (62, 24363), (87, 24483), (101, 24570), (112, 24612), (117, 24627), (121, 24660),

Gene: Stayer_27 Start: 24029, Stop: 24829, Start Num: 13

Candidate Starts for Stayer_27:

(Start: 13 @24029 has 54 MA's), (39, 24212), (44, 24230), (47, 24248), (49, 24275), (62, 24362), (87, 24482), (101, 24569), (112, 24611), (117, 24626), (121, 24659),

Gene: Stoor_20 Start: 16841, Stop: 17644, Start Num: 11

Candidate Starts for Stoor_20:

(Start: 11 @16841 has 109 MA's), (40, 17009), (65, 17162), (67, 17168), (87, 17270), (105, 17375),

Gene: Stromboli_20 Start: 16977, Stop: 17780, Start Num: 11

Candidate Starts for Stromboli_20:

(Start: 11 @16977 has 109 MA's), (40, 17145), (50, 17214), (57, 17271), (64, 17295), (87, 17406), (89, 17412), (101, 17496), (102, 17499), (115, 17559),

Gene: SuMoo_19 Start: 16242, Stop: 17054, Start Num: 13

Candidate Starts for SuMoo_19:

(2, 15909), (4, 16029), (Start: 13 @16242 has 54 MA's), (104, 16803),

Gene: Sucha_21 Start: 16903, Stop: 17718, Start Num: 11

Candidate Starts for Sucha_21:

(Start: 11 @16903 has 109 MA's), (28, 17008), (42, 17077), (46, 17092), (60, 17209), (67, 17230), (110, 17476), (118, 17512), (126, 17581), (130, 17605), (131, 17626), (134, 17638), (136, 17644), (140, 17671), (141, 17674), (143, 17683),

Gene: SuperHands_21 Start: 18769, Stop: 19587, Start Num: 12

Candidate Starts for SuperHands_21:

(8, 18751), (Start: 12 @18769 has 8 MA's), (26, 18868), (31, 18889), (77, 19186), (87, 19231), (104, 19333), (132, 19498),

Gene: Sweetums_25 Start: 17926, Stop: 18744, Start Num: 11

Candidate Starts for Sweetums_25:

(Start: 11 @17926 has 109 MA's), (18, 17977), (40, 18094), (71, 18280), (84, 18352), (90, 18376), (91, 18379), (119, 18538), (126, 18601), (129, 18619), (130, 18625), (136, 18664),

Gene: Swervy_21 Start: 17191, Stop: 17994, Start Num: 11

Candidate Starts for Swervy_21:

(Start: 11 @17191 has 109 MA's), (40, 17359), (70, 17551), (87, 17620), (113, 17764), (117, 17785),

Gene: Synopsis_29 Start: 26956, Stop: 27744, Start Num: 13

Candidate Starts for Synepsis_29:

(Start: 13 @26956 has 54 MA's), (24, 27031), (25, 27055), (49, 27187), (52, 27205), (67, 27289), (80, 27370), (85, 27391),

Gene: Tatanka_30 Start: 27440, Stop: 28228, Start Num: 13

Candidate Starts for Tatanka_30:

(Start: 13 @27440 has 54 MA's), (24, 27515), (25, 27539), (49, 27671), (52, 27689), (67, 27773), (80, 27854), (85, 27875), (87, 27884),

Gene: Teacup_30 Start: 26812, Stop: 27600, Start Num: 13

Candidate Starts for Teacup_30:

(Start: 13 @26812 has 54 MA's), (24, 26887), (25, 26911), (44, 26998), (49, 27043), (52, 27061), (67, 27145), (80, 27226), (85, 27247),

Gene: Tedro_33 Start: 20927, Stop: 21739, Start Num: 9

Candidate Starts for Tedro_33:

(Start: 9 @20927 has 34 MA's), (15, 20954), (41, 21110), (59, 21236), (87, 21371), (121, 21563),

Gene: Teng_27 Start: 17864, Stop: 18682, Start Num: 11

Candidate Starts for Teng_27:

(Start: 11 @17864 has 109 MA's), (18, 17915), (40, 18032), (51, 18104), (71, 18218), (84, 18290), (90, 18314), (91, 18317), (96, 18365), (119, 18476), (126, 18539), (129, 18557), (130, 18563), (136, 18602),

Gene: Tenno_31 Start: 28038, Stop: 28826, Start Num: 13

Candidate Starts for Tenno_31:

(Start: 13 @28038 has 54 MA's), (24, 28113), (25, 28137), (44, 28224), (49, 28269), (52, 28287), (67, 28371), (80, 28452), (85, 28473), (87, 28482),

Gene: Tipton_31 Start: 27143, Stop: 27934, Start Num: 13

Candidate Starts for Tipton_31:

(Start: 13 @27143 has 54 MA's), (25, 27242), (33, 27275), (44, 27329), (47, 27347), (49, 27374), (85, 27578), (87, 27587),

Gene: Tokki_31 Start: 27098, Stop: 27889, Start Num: 13

Candidate Starts for Tokki_31:

(Start: 13 @27098 has 54 MA's), (33, 27230), (44, 27284), (47, 27302), (49, 27329), (85, 27533), (87, 27542), (103, 27638), (125, 27746),

Gene: Tongui_32 Start: 20953, Stop: 21765, Start Num: 9

Candidate Starts for Tongui_32:

(Start: 9 @20953 has 34 MA's), (15, 20980), (32, 21082), (43, 21142), (49, 21187), (59, 21262), (110, 21529), (119, 21571), (121, 21589), (142, 21718),

Gene: Truckee_29 Start: 26981, Stop: 27772, Start Num: 13

Candidate Starts for Truckee_29:

(Start: 13 @26981 has 54 MA's), (29, 27095), (44, 27167), (47, 27185), (49, 27212), (62, 27299), (67, 27314), (85, 27416), (87, 27425), (103, 27521),

Gene: Trustiboi_31 Start: 27509, Stop: 28297, Start Num: 13

Candidate Starts for Trustiboi_31:

(Start: 13 @27509 has 54 MA's), (24, 27584), (25, 27608), (49, 27740), (52, 27758), (67, 27842), (80, 27923), (85, 27944),

Gene: TukTuk_21 Start: 17249, Stop: 18052, Start Num: 11
Candidate Starts for TukTuk_21:
(Start: 11 @17249 has 109 MA's), (40, 17417), (44, 17432), (118, 17852),

Gene: TurboVicky_24 Start: 19192, Stop: 20013, Start Num: 11
Candidate Starts for TurboVicky_24:
(Start: 11 @19192 has 109 MA's), (18, 19243), (40, 19360), (51, 19432), (71, 19546), (90, 19642), (91, 19645), (118, 19801), (129, 19888), (130, 19894), (136, 19933),

Gene: Typher_26 Start: 19321, Stop: 20142, Start Num: 11
Candidate Starts for Typher_26:
(Start: 11 @19321 has 109 MA's), (18, 19372), (40, 19489), (51, 19561), (71, 19675), (90, 19771), (91, 19774), (118, 19930), (129, 20017), (130, 20023), (136, 20062),

Gene: UtzChips_19 Start: 16878, Stop: 17657, Start Num: 12
Candidate Starts for UtzChips_19:
(Start: 12 @16878 has 8 MA's), (54, 17139), (73, 17256), (87, 17307), (111, 17430), (142, 17616),

Gene: Violeta_28 Start: 17468, Stop: 18289, Start Num: 11
Candidate Starts for Violeta_28:
(Start: 11 @17468 has 109 MA's), (29, 17579), (51, 17708), (67, 17795), (89, 17915), (94, 17954), (97, 17975), (118, 18077), (119, 18083), (129, 18164), (141, 18239), (147, 18284),

Gene: Vitas_19 Start: 15030, Stop: 15818, Start Num: 11
Candidate Starts for Vitas_19:
(7, 14898), (Start: 11 @15030 has 109 MA's), (19, 15084), (40, 15198), (46, 15219), (56, 15318), (57, 15324), (67, 15357), (68, 15372), (85, 15450), (94, 15504), (100, 15540), (129, 15693), (131, 15720), (145, 15798),

Gene: WalkingDead_20 Start: 16969, Stop: 17772, Start Num: 11
Candidate Starts for WalkingDead_20:
(Start: 11 @16969 has 109 MA's), (40, 17137), (50, 17206), (64, 17287), (87, 17398), (89, 17404), (101, 17488), (102, 17491), (115, 17551),

Gene: Warren_27 Start: 17574, Stop: 18395, Start Num: 11
Candidate Starts for Warren_27:
(Start: 11 @17574 has 109 MA's), (51, 17814), (67, 17901), (91, 18027), (97, 18081), (129, 18270), (147, 18390),

Gene: Westerlin_31 Start: 28621, Stop: 29409, Start Num: 13
Candidate Starts for Westerlin_31:
(Start: 13 @28621 has 54 MA's), (24, 28696), (25, 28720), (44, 28807), (49, 28852), (52, 28870), (80, 29035), (85, 29056),

Gene: Winchester007_42 Start: 23488, Stop: 24309, Start Num: 11
Candidate Starts for Winchester007_42:
(Start: 11 @23488 has 109 MA's), (29, 23599), (51, 23728), (67, 23815), (89, 23935), (94, 23974), (97, 23995), (118, 24097), (129, 24184), (141, 24259), (147, 24304),

Gene: Wrackline_31 Start: 19179, Stop: 20000, Start Num: 11
Candidate Starts for Wrackline_31:

(Start: 11 @19179 has 109 MA's), (17, 19224), (22, 19245), (29, 19290), (42, 19353), (46, 19368), (51, 19419), (84, 19605), (97, 19686), (118, 19788), (130, 19881), (131, 19902), (136, 19920), (140, 19947), (141, 19950),

Gene: Zanella_24 Start: 19195, Stop: 20016, Start Num: 11

Candidate Starts for Zanella_24:

(Start: 11 @19195 has 109 MA's), (18, 19246), (40, 19363), (51, 19435), (71, 19549), (90, 19645), (91, 19648), (118, 19804), (129, 19891), (130, 19897), (136, 19936),

Gene: Zeta1847_18 Start: 16881, Stop: 17684, Start Num: 11

Candidate Starts for Zeta1847_18:

(Start: 11 @16881 has 109 MA's), (38, 17049), (50, 17121),

Gene: Zippen_30 Start: 27285, Stop: 28076, Start Num: 13

Candidate Starts for Zippen_30:

(Start: 13 @27285 has 54 MA's), (47, 27489), (85, 27720), (103, 27822),