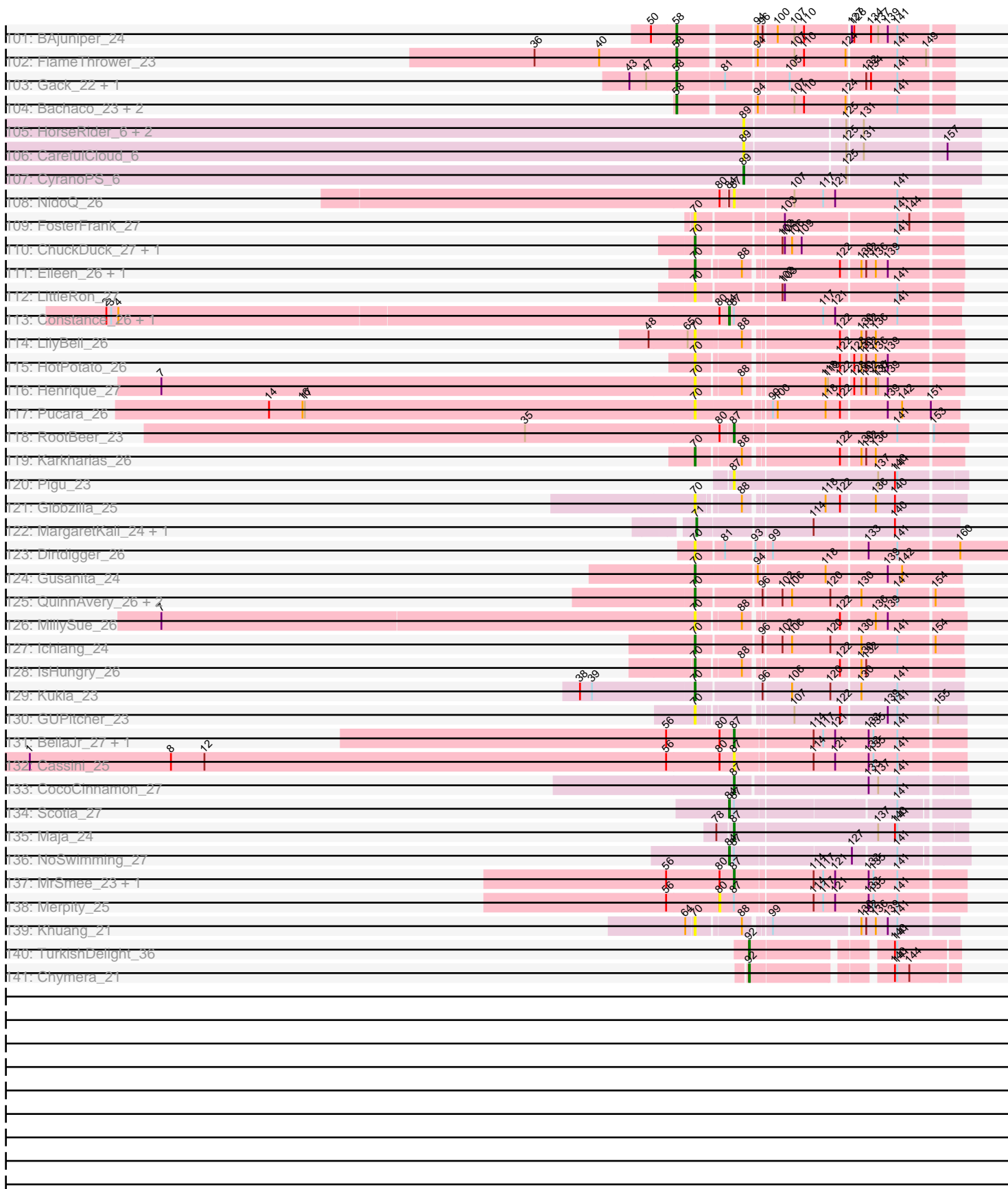


Pham 296205



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 296205 Report

This analysis was run 04/25/26 on database version 644.

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 296205 has 255 members, 64 are drafts.

Phages represented in each track:

- Track 1 : EastWest_30
- Track 2 : Beans_27
- Track 3 : Brent_27, Franzy_27
- Track 4 : Jawnski_27
- Track 5 : NathanVaag_27
- Track 6 : Piccoletto_27
- Track 7 : King2_27
- Track 8 : Shade_29
- Track 9 : Wyborn_30
- Track 10 : Jordan_29, Zartrosa_29, Sonny_29
- Track 11 : StevieBAY_29
- Track 12 : GravityBall_29, BigDome_29
- Track 13 : BossLady_29
- Track 14 : TaeYoung_29, Martha_29, Grekaycon_29
- Track 15 : BarretLemon_29, Timinator_29, LeeroyJ_29
- Track 16 : Pippa_29
- Track 17 : JKerns_29
- Track 18 : Ren19_44, Nikan_46
- Track 19 : Ollypop_46
- Track 20 : AWGoat_38
- Track 21 : SilentRX_40
- Track 22 : KendraB23_25, Amanises_25, Toad24_25, Pelletreau_25, Westrich_25, Gravel_25, Shen_25, Eesa_24, Orcanus_24
- Track 23 : Galaxy_25
- Track 24 : Abidatro_25
- Track 25 : Brynnie_24
- Track 26 : WileyE_23, Chickaboom_23
- Track 27 : Vulpecula_24
- Track 28 : TaylorSipht_24
- Track 29 : Zixiang_24, Niblet_24, Chicken_24
- Track 30 : Basilisk_24
- Track 31 : Jamun_24
- Track 32 : Ruchi_24

- Track 33 : Colusalem_24, Pineda_25, Bedetta_25, OtsoOtso_24, Polka_24
- Track 34 : Daob_25, Melons_25, Cote_25, Lunar_25
- Track 35 : Kepler_24
- Track 36 : Jerole_25
- Track 37 : Bibble12_25
- Track 38 : Amelia_25, Coral_24
- Track 39 : HannahPhantana_25
- Track 40 : Cygnet_24
- Track 41 : LittleTokyo_24
- Track 42 : PhirstandPhine_25
- Track 43 : Antrice_24
- Track 44 : Kuleana_24
- Track 45 : Zhuangyuan_25
- Track 46 : AlexMinion_24, StuartMinion_23
- Track 47 : DanHam62_23, AdoptaAdorbs_23, Atlantica_23, Oppalora_23, AmiCi24_23, HamCheese_23, Camara_23, Glotell_23, Laphuphu24k_23, KHumphrey_23, PhluffyCoco_23, Amphitrite_23, RedFox_23, Fingolfin_23
- Track 48 : Leona_23, Rattail_23, Azaz_23
- Track 49 : Andrew_24
- Track 50 : Babushka_23
- Track 51 : Renna12_24
- Track 52 : Juno112_23
- Track 53 : Aikyam_28, CookieBear_28, RadFad_28, Richie_28, Auxilium_28, MaterMagnus_28, BenchScraper_28, YoungHarleezy_28, Lasker_28, MidnightRain_28, Hillester_28
- Track 54 : Sporco_29, Raphaella_28
- Track 55 : SonDevVon_27, Vopal_29, Phrank15_27, MUWow_27, JellyBread_28, Sakai_28, NewKitty_29, BillyTP_28, Mapleville_28, Lawnathon_28, Gorpy_28, AdaS_28, Isolde_28
- Track 56 : LeBruni_27
- Track 57 : Sashimi_26
- Track 58 : EvePickles_25
- Track 59 : Ding_28
- Track 60 : BasketStar_28, BlueShadow_28, Windest_29
- Track 61 : Globfish_28
- Track 62 : ThayneTheZag_28
- Track 63 : SpicyFrank_28
- Track 64 : Kabloowy_28
- Track 65 : Faja_25
- Track 66 : ToastyFinz_22
- Track 67 : Tubberson_23, DaRealMyers_23, SoJo_23
- Track 68 : Picard_22
- Track 69 : SV1_22
- Track 70 : Mojorita_22
- Track 71 : Raleigh_23
- Track 72 : Darolandstone_23
- Track 73 : PapayaSalad_22, Bioscum_22, Austintatious_22, Ididsumtinwong_22, Lishka_22
- Track 74 : AbbeyMikolon_23, Nesbitt_23
- Track 75 : Greenbelt_28
- Track 76 : Virizion_33, Lizz_29, PHTowN_29, Gibson_29, Rooney_29, ShakeNBake_29
- Track 77 : Dryad_32

- Track 78 : Wilkos_30
- Track 79 : Wentworth_30
- Track 80 : Yara_26
- Track 81 : SassyC_31
- Track 82 : ArizonaGT_21, Cumberbatch_21, Ignacio_21, HFrancette_21
- Track 83 : Eklok_21, AxeJC_21, FrumpyGal_21, Piccadilly_21, Eastland_21
- Track 84 : Schlegelian_21
- Track 85 : Vondra_21
- Track 86 : Gspu1_22
- Track 87 : Schmidt_22
- Track 88 : Octobien14_37
- Track 89 : Sephiroth_36, Syleon_36, Kudrefre_35
- Track 90 : Rabbitrun_38
- Track 91 : LilJank_36, Trax_36
- Track 92 : DonkeyMan_22
- Track 93 : DearBasketball_25, DinoNuggs_23, Reyja_23
- Track 94 : Heinz_22, Hibiscus_22, Jojo24_22
- Track 95 : Santhid_22
- Track 96 : Tarzan_22
- Track 97 : Katzastrophic_23
- Track 98 : Clayda5_22, Rollins_22, Skylord_22, Armstrong_22, Bernstein_22, Vitas_22
- Track 99 : Eden_22
- Track 100 : Coltrane_22, Brahms_22
- Track 101 : BAjuniper_24
- Track 102 : FlameThrower_23
- Track 103 : Gack_22, Franklin22_23
- Track 104 : Bachaco_23, Quenya_24, Celaena_23
- Track 105 : HorseRider_6, TailX7_6, Jalloh_6
- Track 106 : CarefulCloud_6
- Track 107 : CyranoPS_6
- Track 108 : NidoQ_26
- Track 109 : FosterFrank_27
- Track 110 : ChuckDuck_27, KayMoney_27
- Track 111 : Eileen_26, Peas_26
- Track 112 : LittleRon_27
- Track 113 : Constance_26, PeggyLeg03_26
- Track 114 : LilyBell_26
- Track 115 : HotPotato_26
- Track 116 : Henrique_27
- Track 117 : Pucara_26
- Track 118 : RootBeer_23
- Track 119 : Karkharias_26
- Track 120 : Pigu_23
- Track 121 : Gibbzilla_25
- Track 122 : MargaretKali_24, Kumotta_24
- Track 123 : Dirtigger_26
- Track 124 : Gusanita_24
- Track 125 : QuinnAvery_26, BigSherm_25, Hallweekend_24
- Track 126 : MillySue_26
- Track 127 : Ichiang_24
- Track 128 : IsHungry_26
- Track 129 : Kukla_23

- Track 130 : GUPitcher_23
- Track 131 : BellaJr_27, BlackSpider_25
- Track 132 : Cassini_25
- Track 133 : CocoCinnamon_27
- Track 134 : Scotia_27
- Track 135 : Maja_24
- Track 136 : NoSwimming_27
- Track 137 : MrSmee_23, Skitty_23
- Track 138 : Merpity_25
- Track 139 : Khuang_21
- Track 140 : TurkishDelight_36
- Track 141 : Chymera_21

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

The start number called the most often in the published annotations is 70, it was called in 39 of the 191 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AdaS_28, Aikyam_28, Auxilium_28, BasketStar_28, BenchScraper_28, BigSherm_25, BillyTP_28, BlueShadow_28, ChuckDuck_27, CookieBear_28, Ding_28, Dirdigger_26, Eileen_26, EvePickles_25, Faja_25, FosterFrank_27, GUPitcher_23, Gibbzilla_25, Globfish_28, Gorpy_28, Gusanita_24, Halloweekend_24, Henrique_27, Hillester_28, HotPotato_26, Ichiang_24, IsHungry_26, Isolde_28, JellyBread_28, Kabloowy_28, Karkharias_26, KayMoney_27, Khuang_21, Kukla_23, Lasker_28, Lawnathon_28, LeBruni_27, LilyBell_26, LittleRon_27, MUWow_27, Mapleville_28, MaterMagnus_28, MidnightRain_28, MillySue_26, NewKitty_29, Peas_26, Phrank15_27, Pucara_26, QuinnAvery_26, RadFad_28, Raphaella_28, Richie_28, Sakai_28, Sashimi_26, SonDevVon_27, SpicyFrank_28, Sporco_29, ThayneTheZag_28, Vopal_29, Windest_29, YoungHarleezy_28,

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

- Antrice_24, Zhuangyuan_25,

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

- AWGoat_38, AbbeyMikolon_23, Abidatro_25, AdoptaAdorbs_23, AlexMinion_24, Amanises_25, Amelia_25, AmiCi24_23, Amphitrite_23, Andrew_24, ArizonaGT_21, Armstrong_22, Atlantica_23, Austintatious_22, AxeJC_21, Azaz_23, BAjuniper_24, Babushka_23, Bachaco_23, BarretLemon_29, Basilisk_24, Beans_27, Bedetta_25, BellaJr_27, Bernstein_22, Bibble12_25, BigDome_29, Bioscum_22, BlackSpider_25, BossLady_29, Brahms_22, Brent_27, Brynnie_24, Camara_23, CarefulCloud_6, Cassini_25, Celaena_23, Chickaboom_23, Chicken_24, Chymera_21, Clayda5_22, CocoCinnamon_27, Coltrane_22, Colusalem_24, Constance_26, Coral_24, Cote_25, Cumberbatch_21, Cygnet_24, CyranoPS_6, DaRealMyers_23, DanHam62_23, Daob_25, Darolandstone_23, DearBasketball_25, DinoNuggs_23, DonkeyMan_22, Dryad_32, EastWest_30, Eastland_21, Eden_22, Eesa_24, Eklok_21, Fingolfin_23, FlameThrower_23, Franklin22_23, Franzy_27, FrumpyGal_21, Gack_22, Galaxy_25, Gibson_29, Glotell_23, Gravel_25, GravityBall_29, Greenbelt_28, Grekaycon_29, Gsput1_22, HFrancette_21, HamCheese_23, HannahPhantana_25, Heinz_22,

Hibiscus_22, HorseRider_6, Ididsumtinwong_22, Ignacio_21, JKerns_29, Jalloh_6, Jamun_24, Jawnski_27, Jerole_25, Jojo24_22, Jordan_29, Juno112_23, KHumphrey_23, Katzastrophic_23, KendraB23_25, Kepler_24, King2_27, Kudrefre_35, Kuleana_24, Kumotta_24, Laphuphu24k_23, LeeroyJ_29, Leona_23, LilJank_36, Lishka_22, LittleTokyo_24, Lizz_29, Lunar_25, Maja_24, MargaretKali_24, Martha_29, Melons_25, Merpity_25, Mojorita_22, MrSmee_23, NathanVaag_27, Nesbitt_23, Niblet_24, NidoQ_26, Nikan_46, NoSwimming_27, Octobien14_37, Ollypop_46, Oppalora_23, Orcanus_24, OtsoOtso_24, PHTowN_29, PapayaSalad_22, PeggyLeg03_26, Pelletreau_25, PhirstandPhine_25, PhluffyCoco_23, Picard_22, Piccadilly_21, Piccoletto_27, Pigu_23, Pineda_25, Pippa_29, Polka_24, Quenya_24, Rabbitrun_38, Raleigh_23, Rattail_23, RedFox_23, Ren19_44, Renna12_24, Reyja_23, Rollins_22, Rooney_29, RootBeer_23, Ruchi_24, SV1_22, Santhid_22, SassyC_31, Schlegelian_21, Schmidt_22, Scotia_27, Sephiroth_36, Shade_29, ShakeNBake_29, Shen_25, SilentRX_40, Skitty_23, Skylord_22, SoJo_23, Sonny_29, StevieBAY_29, StuartMinion_23, Syleon_36, TaeYoung_29, TailX7_6, Tarzan_22, TaylorSipht_24, Timinator_29, Toad24_25, ToastyFinz_22, Trax_36, Tubberson_23, TurkishDelight_36, Virizion_33, Vitas_22, Vondra_21, Vulpecula_24, Wentworth_30, Westrich_25, WileyE_23, Wilkos_30, Wyborn_30, Yara_26, Zartrosa_29, Zixiang_24,

Summary by start number:

Start 51:

- Found in 3 of 255 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nikan_46 (AP2), Ollypop_46 (AP2), Ren19_44 (AP2),

Start 53:

- Found in 6 of 255 (2.4%) of genes in pham
- Manual Annotations of this start: 4 of 191
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BarretLemon_29 (AO2), LeeroyJ_29 (AO2), StevieBAY_29 (AO2), Timinator_29 (AO2),

Start 54:

- Found in 24 of 255 (9.4%) of genes in pham
- Manual Annotations of this start: 18 of 191
- Called 79.2% of time when present
- Phage (with cluster) where this start called: Beans_27 (AO1), BigDome_29 (AO2), BossLady_29 (AO2), Brent_27 (AO1), Franzy_27 (AO1), GravityBall_29 (AO2), Grekaycon_29 (AO2), JKerns_29 (AO2), Jawnski_27 (AO1), Jordan_29 (AO2), King2_27 (AO1), Martha_29 (AO2), NathanVaag_27 (AO1), Piccoletto_27 (AO1), Pippa_29 (AO2), Shade_29 (AO2), Sonny_29 (AO2), TaeYoung_29 (AO2), Zartrosa_29 (AO2),

Start 55:

- Found in 1 of 255 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat_38 (AP4),

Start 58:

- Found in 23 of 255 (9.0%) of genes in pham
- Manual Annotations of this start: 17 of 191
- Called 73.9% of time when present
- Phage (with cluster) where this start called: Armstrong_22 (EB), BAjuniper_24 (EB), Bachaco_23 (EB), Bernstein_22 (EB), Brahms_22 (EB), Celaena_23 (EB), Clayda5_22 (EB), Coltrane_22 (EB), Eden_22 (EB), FlameThrower_23 (EB), Franklin22_23 (EB), Gack_22 (EB), Katzastrophic_23 (EB), Quenya_24 (EB), Rollins_22 (EB), Skylord_22 (EB), Vitas_22 (EB),

Start 60:

- Found in 1 of 255 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SilentRX_40 (AP4),

Start 61:

- Found in 1 of 255 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andrew_24 (AS3),

Start 62:

- Found in 1 of 255 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EastWest_30 (AO),

Start 63:

- Found in 4 of 255 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Wyborn_30 (AO2),

Start 64:

- Found in 50 of 255 (19.6%) of genes in pham
- Manual Annotations of this start: 28 of 191
- Called 92.0% of time when present
- Phage (with cluster) where this start called: Abidatro_25 (AS1), AdoptaAdorbs_23 (AS3), AlexMinion_24 (AS3), Amanises_25 (AS1), AmiCi24_23 (AS3), Amphitrite_23 (AS3), Antrice_24 (AS2), Atlantica_23 (AS3), Azaz_23 (AS3), Babushka_23 (AS3), Basilisk_24 (AS1), Brynnie_24 (AS1), Camara_23 (AS3), Chickaboom_23 (AS1), Chicken_24 (AS1), Cygnet_24 (AS2), DanHam62_23 (AS3), Eesa_24 (AS1), Fingolfin_23 (AS3), Galaxy_25 (AS1), Glotell_23 (AS3), Gravel_25 (AS1), HamCheese_23 (AS3), Jamun_24 (AS1), Juno112_23 (AS3), KHumphrey_23 (AS3), KendraB23_25 (AS1), Laphuphu24k_23 (AS3), Leona_23 (AS3), Niblet_24 (AS1), Oppalora_23 (AS3), Orcanus_24 (AS1), Pelletreau_25 (AS1), PhluffyCoco_23 (AS3), Rattail_23 (AS3), RedFox_23 (AS3), Renna12_24 (AS3), Shen_25 (AS1), StuartMinion_23 (AS3), TaylorSipht_24 (AS1), Toad24_25 (AS1), Vulpecula_24 (AS1), Westrich_25 (AS1), WileyE_23 (AS1), Zhuangyuan_25 (AS2), Zixiang_24 (AS1),

Start 68:

- Found in 14 of 255 (5.5%) of genes in pham
- Manual Annotations of this start: 10 of 191
- Called 92.9% of time when present
- Phage (with cluster) where this start called: Amelia_25 (AS2), Bedetta_25 (AS2), Bible12_25 (AS2), Colusalem_24 (AS2), Coral_24 (AS2), Cote_25 (AS2), Daob_25 (AS2), LittleTokyo_24 (AS2), Lunar_25 (AS2), Melons_25 (AS2), OtsoOtso_24 (AS2), Pineda_25 (AS2), Polka_24 (AS2),

Start 69:

- Found in 20 of 255 (7.8%) of genes in pham
- Manual Annotations of this start: 4 of 191
- Called 25.0% of time when present
- Phage (with cluster) where this start called: HannahPhantana_25 (AS2), Jerole_25 (AS2), Kepler_24 (AS2), Kuleana_24 (AS2), PhirstandPhine_25 (AS2),

Start 70:

- Found in 63 of 255 (24.7%) of genes in pham
- Manual Annotations of this start: 39 of 191
- Called 96.8% of time when present
- Phage (with cluster) where this start called: AdaS_28 (AY), Aikyam_28 (AY), Auxilium_28 (AY), BasketStar_28 (AY), BenchScraper_28 (AY), BigSherm_25 (FF), BillyTP_28 (AY), BlueShadow_28 (AY), ChuckDuck_27 (FA), CookieBear_28 (AY), Ding_28 (AY), DirtDigger_26 (FF), Eileen_26 (FA), EvePickles_25 (AY), Faja_25 (AY), FosterFrank_27 (FA), GUPitcher_23 (FJ), Gibbzilla_25 (FB), Globfish_28 (AY), Gorpy_28 (AY), Gusanita_24 (FF), Halloweekend_24 (FF), Henrique_27 (FA), Hillester_28 (AY), HotPotato_26 (FA), Ichiang_24 (FF), IsHungry_26 (FF), Isolde_28 (AY), JellyBread_28 (AY), Kabloowy_28 (AY), Karkharias_26 (FA), KayMoney_27 (FA), Khuang_21 (FS), Kukla_23 (FJ), Lasker_28 (AY), Lawnathon_28 (AY), LeBruni_27 (AY), LilyBell_26 (FA), LittleRon_27 (FA), MUWow_27 (AY), Mapleville_28 (AY), MaterMagnus_28 (AY), MidnightRain_28 (AY), MillySue_26 (FF), NewKitty_29 (AY), Peas_26 (FA), Phrank15_27 (AY), Pucara_26 (FA), QuinnAvery_26 (FF), RadFad_28 (AY), Raphaella_28 (AY), Richie_28 (AY), Sakai_28 (AY), Sashimi_26 (AY), SonDevVon_27 (AY), SpicyFrank_28 (AY), Sporco_29 (AY), ThayneTheZag_28 (AY), Vopal_29 (AY), Windest_29 (AY), YoungHarleezy_28 (AY),

Start 71:

- Found in 2 of 255 (0.8%) of genes in pham
- Manual Annotations of this start: 2 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumotta_24 (FB), MargaretKali_24 (FB),

Start 75:

- Found in 18 of 255 (7.1%) of genes in pham
- Manual Annotations of this start: 8 of 191
- Called 55.6% of time when present
- Phage (with cluster) where this start called: DearBasketball_25 (DY), DinoNuggs_23 (DY), DonkeyMan_22 (DY), Heinz_22 (DY), Hibiscus_22 (DY), Jojo24_22 (DY), Reyja_23 (DY), Ruchi_24 (AS1), Santhid_22 (DY), Tarzan_22 (DY),

Start 80:

- Found in 10 of 255 (3.9%) of genes in pham
- No Manual Annotations of this start.

- Called 10.0% of time when present
- Phage (with cluster) where this start called: Merpity_25 (FQ),

Start 83:

- Found in 2 of 255 (0.8%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gspu1_22 (CU2),

Start 84:

- Found in 5 of 255 (2.0%) of genes in pham
- Manual Annotations of this start: 4 of 191
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Constance_26 (FA), NoSwimming_27 (FO), PeggyLeg03_26 (FA), Scotia_27 (FO),

Start 87:

- Found in 15 of 255 (5.9%) of genes in pham
- Manual Annotations of this start: 6 of 191
- Called 66.7% of time when present
- Phage (with cluster) where this start called: BellaJr_27 (FN), BlackSpider_25 (FN), Cassini_25 (FN), CocoCinnamon_27 (FO), Maja_24 (FO), MrSmee_23 (FQ), NidoQ_26 (FA), Pigu_23 (FB), RootBeer_23 (FA), Skitty_23 (FQ),

Start 89:

- Found in 5 of 255 (2.0%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CarefulCloud_6 (ER), CyranoPS_6 (ER), HorseRider_6 (ER), Jalloh_6 (ER), TailX7_6 (ER),

Start 91:

- Found in 6 of 255 (2.4%) of genes in pham
- Manual Annotations of this start: 2 of 191
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Octobien14_37 (DU1), Schmidt_22 (CU4),

Start 92:

- Found in 33 of 255 (12.9%) of genes in pham
- Manual Annotations of this start: 31 of 191
- Called 97.0% of time when present
- Phage (with cluster) where this start called: AbbeyMikolon_23 (BL), ArizonaGT_21 (BP), Austintatious_22 (BC3), AxeJC_21 (BP), Bioscum_22 (BC3), Chymera_21 (singleton), Cumberbatch_21 (BP), DaRealMyers_23 (BC1), Darolandstone_23 (BC2), Eastland_21 (BP), Eklok_21 (BP), FrumpyGal_21 (BP), HFrancette_21 (BP), Ididsumtinwong_22 (BC3), Ignacio_21 (BP), Kudrefre_35 (DU1), Lishka_22 (BC3), Moajorita_22 (BC1), Nesbitt_23 (BL), PapayaSalad_22 (BC3), Picard_22 (BC1), Piccadilly_21 (BP), Raleigh_23 (BC2), SV1_22 (BC1), Schlegelian_21 (BP), Sephiroth_36 (DU1), SoJo_23 (BC1), Syleon_36 (DU1), ToastyFinz_22 (BC1), Tubberson_23 (BC1), TurkishDelight_36 (singleton), Vondra_21 (BP),

Start 95:

- Found in 10 of 255 (3.9%) of genes in pham
- Manual Annotations of this start: 7 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dryad_32 (BN), Gibson_29 (BN), Lizz_29 (BN), PHTowN_29 (BN), Rooney_29 (BN), SassyC_31 (BN), ShakeNBake_29 (BN), Virizion_33 (BN), Wentworth_30 (BN), Wilkos_30 (BN),

Start 96:

- Found in 42 of 255 (16.5%) of genes in pham
- Manual Annotations of this start: 2 of 191
- Called 7.1% of time when present
- Phage (with cluster) where this start called: LilJank_36 (DU2), Rabbitrun_38 (DU2), Trax_36 (DU2),

Start 97:

- Found in 1 of 255 (0.4%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greenbelt_28 (BN),

Start 98:

- Found in 25 of 255 (9.8%) of genes in pham
- Manual Annotations of this start: 1 of 191
- Called 4.0% of time when present
- Phage (with cluster) where this start called: Yara_26 (BN),

Summary by clusters:

There are 31 clusters represented in this pham: FQ, singleton, FS, AP2, BN, AP4, FA, FB, BP, FF, DY, FJ, FN, FO, CU4, CU2, BL, DU1, DU2, AS3, AS2, AS1, AO, EB, AO2, AO1, AY, ER, BC1, BC2, BC3,

Info for manual annotations of cluster AO:

- Start number 62 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 54 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 53 was manually annotated 4 times for cluster AO2.
- Start number 54 was manually annotated 11 times for cluster AO2.
- Start number 63 was manually annotated 1 time for cluster AO2.

Info for manual annotations of cluster AP2:

- Start number 51 was manually annotated 1 time for cluster AP2.

Info for manual annotations of cluster AP4:

- Start number 55 was manually annotated 1 time for cluster AP4.
- Start number 60 was manually annotated 1 time for cluster AP4.

Info for manual annotations of cluster AS1:

- Start number 64 was manually annotated 12 times for cluster AS1.
- Start number 75 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 64 was manually annotated 3 times for cluster AS2.
- Start number 68 was manually annotated 10 times for cluster AS2.
- Start number 69 was manually annotated 4 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 61 was manually annotated 1 time for cluster AS3.
- Start number 64 was manually annotated 13 times for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 70 was manually annotated 28 times for cluster AY.

Info for manual annotations of cluster BC1:

- Start number 92 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 92 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 92 was manually annotated 5 times for cluster BC3.

Info for manual annotations of cluster BL:

- Start number 92 was manually annotated 2 times for cluster BL.

Info for manual annotations of cluster BN:

- Start number 95 was manually annotated 7 times for cluster BN.
- Start number 97 was manually annotated 1 time for cluster BN.
- Start number 98 was manually annotated 1 time for cluster BN.

Info for manual annotations of cluster BP:

- Start number 92 was manually annotated 11 times for cluster BP.

Info for manual annotations of cluster CU4:

- Start number 91 was manually annotated 1 time for cluster CU4.

Info for manual annotations of cluster DU1:

- Start number 91 was manually annotated 1 time for cluster DU1.
- Start number 92 was manually annotated 3 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 96 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster DY:

- Start number 75 was manually annotated 7 times for cluster DY.

Info for manual annotations of cluster EB:

- Start number 58 was manually annotated 17 times for cluster EB.

Info for manual annotations of cluster ER:

- Start number 89 was manually annotated 1 time for cluster ER.

Info for manual annotations of cluster FA:

- Start number 70 was manually annotated 5 times for cluster FA.
- Start number 84 was manually annotated 2 times for cluster FA.
- Start number 87 was manually annotated 1 time for cluster FA.

Info for manual annotations of cluster FB:

- Start number 71 was manually annotated 2 times for cluster FB.

Info for manual annotations of cluster FF:

- Start number 70 was manually annotated 5 times for cluster FF.

Info for manual annotations of cluster FJ:

- Start number 70 was manually annotated 1 time for cluster FJ.

Info for manual annotations of cluster FN:

- Start number 87 was manually annotated 1 time for cluster FN.

Info for manual annotations of cluster FO:

- Start number 84 was manually annotated 2 times for cluster FO.
- Start number 87 was manually annotated 2 times for cluster FO.

Info for manual annotations of cluster FQ:

- Start number 87 was manually annotated 2 times for cluster FQ.

Gene Information:

Gene: AWGoat_38 Start: 34355, Stop: 34708, Start Num: 55

Candidate Starts for AWGoat_38:

(Start: 55 @34355 has 1 MA's), (93, 34463), (107, 34508), (141, 34631), (149, 34667),

Gene: AbbeyMikolon_23 Start: 18386, Stop: 18598, Start Num: 92

Candidate Starts for AbbeyMikolon_23:

(Start: 92 @18386 has 31 MA's), (110, 18452), (114, 18464), (139, 18530), (141, 18542), (144, 18557),

Gene: Abidatro_25 Start: 18908, Stop: 19243, Start Num: 64

Candidate Starts for Abidatro_25:

(Start: 64 @18908 has 28 MA's), (77, 18941), (93, 18986), (Start: 98 @19001 has 1 MA's), (141, 19154),

Gene: AdaS_28 Start: 20360, Stop: 20668, Start Num: 70

Candidate Starts for AdaS_28:

(Start: 70 @20360 has 39 MA's), (102, 20456), (103, 20459), (106, 20468), (141, 20594), (144, 20609), (146, 20621),

Gene: AdoptaAdorbs_23 Start: 17622, Stop: 17945, Start Num: 64

Candidate Starts for AdoptaAdorbs_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: Aikyam_28 Start: 20431, Stop: 20736, Start Num: 70

Candidate Starts for Aikyam_28:

(Start: 70 @20431 has 39 MA's), (88, 20482), (111, 20548), (118, 20572), (122, 20590), (130, 20611), (132, 20617), (136, 20629),

Gene: AlexMinion_24 Start: 17655, Stop: 17969, Start Num: 64

Candidate Starts for AlexMinion_24:

(Start: 63 @17652 has 1 MA's), (Start: 64 @17655 has 28 MA's), (81, 17691), (90, 17715), (Start: 96 @17733 has 2 MA's), (Start: 98 @17739 has 1 MA's), (103, 17757), (106, 17766), (119, 17811), (139, 17880), (141, 17892), (148, 17925),

Gene: Amanises_25 Start: 19185, Stop: 19517, Start Num: 64

Candidate Starts for Amanises_25:

(Start: 64 @19185 has 28 MA's), (93, 19260), (Start: 96 @19269 has 2 MA's), (103, 19293), (104, 19296), (120, 19350), (122, 19362), (139, 19416), (141, 19428),

Gene: Amelia_25 Start: 18043, Stop: 18393, Start Num: 68

Candidate Starts for Amelia_25:

(Start: 68 @18043 has 10 MA's), (Start: 69 @18046 has 4 MA's), (77, 18064), (81, 18076), (Start: 98 @18124 has 1 MA's), (103, 18142), (141, 18277), (144, 18292), (158, 18343),

Gene: AmiCi24_23 Start: 17621, Stop: 17944, Start Num: 64

Candidate Starts for AmiCi24_23:

(Start: 64 @17621 has 28 MA's), (81, 17660), (93, 17693), (103, 17726), (119, 17780), (141, 17861),

Gene: Amphitrite_23 Start: 17620, Stop: 17943, Start Num: 64

Candidate Starts for Amphitrite_23:

(Start: 64 @17620 has 28 MA's), (81, 17659), (93, 17692), (103, 17725), (119, 17779), (141, 17860),

Gene: Andrew_24 Start: 18042, Stop: 18377, Start Num: 61

Candidate Starts for Andrew_24:

(Start: 61 @18042 has 1 MA's), (Start: 64 @18048 has 28 MA's), (Start: 96 @18135 has 2 MA's), (Start: 98 @18141 has 1 MA's), (103, 18159), (119, 18213), (141, 18294), (144, 18309),

Gene: Antrice_24 Start: 18536, Stop: 18868, Start Num: 64

Candidate Starts for Antrice_24:

(Start: 64 @18536 has 28 MA's), (Start: 70 @18548 has 39 MA's), (81, 18578), (93, 18611), (94, 18614), (105, 18650), (109, 18665), (120, 18701), (122, 18713), (133, 18743), (141, 18779), (142, 18785), (144, 18794),

Gene: ArizonaGT_21 Start: 17942, Stop: 18202, Start Num: 92

Candidate Starts for ArizonaGT_21:

(6, 17210), (19, 17399), (24, 17477), (28, 17525), (32, 17612), (76, 17897), (90, 17936), (Start: 92 @17942 has 31 MA's), (107, 17996), (109, 18005), (141, 18122),

Gene: Armstrong_22 Start: 17107, Stop: 17433, Start Num: 58

Candidate Starts for Armstrong_22:

(Start: 58 @17107 has 17 MA's), (120, 17290), (121, 17296), (141, 17368),

Gene: Atlantica_23 Start: 17622, Stop: 17945, Start Num: 64

Candidate Starts for Atlantica_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: Austintatious_22 Start: 17098, Stop: 17331, Start Num: 92

Candidate Starts for Austintatious_22:

(Start: 92 @17098 has 31 MA's), (100, 17131), (141, 17254),

Gene: Auxilium_28 Start: 20421, Stop: 20726, Start Num: 70

Candidate Starts for Auxilium_28:

(Start: 70 @20421 has 39 MA's), (88, 20472), (111, 20538), (118, 20562), (122, 20580), (130, 20601), (132, 20607), (136, 20619),

Gene: AxeJC_21 Start: 17926, Stop: 18183, Start Num: 92

Candidate Starts for AxeJC_21:

(6, 17209), (19, 17398), (24, 17476), (28, 17524), (76, 17881), (90, 17920), (Start: 92 @17926 has 31 MA's), (107, 17980), (109, 17989), (141, 18106),

Gene: Azaz_23 Start: 17683, Stop: 18000, Start Num: 64

Candidate Starts for Azaz_23:

(Start: 64 @17683 has 28 MA's), (81, 17722), (93, 17755), (103, 17788), (119, 17842), (141, 17923),

Gene: BAjuniper_24 Start: 20341, Stop: 20658, Start Num: 58

Candidate Starts for BAjuniper_24:

(50, 20311), (Start: 58 @20341 has 17 MA's), (94, 20428), (Start: 96 @20434 has 2 MA's), (100, 20449), (107, 20470), (110, 20482), (127, 20536), (128, 20539), (134, 20560), (137, 20569), (139, 20581), (141, 20593),

Gene: Babushka_23 Start: 17682, Stop: 18029, Start Num: 64

Candidate Starts for Babushka_23:

(Start: 64 @17682 has 28 MA's), (81, 17721), (Start: 98 @17769 has 1 MA's), (101, 17781), (103, 17787), (106, 17796), (119, 17841), (141, 17922), (146, 17949),

Gene: Bachaco_23 Start: 20374, Stop: 20691, Start Num: 58

Candidate Starts for Bachaco_23:

(Start: 58 @20374 has 17 MA's), (94, 20461), (107, 20503), (110, 20515), (124, 20566), (141, 20626),

Gene: BarretLemon_29 Start: 25316, Stop: 25687, Start Num: 53

Candidate Starts for BarretLemon_29:

(Start: 53 @25316 has 4 MA's), (Start: 54 @25319 has 18 MA's), (Start: 58 @25340 has 17 MA's), (94, 25424), (107, 25466), (109, 25475), (113, 25487), (119, 25508), (122, 25523), (141, 25589), (152, 25628),

Gene: Basilisk_24 Start: 19320, Stop: 19652, Start Num: 64

Candidate Starts for Basilisk_24:

(Start: 64 @19320 has 28 MA's), (Start: 75 @19347 has 8 MA's), (93, 19395), (Start: 96 @19404 has 2 MA's), (103, 19428), (120, 19485), (122, 19497), (139, 19551), (141, 19563),

Gene: BasketStar_28 Start: 20475, Stop: 20780, Start Num: 70

Candidate Starts for BasketStar_28:

(Start: 70 @20475 has 39 MA's), (88, 20526), (111, 20592), (118, 20616), (122, 20634), (130, 20655), (132, 20661), (136, 20673), (155, 20745),

Gene: Beans_27 Start: 24983, Stop: 25351, Start Num: 54

Candidate Starts for Beans_27:

(Start: 54 @24983 has 18 MA's), (94, 25088), (107, 25130), (109, 25139), (113, 25151), (119, 25172), (122, 25187), (141, 25253), (152, 25292),

Gene: Bedetta_25 Start: 18047, Stop: 18397, Start Num: 68

Candidate Starts for Bedetta_25:

(Start: 68 @18047 has 10 MA's), (Start: 69 @18050 has 4 MA's), (77, 18068), (81, 18080), (Start: 98 @18128 has 1 MA's), (103, 18146), (141, 18281), (144, 18296),

Gene: BellaJr_27 Start: 21288, Stop: 21566, Start Num: 87

Candidate Starts for BellaJr_27:

(56, 21204), (80, 21270), (Start: 87 @21288 has 6 MA's), (114, 21381), (117, 21393), (121, 21408), (133, 21450), (135, 21456), (141, 21486),

Gene: BenchScraper_28 Start: 20436, Stop: 20741, Start Num: 70

Candidate Starts for BenchScraper_28:

(Start: 70 @20436 has 39 MA's), (88, 20487), (111, 20553), (118, 20577), (122, 20595), (130, 20616), (132, 20622), (136, 20634),

Gene: Bernstein_22 Start: 17162, Stop: 17488, Start Num: 58

Candidate Starts for Bernstein_22:

(Start: 58 @17162 has 17 MA's), (120, 17345), (121, 17351), (141, 17423),

Gene: Bible12_25 Start: 18034, Stop: 18396, Start Num: 68

Candidate Starts for Bible12_25:

(Start: 68 @18034 has 10 MA's), (Start: 69 @18037 has 4 MA's), (Start: 75 @18052 has 8 MA's), (77, 18055), (81, 18067), (Start: 98 @18115 has 1 MA's), (103, 18133), (119, 18187), (141, 18268), (144, 18283), (159, 18337), (161, 18343),

Gene: BigDome_29 Start: 25311, Stop: 25679, Start Num: 54

Candidate Starts for BigDome_29:

(Start: 53 @25308 has 4 MA's), (Start: 54 @25311 has 18 MA's), (94, 25416), (107, 25458), (109, 25467), (113, 25479), (119, 25500), (122, 25515), (141, 25581), (152, 25620),

Gene: BigSherm_25 Start: 19724, Stop: 20032, Start Num: 70

Candidate Starts for BigSherm_25:

(Start: 70 @19724 has 39 MA's), (Start: 96 @19799 has 2 MA's), (102, 19820), (106, 19832), (120, 19880), (130, 19913), (141, 19958), (154, 20000),

Gene: BillyTP_28 Start: 20144, Stop: 20452, Start Num: 70

Candidate Starts for BillyTP_28:

(Start: 70 @20144 has 39 MA's), (102, 20240), (103, 20243), (106, 20252), (141, 20378), (144, 20393), (146, 20405),

Gene: Bioscum_22 Start: 17134, Stop: 17367, Start Num: 92

Candidate Starts for Bioscum_22:

(Start: 92 @17134 has 31 MA's), (100, 17167), (141, 17290),

Gene: BlackSpider_25 Start: 20146, Stop: 20424, Start Num: 87

Candidate Starts for BlackSpider_25:

(56, 20062), (80, 20128), (Start: 87 @20146 has 6 MA's), (114, 20239), (117, 20251), (121, 20266), (133, 20308), (135, 20314), (141, 20344),

Gene: BlueShadow_28 Start: 20421, Stop: 20726, Start Num: 70

Candidate Starts for BlueShadow_28:

(Start: 70 @20421 has 39 MA's), (88, 20472), (111, 20538), (118, 20562), (122, 20580), (130, 20601), (132, 20607), (136, 20619), (155, 20691),

Gene: BossLady_29 Start: 25299, Stop: 25667, Start Num: 54

Candidate Starts for BossLady_29:

(Start: 54 @25299 has 18 MA's), (82, 25371), (90, 25392), (94, 25404), (Start: 96 @25410 has 2 MA's), (107, 25446), (113, 25467), (119, 25488), (122, 25503), (141, 25569), (152, 25608),

Gene: Brahms_22 Start: 17110, Stop: 17436, Start Num: 58

Candidate Starts for Brahms_22:

(Start: 58 @17110 has 17 MA's), (120, 17293), (141, 17371),

Gene: Brent_27 Start: 24986, Stop: 25354, Start Num: 54

Candidate Starts for Brent_27:

(Start: 54 @24986 has 18 MA's), (Start: 58 @25007 has 17 MA's), (94, 25091), (107, 25133), (109, 25142), (113, 25154), (141, 25256), (152, 25295),

Gene: Brynnie_24 Start: 19128, Stop: 19460, Start Num: 64

Candidate Starts for Brynnie_24:

(Start: 64 @19128 has 28 MA's), (Start: 75 @19155 has 8 MA's), (93, 19203), (Start: 96 @19212 has 2 MA's), (109, 19257), (120, 19293), (122, 19305), (139, 19359), (141, 19371),

Gene: Camara_23 Start: 17623, Stop: 17946, Start Num: 64

Candidate Starts for Camara_23:

(Start: 64 @17623 has 28 MA's), (81, 17662), (93, 17695), (103, 17728), (119, 17782), (141, 17863),

Gene: CarefulCloud_6 Start: 3802, Stop: 4080, Start Num: 89

Candidate Starts for CarefulCloud_6:

(Start: 89 @3802 has 1 MA's), (125, 3922), (131, 3940), (157, 4039),

Gene: Cassini_25 Start: 20383, Stop: 20661, Start Num: 87

Candidate Starts for Cassini_25:

(1, 19501), (8, 19678), (12, 19720), (56, 20299), (80, 20365), (Start: 87 @20383 has 6 MA's), (114, 20476), (121, 20503), (133, 20545), (135, 20551), (141, 20581),

Gene: Celaena_23 Start: 20322, Stop: 20639, Start Num: 58

Candidate Starts for Celaena_23:

(Start: 58 @20322 has 17 MA's), (94, 20409), (107, 20451), (110, 20463), (124, 20514), (141, 20574),

Gene: Chickaboom_23 Start: 18049, Stop: 18381, Start Num: 64

Candidate Starts for Chickaboom_23:

(Start: 64 @18049 has 28 MA's), (Start: 75 @18076 has 8 MA's), (93, 18124), (Start: 96 @18133 has 2 MA's), (103, 18157), (109, 18178), (120, 18214), (139, 18280), (141, 18292),

Gene: Chicken_24 Start: 19054, Stop: 19386, Start Num: 64

Candidate Starts for Chicken_24:

(Start: 64 @19054 has 28 MA's), (72, 19072), (93, 19129), (103, 19162), (120, 19219), (122, 19231), (141, 19297),

Gene: ChuckDuck_27 Start: 20261, Stop: 20569, Start Num: 70

Candidate Starts for ChuckDuck_27:

(Start: 70 @20261 has 39 MA's), (102, 20357), (103, 20360), (106, 20369), (109, 20381), (141, 20495),

Gene: Chymera_21 Start: 17166, Stop: 17393, Start Num: 92

Candidate Starts for Chymera_21:

(Start: 92 @17166 has 31 MA's), (140, 17319), (141, 17322), (144, 17337),

Gene: Clayda5_22 Start: 17113, Stop: 17439, Start Num: 58
Candidate Starts for Clayda5_22:
(Start: 58 @17113 has 17 MA's), (120, 17296), (121, 17302), (141, 17374),

Gene: CocoCinnamon_27 Start: 20011, Stop: 20283, Start Num: 87
Candidate Starts for CocoCinnamon_27:
(Start: 87 @20011 has 6 MA's), (133, 20170), (137, 20182), (141, 20206),

Gene: Coltrane_22 Start: 17110, Stop: 17436, Start Num: 58
Candidate Starts for Coltrane_22:
(Start: 58 @17110 has 17 MA's), (120, 17293), (141, 17371),

Gene: Colusalem_24 Start: 17886, Stop: 18236, Start Num: 68
Candidate Starts for Colusalem_24:
(Start: 68 @17886 has 10 MA's), (Start: 69 @17889 has 4 MA's), (77, 17907), (81, 17919), (Start: 98 @17967 has 1 MA's), (103, 17985), (141, 18120), (144, 18135),

Gene: Constance_26 Start: 20763, Stop: 21041, Start Num: 84
Candidate Starts for Constance_26:
(2, 19992), (3, 19998), (4, 20007), (80, 20754), (Start: 84 @20763 has 4 MA's), (Start: 87 @20769 has 6 MA's), (117, 20877), (121, 20892), (141, 20970),

Gene: CookieBear_28 Start: 20421, Stop: 20726, Start Num: 70
Candidate Starts for CookieBear_28:
(Start: 70 @20421 has 39 MA's), (88, 20472), (111, 20538), (118, 20562), (122, 20580), (130, 20601), (132, 20607), (136, 20619),

Gene: Coral_24 Start: 17882, Stop: 18232, Start Num: 68
Candidate Starts for Coral_24:
(Start: 68 @17882 has 10 MA's), (Start: 69 @17885 has 4 MA's), (77, 17903), (81, 17915), (Start: 98 @17963 has 1 MA's), (103, 17981), (141, 18116), (144, 18131), (158, 18182),

Gene: Cote_25 Start: 18034, Stop: 18384, Start Num: 68
Candidate Starts for Cote_25:
(Start: 68 @18034 has 10 MA's), (Start: 69 @18037 has 4 MA's), (77, 18055), (Start: 98 @18115 has 1 MA's), (103, 18133), (141, 18268), (144, 18283), (159, 18337), (161, 18343),

Gene: Cumberbatch_21 Start: 17942, Stop: 18202, Start Num: 92
Candidate Starts for Cumberbatch_21:
(6, 17210), (19, 17399), (24, 17477), (28, 17525), (32, 17612), (76, 17897), (90, 17936), (Start: 92 @17942 has 31 MA's), (107, 17996), (109, 18005), (141, 18122),

Gene: Cygnet_24 Start: 18687, Stop: 19016, Start Num: 64
Candidate Starts for Cygnet_24:
(Start: 63 @18684 has 1 MA's), (Start: 64 @18687 has 28 MA's), (81, 18726), (Start: 96 @18768 has 2 MA's), (Start: 98 @18774 has 1 MA's), (103, 18792), (119, 18846), (133, 18891), (139, 18915), (141, 18927), (144, 18942), (154, 18969),

Gene: CyranoPS_6 Start: 3800, Stop: 4078, Start Num: 89
Candidate Starts for CyranoPS_6:
(Start: 89 @3800 has 1 MA's), (125, 3920),

Gene: DaRealMyers_23 Start: 19333, Stop: 19587, Start Num: 92
Candidate Starts for DaRealMyers_23:
(Start: 92 @19333 has 31 MA's), (132, 19471), (139, 19498), (141, 19510),

Gene: DanHam62_23 Start: 17622, Stop: 17945, Start Num: 64
Candidate Starts for DanHam62_23:
(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: Daob_25 Start: 18039, Stop: 18389, Start Num: 68
Candidate Starts for Daob_25:
(Start: 68 @18039 has 10 MA's), (Start: 69 @18042 has 4 MA's), (77, 18060), (Start: 98 @18120 has 1 MA's), (103, 18138), (141, 18273), (144, 18288), (159, 18342), (161, 18348),

Gene: Darolandstone_23 Start: 19517, Stop: 19762, Start Num: 92
Candidate Starts for Darolandstone_23:
(44, 19388), (Start: 92 @19517 has 31 MA's), (114, 19595), (118, 19610), (141, 19673),

Gene: DearBasketball_25 Start: 18817, Stop: 19116, Start Num: 75
Candidate Starts for DearBasketball_25:
(9, 18160), (13, 18220), (21, 18352), (22, 18361), (33, 18535), (74, 18814), (Start: 75 @18817 has 8 MA's), (107, 18919), (120, 18961), (133, 19006), (137, 19015), (141, 19039), (156, 19087),

Gene: Ding_28 Start: 20382, Stop: 20687, Start Num: 70
Candidate Starts for Ding_28:
(41, 20298), (59, 20364), (Start: 70 @20382 has 39 MA's), (88, 20433), (99, 20457), (111, 20499), (130, 20562), (132, 20568), (139, 20595),

Gene: DinoNuggs_23 Start: 18783, Stop: 19082, Start Num: 75
Candidate Starts for DinoNuggs_23:
(9, 18126), (13, 18186), (21, 18318), (22, 18327), (33, 18501), (74, 18780), (Start: 75 @18783 has 8 MA's), (107, 18885), (120, 18927), (133, 18972), (137, 18981), (141, 19005), (156, 19053),

Gene: Dirdigger_26 Start: 19487, Stop: 19855, Start Num: 70
Candidate Starts for Dirdigger_26:
(Start: 70 @19487 has 39 MA's), (81, 19520), (93, 19553), (99, 19571), (133, 19685), (141, 19721), (160, 19790),

Gene: DonkeyMan_22 Start: 18572, Stop: 18871, Start Num: 75
Candidate Starts for DonkeyMan_22:
(33, 18290), (74, 18569), (Start: 75 @18572 has 8 MA's), (107, 18674), (120, 18716), (133, 18761), (137, 18770), (141, 18794), (156, 18842), (159, 18863),

Gene: Dryad_32 Start: 21653, Stop: 21880, Start Num: 95
Candidate Starts for Dryad_32:
(Start: 95 @21653 has 7 MA's), (129, 21758), (139, 21797), (141, 21809), (146, 21836),

Gene: EastWest_30 Start: 25176, Stop: 25514, Start Num: 62
Candidate Starts for EastWest_30:
(Start: 62 @25176 has 1 MA's), (94, 25257), (105, 25293), (107, 25299), (113, 25320), (116, 25332), (141, 25422), (152, 25461),

Gene: Eastland_21 Start: 17911, Stop: 18168, Start Num: 92
Candidate Starts for Eastland_21:

(6, 17194), (19, 17383), (24, 17461), (28, 17509), (76, 17866), (90, 17905), (Start: 92 @17911 has 31 MA's), (107, 17965), (109, 17974), (141, 18091),

Gene: Eden_22 Start: 17389, Stop: 17712, Start Num: 58

Candidate Starts for Eden_22:

(Start: 58 @17389 has 17 MA's), (81, 17446), (93, 17479), (105, 17518), (134, 17614), (141, 17647),

Gene: Eesa_24 Start: 19277, Stop: 19609, Start Num: 64

Candidate Starts for Eesa_24:

(Start: 64 @19277 has 28 MA's), (93, 19352), (Start: 96 @19361 has 2 MA's), (103, 19385), (104, 19388), (120, 19442), (122, 19454), (139, 19508), (141, 19520),

Gene: Eileen_26 Start: 20113, Stop: 20415, Start Num: 70

Candidate Starts for Eileen_26:

(Start: 70 @20113 has 39 MA's), (88, 20164), (122, 20272), (130, 20293), (132, 20299), (136, 20311), (139, 20326),

Gene: Eklok_21 Start: 17926, Stop: 18183, Start Num: 92

Candidate Starts for Eklok_21:

(6, 17209), (19, 17398), (24, 17476), (28, 17524), (76, 17881), (90, 17920), (Start: 92 @17926 has 31 MA's), (107, 17980), (109, 17989), (141, 18106),

Gene: EvePickles_25 Start: 18992, Stop: 19300, Start Num: 70

Candidate Starts for EvePickles_25:

(Start: 70 @18992 has 39 MA's), (Start: 98 @19073 has 1 MA's), (106, 19100), (120, 19148), (141, 19226), (144, 19241),

Gene: Faja_25 Start: 18886, Stop: 19194, Start Num: 70

Candidate Starts for Faja_25:

(Start: 70 @18886 has 39 MA's), (103, 18985), (141, 19120), (144, 19135),

Gene: Fingolfin_23 Start: 17623, Stop: 17946, Start Num: 64

Candidate Starts for Fingolfin_23:

(Start: 64 @17623 has 28 MA's), (81, 17662), (93, 17695), (103, 17728), (119, 17782), (141, 17863),

Gene: FlameThrower_23 Start: 19859, Stop: 20176, Start Num: 58

Candidate Starts for FlameThrower_23:

(36, 19682), (40, 19763), (Start: 58 @19859 has 17 MA's), (94, 19946), (107, 19988), (110, 20000), (124, 20051), (141, 20111), (149, 20147),

Gene: FosterFrank_27 Start: 20334, Stop: 20642, Start Num: 70

Candidate Starts for FosterFrank_27:

(Start: 70 @20334 has 39 MA's), (103, 20433), (141, 20568), (144, 20583),

Gene: Franklin22_23 Start: 17574, Stop: 17897, Start Num: 58

Candidate Starts for Franklin22_23:

(43, 17517), (47, 17538), (Start: 58 @17574 has 17 MA's), (81, 17631), (105, 17703), (132, 17793), (134, 17799), (141, 17832),

Gene: Franzy_27 Start: 24985, Stop: 25353, Start Num: 54

Candidate Starts for Franzy_27:

(Start: 54 @24985 has 18 MA's), (Start: 58 @25006 has 17 MA's), (94, 25090), (107, 25132), (109, 25141), (113, 25153), (141, 25255), (152, 25294),

Gene: FrumpyGal_21 Start: 17911, Stop: 18168, Start Num: 92
Candidate Starts for FrumpyGal_21:
(6, 17194), (19, 17383), (24, 17461), (28, 17509), (76, 17866), (90, 17905), (Start: 92 @17911 has 31 MA's), (107, 17965), (109, 17974), (141, 18091),

Gene: GUPitcher_23 Start: 18548, Stop: 18850, Start Num: 70
Candidate Starts for GUPitcher_23:
(Start: 70 @18548 has 39 MA's), (107, 18647), (122, 18704), (139, 18758), (141, 18770), (155, 18815),

Gene: Gack_22 Start: 17460, Stop: 17783, Start Num: 58
Candidate Starts for Gack_22:
(43, 17403), (47, 17424), (Start: 58 @17460 has 17 MA's), (81, 17517), (105, 17589), (132, 17679), (134, 17685), (141, 17718),

Gene: Galaxy_25 Start: 19013, Stop: 19336, Start Num: 64
Candidate Starts for Galaxy_25:
(Start: 64 @19013 has 28 MA's), (77, 19046), (Start: 98 @19106 has 1 MA's), (109, 19145), (141, 19259),

Gene: Gibbzilla_25 Start: 16637, Stop: 16939, Start Num: 70
Candidate Starts for Gibbzilla_25:
(Start: 70 @16637 has 39 MA's), (88, 16685), (118, 16775), (122, 16793), (136, 16832), (140, 16856),

Gene: Gibson_29 Start: 20816, Stop: 21049, Start Num: 95
Candidate Starts for Gibson_29:
(Start: 95 @20816 has 7 MA's), (137, 20957), (139, 20969), (141, 20981), (146, 21008),

Gene: Globfish_28 Start: 20655, Stop: 20960, Start Num: 70
Candidate Starts for Globfish_28:
(Start: 64 @20646 has 28 MA's), (Start: 70 @20655 has 39 MA's), (88, 20706), (118, 20796), (130, 20835), (136, 20853), (141, 20880),

Gene: Glotell_23 Start: 17620, Stop: 17943, Start Num: 64
Candidate Starts for Glotell_23:
(Start: 64 @17620 has 28 MA's), (81, 17659), (93, 17692), (103, 17725), (119, 17779), (141, 17860),

Gene: Gorpy_28 Start: 20369, Stop: 20677, Start Num: 70
Candidate Starts for Gorpy_28:
(Start: 70 @20369 has 39 MA's), (102, 20465), (103, 20468), (106, 20477), (141, 20603), (144, 20618), (146, 20630),

Gene: Gravel_25 Start: 19183, Stop: 19515, Start Num: 64
Candidate Starts for Gravel_25:
(Start: 64 @19183 has 28 MA's), (93, 19258), (Start: 96 @19267 has 2 MA's), (103, 19291), (104, 19294), (120, 19348), (122, 19360), (139, 19414), (141, 19426),

Gene: GravityBall_29 Start: 25318, Stop: 25686, Start Num: 54
Candidate Starts for GravityBall_29:
(Start: 53 @25315 has 4 MA's), (Start: 54 @25318 has 18 MA's), (94, 25423), (107, 25465), (109, 25474), (113, 25486), (119, 25507), (122, 25522), (141, 25588), (152, 25627),

Gene: Greenbelt_28 Start: 20069, Stop: 20296, Start Num: 97

Candidate Starts for Greenbelt_28:

(11, 19364), (23, 19559), (29, 19652), (30, 19685), (Start: 54 @19937 has 18 MA's), (79, 20012), (86, 20030), (Start: 97 @20069 has 1 MA's), (121, 20153), (131, 20189), (141, 20231), (144, 20246),

Gene: Grekaycon_29 Start: 25245, Stop: 25613, Start Num: 54

Candidate Starts for Grekaycon_29:

(Start: 54 @25245 has 18 MA's), (82, 25317), (90, 25338), (94, 25350), (Start: 96 @25356 has 2 MA's), (107, 25392), (109, 25401), (113, 25413), (119, 25434), (120, 25437), (122, 25449), (141, 25515), (152, 25554),

Gene: Gspu1_22 Start: 18136, Stop: 18396, Start Num: 83

Candidate Starts for Gspu1_22:

(31, 17824), (34, 17839), (44, 18016), (83, 18136), (85, 18139), (Start: 91 @18157 has 2 MA's), (Start: 96 @18172 has 2 MA's), (106, 18205), (108, 18214), (115, 18238), (118, 18247), (136, 18301), (141, 18325), (144, 18340), (147, 18355), (150, 18364),

Gene: Gusanita_24 Start: 19423, Stop: 19737, Start Num: 70

Candidate Starts for Gusanita_24:

(Start: 70 @19423 has 39 MA's), (94, 19495), (118, 19573), (139, 19645), (142, 19663),

Gene: HFrancette_21 Start: 17957, Stop: 18214, Start Num: 92

Candidate Starts for HFrancette_21:

(6, 17225), (19, 17414), (24, 17492), (28, 17540), (32, 17627), (76, 17912), (90, 17951), (Start: 92 @17957 has 31 MA's), (107, 18011), (109, 18020), (141, 18137),

Gene: Halloweekend_24 Start: 19350, Stop: 19658, Start Num: 70

Candidate Starts for Halloweekend_24:

(Start: 70 @19350 has 39 MA's), (Start: 96 @19425 has 2 MA's), (102, 19446), (106, 19458), (120, 19506), (130, 19539), (141, 19584), (154, 19626),

Gene: HamCheese_23 Start: 17622, Stop: 17930, Start Num: 64

Candidate Starts for HamCheese_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: HannahPhantana_25 Start: 18037, Stop: 18396, Start Num: 69

Candidate Starts for HannahPhantana_25:

(Start: 68 @18034 has 10 MA's), (Start: 69 @18037 has 4 MA's), (Start: 75 @18052 has 8 MA's), (77, 18055), (81, 18067), (Start: 98 @18115 has 1 MA's), (103, 18133), (119, 18187), (141, 18268), (144, 18283), (159, 18337), (161, 18343),

Gene: Heinz_22 Start: 18664, Stop: 18963, Start Num: 75

Candidate Starts for Heinz_22:

(37, 18460), (74, 18661), (Start: 75 @18664 has 8 MA's), (103, 18754), (107, 18766), (120, 18808), (133, 18853), (137, 18862), (141, 18886), (156, 18934),

Gene: Henrique_27 Start: 20198, Stop: 20500, Start Num: 70

Candidate Starts for Henrique_27:

(7, 19532), (Start: 70 @20198 has 39 MA's), (88, 20249), (118, 20339), (119, 20342), (122, 20357), (128, 20369), (130, 20378), (132, 20384), (136, 20396), (137, 20399), (139, 20411),

Gene: Hibiscus_22 Start: 18612, Stop: 18911, Start Num: 75

Candidate Starts for Hibiscus_22:

(37, 18408), (74, 18609), (Start: 75 @18612 has 8 MA's), (103, 18702), (107, 18714), (120, 18756), (133, 18801), (137, 18810), (141, 18834), (156, 18882),

Gene: Hillester_28 Start: 20421, Stop: 20726, Start Num: 70

Candidate Starts for Hillester_28:

(Start: 70 @20421 has 39 MA's), (88, 20472), (111, 20538), (118, 20562), (122, 20580), (130, 20601), (132, 20607), (136, 20619),

Gene: HorseRider_6 Start: 3802, Stop: 4080, Start Num: 89

Candidate Starts for HorseRider_6:

(Start: 89 @3802 has 1 MA's), (125, 3922), (131, 3940),

Gene: HotPotato_26 Start: 20119, Stop: 20421, Start Num: 70

Candidate Starts for HotPotato_26:

(Start: 70 @20119 has 39 MA's), (122, 20278), (128, 20290), (130, 20299), (132, 20305), (136, 20317), (139, 20332),

Gene: Ichiang_24 Start: 19369, Stop: 19677, Start Num: 70

Candidate Starts for Ichiang_24:

(Start: 70 @19369 has 39 MA's), (Start: 96 @19444 has 2 MA's), (102, 19465), (106, 19477), (120, 19525), (130, 19558), (141, 19603), (154, 19645),

Gene: Ididsumtinwong_22 Start: 17134, Stop: 17367, Start Num: 92

Candidate Starts for Ididsumtinwong_22:

(Start: 92 @17134 has 31 MA's), (100, 17167), (141, 17290),

Gene: Ignacio_21 Start: 17957, Stop: 18214, Start Num: 92

Candidate Starts for Ignacio_21:

(6, 17225), (19, 17414), (24, 17492), (28, 17540), (32, 17627), (76, 17912), (90, 17951), (Start: 92 @17957 has 31 MA's), (107, 18011), (109, 18020), (141, 18137),

Gene: IsHungry_26 Start: 19976, Stop: 20278, Start Num: 70

Candidate Starts for IsHungry_26:

(Start: 70 @19976 has 39 MA's), (88, 20027), (122, 20135), (130, 20156), (132, 20162),

Gene: Isolde_28 Start: 20195, Stop: 20503, Start Num: 70

Candidate Starts for Isolde_28:

(Start: 70 @20195 has 39 MA's), (102, 20291), (103, 20294), (106, 20303), (141, 20429), (144, 20444), (146, 20456),

Gene: JKerns_29 Start: 25272, Stop: 25640, Start Num: 54

Candidate Starts for JKerns_29:

(Start: 54 @25272 has 18 MA's), (94, 25377), (Start: 96 @25383 has 2 MA's), (107, 25419), (109, 25428), (113, 25440), (119, 25461), (122, 25476), (137, 25518), (141, 25542), (152, 25581),

Gene: Jalloh_6 Start: 3801, Stop: 4079, Start Num: 89

Candidate Starts for Jalloh_6:

(Start: 89 @3801 has 1 MA's), (125, 3921), (131, 3939),

Gene: Jamun_24 Start: 18726, Stop: 19058, Start Num: 64

Candidate Starts for Jamun_24:

(Start: 64 @18726 has 28 MA's), (93, 18801), (119, 18888), (120, 18891), (122, 18903), (129, 18918), (139, 18957), (141, 18969),

Gene: Jawnski_27 Start: 24995, Stop: 25363, Start Num: 54

Candidate Starts for Jawnski_27:

(Start: 54 @24995 has 18 MA's), (94, 25100), (107, 25142), (109, 25151), (113, 25163), (122, 25199), (127, 25208), (138, 25250), (141, 25265), (152, 25304),

Gene: JellyBread_28 Start: 20353, Stop: 20661, Start Num: 70

Candidate Starts for JellyBread_28:

(Start: 70 @20353 has 39 MA's), (102, 20449), (103, 20452), (106, 20461), (141, 20587), (144, 20602), (146, 20614),

Gene: Jerole_25 Start: 18034, Stop: 18381, Start Num: 69

Candidate Starts for Jerole_25:

(Start: 69 @18034 has 4 MA's), (Start: 75 @18049 has 8 MA's), (77, 18052), (81, 18064), (Start: 98 @18112 has 1 MA's), (103, 18130), (113, 18163), (141, 18265), (144, 18280), (159, 18334), (161, 18340),

Gene: Jojo24_22 Start: 18609, Stop: 18908, Start Num: 75

Candidate Starts for Jojo24_22:

(37, 18405), (74, 18606), (Start: 75 @18609 has 8 MA's), (103, 18699), (107, 18711), (120, 18753), (133, 18798), (137, 18807), (141, 18831), (156, 18879),

Gene: Jordan_29 Start: 25242, Stop: 25610, Start Num: 54

Candidate Starts for Jordan_29:

(Start: 54 @25242 has 18 MA's), (94, 25347), (Start: 96 @25353 has 2 MA's), (107, 25389), (109, 25398), (113, 25410), (119, 25431), (122, 25446), (137, 25488), (141, 25512), (142, 25518), (152, 25551),

Gene: Juno112_23 Start: 17622, Stop: 17945, Start Num: 64

Candidate Starts for Juno112_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: KHumphrey_23 Start: 17620, Stop: 17943, Start Num: 64

Candidate Starts for KHumphrey_23:

(Start: 64 @17620 has 28 MA's), (81, 17659), (93, 17692), (103, 17725), (119, 17779), (141, 17860),

Gene: Kabloowy_28 Start: 20549, Stop: 20857, Start Num: 70

Candidate Starts for Kabloowy_28:

(5, 19871), (15, 20021), (Start: 70 @20549 has 39 MA's), (102, 20645), (103, 20648), (106, 20657), (141, 20783), (144, 20798), (146, 20810),

Gene: Karkharias_26 Start: 20115, Stop: 20417, Start Num: 70

Candidate Starts for Karkharias_26:

(Start: 70 @20115 has 39 MA's), (88, 20166), (122, 20274), (130, 20295), (132, 20301), (136, 20313),

Gene: Katzastrophic_23 Start: 19980, Stop: 20297, Start Num: 58

Candidate Starts for Katzastrophic_23:

(Start: 58 @19980 has 17 MA's), (94, 20067), (107, 20109), (110, 20121), (124, 20172), (141, 20232), (149, 20268),

Gene: KayMoney_27 Start: 20265, Stop: 20573, Start Num: 70

Candidate Starts for KayMoney_27:

(Start: 70 @20265 has 39 MA's), (102, 20361), (103, 20364), (106, 20373), (109, 20385), (141, 20499),

Gene: KendraB23_25 Start: 19185, Stop: 19517, Start Num: 64

Candidate Starts for KendraB23_25:

(Start: 64 @19185 has 28 MA's), (93, 19260), (Start: 96 @19269 has 2 MA's), (103, 19293), (104, 19296), (120, 19350), (122, 19362), (139, 19416), (141, 19428),

Gene: Kepler_24 Start: 17872, Stop: 18219, Start Num: 69

Candidate Starts for Kepler_24:

(Start: 69 @17872 has 4 MA's), (Start: 75 @17887 has 8 MA's), (77, 17890), (81, 17902), (Start: 98 @17950 has 1 MA's), (103, 17968), (141, 18103), (144, 18118), (159, 18172), (161, 18178),

Gene: Khuang_21 Start: 17688, Stop: 17984, Start Num: 70

Candidate Starts for Khuang_21:

(Start: 64 @17679 has 28 MA's), (Start: 70 @17688 has 39 MA's), (88, 17739), (99, 17763), (130, 17868), (132, 17874), (136, 17886), (139, 17901), (141, 17913),

Gene: King2_27 Start: 24982, Stop: 25350, Start Num: 54

Candidate Starts for King2_27:

(Start: 54 @24982 has 18 MA's), (94, 25087), (107, 25129), (109, 25138), (113, 25150), (122, 25186), (127, 25195), (141, 25252), (152, 25291),

Gene: Kudefre_35 Start: 29727, Stop: 29957, Start Num: 92

Candidate Starts for Kudefre_35:

(Start: 91 @29724 has 2 MA's), (Start: 92 @29727 has 31 MA's), (106, 29772), (109, 29784), (112, 29793), (120, 29820), (130, 29853), (132, 29859), (134, 29865), (140, 29892), (141, 29895), (143, 29907), (150, 29934), (154, 29943),

Gene: Kukla_23 Start: 18379, Stop: 18687, Start Num: 70

Candidate Starts for Kukla_23:

(38, 18238), (39, 18253), (Start: 70 @18379 has 39 MA's), (Start: 96 @18454 has 2 MA's), (106, 18487), (120, 18535), (130, 18568), (141, 18613),

Gene: Kuleana_24 Start: 17910, Stop: 18254, Start Num: 69

Candidate Starts for Kuleana_24:

(66, 17904), (Start: 69 @17910 has 4 MA's), (88, 17961), (103, 18006), (119, 18060), (120, 18063), (141, 18141), (142, 18147), (144, 18156), (159, 18210), (162, 18231), (163, 18237),

Gene: Kumotta_24 Start: 18861, Stop: 19166, Start Num: 71

Candidate Starts for Kumotta_24:

(Start: 71 @18861 has 2 MA's), (114, 18996), (140, 19092),

Gene: Laphuphu24k_23 Start: 17622, Stop: 17930, Start Num: 64

Candidate Starts for Laphuphu24k_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: Lasker_28 Start: 20429, Stop: 20734, Start Num: 70

Candidate Starts for Lasker_28:

(Start: 70 @20429 has 39 MA's), (88, 20480), (111, 20546), (118, 20570), (122, 20588), (130, 20609), (132, 20615), (136, 20627),

Gene: Lawnathon_28 Start: 20289, Stop: 20597, Start Num: 70

Candidate Starts for Lawnathon_28:

(Start: 70 @20289 has 39 MA's), (102, 20385), (103, 20388), (106, 20397), (141, 20523), (144, 20538), (146, 20550),

Gene: LeBruni_27 Start: 20262, Stop: 20564, Start Num: 70

Candidate Starts for LeBruni_27:

(67, 20256), (Start: 70 @20262 has 39 MA's), (94, 20331), (128, 20442), (133, 20460), (139, 20484), (141, 20496),

Gene: LeeroyJ_29 Start: 25315, Stop: 25686, Start Num: 53

Candidate Starts for LeeroyJ_29:

(Start: 53 @25315 has 4 MA's), (Start: 54 @25318 has 18 MA's), (Start: 58 @25339 has 17 MA's), (94, 25423), (107, 25465), (109, 25474), (113, 25486), (119, 25507), (122, 25522), (141, 25588), (152, 25627),

Gene: Leona_23 Start: 17683, Stop: 18000, Start Num: 64

Candidate Starts for Leona_23:

(Start: 64 @17683 has 28 MA's), (81, 17722), (93, 17755), (103, 17788), (119, 17842), (141, 17923),

Gene: LilJank_36 Start: 31388, Stop: 31618, Start Num: 96

Candidate Starts for LilJank_36:

(Start: 96 @31388 has 2 MA's), (110, 31436), (140, 31541), (141, 31544), (144, 31559), (146, 31571),

Gene: LilyBell_26 Start: 20124, Stop: 20429, Start Num: 70

Candidate Starts for LilyBell_26:

(48, 20067), (65, 20115), (Start: 70 @20124 has 39 MA's), (88, 20178), (122, 20286), (130, 20307), (132, 20313), (136, 20325),

Gene: Lishka_22 Start: 17098, Stop: 17331, Start Num: 92

Candidate Starts for Lishka_22:

(Start: 92 @17098 has 31 MA's), (100, 17131), (141, 17254),

Gene: LittleRon_27 Start: 20234, Stop: 20542, Start Num: 70

Candidate Starts for LittleRon_27:

(Start: 70 @20234 has 39 MA's), (102, 20330), (103, 20333), (141, 20468),

Gene: LittleTokyo_24 Start: 17866, Stop: 18186, Start Num: 68

Candidate Starts for LittleTokyo_24:

(66, 17863), (Start: 68 @17866 has 10 MA's), (88, 17917), (103, 17962), (123, 18031), (137, 18073), (144, 18112),

Gene: Lizz_29 Start: 20625, Stop: 20858, Start Num: 95

Candidate Starts for Lizz_29:

(Start: 95 @20625 has 7 MA's), (137, 20766), (139, 20778), (141, 20790), (146, 20817),

Gene: Lunar_25 Start: 18034, Stop: 18384, Start Num: 68

Candidate Starts for Lunar_25:

(Start: 68 @18034 has 10 MA's), (Start: 69 @18037 has 4 MA's), (77, 18055), (Start: 98 @18115 has 1 MA's), (103, 18133), (141, 18268), (144, 18283), (159, 18337), (161, 18343),

Gene: MUWow_27 Start: 20453, Stop: 20761, Start Num: 70

Candidate Starts for MUWow_27:

(Start: 70 @20453 has 39 MA's), (102, 20549), (103, 20552), (106, 20561), (141, 20687), (144, 20702), (146, 20714),

Gene: Maja_24 Start: 18850, Stop: 19128, Start Num: 87

Candidate Starts for Maja_24:

(78, 18832), (Start: 87 @18850 has 6 MA's), (137, 19027), (140, 19048), (141, 19051),

Gene: Mapleville_28 Start: 20359, Stop: 20667, Start Num: 70

Candidate Starts for Mapleville_28:

(Start: 70 @20359 has 39 MA's), (102, 20455), (103, 20458), (106, 20467), (141, 20593), (144, 20608), (146, 20620),

Gene: MargaretKali_24 Start: 18496, Stop: 18801, Start Num: 71

Candidate Starts for MargaretKali_24:

(Start: 71 @18496 has 2 MA's), (114, 18631), (140, 18727),

Gene: Martha_29 Start: 25246, Stop: 25614, Start Num: 54

Candidate Starts for Martha_29:

(Start: 54 @25246 has 18 MA's), (82, 25318), (90, 25339), (94, 25351), (Start: 96 @25357 has 2 MA's), (107, 25393), (109, 25402), (113, 25414), (119, 25435), (120, 25438), (122, 25450), (141, 25516), (152, 25555),

Gene: MaterMagnus_28 Start: 20431, Stop: 20736, Start Num: 70

Candidate Starts for MaterMagnus_28:

(Start: 70 @20431 has 39 MA's), (88, 20482), (111, 20548), (118, 20572), (122, 20590), (130, 20611), (132, 20617), (136, 20629),

Gene: Melons_25 Start: 18034, Stop: 18384, Start Num: 68

Candidate Starts for Melons_25:

(Start: 68 @18034 has 10 MA's), (Start: 69 @18037 has 4 MA's), (77, 18055), (Start: 98 @18115 has 1 MA's), (103, 18133), (141, 18268), (144, 18283), (159, 18337), (161, 18343),

Gene: Merpity_25 Start: 18054, Stop: 18350, Start Num: 80

Candidate Starts for Merpity_25:

(56, 17988), (80, 18054), (Start: 87 @18072 has 6 MA's), (114, 18165), (117, 18177), (121, 18192), (133, 18234), (135, 18240), (141, 18270),

Gene: MidnightRain_28 Start: 20420, Stop: 20725, Start Num: 70

Candidate Starts for MidnightRain_28:

(Start: 70 @20420 has 39 MA's), (88, 20471), (111, 20537), (118, 20561), (122, 20579), (130, 20600), (132, 20606), (136, 20618),

Gene: MillySue_26 Start: 19546, Stop: 19851, Start Num: 70

Candidate Starts for MillySue_26:

(7, 18883), (Start: 70 @19546 has 39 MA's), (88, 19597), (122, 19705), (136, 19744), (139, 19759),

Gene: Mojarita_22 Start: 17147, Stop: 17407, Start Num: 92

Candidate Starts for Mojarita_22:

(52, 17030), (Start: 92 @17147 has 31 MA's), (110, 17213), (141, 17327),

Gene: MrSmee_23 Start: 18072, Stop: 18350, Start Num: 87

Candidate Starts for MrSmee_23:

(56, 17988), (80, 18054), (Start: 87 @18072 has 6 MA's), (114, 18165), (117, 18177), (121, 18192), (133, 18234), (135, 18240), (141, 18270),

Gene: NathanVaag_27 Start: 24958, Stop: 25326, Start Num: 54

Candidate Starts for NathanVaag_27:

(Start: 54 @24958 has 18 MA's), (94, 25063), (107, 25105), (109, 25114), (110, 25117), (113, 25126), (122, 25162), (141, 25228), (152, 25267),

Gene: Nesbitt_23 Start: 18458, Stop: 18670, Start Num: 92

Candidate Starts for Nesbitt_23:

(Start: 92 @18458 has 31 MA's), (110, 18524), (114, 18536), (139, 18602), (141, 18614), (144, 18629),

Gene: NewKitty_29 Start: 20590, Stop: 20898, Start Num: 70

Candidate Starts for NewKitty_29:

(Start: 70 @20590 has 39 MA's), (102, 20686), (103, 20689), (106, 20698), (141, 20824), (144, 20839), (146, 20851),

Gene: Niblet_24 Start: 19054, Stop: 19386, Start Num: 64

Candidate Starts for Niblet_24:

(Start: 64 @19054 has 28 MA's), (72, 19072), (93, 19129), (103, 19162), (120, 19219), (122, 19231), (141, 19297),

Gene: NidoQ_26 Start: 20786, Stop: 21058, Start Num: 87

Candidate Starts for NidoQ_26:

(80, 20771), (Start: 84 @20780 has 4 MA's), (Start: 87 @20786 has 6 MA's), (107, 20858), (117, 20894), (121, 20909), (141, 20987),

Gene: Nikan_46 Start: 34694, Stop: 35047, Start Num: 51

Candidate Starts for Nikan_46:

(42, 34661), (Start: 51 @34694 has 1 MA's), (Start: 69 @34742 has 4 MA's), (73, 34751), (81, 34778), (106, 34853), (120, 34901), (132, 34940), (141, 34979), (145, 34997),

Gene: NoSwimming_27 Start: 24543, Stop: 24818, Start Num: 84

Candidate Starts for NoSwimming_27:

(Start: 84 @24543 has 4 MA's), (Start: 87 @24549 has 6 MA's), (127, 24687), (141, 24738),

Gene: Octobien14_37 Start: 30411, Stop: 30644, Start Num: 91

Candidate Starts for Octobien14_37:

(Start: 91 @30411 has 2 MA's), (Start: 92 @30414 has 31 MA's), (106, 30459), (109, 30471), (112, 30480), (115, 30492), (120, 30507), (130, 30540), (132, 30546), (134, 30552), (140, 30579), (141, 30582), (143, 30594), (150, 30621), (154, 30630),

Gene: Ollypop_46 Start: 35786, Stop: 36139, Start Num: 51

Candidate Starts for Ollypop_46:

(Start: 51 @35786 has 1 MA's), (Start: 58 @35813 has 17 MA's), (66, 35828), (Start: 69 @35834 has 4 MA's), (73, 35843), (Start: 96 @35912 has 2 MA's), (106, 35945), (124, 36011), (132, 36032), (141, 36071), (145, 36089),

Gene: Oppalora_23 Start: 17621, Stop: 17944, Start Num: 64

Candidate Starts for Oppalora_23:

(Start: 64 @17621 has 28 MA's), (81, 17660), (93, 17693), (103, 17726), (119, 17780), (141, 17861),

Gene: Orcanus_24 Start: 18977, Stop: 19309, Start Num: 64

Candidate Starts for Orcanus_24:

(Start: 64 @18977 has 28 MA's), (93, 19052), (Start: 96 @19061 has 2 MA's), (103, 19085), (104, 19088), (120, 19142), (122, 19154), (139, 19208), (141, 19220),

Gene: OtsoOtso_24 Start: 17889, Stop: 18239, Start Num: 68

Candidate Starts for OtsoOtso_24:

(Start: 68 @17889 has 10 MA's), (Start: 69 @17892 has 4 MA's), (77, 17910), (81, 17922), (Start: 98 @17970 has 1 MA's), (103, 17988), (141, 18123), (144, 18138),

Gene: PHTowN_29 Start: 20623, Stop: 20856, Start Num: 95

Candidate Starts for PHTowN_29:

(Start: 95 @20623 has 7 MA's), (137, 20764), (139, 20776), (141, 20788), (146, 20815),

Gene: PapayaSalad_22 Start: 17109, Stop: 17342, Start Num: 92

Candidate Starts for PapayaSalad_22:

(Start: 92 @17109 has 31 MA's), (100, 17142), (141, 17265),

Gene: Peas_26 Start: 20113, Stop: 20415, Start Num: 70

Candidate Starts for Peas_26:

(Start: 70 @20113 has 39 MA's), (88, 20164), (122, 20272), (130, 20293), (132, 20299), (136, 20311), (139, 20326),

Gene: PeggyLeg03_26 Start: 20763, Stop: 21041, Start Num: 84

Candidate Starts for PeggyLeg03_26:

(2, 19992), (3, 19998), (4, 20007), (80, 20754), (Start: 84 @20763 has 4 MA's), (Start: 87 @20769 has 6 MA's), (117, 20877), (121, 20892), (141, 20970),

Gene: Pelletreau_25 Start: 19183, Stop: 19515, Start Num: 64

Candidate Starts for Pelletreau_25:

(Start: 64 @19183 has 28 MA's), (93, 19258), (Start: 96 @19267 has 2 MA's), (103, 19291), (104, 19294), (120, 19348), (122, 19360), (139, 19414), (141, 19426),

Gene: PhirstandPhine_25 Start: 18037, Stop: 18390, Start Num: 69

Candidate Starts for PhirstandPhine_25:

(Start: 69 @18037 has 4 MA's), (77, 18055), (Start: 98 @18115 has 1 MA's), (103, 18133), (141, 18268), (144, 18283), (159, 18337),

Gene: PhluffyCoco_23 Start: 17622, Stop: 17930, Start Num: 64

Candidate Starts for PhluffyCoco_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: Phrank15_27 Start: 20294, Stop: 20602, Start Num: 70

Candidate Starts for Phrank15_27:

(Start: 70 @20294 has 39 MA's), (102, 20390), (103, 20393), (106, 20402), (141, 20528), (144, 20543), (146, 20555),

Gene: Picard_22 Start: 17138, Stop: 17398, Start Num: 92

Candidate Starts for Picard_22:

(52, 17024), (Start: 92 @17138 has 31 MA's), (110, 17204), (141, 17318),

Gene: Piccadilly_21 Start: 17910, Stop: 18167, Start Num: 92

Candidate Starts for Piccadilly_21:

(6, 17193), (19, 17382), (24, 17460), (28, 17508), (76, 17865), (90, 17904), (Start: 92 @17910 has 31 MA's), (107, 17964), (109, 17973), (141, 18090),

Gene: Piccoletto_27 Start: 24960, Stop: 25328, Start Num: 54

Candidate Starts for Piccoletto_27:

(Start: 54 @24960 has 18 MA's), (94, 25065), (107, 25107), (109, 25116), (113, 25128), (119, 25149), (122, 25164), (141, 25230), (152, 25269),

Gene: Pigu_23 Start: 17919, Stop: 18197, Start Num: 87

Candidate Starts for Pigu_23:

(Start: 87 @17919 has 6 MA's), (137, 18096), (140, 18117), (141, 18120),

Gene: Pineda_25 Start: 18045, Stop: 18395, Start Num: 68

Candidate Starts for Pineda_25:

(Start: 68 @18045 has 10 MA's), (Start: 69 @18048 has 4 MA's), (77, 18066), (81, 18078), (Start: 98 @18126 has 1 MA's), (103, 18144), (141, 18279), (144, 18294),

Gene: Pippa_29 Start: 25371, Stop: 25739, Start Num: 54

Candidate Starts for Pippa_29:

(Start: 54 @25371 has 18 MA's), (94, 25476), (Start: 96 @25482 has 2 MA's), (107, 25518), (109, 25527), (113, 25539), (122, 25575), (127, 25584), (138, 25626), (141, 25641), (152, 25680),

Gene: Polka_24 Start: 17889, Stop: 18239, Start Num: 68

Candidate Starts for Polka_24:

(Start: 68 @17889 has 10 MA's), (Start: 69 @17892 has 4 MA's), (77, 17910), (81, 17922), (Start: 98 @17970 has 1 MA's), (103, 17988), (141, 18123), (144, 18138),

Gene: Pucara_26 Start: 20288, Stop: 20599, Start Num: 70

Candidate Starts for Pucara_26:

(14, 19760), (16, 19802), (17, 19805), (Start: 70 @20288 has 39 MA's), (99, 20372), (100, 20378), (118, 20438), (122, 20456), (139, 20510), (142, 20528), (151, 20564),

Gene: Quenya_24 Start: 19845, Stop: 20162, Start Num: 58

Candidate Starts for Quenya_24:

(Start: 58 @19845 has 17 MA's), (94, 19932), (107, 19974), (110, 19986), (124, 20037), (141, 20097),

Gene: QuinnAvery_26 Start: 19733, Stop: 20041, Start Num: 70

Candidate Starts for QuinnAvery_26:

(Start: 70 @19733 has 39 MA's), (Start: 96 @19808 has 2 MA's), (102, 19829), (106, 19841), (120, 19889), (130, 19922), (141, 19967), (154, 20009),

Gene: Rabbitrun_38 Start: 31471, Stop: 31689, Start Num: 96

Candidate Starts for Rabbitrun_38:

(Start: 96 @31471 has 2 MA's), (110, 31519), (120, 31552), (130, 31585), (132, 31591), (134, 31597), (136, 31603), (139, 31615), (140, 31624), (141, 31627), (144, 31642), (146, 31654), (150, 31666),

Gene: RadFad_28 Start: 20421, Stop: 20726, Start Num: 70

Candidate Starts for RadFad_28:

(Start: 70 @20421 has 39 MA's), (88, 20472), (111, 20538), (118, 20562), (122, 20580), (130, 20601), (132, 20607), (136, 20619),

Gene: Raleigh_23 Start: 19748, Stop: 19987, Start Num: 92

Candidate Starts for Raleigh_23:

(Start: 92 @19748 has 31 MA's), (114, 19826), (118, 19841), (141, 19904),

Gene: Raphaella_28 Start: 20360, Stop: 20668, Start Num: 70

Candidate Starts for Raphaella_28:

(Start: 70 @20360 has 39 MA's), (102, 20456), (103, 20459), (106, 20468), (141, 20594), (144, 20609), (146, 20621),

Gene: Rattail_23 Start: 17683, Stop: 18000, Start Num: 64

Candidate Starts for Rattail_23:

(Start: 64 @17683 has 28 MA's), (81, 17722), (93, 17755), (103, 17788), (119, 17842), (141, 17923),

Gene: RedFox_23 Start: 17622, Stop: 17945, Start Num: 64

Candidate Starts for RedFox_23:

(Start: 64 @17622 has 28 MA's), (81, 17661), (93, 17694), (103, 17727), (119, 17781), (141, 17862),

Gene: Ren19_44 Start: 34694, Stop: 35047, Start Num: 51

Candidate Starts for Ren19_44:

(42, 34661), (Start: 51 @34694 has 1 MA's), (Start: 69 @34742 has 4 MA's), (73, 34751), (81, 34778), (106, 34853), (120, 34901), (132, 34940), (141, 34979), (145, 34997),

Gene: Renna12_24 Start: 17975, Stop: 18319, Start Num: 64

Candidate Starts for Renna12_24:

(Start: 64 @17975 has 28 MA's), (81, 18014), (93, 18047), (103, 18080), (119, 18134), (139, 18203), (141, 18215),

Gene: Reyja_23 Start: 18783, Stop: 19082, Start Num: 75

Candidate Starts for Reyja_23:

(9, 18126), (13, 18186), (21, 18318), (22, 18327), (33, 18501), (74, 18780), (Start: 75 @18783 has 8 MA's), (107, 18885), (120, 18927), (133, 18972), (137, 18981), (141, 19005), (156, 19053),

Gene: Richie_28 Start: 20436, Stop: 20741, Start Num: 70

Candidate Starts for Richie_28:

(Start: 70 @20436 has 39 MA's), (88, 20487), (111, 20553), (118, 20577), (122, 20595), (130, 20616), (132, 20622), (136, 20634),

Gene: Rollins_22 Start: 17162, Stop: 17488, Start Num: 58

Candidate Starts for Rollins_22:

(Start: 58 @17162 has 17 MA's), (120, 17345), (121, 17351), (141, 17423),

Gene: Rooney_29 Start: 20813, Stop: 21046, Start Num: 95

Candidate Starts for Rooney_29:

(Start: 95 @20813 has 7 MA's), (137, 20954), (139, 20966), (141, 20978), (146, 21005),

Gene: RootBeer_23 Start: 17990, Stop: 18268, Start Num: 87

Candidate Starts for RootBeer_23:

(35, 17732), (80, 17975), (Start: 87 @17990 has 6 MA's), (141, 18188), (153, 18227),

Gene: Ruchi_24 Start: 19293, Stop: 19598, Start Num: 75

Candidate Starts for Ruchi_24:

(Start: 64 @19266 has 28 MA's), (Start: 75 @19293 has 8 MA's), (93, 19341), (Start: 96 @19350 has 2 MA's), (103, 19374), (120, 19431), (122, 19443), (139, 19497), (141, 19509),

Gene: SV1_22 Start: 17352, Stop: 17588, Start Num: 92

Candidate Starts for SV1_22:

(Start: 92 @17352 has 31 MA's), (141, 17508),

Gene: Sakai_28 Start: 20369, Stop: 20677, Start Num: 70

Candidate Starts for Sakai_28:

(Start: 70 @20369 has 39 MA's), (102, 20465), (103, 20468), (106, 20477), (141, 20603), (144, 20618), (146, 20630),

Gene: Santhid_22 Start: 18617, Stop: 18916, Start Num: 75

Candidate Starts for Santhid_22:

(74, 18614), (Start: 75 @18617 has 8 MA's), (107, 18719), (120, 18761), (133, 18806), (137, 18815), (141, 18839), (156, 18887),

Gene: Sashimi_26 Start: 18795, Stop: 19100, Start Num: 70

Candidate Starts for Sashimi_26:

(57, 18762), (Start: 70 @18795 has 39 MA's), (88, 18846), (104, 18888), (121, 18948), (122, 18954), (131, 18978), (132, 18981), (136, 18993), (139, 19008), (140, 19017),

Gene: SassyC_31 Start: 20941, Stop: 21174, Start Num: 95

Candidate Starts for SassyC_31:

(7, 20191), (10, 20227), (23, 20431), (25, 20464), (26, 20479), (27, 20494), (Start: 95 @20941 has 7 MA's), (113, 20995), (134, 21070), (137, 21079), (141, 21103), (146, 21130),

Gene: Schlegelian_21 Start: 17946, Stop: 18206, Start Num: 92

Candidate Starts for Schlegelian_21:

(6, 17208), (18, 17391), (19, 17397), (20, 17427), (24, 17475), (28, 17523), (32, 17610), (76, 17901), (90, 17940), (Start: 92 @17946 has 31 MA's), (107, 18000), (109, 18009), (141, 18126),

Gene: Schmidt_22 Start: 17098, Stop: 17373, Start Num: 91

Candidate Starts for Schmidt_22:

(83, 17077), (Start: 91 @17098 has 2 MA's), (Start: 96 @17113 has 2 MA's), (106, 17146), (115, 17179), (118, 17188), (128, 17218), (135, 17239), (139, 17254), (140, 17263),

Gene: Scotia_27 Start: 24546, Stop: 24821, Start Num: 84

Candidate Starts for Scotia_27:

(Start: 84 @24546 has 4 MA's), (Start: 87 @24552 has 6 MA's), (141, 24741),

Gene: Sephiroth_36 Start: 29898, Stop: 30128, Start Num: 92

Candidate Starts for Sephiroth_36:

(Start: 91 @29895 has 2 MA's), (Start: 92 @29898 has 31 MA's), (106, 29943), (109, 29955), (112, 29964), (120, 29991), (130, 30024), (132, 30030), (134, 30036), (140, 30063), (141, 30066), (143, 30078), (150, 30105), (154, 30114),

Gene: Shade_29 Start: 25212, Stop: 25580, Start Num: 54

Candidate Starts for Shade_29:

(Start: 54 @25212 has 18 MA's), (94, 25317), (Start: 96 @25323 has 2 MA's), (107, 25359), (109, 25368), (113, 25380), (122, 25416), (137, 25458), (141, 25482), (142, 25488), (152, 25521),

Gene: ShakeNBake_29 Start: 20641, Stop: 20874, Start Num: 95

Candidate Starts for ShakeNBake_29:

(Start: 95 @20641 has 7 MA's), (137, 20782), (139, 20794), (141, 20806), (146, 20833),

Gene: Shen_25 Start: 19184, Stop: 19516, Start Num: 64

Candidate Starts for Shen_25:

(Start: 64 @19184 has 28 MA's), (93, 19259), (Start: 96 @19268 has 2 MA's), (103, 19292), (104, 19295), (120, 19349), (122, 19361), (139, 19415), (141, 19427),

Gene: SilentRX_40 Start: 35414, Stop: 35743, Start Num: 60

Candidate Starts for SilentRX_40:

(46, 35366), (Start: 60 @35414 has 1 MA's), (93, 35498), (101, 35525), (109, 35552), (141, 35666), (144, 35681),

Gene: Skitty_23 Start: 18072, Stop: 18350, Start Num: 87

Candidate Starts for Skitty_23:

(56, 17988), (80, 18054), (Start: 87 @18072 has 6 MA's), (114, 18165), (117, 18177), (121, 18192), (133, 18234), (135, 18240), (141, 18270),

Gene: Skylord_22 Start: 17110, Stop: 17436, Start Num: 58

Candidate Starts for Skylord_22:

(Start: 58 @17110 has 17 MA's), (120, 17293), (121, 17299), (141, 17371),

Gene: SoJo_23 Start: 19328, Stop: 19582, Start Num: 92

Candidate Starts for SoJo_23:

(Start: 92 @19328 has 31 MA's), (132, 19466), (139, 19493), (141, 19505),

Gene: SonDevVon_27 Start: 20362, Stop: 20670, Start Num: 70

Candidate Starts for SonDevVon_27:

(Start: 70 @20362 has 39 MA's), (102, 20458), (103, 20461), (106, 20470), (141, 20596), (144, 20611), (146, 20623),

Gene: Sonny_29 Start: 25242, Stop: 25610, Start Num: 54

Candidate Starts for Sonny_29:

(Start: 54 @25242 has 18 MA's), (94, 25347), (Start: 96 @25353 has 2 MA's), (107, 25389), (109, 25398), (113, 25410), (119, 25431), (122, 25446), (137, 25488), (141, 25512), (142, 25518), (152, 25551),

Gene: SpicyFrank_28 Start: 20656, Stop: 20961, Start Num: 70

Candidate Starts for SpicyFrank_28:

(Start: 70 @20656 has 39 MA's), (88, 20707), (118, 20797), (130, 20836), (136, 20854), (141, 20881),

Gene: Sporco_29 Start: 20417, Stop: 20725, Start Num: 70

Candidate Starts for Sporco_29:

(Start: 70 @20417 has 39 MA's), (102, 20513), (103, 20516), (106, 20525), (141, 20651), (144, 20666), (146, 20678),

Gene: StevieBAY_29 Start: 25315, Stop: 25686, Start Num: 53

Candidate Starts for StevieBAY_29:

(Start: 53 @25315 has 4 MA's), (Start: 54 @25318 has 18 MA's), (94, 25423), (107, 25465), (109, 25474), (113, 25486), (119, 25507), (122, 25522), (141, 25588), (152, 25627),

Gene: StuartMinion_23 Start: 17655, Stop: 17969, Start Num: 64

Candidate Starts for StuartMinion_23:

(Start: 63 @17652 has 1 MA's), (Start: 64 @17655 has 28 MA's), (81, 17691), (90, 17715), (Start: 96 @17733 has 2 MA's), (Start: 98 @17739 has 1 MA's), (103, 17757), (106, 17766), (119, 17811), (139, 17880), (141, 17892), (148, 17925),

Gene: Syleon_36 Start: 29820, Stop: 30050, Start Num: 92

Candidate Starts for Syleon_36:

(Start: 91 @29817 has 2 MA's), (Start: 92 @29820 has 31 MA's), (106, 29865), (109, 29877), (112, 29886), (120, 29913), (130, 29946), (132, 29952), (134, 29958), (140, 29985), (141, 29988), (143,

30000), (150, 30027), (154, 30036),

Gene: TaeYoung_29 Start: 25246, Stop: 25614, Start Num: 54

Candidate Starts for TaeYoung_29:

(Start: 54 @25246 has 18 MA's), (82, 25318), (90, 25339), (94, 25351), (Start: 96 @25357 has 2 MA's), (107, 25393), (109, 25402), (113, 25414), (119, 25435), (120, 25438), (122, 25450), (141, 25516), (152, 25555),

Gene: TailX7_6 Start: 3802, Stop: 4080, Start Num: 89

Candidate Starts for TailX7_6:

(Start: 89 @3802 has 1 MA's), (125, 3922), (131, 3940),

Gene: Tarzan_22 Start: 18586, Stop: 18885, Start Num: 75

Candidate Starts for Tarzan_22:

(9, 17929), (13, 17989), (21, 18121), (22, 18130), (33, 18304), (74, 18583), (Start: 75 @18586 has 8 MA's), (107, 18688), (120, 18730), (133, 18775), (137, 18784), (141, 18808), (156, 18856), (159, 18877),

Gene: TaylorSipht_24 Start: 18002, Stop: 18337, Start Num: 64

Candidate Starts for TaylorSipht_24:

(Start: 64 @18002 has 28 MA's), (77, 18032), (93, 18077), (103, 18110), (109, 18131), (119, 18164), (120, 18167), (122, 18179), (133, 18209), (139, 18233), (141, 18245),

Gene: ThayneTheZag_28 Start: 20519, Stop: 20830, Start Num: 70

Candidate Starts for ThayneTheZag_28:

(Start: 70 @20519 has 39 MA's), (88, 20576), (118, 20669), (122, 20687), (140, 20750), (144, 20768),

Gene: Timinator_29 Start: 25315, Stop: 25686, Start Num: 53

Candidate Starts for Timinator_29:

(Start: 53 @25315 has 4 MA's), (Start: 54 @25318 has 18 MA's), (Start: 58 @25339 has 17 MA's), (94, 25423), (107, 25465), (109, 25474), (113, 25486), (119, 25507), (122, 25522), (141, 25588), (152, 25627),

Gene: Toad24_25 Start: 19184, Stop: 19516, Start Num: 64

Candidate Starts for Toad24_25:

(Start: 64 @19184 has 28 MA's), (93, 19259), (Start: 96 @19268 has 2 MA's), (103, 19292), (104, 19295), (120, 19349), (122, 19361), (139, 19415), (141, 19427),

Gene: ToastyFinz_22 Start: 19068, Stop: 19331, Start Num: 92

Candidate Starts for ToastyFinz_22:

(Start: 92 @19068 has 31 MA's), (110, 19134), (141, 19248),

Gene: Trax_36 Start: 31334, Stop: 31564, Start Num: 96

Candidate Starts for Trax_36:

(Start: 96 @31334 has 2 MA's), (110, 31382), (140, 31487), (141, 31490), (144, 31505), (146, 31517),

Gene: Tubberson_23 Start: 19333, Stop: 19587, Start Num: 92

Candidate Starts for Tubberson_23:

(Start: 92 @19333 has 31 MA's), (132, 19471), (139, 19498), (141, 19510),

Gene: TurkishDelight_36 Start: 34260, Stop: 34487, Start Num: 92

Candidate Starts for TurkishDelight_36:

(Start: 92 @34260 has 31 MA's), (140, 34413), (141, 34416),

Gene: Virizion_33 Start: 21012, Stop: 21245, Start Num: 95

Candidate Starts for Virizion_33:

(Start: 95 @21012 has 7 MA's), (137, 21153), (139, 21165), (141, 21177), (146, 21204),

Gene: Vitas_22 Start: 17102, Stop: 17428, Start Num: 58

Candidate Starts for Vitas_22:

(Start: 58 @17102 has 17 MA's), (120, 17285), (121, 17291), (141, 17363),

Gene: Vondra_21 Start: 17962, Stop: 18219, Start Num: 92

Candidate Starts for Vondra_21:

(6, 17224), (19, 17413), (24, 17491), (28, 17539), (32, 17626), (76, 17917), (90, 17956), (Start: 92 @17962 has 31 MA's), (107, 18016), (109, 18025), (141, 18142),

Gene: Vopal_29 Start: 20432, Stop: 20740, Start Num: 70

Candidate Starts for Vopal_29:

(Start: 70 @20432 has 39 MA's), (102, 20528), (103, 20531), (106, 20540), (141, 20666), (144, 20681), (146, 20693),

Gene: Vulpecula_24 Start: 18724, Stop: 19056, Start Num: 64

Candidate Starts for Vulpecula_24:

(Start: 64 @18724 has 28 MA's), (93, 18799), (Start: 96 @18808 has 2 MA's), (120, 18889), (122, 18901), (129, 18916), (139, 18955), (141, 18967),

Gene: Wentworth_30 Start: 20992, Stop: 21219, Start Num: 95

Candidate Starts for Wentworth_30:

(Start: 95 @20992 has 7 MA's), (104, 21013), (105, 21016), (112, 21040), (117, 21058), (137, 21127), (141, 21151), (143, 21163), (146, 21178),

Gene: Westrich_25 Start: 19173, Stop: 19505, Start Num: 64

Candidate Starts for Westrich_25:

(Start: 64 @19173 has 28 MA's), (93, 19248), (Start: 96 @19257 has 2 MA's), (103, 19281), (104, 19284), (120, 19338), (122, 19350), (139, 19404), (141, 19416),

Gene: WileyE_23 Start: 18049, Stop: 18381, Start Num: 64

Candidate Starts for WileyE_23:

(Start: 64 @18049 has 28 MA's), (Start: 75 @18076 has 8 MA's), (93, 18124), (Start: 96 @18133 has 2 MA's), (103, 18157), (109, 18178), (120, 18214), (139, 18280), (141, 18292),

Gene: Wilkos_30 Start: 20904, Stop: 21131, Start Num: 95

Candidate Starts for Wilkos_30:

(Start: 95 @20904 has 7 MA's), (108, 20940), (113, 20955), (116, 20967), (117, 20970), (141, 21063), (146, 21090),

Gene: Windest_29 Start: 20486, Stop: 20791, Start Num: 70

Candidate Starts for Windest_29:

(Start: 70 @20486 has 39 MA's), (88, 20537), (111, 20603), (118, 20627), (122, 20645), (130, 20666), (132, 20672), (136, 20684), (155, 20756),

Gene: Wyborn_30 Start: 25584, Stop: 25931, Start Num: 63

Candidate Starts for Wyborn_30:

(49, 25542), (Start: 63 @25584 has 1 MA's), (88, 25656), (93, 25668), (94, 25671), (105, 25707), (107, 25713), (110, 25725), (120, 25758), (124, 25776), (141, 25836), (142, 25842),

Gene: Yara_26 Start: 20240, Stop: 20461, Start Num: 98

Candidate Starts for Yara_26:

(45, 20069), (Start: 98 @20240 has 1 MA's), (126, 20336), (141, 20399),

Gene: YoungHarleezy_28 Start: 20434, Stop: 20739, Start Num: 70

Candidate Starts for YoungHarleezy_28:

(Start: 70 @20434 has 39 MA's), (88, 20485), (111, 20551), (118, 20575), (122, 20593), (130, 20614), (132, 20620), (136, 20632),

Gene: Zartrosa_29 Start: 25236, Stop: 25604, Start Num: 54

Candidate Starts for Zartrosa_29:

(Start: 54 @25236 has 18 MA's), (94, 25341), (Start: 96 @25347 has 2 MA's), (107, 25383), (109, 25392), (113, 25404), (119, 25425), (122, 25440), (137, 25482), (141, 25506), (142, 25512), (152, 25545),

Gene: Zhuangyuan_25 Start: 18457, Stop: 18819, Start Num: 64

Candidate Starts for Zhuangyuan_25:

(Start: 64 @18457 has 28 MA's), (Start: 70 @18469 has 39 MA's), (Start: 96 @18541 has 2 MA's), (103, 18565), (119, 18619), (139, 18688), (141, 18700),

Gene: Zixiang_24 Start: 19055, Stop: 19387, Start Num: 64

Candidate Starts for Zixiang_24:

(Start: 64 @19055 has 28 MA's), (72, 19073), (93, 19130), (103, 19163), (120, 19220), (122, 19232), (141, 19298),