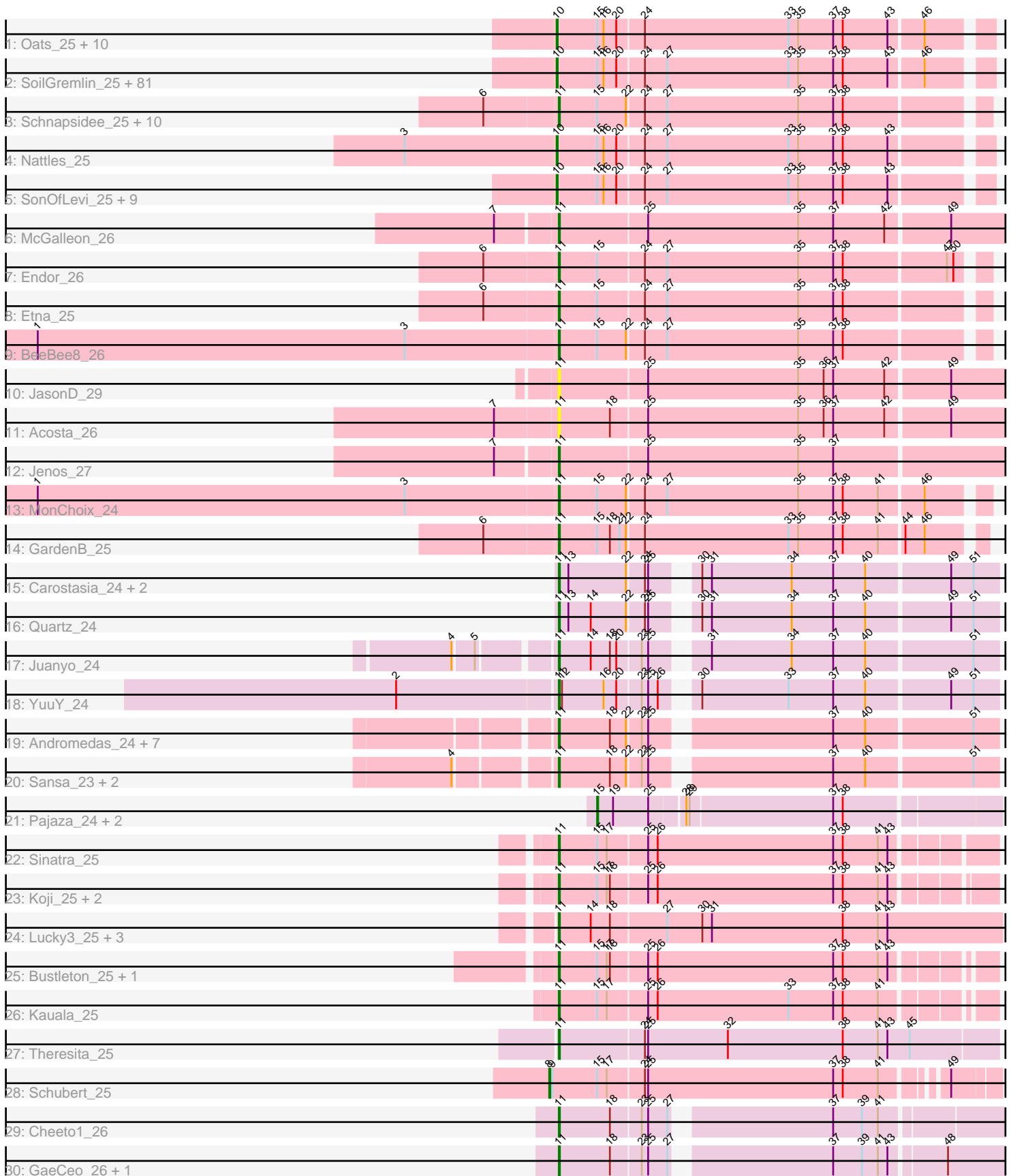


Pham 737



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 737 Report

This analysis was run 04/28/24 on database version 559.

Pham number 737 has 160 members, 22 are drafts.

Phages represented in each track:

- Track 1 : Oats_25, Espinosa_25, Asta_27, Aubergine_25, TeddyBear_25, Tenda_25, Pocket_25, Gershwin_25, Kale_25, ManRay_25, Christoph_25
- Track 2 : SoilGremlin_25, ParleG_25, Velene_25, JasperRussell_25, Lovelyunicorn_25, Clancy_25, StirfryIV_26, Jerbirus_26, Phireproof_25, Oxtober96_25, Renzie_25, AranulaLuti_25, Ilzat_25, HanSolo_25, Shee_25, Delphidian_26, KannH_25, Inventa_25, Riylhil_25, Teagan_25, Ludgate_25, MillyPhilly_25, PuppyEggo_25, HankSprout_27, Gargoyle_25, Alyxandracam_25, Kurt1_25, Rog141_26, Rapheph_25, TatarkaPM_25, Nagem_25, Byron23_25, Antoinette_25, Winzigespinne_25, Pherferi_25, Janus167_25, Knox_25, JeriBeth_26, AxiPup_25, Baines_25, Phriends_25, Convict_25, Superfresh_25, Papafritta_25, Chako_25, OldNelly_25, Dave_25, Duocatuli_25, Gubbabump_25, Blage_25, AlexAdler_25, WildNOut_25, Den3_25, ShaiHulud_25, Stanktossa_25, PhredFlintston_25, Dothraki_25, MaeLinda_25, Vispistious_25, NickSell_26, Martin_26, HungryHenry_26, Greys_25, Bandik_25, TinSulphur_25, Zada_25, Phiderman_26, Strathdee_25, Robinson_25, Sedgewig_25, SJay_25, BeautPeep30_25, Ioannes_25, BigRedClifford_25, BonesMcCoy_25, Benjalauren_26, Thompsons_25, Peep_25, StingRay_25, Raptor_25, Thorongil_25, MrWorldwide_25
- Track 3 : Schnapsidee_25, Balsa_25, KingJulien_25, Hamlet_25, Peppino_25, Raccoon_25, Redfield_25, Agente005_26, FarmerDoug_25, Leafus_25, Stormbreaker8_25
- Track 4 : Nattles_25
- Track 5 : SonOfLevi_25, Etta_25, Garey24_25, Chamuel_25, Bonino_25, Calix_25, Figueroism_25, Erla_25, Gelo_25, Klimt_25
- Track 6 : McGalleon_26
- Track 7 : Endor_26
- Track 8 : Etna_25
- Track 9 : BeeBee8_26
- Track 10 : JasonD_29
- Track 11 : Acosta_26
- Track 12 : Jenos_27
- Track 13 : MonChoix_24
- Track 14 : GardenB_25
- Track 15 : Carostasia_24, Mandalorian_24, Nucci_24
- Track 16 : Quartz_24
- Track 17 : Juanyo_24
- Track 18 : YuuY_24

- Track 19 : Andromedas_24, ChikPic_24, ColaCorta_24, Glamour_23, Finny_24, Eleri_24, Saratos_24, Shamu_24
- Track 20 : Sansa_23, MCubed_24, Zenitsu_24
- Track 21 : Pajaza_24, Casey_24, Pikmin_24
- Track 22 : Sinatra_25
- Track 23 : Koji_25, BouleyBill_26, PrincePhergus_25
- Track 24 : Lucky3_25, Guetzie_25, SirVictor_25, Golden_25
- Track 25 : Bustleton_25, Pherbot_25
- Track 26 : Kauala_25
- Track 27 : Theresita_25
- Track 28 : Schubert_25
- Track 29 : Cheeto1_26
- Track 30 : GaeCeo_26, ChickenKing_25

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

The start number called the most often in the published annotations is 10, it was called in 89 of the 138 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlexAdler_25, Alyxandracam_25, Antoinette_25, AranulaLuti_25, Asta_27, Aubergine_25, AxiPup_25, Baines_25, Bandik_25, BeautPeep30_25, Benjalauren_26, BigRedClifford_25, Blage_25, BonesMcCoy_25, Bonino_25, Byron23_25, Calix_25, Chako_25, Chamuel_25, Christoph_25, Clancy_25, Convict_25, Dave_25, Delphidian_26, Den3_25, Dothraki_25, Duocatuli_25, Erla_25, Espinosa_25, Etta_25, Figueroism_25, Garey24_25, Gargoyle_25, Gelo_25, Gershwin_25, Greys_25, Gubbabump_25, HanSolo_25, HankSprout_27, HungryHenry_26, Ilzat_25, Inventa_25, Ioannes_25, Janus167_25, JasperRussell_25, Jerbirus_26, JeriBeth_26, Kale_25, KannH_25, Klimt_25, Knox_25, Kurt1_25, Lovelyunicorn_25, Ludgate_25, MaeLinda_25, ManRay_25, Martin_26, MillyPhilly_25, MrWorldwide_25, Nagem_25, Nattles_25, NickSell_26, Oats_25, OldNelly_25, Oxtober96_25, Papafritta_25, ParleG_25, Peep_25, Pherferi_25, Phiderman_26, Phireproof_25, PhredFlintston_25, Phriends_25, Pocket_25, PuppyEggo_25, Rapheph_25, Raptor_25, Renzie_25, Riyhil_25, Robinson_25, Rog141_26, SJay_25, Sedgewig_25, ShaiHulud_25, Shee_25, SoilGremlin_25, SonOfLevi_25, Stanktossa_25, StingRay_25, StirfryIV_26, Strathdee_25, Superfresh_25, TatarkaPM_25, Teagan_25, TeddyBear_25, Tenda_25, Thompsone_25, Thorongil_25, TinSulphur_25, Velene_25, Vispitious_25, WildNOut_25, Winzigespinne_25, Zada_25,

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

-

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

- Acosta_26, Agente005_26, Andromedas_24, Balsa_25, BeeBee8_26, BouleyBill_26, Bustleton_25, Carostasia_24, Casey_24, Cheeto1_26, ChickenKing_25, ChikPic_24, ColaCorta_24, Eleri_24, Endor_26, Etna_25, FarmerDoug_25, Finny_24, GaeCeo_26, GardenB_25, Glamour_23, Golden_25, Guetzie_25, Hamlet_25, JasonD_29, Jenos_27, Juanyo_24, Kauala_25, KingJulien_25, Koji_25, Leafus_25, Lucky3_25, MCubed_24, Mandalorian_24,

McGalleon_26, MonChoix_24, Nucci_24, Pajaza_24, Peppino_25, Pherbot_25, Pikmin_24, PrincePhergus_25, Quartz_24, Raccoon_25, Redfield_25, Sansa_23, Saratos_24, Schnapsidee_25, Schubert_25, Shamu_24, Sinatra_25, SirVictor_25, Stormbreaker8_25, Theresita_25, Yuyu_24, Zenitsu_24,

Summary by start number:

Start 8:

- Found in 1 of 160 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 138
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Schubert_25 (EA8),

Start 10:

- Found in 104 of 160 (65.0%) of genes in pham
- Manual Annotations of this start: 89 of 138
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlexAdler_25 (EA1), Alyxandracam_25 (EA1), Antoinette_25 (EA1), AranulaLuti_25 (EA1), Asta_27 (EA1), Aubergine_25 (EA1), AxiPup_25 (EA1), Baines_25 (EA1), Bandik_25 (EA1), BeautPeep30_25 (EA1), Benjalauren_26 (EA1), BigRedClifford_25 (EA1), Blage_25 (EA1), BonesMcCoy_25 (EA1), Bonino_25 (EA1), Byron23_25 (EA1), Calix_25 (EA1), Chako_25 (EA1), Chamuel_25 (EA1), Christoph_25 (EA1), Clancy_25 (EA1), Convict_25 (EA1), Dave_25 (EA1), Delphidian_26 (EA1), Den3_25 (EA1), Dothraki_25 (EA1), Duocatuli_25 (EA1), Erla_25 (EA1), Espinosa_25 (EA1), Etta_25 (EA1), Figueroism_25 (EA1), Garey24_25 (EA1), Gargoyle_25 (EA1), Gelo_25 (EA1), Gershwin_25 (EA1), Greys_25 (EA1), Gubbabump_25 (EA1), HanSolo_25 (EA1), HankSprout_27 (EA1), HungryHenry_26 (EA1), Ilzat_25 (EA1), Inventa_25 (EA1), Ioannes_25 (EA1), Janus167_25 (EA1), JasperRussell_25 (EA1), Jerbirus_26 (EA1), JeriBeth_26 (EA1), Kale_25 (EA1), KannH_25 (EA1), Klimt_25 (EA1), Knox_25 (EA1), Kurt1_25 (EA1), Lovelyunicorn_25 (EA1), Ludgate_25 (EA1), MaeLinda_25 (EA1), ManRay_25 (EA1), Martin_26 (EA1), MillyPhilly_25 (EA1), MrWorldwide_25 (EA1), Nagem_25 (EA1), Nattles_25 (EA1), NickSell_26 (EA1), Oats_25 (EA1), OldNelly_25 (EA1), Oxtober96_25 (EA1), Papafritta_25 (EA1), ParleG_25 (EA1), Peep_25 (EA1), Pherferi_25 (EA1), Phiderman_26 (EA1), Phireproof_25 (EA1), PhredFlintston_25 (EA1), Phriends_25 (EA1), Pocket_25 (EA1), PuppyEggo_25 (EA1), Rapheph_25 (EA1), Raptor_25 (EA1), Renzie_25 (EA1), Riyhil_25 (EA1), Robinson_25 (EA1), Rog141_26 (EA1), SJay_25 (EA1), Sedgewig_25 (EA1), ShaiHulud_25 (EA1), Shee_25 (EA1), SoilGremlin_25 (EA1), SonOfLevi_25 (EA1), Stanktossa_25 (EA1), StingRay_25 (EA1), StirfryIV_26 (EA1), Strathdee_25 (EA1), Superfresh_25 (EA1), TatarkaPM_25 (EA1), Teagan_25 (EA1), TeddyBear_25 (EA1), Tenda_25 (EA1), Thompsone_25 (EA1), Thorongil_25 (EA1), TinSulphur_25 (EA1), Velene_25 (EA1), Vispistious_25 (EA1), WildNOut_25 (EA1), Winzigespinne_25 (EA1), Zada_25 (EA1),

Start 11:

- Found in 52 of 160 (32.5%) of genes in pham
- Manual Annotations of this start: 45 of 138
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_26 (EA1), Agente005_26 (EA1), Andromedas_24 (EA2), Balsa_25 (EA1), BeeBee8_26 (EA1), BouleyBill_26 (EA4), Bustleton_25 (EA4), Carostasia_24 (EA10), Cheeto1_26 (EA9), ChickenKing_25 (EA9), ChikPic_24 (EA2), ColaCorta_24 (EA2), Eleri_24 (EA2), Endor_26 (EA1),

Etna_25 (EA1), FarmerDoug_25 (EA1), Finny_24 (EA2), GaeCeo_26 (EA9), GardenB_25 (EA1), Glamour_23 (EA2), Golden_25 (EA4), Guetzie_25 (EA4), Hamlet_25 (EA1), JasonD_29 (EA1), Jenos_27 (EA1), Juanyo_24 (EA10), Kauala_25 (EA4), KingJulien_25 (EA1), Koji_25 (EA4), Leafus_25 (EA1), Lucky3_25 (EA4), MCubed_24 (EA2), Mandalorian_24 (EA10), McGalleon_26 (EA1), MonChoix_24 (EA1), Nucci_24 (EA10), Peppino_25 (EA1), Pherbot_25 (EA4), PrincePhergus_25 (EA4), Quartz_24 (EA10), Raccoon_25 (EA1), Redfield_25 (EA1), Sansa_23 (EA2), Saratos_24 (EA2), Schnapsidee_25 (EA1), Shamu_24 (EA2), Sinatra_25 (EA4), SirVictor_25 (EA4), Stormbreaker8_25 (EA1), Theresita_25 (EA7), YuuY_24 (EA10), Zenitsu_24 (EA2),

Start 15:

- Found in 131 of 160 (81.9%) of genes in pham
- Manual Annotations of this start: 3 of 138
- Called 2.3% of time when present
- Phage (with cluster) where this start called: Casey_24 (EA3), Pajaza_24 (EA3), Pikmin_24 (EA3),

Summary by clusters:

There are 8 clusters represented in this pham: EA10, EA9, EA8, EA1, EA3, EA2, EA4, EA7,

Info for manual annotations of cluster EA1:

- Start number 10 was manually annotated 89 times for cluster EA1.
- Start number 11 was manually annotated 15 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 11 was manually annotated 5 times for cluster EA10.

Info for manual annotations of cluster EA2:

- Start number 11 was manually annotated 11 times for cluster EA2.

Info for manual annotations of cluster EA3:

- Start number 15 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 11 was manually annotated 10 times for cluster EA4.

Info for manual annotations of cluster EA7:

- Start number 11 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EA8:

- Start number 8 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 11 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_26 Start: 19363, Stop: 19776, Start Num: 11

Candidate Starts for Acosta_26:

(7, 19306), (Start: 11 @19363 has 45 MA's), (18, 19411), (25, 19444), (35, 19585), (36, 19609), (37, 19618), (42, 19666), (49, 19723),

Gene: Agente005_26 Start: 19575, Stop: 19961, Start Num: 11

Candidate Starts for Agente005_26:

(6, 19509), (Start: 11 @19575 has 45 MA's), (Start: 15 @19611 has 3 MA's), (22, 19638), (24, 19653), (27, 19674), (35, 19797), (37, 19830), (38, 19839),

Gene: AlexAdler_25 Start: 19088, Stop: 19477, Start Num: 10

Candidate Starts for AlexAdler_25:

(Start: 10 @19088 has 89 MA's), (Start: 15 @19124 has 3 MA's), (16, 19130), (20, 19142), (24, 19166), (27, 19187), (33, 19301), (35, 19310), (37, 19343), (38, 19352), (43, 19394), (46, 19424),

Gene: Alyxandracam_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Alyxandracam_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Andromedas_24 Start: 19269, Stop: 19652, Start Num: 11

Candidate Starts for Andromedas_24:

(Start: 11 @19269 has 45 MA's), (18, 19317), (22, 19332), (23, 19344), (25, 19350), (37, 19503), (40, 19533), (51, 19629),

Gene: Antoinette_25 Start: 19088, Stop: 19477, Start Num: 10

Candidate Starts for Antoinette_25:

(Start: 10 @19088 has 89 MA's), (Start: 15 @19124 has 3 MA's), (16, 19130), (20, 19142), (24, 19166), (27, 19187), (33, 19301), (35, 19310), (37, 19343), (38, 19352), (43, 19394), (46, 19424),

Gene: AranulaLuti_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for AranulaLuti_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Asta_27 Start: 19397, Stop: 19786, Start Num: 10

Candidate Starts for Asta_27:

(Start: 10 @19397 has 89 MA's), (Start: 15 @19433 has 3 MA's), (16, 19439), (20, 19451), (24, 19475), (33, 19610), (35, 19619), (37, 19652), (38, 19661), (43, 19703), (46, 19733),

Gene: Aubergine_25 Start: 19397, Stop: 19786, Start Num: 10

Candidate Starts for Aubergine_25:

(Start: 10 @19397 has 89 MA's), (Start: 15 @19433 has 3 MA's), (16, 19439), (20, 19451), (24, 19475), (33, 19610), (35, 19619), (37, 19652), (38, 19661), (43, 19703), (46, 19733),

Gene: AxiPup_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for AxiPup_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: Baines_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Baines_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Balsa_25 Start: 19423, Stop: 19809, Start Num: 11

Candidate Starts for Balsa_25:

(6, 19357), (Start: 11 @19423 has 45 MA's), (Start: 15 @19459 has 3 MA's), (22, 19486), (24, 19501), (27, 19522), (35, 19645), (37, 19678), (38, 19687),

Gene: Bandik_25 Start: 19096, Stop: 19485, Start Num: 10

Candidate Starts for Bandik_25:

(Start: 10 @19096 has 89 MA's), (Start: 15 @19132 has 3 MA's), (16, 19138), (20, 19150), (24, 19174), (27, 19195), (33, 19309), (35, 19318), (37, 19351), (38, 19360), (43, 19402), (46, 19432),

Gene: BeautPeep30_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for BeautPeep30_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: BeeBee8_26 Start: 19589, Stop: 19975, Start Num: 11

Candidate Starts for BeeBee8_26:

(1, 19103), (3, 19448), (Start: 11 @19589 has 45 MA's), (Start: 15 @19625 has 3 MA's), (22, 19652), (24, 19667), (27, 19688), (35, 19811), (37, 19844), (38, 19853),

Gene: Benjalauren_26 Start: 19393, Stop: 19782, Start Num: 10

Candidate Starts for Benjalauren_26:

(Start: 10 @19393 has 89 MA's), (Start: 15 @19429 has 3 MA's), (16, 19435), (20, 19447), (24, 19471), (27, 19492), (33, 19606), (35, 19615), (37, 19648), (38, 19657), (43, 19699), (46, 19729),

Gene: BigRedClifford_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for BigRedClifford_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Blage_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Blage_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: BonesMcCoy_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for BonesMcCoy_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Bonino_25 Start: 19373, Stop: 19762, Start Num: 10

Candidate Starts for Bonino_25:

(Start: 10 @19373 has 89 MA's), (Start: 15 @19409 has 3 MA's), (16, 19415), (20, 19427), (24, 19451), (27, 19472), (33, 19586), (35, 19595), (37, 19628), (38, 19637), (43, 19679),

Gene: BouleyBill_26 Start: 19641, Stop: 20027, Start Num: 11

Candidate Starts for BouleyBill_26:

(Start: 11 @19641 has 45 MA's), (Start: 15 @19677 has 3 MA's), (17, 19686), (18, 19689), (25, 19722), (26, 19731), (37, 19896), (38, 19905), (41, 19938), (43, 19947),

Gene: Bustleton_25 Start: 19641, Stop: 20027, Start Num: 11

Candidate Starts for Bustleton_25:

(Start: 11 @19641 has 45 MA's), (Start: 15 @19677 has 3 MA's), (17, 19686), (18, 19689), (25, 19722), (26, 19731), (37, 19896), (38, 19905), (41, 19938), (43, 19947),

Gene: Byron23_25 Start: 19105, Stop: 19494, Start Num: 10

Candidate Starts for Byron23_25:

(Start: 10 @19105 has 89 MA's), (Start: 15 @19141 has 3 MA's), (16, 19147), (20, 19159), (24, 19183), (27, 19204), (33, 19318), (35, 19327), (37, 19360), (38, 19369), (43, 19411), (46, 19441),

Gene: Calix_25 Start: 19377, Stop: 19766, Start Num: 10

Candidate Starts for Calix_25:

(Start: 10 @19377 has 89 MA's), (Start: 15 @19413 has 3 MA's), (16, 19419), (20, 19431), (24, 19455), (27, 19476), (33, 19590), (35, 19599), (37, 19632), (38, 19641), (43, 19683),

Gene: Carostasia_24 Start: 19563, Stop: 19946, Start Num: 11

Candidate Starts for Carostasia_24:

(Start: 11 @19563 has 45 MA's), (13, 19572), (22, 19626), (24, 19641), (25, 19644), (30, 19674), (31, 19683), (34, 19758), (37, 19797), (40, 19827), (49, 19902), (51, 19923),

Gene: Casey_24 Start: 19595, Stop: 19954, Start Num: 15

Candidate Starts for Casey_24:

(Start: 15 @19595 has 3 MA's), (19, 19610), (25, 19643), (28, 19673), (29, 19676), (37, 19808), (38, 19817),

Gene: Chako_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Chako_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Chamuel_25 Start: 19379, Stop: 19768, Start Num: 10

Candidate Starts for Chamuel_25:

(Start: 10 @19379 has 89 MA's), (Start: 15 @19415 has 3 MA's), (16, 19421), (20, 19433), (24, 19457), (27, 19478), (33, 19592), (35, 19601), (37, 19634), (38, 19643), (43, 19685),

Gene: Cheeto1_26 Start: 19465, Stop: 19857, Start Num: 11

Candidate Starts for Cheeto1_26:

(Start: 11 @19465 has 45 MA's), (18, 19513), (23, 19540), (25, 19546), (27, 19564), (37, 19699), (39, 19726), (41, 19741),

Gene: ChickenKing_25 Start: 19360, Stop: 19755, Start Num: 11

Candidate Starts for ChickenKing_25:

(Start: 11 @19360 has 45 MA's), (18, 19408), (23, 19435), (25, 19441), (27, 19459), (37, 19594), (39, 19621), (41, 19636), (43, 19645), (48, 19693),

Gene: ChikPic_24 Start: 19285, Stop: 19668, Start Num: 11

Candidate Starts for ChikPic_24:

(Start: 11 @19285 has 45 MA's), (18, 19333), (22, 19348), (23, 19360), (25, 19366), (37, 19519), (40, 19549), (51, 19645),

Gene: Christoph_25 Start: 19395, Stop: 19784, Start Num: 10

Candidate Starts for Christoph_25:

(Start: 10 @19395 has 89 MA's), (Start: 15 @19431 has 3 MA's), (16, 19437), (20, 19449), (24, 19473), (33, 19608), (35, 19617), (37, 19650), (38, 19659), (43, 19701), (46, 19731),

Gene: Clancy_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Clancy_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: ColaCorta_24 Start: 19269, Stop: 19652, Start Num: 11

Candidate Starts for ColaCorta_24:

(Start: 11 @19269 has 45 MA's), (18, 19317), (22, 19332), (23, 19344), (25, 19350), (37, 19503), (40, 19533), (51, 19629),

Gene: Convict_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Convict_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Dave_25 Start: 19088, Stop: 19477, Start Num: 10

Candidate Starts for Dave_25:

(Start: 10 @19088 has 89 MA's), (Start: 15 @19124 has 3 MA's), (16, 19130), (20, 19142), (24, 19166), (27, 19187), (33, 19301), (35, 19310), (37, 19343), (38, 19352), (43, 19394), (46, 19424),

Gene: Delphidian_26 Start: 19099, Stop: 19488, Start Num: 10

Candidate Starts for Delphidian_26:

(Start: 10 @19099 has 89 MA's), (Start: 15 @19135 has 3 MA's), (16, 19141), (20, 19153), (24, 19177), (27, 19198), (33, 19312), (35, 19321), (37, 19354), (38, 19363), (43, 19405), (46, 19435),

Gene: Den3_25 Start: 19104, Stop: 19493, Start Num: 10

Candidate Starts for Den3_25:

(Start: 10 @19104 has 89 MA's), (Start: 15 @19140 has 3 MA's), (16, 19146), (20, 19158), (24, 19182), (27, 19203), (33, 19317), (35, 19326), (37, 19359), (38, 19368), (43, 19410), (46, 19440),

Gene: Dothraki_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Dothraki_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Duocatuli_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Duocatuli_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Eleri_24 Start: 19282, Stop: 19665, Start Num: 11

Candidate Starts for Eleri_24:

(Start: 11 @19282 has 45 MA's), (18, 19330), (22, 19345), (23, 19357), (25, 19363), (37, 19516), (40, 19546), (51, 19642),

Gene: Endor_26 Start: 19555, Stop: 19941, Start Num: 11

Candidate Starts for Endor_26:

(6, 19489), (Start: 11 @19555 has 45 MA's), (Start: 15 @19591 has 3 MA's), (24, 19633), (27, 19654), (35, 19777), (37, 19810), (38, 19819), (47, 19912), (50, 19918),

Gene: Erla_25 Start: 19377, Stop: 19766, Start Num: 10

Candidate Starts for Erla_25:

(Start: 10 @19377 has 89 MA's), (Start: 15 @19413 has 3 MA's), (16, 19419), (20, 19431), (24, 19455), (27, 19476), (33, 19590), (35, 19599), (37, 19632), (38, 19641), (43, 19683),

Gene: Espinosa_25 Start: 19395, Stop: 19784, Start Num: 10

Candidate Starts for Espinosa_25:

(Start: 10 @19395 has 89 MA's), (Start: 15 @19431 has 3 MA's), (16, 19437), (20, 19449), (24, 19473), (33, 19608), (35, 19617), (37, 19650), (38, 19659), (43, 19701), (46, 19731),

Gene: Etna_25 Start: 19416, Stop: 19802, Start Num: 11

Candidate Starts for Etna_25:

(6, 19350), (Start: 11 @19416 has 45 MA's), (Start: 15 @19452 has 3 MA's), (24, 19494), (27, 19515), (35, 19638), (37, 19671), (38, 19680),

Gene: Etta_25 Start: 19381, Stop: 19770, Start Num: 10

Candidate Starts for Etta_25:

(Start: 10 @19381 has 89 MA's), (Start: 15 @19417 has 3 MA's), (16, 19423), (20, 19435), (24, 19459), (27, 19480), (33, 19594), (35, 19603), (37, 19636), (38, 19645), (43, 19687),

Gene: FarmerDoug_25 Start: 19131, Stop: 19523, Start Num: 11

Candidate Starts for FarmerDoug_25:

(6, 19065), (Start: 11 @19131 has 45 MA's), (Start: 15 @19167 has 3 MA's), (22, 19194), (24, 19209), (27, 19230), (35, 19353), (37, 19386), (38, 19395),

Gene: Figueroism_25 Start: 19084, Stop: 19473, Start Num: 10

Candidate Starts for Figueroism_25:

(Start: 10 @19084 has 89 MA's), (Start: 15 @19120 has 3 MA's), (16, 19126), (20, 19138), (24, 19162), (27, 19183), (33, 19297), (35, 19306), (37, 19339), (38, 19348), (43, 19390),

Gene: Finny_24 Start: 19268, Stop: 19651, Start Num: 11

Candidate Starts for Finny_24:

(Start: 11 @19268 has 45 MA's), (18, 19316), (22, 19331), (23, 19343), (25, 19349), (37, 19502), (40, 19532), (51, 19628),

Gene: GaeCeo_26 Start: 19533, Stop: 19928, Start Num: 11

Candidate Starts for GaeCeo_26:

(Start: 11 @19533 has 45 MA's), (18, 19581), (23, 19608), (25, 19614), (27, 19632), (37, 19767), (39, 19794), (41, 19809), (43, 19818), (48, 19866),

Gene: GardenB_25 Start: 19420, Stop: 19803, Start Num: 11

Candidate Starts for GardenB_25:

(6, 19354), (Start: 11 @19420 has 45 MA's), (Start: 15 @19456 has 3 MA's), (18, 19468), (21, 19477), (22, 19483), (24, 19498), (33, 19633), (35, 19642), (37, 19675), (38, 19684), (41, 19717), (44, 19738), (46, 19756),

Gene: Garey24_25 Start: 19360, Stop: 19749, Start Num: 10

Candidate Starts for Garey24_25:

(Start: 10 @19360 has 89 MA's), (Start: 15 @19396 has 3 MA's), (16, 19402), (20, 19414), (24, 19438), (27, 19459), (33, 19573), (35, 19582), (37, 19615), (38, 19624), (43, 19666),

Gene: Gargoyle_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Gargoyle_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Gelo_25 Start: 19381, Stop: 19770, Start Num: 10

Candidate Starts for Gelo_25:

(Start: 10 @19381 has 89 MA's), (Start: 15 @19417 has 3 MA's), (16, 19423), (20, 19435), (24, 19459), (27, 19480), (33, 19594), (35, 19603), (37, 19636), (38, 19645), (43, 19687),

Gene: Gershwin_25 Start: 19397, Stop: 19786, Start Num: 10

Candidate Starts for Gershwin_25:

(Start: 10 @19397 has 89 MA's), (Start: 15 @19433 has 3 MA's), (16, 19439), (20, 19451), (24, 19475), (33, 19610), (35, 19619), (37, 19652), (38, 19661), (43, 19703), (46, 19733),

Gene: Glamour_23 Start: 19270, Stop: 19653, Start Num: 11

Candidate Starts for Glamour_23:

(Start: 11 @19270 has 45 MA's), (18, 19318), (22, 19333), (23, 19345), (25, 19351), (37, 19504), (40, 19534), (51, 19630),

Gene: Golden_25 Start: 19716, Stop: 20129, Start Num: 11

Candidate Starts for Golden_25:

(Start: 11 @19716 has 45 MA's), (14, 19746), (18, 19764), (27, 19815), (30, 19848), (31, 19857), (38, 19980), (41, 20013), (43, 20022),

Gene: Greys_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for Greys_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: Gubbabump_25 Start: 19386, Stop: 19775, Start Num: 10

Candidate Starts for Gubbabump_25:

(Start: 10 @19386 has 89 MA's), (Start: 15 @19422 has 3 MA's), (16, 19428), (20, 19440), (24, 19464), (27, 19485), (33, 19599), (35, 19608), (37, 19641), (38, 19650), (43, 19692), (46, 19722),

Gene: Guetzie_25 Start: 19704, Stop: 20117, Start Num: 11

Candidate Starts for Guetzie_25:

(Start: 11 @19704 has 45 MA's), (14, 19734), (18, 19752), (27, 19803), (30, 19836), (31, 19845), (38, 19968), (41, 20001), (43, 20010),

Gene: Hamlet_25 Start: 19423, Stop: 19809, Start Num: 11

Candidate Starts for Hamlet_25:

(6, 19357), (Start: 11 @19423 has 45 MA's), (Start: 15 @19459 has 3 MA's), (22, 19486), (24, 19501), (27, 19522), (35, 19645), (37, 19678), (38, 19687),

Gene: HanSolo_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for HanSolo_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: HankSprout_27 Start: 19264, Stop: 19653, Start Num: 10

Candidate Starts for HankSprout_27:

(Start: 10 @19264 has 89 MA's), (Start: 15 @19300 has 3 MA's), (16, 19306), (20, 19318), (24, 19342), (27, 19363), (33, 19477), (35, 19486), (37, 19519), (38, 19528), (43, 19570), (46, 19600),

Gene: HungryHenry_26 Start: 19394, Stop: 19783, Start Num: 10

Candidate Starts for HungryHenry_26:

(Start: 10 @19394 has 89 MA's), (Start: 15 @19430 has 3 MA's), (16, 19436), (20, 19448), (24, 19472), (27, 19493), (33, 19607), (35, 19616), (37, 19649), (38, 19658), (43, 19700), (46, 19730),

Gene: Ilzat_25 Start: 19393, Stop: 19782, Start Num: 10

Candidate Starts for Ilzat_25:

(Start: 10 @19393 has 89 MA's), (Start: 15 @19429 has 3 MA's), (16, 19435), (20, 19447), (24, 19471), (27, 19492), (33, 19606), (35, 19615), (37, 19648), (38, 19657), (43, 19699), (46, 19729),

Gene: Inventa_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Inventa_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: loannes_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for loannes_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Janus167_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Janus167_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: JasonD_29 Start: 19525, Stop: 19938, Start Num: 11

Candidate Starts for JasonD_29:

(Start: 11 @19525 has 45 MA's), (25, 19606), (35, 19747), (36, 19771), (37, 19780), (42, 19828), (49, 19885),

Gene: JasperRussell_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for JasperRussell_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Jenos_27 Start: 19848, Stop: 20261, Start Num: 11

Candidate Starts for Jenos_27:

(7, 19794), (Start: 11 @19848 has 45 MA's), (25, 19929), (35, 20070), (37, 20103),

Gene: Jerbirus_26 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Jerbirus_26:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: JeriBeth_26 Start: 19240, Stop: 19629, Start Num: 10

Candidate Starts for JeriBeth_26:

(Start: 10 @19240 has 89 MA's), (Start: 15 @19276 has 3 MA's), (16, 19282), (20, 19294), (24, 19318), (27, 19339), (33, 19453), (35, 19462), (37, 19495), (38, 19504), (43, 19546), (46, 19576),

Gene: Juanyo_24 Start: 19444, Stop: 19827, Start Num: 11

Candidate Starts for Juanyo_24:

(4, 19363), (5, 19381), (Start: 11 @19444 has 45 MA's), (14, 19474), (18, 19492), (20, 19498), (23, 19519), (25, 19525), (31, 19564), (34, 19639), (37, 19678), (40, 19708), (51, 19804),

Gene: Kale_25 Start: 19399, Stop: 19788, Start Num: 10

Candidate Starts for Kale_25:

(Start: 10 @19399 has 89 MA's), (Start: 15 @19435 has 3 MA's), (16, 19441), (20, 19453), (24, 19477), (33, 19612), (35, 19621), (37, 19654), (38, 19663), (43, 19705), (46, 19735),

Gene: KannH_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for KannH_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Kauala_25 Start: 19645, Stop: 20031, Start Num: 11

Candidate Starts for Kauala_25:

(Start: 11 @19645 has 45 MA's), (Start: 15 @19681 has 3 MA's), (17, 19690), (25, 19726), (26, 19735), (33, 19858), (37, 19900), (38, 19909), (41, 19942),

Gene: KingJulien_25 Start: 19416, Stop: 19802, Start Num: 11

Candidate Starts for KingJulien_25:

(6, 19350), (Start: 11 @19416 has 45 MA's), (Start: 15 @19452 has 3 MA's), (22, 19479), (24, 19494), (27, 19515), (35, 19638), (37, 19671), (38, 19680),

Gene: Klimt_25 Start: 19379, Stop: 19768, Start Num: 10

Candidate Starts for Klimt_25:

(Start: 10 @19379 has 89 MA's), (Start: 15 @19415 has 3 MA's), (16, 19421), (20, 19433), (24, 19457), (27, 19478), (33, 19592), (35, 19601), (37, 19634), (38, 19643), (43, 19685),

Gene: Knox_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Knox_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Koji_25 Start: 19767, Stop: 20156, Start Num: 11

Candidate Starts for Koji_25:

(Start: 11 @19767 has 45 MA's), (Start: 15 @19803 has 3 MA's), (17, 19812), (18, 19815), (25, 19848), (26, 19857), (37, 20022), (38, 20031), (41, 20064), (43, 20073),

Gene: Kurt1_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Kurt1_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Leafus_25 Start: 19561, Stop: 19947, Start Num: 11

Candidate Starts for Leafus_25:

(6, 19495), (Start: 11 @19561 has 45 MA's), (Start: 15 @19597 has 3 MA's), (22, 19624), (24, 19639), (27, 19660), (35, 19783), (37, 19816), (38, 19825),

Gene: Lovelyunicorn_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Lovelyunicorn_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Lucky3_25 Start: 19716, Stop: 20129, Start Num: 11

Candidate Starts for Lucky3_25:

(Start: 11 @19716 has 45 MA's), (14, 19746), (18, 19764), (27, 19815), (30, 19848), (31, 19857), (38, 19980), (41, 20013), (43, 20022),

Gene: Ludgate_25 Start: 19096, Stop: 19485, Start Num: 10

Candidate Starts for Ludgate_25:

(Start: 10 @19096 has 89 MA's), (Start: 15 @19132 has 3 MA's), (16, 19138), (20, 19150), (24, 19174), (27, 19195), (33, 19309), (35, 19318), (37, 19351), (38, 19360), (43, 19402), (46, 19432),

Gene: MCubed_24 Start: 19296, Stop: 19679, Start Num: 11

Candidate Starts for MCubed_24:

(4, 19215), (Start: 11 @19296 has 45 MA's), (18, 19344), (22, 19359), (23, 19371), (25, 19377), (37, 19530), (40, 19560), (51, 19656),

Gene: MaeLinda_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for MaeLinda_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: ManRay_25 Start: 19397, Stop: 19786, Start Num: 10

Candidate Starts for ManRay_25:

(Start: 10 @19397 has 89 MA's), (Start: 15 @19433 has 3 MA's), (16, 19439), (20, 19451), (24, 19475), (33, 19610), (35, 19619), (37, 19652), (38, 19661), (43, 19703), (46, 19733),

Gene: Mandalorian_24 Start: 19561, Stop: 19944, Start Num: 11

Candidate Starts for Mandalorian_24:

(Start: 11 @19561 has 45 MA's), (13, 19570), (22, 19624), (24, 19639), (25, 19642), (30, 19672), (31, 19681), (34, 19756), (37, 19795), (40, 19825), (49, 19900), (51, 19921),

Gene: Martin_26 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Martin_26:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: McGalleon_26 Start: 19967, Stop: 20380, Start Num: 11

Candidate Starts for McGalleon_26:

(7, 19913), (Start: 11 @19967 has 45 MA's), (25, 20048), (35, 20189), (37, 20222), (42, 20270), (49, 20327),

Gene: MillyPhilly_25 Start: 19099, Stop: 19488, Start Num: 10

Candidate Starts for MillyPhilly_25:

(Start: 10 @19099 has 89 MA's), (Start: 15 @19135 has 3 MA's), (16, 19141), (20, 19153), (24, 19177), (27, 19198), (33, 19312), (35, 19321), (37, 19354), (38, 19363), (43, 19405), (46, 19435),

Gene: MonChoix_24 Start: 19077, Stop: 19463, Start Num: 11

Candidate Starts for MonChoix_24:

(1, 18591), (3, 18936), (Start: 11 @19077 has 45 MA's), (Start: 15 @19113 has 3 MA's), (22, 19140), (24, 19155), (27, 19176), (35, 19299), (37, 19332), (38, 19341), (41, 19374), (46, 19413),

Gene: MrWorldwide_25 Start: 19103, Stop: 19492, Start Num: 10

Candidate Starts for MrWorldwide_25:

(Start: 10 @19103 has 89 MA's), (Start: 15 @19139 has 3 MA's), (16, 19145), (20, 19157), (24, 19181), (27, 19202), (33, 19316), (35, 19325), (37, 19358), (38, 19367), (43, 19409), (46, 19439),

Gene: Nagem_25 Start: 19096, Stop: 19485, Start Num: 10

Candidate Starts for Nagem_25:

(Start: 10 @19096 has 89 MA's), (Start: 15 @19132 has 3 MA's), (16, 19138), (20, 19150), (24, 19174), (27, 19195), (33, 19309), (35, 19318), (37, 19351), (38, 19360), (43, 19402), (46, 19432),

Gene: Nattles_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Nattles_25:

(3, 19243), (Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690),

Gene: NickSell_26 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for NickSell_26:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Nucci_24 Start: 19550, Stop: 19933, Start Num: 11

Candidate Starts for Nucci_24:

(Start: 11 @19550 has 45 MA's), (13, 19559), (22, 19613), (24, 19628), (25, 19631), (30, 19661), (31, 19670), (34, 19745), (37, 19784), (40, 19814), (49, 19889), (51, 19910),

Gene: Oats_25 Start: 19397, Stop: 19786, Start Num: 10

Candidate Starts for Oats_25:

(Start: 10 @19397 has 89 MA's), (Start: 15 @19433 has 3 MA's), (16, 19439), (20, 19451), (24, 19475), (33, 19610), (35, 19619), (37, 19652), (38, 19661), (43, 19703), (46, 19733),

Gene: OldNelly_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for OldNelly_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Oxtober96_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Oxtober96_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Pajaza_24 Start: 19595, Stop: 19954, Start Num: 15

Candidate Starts for Pajaza_24:

(Start: 15 @19595 has 3 MA's), (19, 19610), (25, 19643), (28, 19673), (29, 19676), (37, 19808), (38, 19817),

Gene: Papafritta_25 Start: 19393, Stop: 19782, Start Num: 10

Candidate Starts for Papafritta_25:

(Start: 10 @19393 has 89 MA's), (Start: 15 @19429 has 3 MA's), (16, 19435), (20, 19447), (24, 19471), (27, 19492), (33, 19606), (35, 19615), (37, 19648), (38, 19657), (43, 19699), (46, 19729),

Gene: ParleG_25 Start: 19103, Stop: 19492, Start Num: 10

Candidate Starts for ParleG_25:

(Start: 10 @19103 has 89 MA's), (Start: 15 @19139 has 3 MA's), (16, 19145), (20, 19157), (24, 19181), (27, 19202), (33, 19316), (35, 19325), (37, 19358), (38, 19367), (43, 19409), (46, 19439),

Gene: Peep_25 Start: 19088, Stop: 19477, Start Num: 10

Candidate Starts for Peep_25:

(Start: 10 @19088 has 89 MA's), (Start: 15 @19124 has 3 MA's), (16, 19130), (20, 19142), (24, 19166), (27, 19187), (33, 19301), (35, 19310), (37, 19343), (38, 19352), (43, 19394), (46, 19424),

Gene: Peppino_25 Start: 19414, Stop: 19800, Start Num: 11

Candidate Starts for Peppino_25:

(6, 19348), (Start: 11 @19414 has 45 MA's), (Start: 15 @19450 has 3 MA's), (22, 19477), (24, 19492), (27, 19513), (35, 19636), (37, 19669), (38, 19678),

Gene: Pherbot_25 Start: 19640, Stop: 20026, Start Num: 11

Candidate Starts for Pherbot_25:

(Start: 11 @19640 has 45 MA's), (Start: 15 @19676 has 3 MA's), (17, 19685), (18, 19688), (25, 19721), (26, 19730), (37, 19895), (38, 19904), (41, 19937), (43, 19946),

Gene: Pherferi_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Pherferi_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Phiderman_26 Start: 19099, Stop: 19488, Start Num: 10

Candidate Starts for Phiderman_26:

(Start: 10 @19099 has 89 MA's), (Start: 15 @19135 has 3 MA's), (16, 19141), (20, 19153), (24, 19177), (27, 19198), (33, 19312), (35, 19321), (37, 19354), (38, 19363), (43, 19405), (46, 19435),

Gene: Phireproof_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Phireproof_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: PhredFlintston_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for PhredFlintston_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Phriends_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Phriends_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Pikmin_24 Start: 19595, Stop: 19954, Start Num: 15

Candidate Starts for Pikmin_24:

(Start: 15 @19595 has 3 MA's), (19, 19610), (25, 19643), (28, 19673), (29, 19676), (37, 19808), (38, 19817),

Gene: Pocket_25 Start: 19382, Stop: 19771, Start Num: 10

Candidate Starts for Pocket_25:

(Start: 10 @19382 has 89 MA's), (Start: 15 @19418 has 3 MA's), (16, 19424), (20, 19436), (24, 19460), (33, 19595), (35, 19604), (37, 19637), (38, 19646), (43, 19688), (46, 19718),

Gene: PrincePhergus_25 Start: 19637, Stop: 20029, Start Num: 11

Candidate Starts for PrincePhergus_25:

(Start: 11 @19637 has 45 MA's), (Start: 15 @19673 has 3 MA's), (17, 19682), (18, 19685), (25, 19718), (26, 19727), (37, 19892), (38, 19901), (41, 19934), (43, 19943),

Gene: PuppyEggo_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for PuppyEggo_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: Quartz_24 Start: 19562, Stop: 19945, Start Num: 11

Candidate Starts for Quartz_24:

(Start: 11 @19562 has 45 MA's), (13, 19571), (14, 19592), (22, 19625), (24, 19640), (25, 19643), (30, 19673), (31, 19682), (34, 19757), (37, 19796), (40, 19826), (49, 19901), (51, 19922),

Gene: Raccoon_25 Start: 19422, Stop: 19808, Start Num: 11

Candidate Starts for Raccoon_25:

(6, 19356), (Start: 11 @19422 has 45 MA's), (Start: 15 @19458 has 3 MA's), (22, 19485), (24, 19500), (27, 19521), (35, 19644), (37, 19677), (38, 19686),

Gene: Rapheph_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Rapheph_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Raptor_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Raptor_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Redfield_25 Start: 19422, Stop: 19808, Start Num: 11

Candidate Starts for Redfield_25:

(6, 19356), (Start: 11 @19422 has 45 MA's), (Start: 15 @19458 has 3 MA's), (22, 19485), (24, 19500), (27, 19521), (35, 19644), (37, 19677), (38, 19686),

Gene: Renzie_25 Start: 19088, Stop: 19477, Start Num: 10

Candidate Starts for Renzie_25:

(Start: 10 @19088 has 89 MA's), (Start: 15 @19124 has 3 MA's), (16, 19130), (20, 19142), (24, 19166), (27, 19187), (33, 19301), (35, 19310), (37, 19343), (38, 19352), (43, 19394), (46, 19424),

Gene: Riyhil_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Riyhil_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Robinson_25 Start: 19091, Stop: 19480, Start Num: 10

Candidate Starts for Robinson_25:

(Start: 10 @19091 has 89 MA's), (Start: 15 @19127 has 3 MA's), (16, 19133), (20, 19145), (24, 19169), (27, 19190), (33, 19304), (35, 19313), (37, 19346), (38, 19355), (43, 19397), (46, 19427),

Gene: Rog141_26 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Rog141_26:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: SJay_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for SJay_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: Sansa_23 Start: 19292, Stop: 19675, Start Num: 11

Candidate Starts for Sansa_23:

(4, 19211), (Start: 11 @19292 has 45 MA's), (18, 19340), (22, 19355), (23, 19367), (25, 19373), (37, 19526), (40, 19556), (51, 19652),

Gene: Saratos_24 Start: 19270, Stop: 19653, Start Num: 11

Candidate Starts for Saratos_24:

(Start: 11 @19270 has 45 MA's), (18, 19318), (22, 19333), (23, 19345), (25, 19351), (37, 19504), (40, 19534), (51, 19630),

Gene: Schnapsidee_25 Start: 19415, Stop: 19801, Start Num: 11

Candidate Starts for Schnapsidee_25:

(6, 19349), (Start: 11 @19415 has 45 MA's), (Start: 15 @19451 has 3 MA's), (22, 19478), (24, 19493), (27, 19514), (35, 19637), (37, 19670), (38, 19679),

Gene: Schubert_25 Start: 19742, Stop: 20137, Start Num: 8

Candidate Starts for Schubert_25:

(Start: 8 @19742 has 1 MA's), (9, 19745), (Start: 15 @19787 has 3 MA's), (17, 19796), (24, 19829), (25, 19832), (37, 20006), (38, 20015), (41, 20048), (49, 20096),

Gene: Sedgewig_25 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for Sedgewig_25:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: ShaiHulud_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for ShaiHulud_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: Shamu_24 Start: 19282, Stop: 19665, Start Num: 11

Candidate Starts for Shamu_24:

(Start: 11 @19282 has 45 MA's), (18, 19330), (22, 19345), (23, 19357), (25, 19363), (37, 19516), (40, 19546), (51, 19642),

Gene: Shee_25 Start: 19099, Stop: 19488, Start Num: 10

Candidate Starts for Shee_25:

(Start: 10 @19099 has 89 MA's), (Start: 15 @19135 has 3 MA's), (16, 19141), (20, 19153), (24, 19177), (27, 19198), (33, 19312), (35, 19321), (37, 19354), (38, 19363), (43, 19405), (46, 19435),

Gene: Sinatra_25 Start: 19634, Stop: 20026, Start Num: 11

Candidate Starts for Sinatra_25:

(Start: 11 @19634 has 45 MA's), (Start: 15 @19670 has 3 MA's), (17, 19679), (25, 19715), (26, 19724), (37, 19889), (38, 19898), (41, 19931), (43, 19940),

Gene: SirVictor_25 Start: 19704, Stop: 20117, Start Num: 11

Candidate Starts for SirVictor_25:

(Start: 11 @19704 has 45 MA's), (14, 19734), (18, 19752), (27, 19803), (30, 19836), (31, 19845), (38, 19968), (41, 20001), (43, 20010),

Gene: SoilGremlin_25 Start: 19099, Stop: 19488, Start Num: 10

Candidate Starts for SoilGremlin_25:

(Start: 10 @19099 has 89 MA's), (Start: 15 @19135 has 3 MA's), (16, 19141), (20, 19153), (24, 19177), (27, 19198), (33, 19312), (35, 19321), (37, 19354), (38, 19363), (43, 19405), (46, 19435),

Gene: SonOfLevi_25 Start: 19379, Stop: 19768, Start Num: 10

Candidate Starts for SonOfLevi_25:

(Start: 10 @19379 has 89 MA's), (Start: 15 @19415 has 3 MA's), (16, 19421), (20, 19433), (24, 19457), (27, 19478), (33, 19592), (35, 19601), (37, 19634), (38, 19643), (43, 19685),

Gene: Stanktossa_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for Stanktossa_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: StingRay_25 Start: 19393, Stop: 19782, Start Num: 10

Candidate Starts for StingRay_25:

(Start: 10 @19393 has 89 MA's), (Start: 15 @19429 has 3 MA's), (16, 19435), (20, 19447), (24, 19471), (27, 19492), (33, 19606), (35, 19615), (37, 19648), (38, 19657), (43, 19699), (46, 19729),

Gene: StirfryIV_26 Start: 19384, Stop: 19773, Start Num: 10

Candidate Starts for StirfryIV_26:

(Start: 10 @19384 has 89 MA's), (Start: 15 @19420 has 3 MA's), (16, 19426), (20, 19438), (24, 19462), (27, 19483), (33, 19597), (35, 19606), (37, 19639), (38, 19648), (43, 19690), (46, 19720),

Gene: Stormbreaker8_25 Start: 19416, Stop: 19802, Start Num: 11

Candidate Starts for Stormbreaker8_25:

(6, 19350), (Start: 11 @19416 has 45 MA's), (Start: 15 @19452 has 3 MA's), (22, 19479), (24, 19494), (27, 19515), (35, 19638), (37, 19671), (38, 19680),

Gene: Strathdee_25 Start: 19101, Stop: 19490, Start Num: 10

Candidate Starts for Strathdee_25:

(Start: 10 @19101 has 89 MA's), (Start: 15 @19137 has 3 MA's), (16, 19143), (20, 19155), (24, 19179), (27, 19200), (33, 19314), (35, 19323), (37, 19356), (38, 19365), (43, 19407), (46, 19437),

Gene: Superfresh_25 Start: 19088, Stop: 19477, Start Num: 10

Candidate Starts for Superfresh_25:

(Start: 10 @19088 has 89 MA's), (Start: 15 @19124 has 3 MA's), (16, 19130), (20, 19142), (24, 19166), (27, 19187), (33, 19301), (35, 19310), (37, 19343), (38, 19352), (43, 19394), (46, 19424),

Gene: TatarkaPM_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for TatarkaPM_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Teagan_25 Start: 19096, Stop: 19485, Start Num: 10

Candidate Starts for Teagan_25:

(Start: 10 @19096 has 89 MA's), (Start: 15 @19132 has 3 MA's), (16, 19138), (20, 19150), (24, 19174), (27, 19195), (33, 19309), (35, 19318), (37, 19351), (38, 19360), (43, 19402), (46, 19432),

Gene: TeddyBear_25 Start: 19397, Stop: 19786, Start Num: 10

Candidate Starts for TeddyBear_25:

(Start: 10 @19397 has 89 MA's), (Start: 15 @19433 has 3 MA's), (16, 19439), (20, 19451), (24, 19475), (33, 19610), (35, 19619), (37, 19652), (38, 19661), (43, 19703), (46, 19733),

Gene: Tenda_25 Start: 19395, Stop: 19784, Start Num: 10

Candidate Starts for Tenda_25:

(Start: 10 @19395 has 89 MA's), (Start: 15 @19431 has 3 MA's), (16, 19437), (20, 19449), (24, 19473), (33, 19608), (35, 19617), (37, 19650), (38, 19659), (43, 19701), (46, 19731),

Gene: Theresita_25 Start: 19250, Stop: 19657, Start Num: 11

Candidate Starts for Theresita_25:

(Start: 11 @19250 has 45 MA's), (24, 19328), (25, 19331), (32, 19406), (38, 19514), (41, 19547), (43, 19556), (45, 19577),

Gene: Thompsonsone_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Thompsonsone_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Thorongil_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for Thorongil_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: TinSulphur_25 Start: 19102, Stop: 19491, Start Num: 10

Candidate Starts for TinSulphur_25:

(Start: 10 @19102 has 89 MA's), (Start: 15 @19138 has 3 MA's), (16, 19144), (20, 19156), (24, 19180), (27, 19201), (33, 19315), (35, 19324), (37, 19357), (38, 19366), (43, 19408), (46, 19438),

Gene: Velene_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for Velene_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Vispistious_25 Start: 19097, Stop: 19486, Start Num: 10

Candidate Starts for Vispistious_25:

(Start: 10 @19097 has 89 MA's), (Start: 15 @19133 has 3 MA's), (16, 19139), (20, 19151), (24, 19175), (27, 19196), (33, 19310), (35, 19319), (37, 19352), (38, 19361), (43, 19403), (46, 19433),

Gene: WildNOut_25 Start: 19100, Stop: 19489, Start Num: 10

Candidate Starts for WildNOut_25:

(Start: 10 @19100 has 89 MA's), (Start: 15 @19136 has 3 MA's), (16, 19142), (20, 19154), (24, 19178), (27, 19199), (33, 19313), (35, 19322), (37, 19355), (38, 19364), (43, 19406), (46, 19436),

Gene: Winzigespinne_25 Start: 19383, Stop: 19772, Start Num: 10

Candidate Starts for Winzigespinne_25:

(Start: 10 @19383 has 89 MA's), (Start: 15 @19419 has 3 MA's), (16, 19425), (20, 19437), (24, 19461), (27, 19482), (33, 19596), (35, 19605), (37, 19638), (38, 19647), (43, 19689), (46, 19719),

Gene: YuuY_24 Start: 19558, Stop: 19941, Start Num: 11

Candidate Starts for YuuY_24:

(2, 19411), (Start: 11 @19558 has 45 MA's), (12, 19561), (16, 19600), (20, 19612), (23, 19633), (25, 19639), (26, 19648), (30, 19669), (33, 19750), (37, 19792), (40, 19822), (49, 19897), (51, 19918),

Gene: Zada_25 Start: 19082, Stop: 19471, Start Num: 10

Candidate Starts for Zada_25:

(Start: 10 @19082 has 89 MA's), (Start: 15 @19118 has 3 MA's), (16, 19124), (20, 19136), (24, 19160), (27, 19181), (33, 19295), (35, 19304), (37, 19337), (38, 19346), (43, 19388), (46, 19418),

Gene: Zenitsu_24 Start: 19297, Stop: 19680, Start Num: 11

Candidate Starts for Zenitsu_24:

(4, 19216), (Start: 11 @19297 has 45 MA's), (18, 19345), (22, 19360), (23, 19372), (25, 19378), (37, 19531), (40, 19561), (51, 19657),