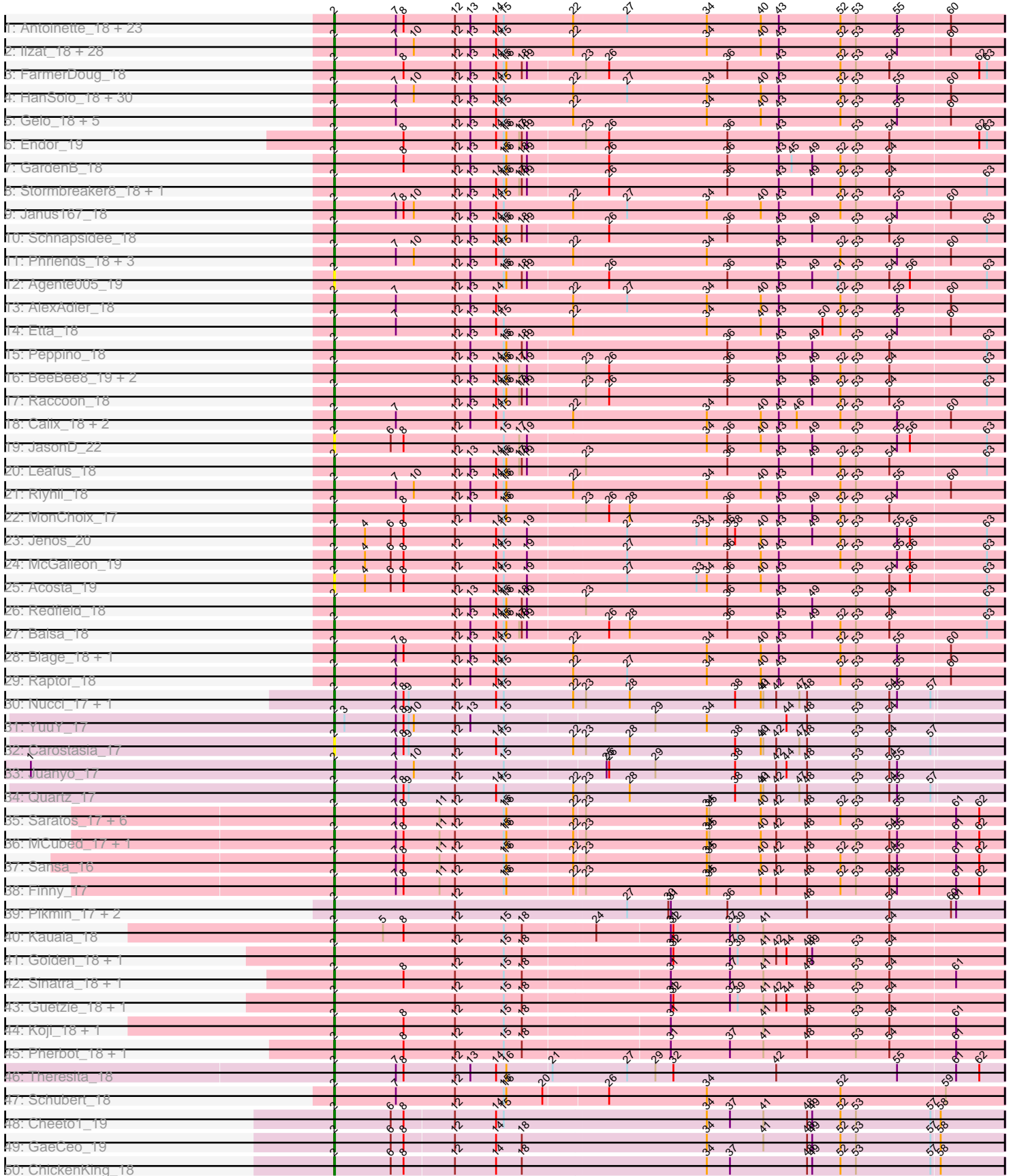


Pham 736



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 736 Report

This analysis was run 07/09/24 on database version 566.

Pham number 736 has 160 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Antoinette_18, WildNOut_18, Lovelyunicorn_18, Knox_18, PuppyEggo_18, Figueroism_18, BonesMcCoy_18, ShaiHulud_18, Renzie_18, Den3_18, Thompsone_18, Ioannes_18, Superfresh_18, Greys_18, Robinson_18, AxiPup_18, Thorongil_18, Velene_18, Peep_18, Vispistious_18, Convict_18, Dave_18, Alyxandracam_18, Oxtober96_18
- Track 2 : Ilzat_18, MaeLinda_18, Pherferi_18, Byron23_17, Gargoyle_18, Delphidian_18, MrWorldwide_18, NickSell_18, Nagem_18, Shee_18, Phiderman_18, Martin_19, Kurt1_18, Ludgate_18, Bandik_18, SJay_18, TatarkaPM_18, PhredFlintston_18, StingRay_18, TinSulphur_18, Inventa_18, Rapheph_18, Dothraki_18, Strathdee_18, Stanktossa_18, ParleG_18, MillyPhilly_18, Teagan_18, Phireproof_18
- Track 3 : FarmerDoug_18
- Track 4 : HanSolo_18, Oats_18, AranulaLuti_18, KannH_18, JasperRussell_18, Zada_18, Rog141_18, Sedgewig_18, Duocatuli_18, Christoph_18, Gubbabump_18, Tenda_18, HankSprout_19, Benjalauren_18, Kale_18, Jerbirus_18, Chako_18, Papafritta_18, Bonino_18, ManRay_18, Asta_18, Gershwin_18, StirfryIV_18, TeddyBear_18, Aubergine_18, JeriBeth_18, Clancy_18, Espinosa_18, Pocket_18, Winzigespinne_18, HungryHenry_18
- Track 5 : Gelo_18, Klimt_18, Chamuel_18, Garey24_18, SonOfLevi_18, Erla_18
- Track 6 : Endor_19
- Track 7 : GardenB_18
- Track 8 : Stormbreaker8_18, Etna_18
- Track 9 : Janus167_18
- Track 10 : Schnapsidee_18
- Track 11 : Phriends_18, OldNelly_18, SoilGremlin_18, BeautPeep30_18
- Track 12 : Agente005_19
- Track 13 : AlexAdler_18
- Track 14 : Etta_18
- Track 15 : Peppino_18
- Track 16 : BeeBee8_19, KingJulien_18, Hamlet_18
- Track 17 : Raccoon_18
- Track 18 : Calix_18, Nattles_18, Baines_18
- Track 19 : JasonD_22
- Track 20 : Leafus_18
- Track 21 : Riyhil_18
- Track 22 : MonChoix_17
- Track 23 : Jenos_20

- Track 24 : McGalleon_19
- Track 25 : Acosta_19
- Track 26 : Redfield_18
- Track 27 : Balsa_18
- Track 28 : Blage_18, BigRedClifford_18
- Track 29 : Raptor_18
- Track 30 : Nucci_17, Mandalorian_17
- Track 31 : YuuY_17
- Track 32 : Carostasia_17
- Track 33 : Juanyo_17
- Track 34 : Quartz_17
- Track 35 : Saratos_17, ColaCorta_17, ChikPic_17, Eleri_17, Glamour_16, Shamu_17, Andromedas_17
- Track 36 : MCubed_17, Zenitsu_17
- Track 37 : Sansa_16
- Track 38 : Finny_17
- Track 39 : Pikmin_17, Casey_17, Pajaza_17
- Track 40 : Kauala_18
- Track 41 : Golden_18, Lucky3_18
- Track 42 : Sinatra_18, PrincePhergus_18
- Track 43 : Guetzie_18, SirVictor_18
- Track 44 : Koji_18, BouleyBill_19
- Track 45 : Pherbot_18, Bustleton_18
- Track 46 : Theresita_18
- Track 47 : Schubert_18
- Track 48 : Cheeto1_19
- Track 49 : GaeCeo_19
- Track 50 : ChickenKing_18

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

The start number called the most often in the published annotations is 2, it was called in 145 of the 145 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Acosta_19, Agente005_19, AlexAdler_18, Alyxandracam_18, Andromedas_17, Antoinette_18, AranulaLuti_18, Asta_18, Aubergine_18, AxiPup_18, Baines_18, Balsa_18, Bandik_18, BeautPeep30_18, BeeBee8_19, Benjalauren_18, BigRedClifford_18, Blage_18, BonesMcCoy_18, Bonino_18, BouleyBill_19, Bustleton_18, Byron23_17, Calix_18, Carostasia_17, Casey_17, Chako_18, Chamuel_18, Cheeto1_19, ChickenKing_18, ChikPic_17, Christoph_18, Clancy_18, ColaCorta_17, Convict_18, Dave_18, Delphidian_18, Den3_18, Dothraki_18, Duocatuli_18, Eleri_17, Endor_19, Erla_18, Espinosa_18, Etna_18, Etta_18, FarmerDoug_18, Figueroism_18, Finny_17, GaeCeo_19, GardenB_18, Garey24_18, Gargoyle_18, Gelo_18, Gershwin_18, Glamour_16, Golden_18, Greys_18, Gubbabump_18, Guetzie_18, Hamlet_18, HanSolo_18, HankSprout_19, HungryHenry_18, Ilzat_18, Inventa_18, Ioannes_18, Janus167_18, JasonD_22, JasperRussell_18, Jenos_20, Jerbirus_18, JeriBeth_18, Juanyo_17, Kale_18, KannH_18, Kauala_18, KingJulien_18, Klimt_18, Knox_18, Koji_18, Kurt1_18, Leafus_18, Lovelyunicorn_18, Lucky3_18, Ludgate_18, MCubed_17, MaeLinda_18,

ManRay_18, Mandalorian_17, Martin_19, McGalleon_19, MillyPhilly_18, MonChoix_17, MrWorldwide_18, Nagem_18, Nattles_18, NickSell_18, Nucci_17, Oats_18, OldNelly_18, Oxtober96_18, Pajaza_17, Papafritta_18, ParleG_18, Peep_18, Peppino_18, Pherbot_18, Pherferi_18, Phiderman_18, Phireproof_18, PhredFlintston_18, Phriends_18, Pikmin_17, Pocket_18, PrincePhergus_18, PuppyEggo_18, Quartz_17, Raccoon_18, Rappheph_18, Raptor_18, Redfield_18, Renzie_18, Rihhil_18, Robinson_18, Rog141_18, SJay_18, Sansa_16, Saratos_17, Schnapsidee_18, Schubert_18, Sedgewig_18, ShaiHulud_18, Shamu_17, Shee_18, Sinatra_18, SirVictor_18, SoilGremlin_18, SonOfLevi_18, Stanktossa_18, StingRay_18, StirfryIV_18, Stormbreaker8_18, Strathdee_18, Superfresh_18, TatarkaPM_18, Teagan_18, TeddyBear_18, Tenda_18, Theresita_18, Thompsone_18, Thorongil_18, TinSulphur_18, Velene_18, Vispistious_18, WildNOut_18, Winzigespinne_18, YuuY_17, Zada_18, Zenitsu_17,

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

-

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

-

Summary by start number:

Start 2:

- Found in 160 of 160 (100.0%) of genes in pham
- Manual Annotations of this start: 145 of 145
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_19 (EA1), Agente005_19 (EA1), AlexAdler_18 (EA1), Alyxandracam_18 (EA1), Andromedas_17 (EA2), Antoinette_18 (EA1), AranulaLuti_18 (EA1), Asta_18 (EA1), Aubergine_18 (EA1), AxiPup_18 (EA1), Baines_18 (EA1), Balsa_18 (EA1), Bandik_18 (EA1), BeautPeep30_18 (EA1), BeeBee8_19 (EA1), Benjalauren_18 (EA1), BigRedClifford_18 (EA1), Blage_18 (EA1), BonesMcCoy_18 (EA1), Bonino_18 (EA1), BouleyBill_19 (EA4), Bustleton_18 (EA4), Byron23_17 (EA1), Calix_18 (EA1), Carostasia_17 (EA10), Casey_17 (EA3), Chako_18 (EA1), Chamuel_18 (EA1), Cheeto1_19 (EA9), ChickenKing_18 (EA9), ChikPic_17 (EA2), Christoph_18 (EA1), Clancy_18 (EA1), ColaCorta_17 (EA2), Convict_18 (EA1), Dave_18 (EA1), Delphidian_18 (EA1), Den3_18 (EA1), Dothraki_18 (EA1), Duocatuli_18 (EA1), Eleri_17 (EA2), Endor_19 (EA1), Erla_18 (EA1), Espinosa_18 (EA1), Etna_18 (EA1), Etta_18 (EA1), FarmerDoug_18 (EA1), Figueroism_18 (EA1), Finny_17 (EA2), GaeCeo_19 (EA9), GardenB_18 (EA1), Garey24_18 (EA1), Gargoyle_18 (EA1), Gelo_18 (EA1), Gershwin_18 (EA1), Glamour_16 (EA2), Golden_18 (EA4), Greys_18 (EA1), Gubbabump_18 (EA1), Guetzie_18 (EA4), Hamlet_18 (EA1), HanSolo_18 (EA1), HankSprout_19 (EA1), HungryHenry_18 (EA1), Ilzat_18 (EA1), Inventa_18 (EA1), Ioannes_18 (EA1), Janus167_18 (EA1), JasonD_22 (EA1), JasperRussell_18 (EA1), Jenos_20 (EA1), Jerbirus_18 (EA1), JeriBeth_18 (EA1), Juanyo_17 (EA10), Kale_18 (EA1), KannH_18 (EA1), Kauala_18 (EA4), KingJulien_18 (EA1), Klimt_18 (EA1), Knox_18 (EA1), Koji_18 (EA4), Kurt1_18 (EA1), Leafus_18 (EA1), Lovelyunicorn_18 (EA1), Lucky3_18 (EA4), Ludgate_18 (EA1), MCubed_17 (EA2), MaeLinda_18 (EA1), ManRay_18 (EA1), Mandalorian_17 (EA10), Martin_19 (EA1), McGalleon_19 (EA1), MillyPhilly_18 (EA1), MonChoix_17 (EA1), MrWorldwide_18 (EA1), Nagem_18 (EA1), Nattles_18 (EA1), NickSell_18 (EA1), Nucci_17 (EA10), Oats_18 (EA1), OldNelly_18 (EA1), Oxtober96_18 (EA1), Pajaza_17 (EA3), Papafritta_18 (EA1), ParleG_18 (EA1), Peep_18 (EA1), Peppino_18 (EA1), Pherbot_18 (EA4), Pherferi_18 (EA1),

Phiderman_18 (EA1), Phireproof_18 (EA1), PhredFlintston_18 (EA1), Phriends_18 (EA1), Pikmin_17 (EA3), Pocket_18 (EA1), PrincePhergus_18 (EA4), PuppyEggo_18 (EA1), Quartz_17 (EA10), Raccoon_18 (EA1), Rapheph_18 (EA1), Raptor_18 (EA1), Redfield_18 (EA1), Renzie_18 (EA1), Rihhil_18 (EA1), Robinson_18 (EA1), Rog141_18 (EA1), SJay_18 (EA1), Sansa_16 (EA2), Saratos_17 (EA2), Schnapsidee_18 (EA1), Schubert_18 (EA8), Sedgewig_18 (EA1), ShaiHulud_18 (EA1), Shamu_17 (EA2), Shee_18 (EA1), Sinatra_18 (EA4), SirVictor_18 (EA4), SoilGremlin_18 (EA1), SonOfLevi_18 (EA1), Stanktossa_18 (EA1), StingRay_18 (EA1), StirfryIV_18 (EA1), Stormbreaker8_18 (EA1), Strathdee_18 (EA1), Superfresh_18 (EA1), TatarkaPM_18 (EA1), Teagan_18 (EA1), TeddyBear_18 (EA1), Tenda_18 (EA1), Theresita_18 (EA7), Thompsone_18 (EA1), Thorongil_18 (EA1), TinSulphur_18 (EA1), Velene_18 (EA1), Vispistious_18 (EA1), WildNOut_18 (EA1), Winzigespinne_18 (EA1), YuuY_17 (EA10), Zada_18 (EA1), Zenitsu_17 (EA2),

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 2 was manually annotated 111 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 2 was manually annotated 5 times for cluster EA10.

Info for manual annotations of cluster EA2:

- Start number 2 was manually annotated 11 times for cluster EA2.

Info for manual annotations of cluster EA3:

- Start number 2 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 2 was manually annotated 10 times for cluster EA4.

Info for manual annotations of cluster EA7:

- Start number 2 was manually annotated 1 time for cluster EA7.

Info for manual annotations of cluster EA8:

- Start number 2 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 2 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_19 Start: 11889, Stop: 12662, Start Num: 2

Candidate Starts for Acosta_19:

(Start: 2 @11889 has 145 MA's), (4, 11925), (6, 11955), (8, 11970), (12, 12030), (14, 12078), (15, 12087), (19, 12114), (27, 12225), (33, 12306), (34, 12318), (36, 12342), (40, 12381), (43, 12402), (53, 12492), (54, 12531), (56, 12555), (63, 12642),

Gene: Agente005_19 Start: 12181, Stop: 12957, Start Num: 2

Candidate Starts for Agente005_19:

(Start: 2 @12181 has 145 MA's), (12, 12322), (13, 12340), (15, 12379), (16, 12382), (18, 12400), (19, 12406), (26, 12499), (36, 12637), (43, 12697), (49, 12736), (51, 12766), (53, 12787), (54, 12826), (56, 12850), (63, 12937),

Gene: AlexAdler_18 Start: 11620, Stop: 12393, Start Num: 2

Candidate Starts for AlexAdler_18:

(Start: 2 @11620 has 145 MA's), (7, 11692), (12, 11761), (13, 11779), (14, 11809), (22, 11899), (27, 11959), (34, 12052), (40, 12115), (43, 12136), (52, 12208), (53, 12226), (55, 12274), (60, 12331),

Gene: Alyxandracam_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Alyxandracam_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Andromedas_17 Start: 11836, Stop: 12609, Start Num: 2

Candidate Starts for Andromedas_17:

(Start: 2 @11836 has 145 MA's), (7, 11908), (8, 11917), (11, 11959), (12, 11977), (15, 12034), (16, 12037), (22, 12112), (23, 12124), (34, 12265), (35, 12268), (40, 12328), (42, 12346), (48, 12382), (52, 12421), (53, 12439), (55, 12487), (61, 12553), (62, 12580),

Gene: Antoinette_18 Start: 11620, Stop: 12393, Start Num: 2

Candidate Starts for Antoinette_18:

(Start: 2 @11620 has 145 MA's), (7, 11692), (8, 11701), (12, 11761), (13, 11779), (14, 11809), (15, 11818), (22, 11899), (27, 11959), (34, 12052), (40, 12115), (43, 12136), (52, 12208), (53, 12226), (55, 12274), (60, 12331),

Gene: AranulaLuti_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for AranulaLuti_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: Asta_18 Start: 11934, Stop: 12707, Start Num: 2

Candidate Starts for Asta_18:

(Start: 2 @11934 has 145 MA's), (7, 12006), (10, 12027), (12, 12075), (13, 12093), (14, 12123), (15, 12132), (22, 12213), (27, 12273), (34, 12366), (40, 12429), (43, 12450), (52, 12522), (53, 12540), (55, 12588), (60, 12645),

Gene: Aubergine_18 Start: 11934, Stop: 12707, Start Num: 2

Candidate Starts for Aubergine_18:

(Start: 2 @11934 has 145 MA's), (7, 12006), (10, 12027), (12, 12075), (13, 12093), (14, 12123), (15, 12132), (22, 12213), (27, 12273), (34, 12366), (40, 12429), (43, 12450), (52, 12522), (53, 12540), (55, 12588), (60, 12645),

Gene: AxiPup_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for AxiPup_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Baines_18 Start: 11919, Stop: 12692, Start Num: 2

Candidate Starts for Baines_18:

(Start: 2 @11919 has 145 MA's), (7, 11991), (12, 12060), (13, 12078), (14, 12108), (15, 12117), (22, 12198), (34, 12351), (40, 12414), (43, 12435), (46, 12456), (52, 12507), (53, 12525), (55, 12573), (60, 12630),

Gene: Balsa_18 Start: 12035, Stop: 12811, Start Num: 2

Candidate Starts for Balsa_18:

(Start: 2 @12035 has 145 MA's), (12, 12176), (13, 12194), (14, 12224), (15, 12233), (16, 12236), (17, 12251), (18, 12254), (19, 12260), (26, 12353), (28, 12377), (36, 12491), (43, 12551), (49, 12590), (52, 12623), (53, 12641), (54, 12680), (63, 12791),

Gene: Bandik_18 Start: 11625, Stop: 12398, Start Num: 2

Candidate Starts for Bandik_18:

(Start: 2 @11625 has 145 MA's), (7, 11697), (10, 11718), (12, 11766), (13, 11784), (14, 11814), (15, 11823), (22, 11904), (34, 12057), (40, 12120), (43, 12141), (52, 12213), (53, 12231), (55, 12279), (60, 12336),

Gene: BeautPeep30_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for BeautPeep30_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: BeeBee8_19 Start: 12198, Stop: 12974, Start Num: 2

Candidate Starts for BeeBee8_19:

(Start: 2 @12198 has 145 MA's), (12, 12339), (13, 12357), (14, 12387), (15, 12396), (16, 12399), (17, 12414), (19, 12423), (23, 12489), (26, 12516), (36, 12654), (43, 12714), (49, 12753), (52, 12786), (53, 12804), (54, 12843), (63, 12954),

Gene: Benjalauren_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Benjalauren_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: BigRedClifford_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for BigRedClifford_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Blage_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Blage_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: BonesMcCoy_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for BonesMcCoy_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Bonino_18 Start: 11911, Stop: 12684, Start Num: 2

Candidate Starts for Bonino_18:

(Start: 2 @11911 has 145 MA's), (7, 11983), (10, 12004), (12, 12052), (13, 12070), (14, 12100), (15, 12109), (22, 12190), (27, 12250), (34, 12343), (40, 12406), (43, 12427), (52, 12499), (53, 12517), (55, 12565), (60, 12622),

Gene: BouleyBill_19 Start: 12000, Stop: 12770, Start Num: 2

Candidate Starts for BouleyBill_19:

(Start: 2 @12000 has 145 MA's), (8, 12081), (12, 12141), (15, 12198), (18, 12219), (31, 12384), (41, 12492), (48, 12543), (53, 12600), (54, 12639), (61, 12714),

Gene: Bustleton_18 Start: 11990, Stop: 12760, Start Num: 2

Candidate Starts for Bustleton_18:

(Start: 2 @11990 has 145 MA's), (8, 12071), (12, 12131), (15, 12188), (18, 12209), (31, 12374), (37, 12443), (41, 12482), (48, 12533), (53, 12590), (54, 12629), (61, 12704),

Gene: Byron23_17 Start: 11634, Stop: 12407, Start Num: 2

Candidate Starts for Byron23_17:

(Start: 2 @11634 has 145 MA's), (7, 11706), (10, 11727), (12, 11775), (13, 11793), (14, 11823), (15, 11832), (22, 11913), (34, 12066), (40, 12129), (43, 12150), (52, 12222), (53, 12240), (55, 12288), (60, 12345),

Gene: Calix_18 Start: 11912, Stop: 12685, Start Num: 2

Candidate Starts for Calix_18:

(Start: 2 @11912 has 145 MA's), (7, 11984), (12, 12053), (13, 12071), (14, 12101), (15, 12110), (22, 12191), (34, 12344), (40, 12407), (43, 12428), (46, 12449), (52, 12500), (53, 12518), (55, 12566), (60, 12623),

Gene: Carostasia_17 Start: 12039, Stop: 12812, Start Num: 2

Candidate Starts for Carostasia_17:

(Start: 2 @12039 has 145 MA's), (7, 12111), (8, 12120), (9, 12126), (12, 12180), (14, 12228), (15, 12237), (22, 12318), (23, 12330), (28, 12381), (38, 12504), (40, 12534), (41, 12537), (42, 12552), (47, 12579), (48, 12588), (53, 12645), (54, 12684), (57, 12732),

Gene: Casey_17 Start: 11991, Stop: 12770, Start Num: 2

Candidate Starts for Casey_17:

(Start: 2 @11991 has 145 MA's), (12, 12132), (27, 12330), (30, 12378), (31, 12381), (36, 12447), (48, 12540), (54, 12636), (60, 12708), (61, 12714),

Gene: Chako_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Chako_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: Chamuel_18 Start: 11914, Stop: 12687, Start Num: 2

Candidate Starts for Chamuel_18:

(Start: 2 @11914 has 145 MA's), (7, 11986), (12, 12055), (13, 12073), (14, 12103), (15, 12112), (22, 12193), (34, 12346), (40, 12409), (43, 12430), (52, 12502), (53, 12520), (55, 12568), (60, 12625),

Gene: Cheeto1_19 Start: 11805, Stop: 12578, Start Num: 2

Candidate Starts for Cheeto1_19:

(Start: 2 @11805 has 145 MA's), (6, 11871), (8, 11886), (12, 11943), (14, 11991), (15, 12000), (34, 12234), (37, 12261), (41, 12300), (48, 12351), (49, 12357), (52, 12390), (53, 12408), (57, 12495), (58, 12504),

Gene: ChickenKing_18 Start: 11706, Stop: 12479, Start Num: 2

Candidate Starts for ChickenKing_18:

(Start: 2 @11706 has 145 MA's), (6, 11772), (8, 11787), (12, 11844), (14, 11892), (18, 11922), (34, 12135), (37, 12162), (48, 12252), (49, 12258), (52, 12291), (53, 12309), (57, 12396), (58, 12405),

Gene: ChikPic_17 Start: 11852, Stop: 12625, Start Num: 2

Candidate Starts for ChikPic_17:

(Start: 2 @11852 has 145 MA's), (7, 11924), (8, 11933), (11, 11975), (12, 11993), (15, 12050), (16, 12053), (22, 12128), (23, 12140), (34, 12281), (35, 12284), (40, 12344), (42, 12362), (48, 12398), (52, 12437), (53, 12455), (55, 12503), (61, 12569), (62, 12596),

Gene: Christoph_18 Start: 11932, Stop: 12705, Start Num: 2

Candidate Starts for Christoph_18:

(Start: 2 @11932 has 145 MA's), (7, 12004), (10, 12025), (12, 12073), (13, 12091), (14, 12121), (15, 12130), (22, 12211), (27, 12271), (34, 12364), (40, 12427), (43, 12448), (52, 12520), (53, 12538), (55, 12586), (60, 12643),

Gene: Clancy_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Clancy_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: ColaCorta_17 Start: 11836, Stop: 12609, Start Num: 2

Candidate Starts for ColaCorta_17:

(Start: 2 @11836 has 145 MA's), (7, 11908), (8, 11917), (11, 11959), (12, 11977), (15, 12034), (16, 12037), (22, 12112), (23, 12124), (34, 12265), (35, 12268), (40, 12328), (42, 12346), (48, 12382), (52, 12421), (53, 12439), (55, 12487), (61, 12553), (62, 12580),

Gene: Convict_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Convict_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Dave_18 Start: 11620, Stop: 12393, Start Num: 2

Candidate Starts for Dave_18:

(Start: 2 @11620 has 145 MA's), (7, 11692), (8, 11701), (12, 11761), (13, 11779), (14, 11809), (15, 11818), (22, 11899), (27, 11959), (34, 12052), (40, 12115), (43, 12136), (52, 12208), (53, 12226), (55, 12274), (60, 12331),

Gene: Delphidian_18 Start: 11628, Stop: 12401, Start Num: 2

Candidate Starts for Delphidian_18:

(Start: 2 @11628 has 145 MA's), (7, 11700), (10, 11721), (12, 11769), (13, 11787), (14, 11817), (15, 11826), (22, 11907), (34, 12060), (40, 12123), (43, 12144), (52, 12216), (53, 12234), (55, 12282), (60, 12339),

Gene: Den3_18 Start: 11633, Stop: 12406, Start Num: 2

Candidate Starts for Den3_18:

(Start: 2 @11633 has 145 MA's), (7, 11705), (8, 11714), (12, 11774), (13, 11792), (14, 11822), (15, 11831), (22, 11912), (27, 11972), (34, 12065), (40, 12128), (43, 12149), (52, 12221), (53, 12239), (55, 12287), (60, 12344),

Gene: Dothraki_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Dothraki_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Duocatuli_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Duocatuli_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: Eleri_17 Start: 11849, Stop: 12622, Start Num: 2

Candidate Starts for Eleri_17:

(Start: 2 @11849 has 145 MA's), (7, 11921), (8, 11930), (11, 11972), (12, 11990), (15, 12047), (16, 12050), (22, 12125), (23, 12137), (34, 12278), (35, 12281), (40, 12341), (42, 12359), (48, 12395), (52, 12434), (53, 12452), (55, 12500), (61, 12566), (62, 12593),

Gene: Endor_19 Start: 12166, Stop: 12942, Start Num: 2

Candidate Starts for Endor_19:

(Start: 2 @12166 has 145 MA's), (8, 12247), (12, 12307), (13, 12325), (14, 12355), (15, 12364), (16, 12367), (17, 12382), (18, 12385), (19, 12391), (23, 12457), (26, 12484), (36, 12622), (43, 12682), (53, 12772), (54, 12811), (62, 12913), (63, 12922),

Gene: Erla_18 Start: 11912, Stop: 12685, Start Num: 2

Candidate Starts for Erla_18:

(Start: 2 @11912 has 145 MA's), (7, 11984), (12, 12053), (13, 12071), (14, 12101), (15, 12110), (22, 12191), (34, 12344), (40, 12407), (43, 12428), (52, 12500), (53, 12518), (55, 12566), (60, 12623),

Gene: Espinosa_18 Start: 11932, Stop: 12705, Start Num: 2

Candidate Starts for Espinosa_18:

(Start: 2 @11932 has 145 MA's), (7, 12004), (10, 12025), (12, 12073), (13, 12091), (14, 12121), (15, 12130), (22, 12211), (27, 12271), (34, 12364), (40, 12427), (43, 12448), (52, 12520), (53, 12538), (55, 12586), (60, 12643),

Gene: Etna_18 Start: 12026, Stop: 12802, Start Num: 2

Candidate Starts for Etna_18:

(Start: 2 @12026 has 145 MA's), (12, 12167), (13, 12185), (14, 12215), (15, 12224), (16, 12227), (17, 12242), (18, 12245), (19, 12251), (26, 12344), (36, 12482), (43, 12542), (49, 12581), (52, 12614), (53, 12632), (54, 12671), (63, 12782),

Gene: Etta_18 Start: 11916, Stop: 12689, Start Num: 2

Candidate Starts for Etta_18:

(Start: 2 @11916 has 145 MA's), (7, 11988), (12, 12057), (13, 12075), (14, 12105), (15, 12114), (22, 12195), (34, 12348), (40, 12411), (43, 12432), (50, 12483), (52, 12504), (53, 12522), (55, 12570), (60, 12627),

Gene: FarmerDoug_18 Start: 11730, Stop: 12506, Start Num: 2

Candidate Starts for FarmerDoug_18:

(Start: 2 @11730 has 145 MA's), (8, 11811), (12, 11871), (13, 11889), (14, 11919), (15, 11928), (16, 11931), (18, 11949), (19, 11955), (23, 12021), (26, 12048), (36, 12186), (43, 12246), (52, 12318), (53, 12336), (54, 12375), (62, 12477), (63, 12486),

Gene: Figueroism_18 Start: 11616, Stop: 12389, Start Num: 2

Candidate Starts for Figueroism_18:

(Start: 2 @11616 has 145 MA's), (7, 11688), (8, 11697), (12, 11757), (13, 11775), (14, 11805), (15, 11814), (22, 11895), (27, 11955), (34, 12048), (40, 12111), (43, 12132), (52, 12204), (53, 12222), (55, 12270), (60, 12327),

Gene: Finny_17 Start: 11836, Stop: 12609, Start Num: 2

Candidate Starts for Finny_17:

(Start: 2 @11836 has 145 MA's), (7, 11908), (8, 11917), (11, 11959), (12, 11977), (15, 12034), (16, 12037), (22, 12112), (23, 12124), (34, 12265), (35, 12268), (40, 12328), (42, 12346), (48, 12382), (52, 12421), (53, 12439), (54, 12478), (55, 12487), (61, 12553), (62, 12580),

Gene: GaeCeo_19 Start: 11876, Stop: 12649, Start Num: 2

Candidate Starts for GaeCeo_19:

(Start: 2 @11876 has 145 MA's), (6, 11942), (8, 11957), (12, 12014), (14, 12062), (18, 12092), (34, 12305), (41, 12371), (48, 12422), (49, 12428), (52, 12461), (53, 12479), (57, 12566), (58, 12575),

Gene: GardenB_18 Start: 12023, Stop: 12799, Start Num: 2

Candidate Starts for GardenB_18:

(Start: 2 @12023 has 145 MA's), (8, 12104), (12, 12164), (13, 12182), (15, 12221), (16, 12224), (18, 12242), (19, 12248), (26, 12341), (36, 12479), (43, 12539), (45, 12554), (49, 12578), (52, 12611), (53, 12629), (54, 12668),

Gene: Garey24_18 Start: 11895, Stop: 12668, Start Num: 2

Candidate Starts for Garey24_18:

(Start: 2 @11895 has 145 MA's), (7, 11967), (12, 12036), (13, 12054), (14, 12084), (15, 12093), (22, 12174), (34, 12327), (40, 12390), (43, 12411), (52, 12483), (53, 12501), (55, 12549), (60, 12606),

Gene: Gargoyle_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Gargoyle_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Gelo_18 Start: 11916, Stop: 12689, Start Num: 2

Candidate Starts for Gelo_18:

(Start: 2 @11916 has 145 MA's), (7, 11988), (12, 12057), (13, 12075), (14, 12105), (15, 12114), (22, 12195), (34, 12348), (40, 12411), (43, 12432), (52, 12504), (53, 12522), (55, 12570), (60, 12627),

Gene: Gershwin_18 Start: 11934, Stop: 12707, Start Num: 2

Candidate Starts for Gershwin_18:

(Start: 2 @11934 has 145 MA's), (7, 12006), (10, 12027), (12, 12075), (13, 12093), (14, 12123), (15, 12132), (22, 12213), (27, 12273), (34, 12366), (40, 12429), (43, 12450), (52, 12522), (53, 12540), (55, 12588), (60, 12645),

Gene: Glamour_16 Start: 11837, Stop: 12610, Start Num: 2

Candidate Starts for Glamour_16:

(Start: 2 @11837 has 145 MA's), (7, 11909), (8, 11918), (11, 11960), (12, 11978), (15, 12035), (16, 12038), (22, 12113), (23, 12125), (34, 12266), (35, 12269), (40, 12329), (42, 12347), (48, 12383), (52,

12422), (53, 12440), (55, 12488), (61, 12554), (62, 12581),

Gene: Golden_18 Start: 12073, Stop: 12846, Start Num: 2

Candidate Starts for Golden_18:

(Start: 2 @12073 has 145 MA's), (12, 12214), (15, 12271), (18, 12292), (31, 12460), (32, 12463), (37, 12529), (39, 12538), (41, 12568), (42, 12583), (44, 12595), (48, 12619), (49, 12625), (53, 12676), (54, 12715),

Gene: Greys_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Greys_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Gubbabump_18 Start: 11923, Stop: 12696, Start Num: 2

Candidate Starts for Gubbabump_18:

(Start: 2 @11923 has 145 MA's), (7, 11995), (10, 12016), (12, 12064), (13, 12082), (14, 12112), (15, 12121), (22, 12202), (27, 12262), (34, 12355), (40, 12418), (43, 12439), (52, 12511), (53, 12529), (55, 12577), (60, 12634),

Gene: Guetzie_18 Start: 12067, Stop: 12840, Start Num: 2

Candidate Starts for Guetzie_18:

(Start: 2 @12067 has 145 MA's), (12, 12208), (15, 12265), (18, 12286), (31, 12454), (32, 12457), (37, 12523), (39, 12532), (41, 12562), (42, 12577), (44, 12589), (48, 12613), (53, 12670), (54, 12709),

Gene: Hamlet_18 Start: 12035, Stop: 12811, Start Num: 2

Candidate Starts for Hamlet_18:

(Start: 2 @12035 has 145 MA's), (12, 12176), (13, 12194), (14, 12224), (15, 12233), (16, 12236), (17, 12251), (19, 12260), (23, 12326), (26, 12353), (36, 12491), (43, 12551), (49, 12590), (52, 12623), (53, 12641), (54, 12680), (63, 12791),

Gene: HanSolo_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for HanSolo_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: HankSprout_19 Start: 11801, Stop: 12574, Start Num: 2

Candidate Starts for HankSprout_19:

(Start: 2 @11801 has 145 MA's), (7, 11873), (10, 11894), (12, 11942), (13, 11960), (14, 11990), (15, 11999), (22, 12080), (27, 12140), (34, 12233), (40, 12296), (43, 12317), (52, 12389), (53, 12407), (55, 12455), (60, 12512),

Gene: HungryHenry_18 Start: 11922, Stop: 12695, Start Num: 2

Candidate Starts for HungryHenry_18:

(Start: 2 @11922 has 145 MA's), (7, 11994), (10, 12015), (12, 12063), (13, 12081), (14, 12111), (15, 12120), (22, 12201), (27, 12261), (34, 12354), (40, 12417), (43, 12438), (52, 12510), (53, 12528), (55, 12576), (60, 12633),

Gene: Ilzat_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Ilzat_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60,

12632),

Gene: Inventa_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Inventa_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: loannes_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for loannes_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Janus167_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Janus167_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (8, 12002), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: JasonD_22 Start: 12050, Stop: 12823, Start Num: 2

Candidate Starts for JasonD_22:

(Start: 2 @12050 has 145 MA's), (6, 12116), (8, 12131), (12, 12191), (15, 12248), (17, 12266), (19, 12275), (34, 12479), (36, 12503), (40, 12542), (43, 12563), (49, 12602), (53, 12653), (55, 12701), (56, 12716), (63, 12803),

Gene: JasperRussell_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for JasperRussell_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: Jenos_20 Start: 12377, Stop: 13150, Start Num: 2

Candidate Starts for Jenos_20:

(Start: 2 @12377 has 145 MA's), (4, 12413), (6, 12443), (8, 12458), (12, 12518), (14, 12566), (15, 12575), (19, 12602), (27, 12713), (33, 12794), (34, 12806), (36, 12830), (38, 12839), (40, 12869), (43, 12890), (49, 12929), (52, 12962), (53, 12980), (55, 13028), (56, 13043), (63, 13130),

Gene: Jerbirus_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Jerbirus_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: JeriBeth_18 Start: 11768, Stop: 12541, Start Num: 2

Candidate Starts for JeriBeth_18:

(Start: 2 @11768 has 145 MA's), (7, 11840), (10, 11861), (12, 11909), (13, 11927), (14, 11957), (15, 11966), (22, 12047), (27, 12107), (34, 12200), (40, 12263), (43, 12284), (52, 12356), (53, 12374), (55, 12422), (60, 12479),

Gene: Juanyo_17 Start: 12019, Stop: 12792, Start Num: 2

Candidate Starts for Juanyo_17:

(1, 11665), (Start: 2 @12019 has 145 MA's), (7, 12091), (10, 12112), (12, 12160), (15, 12217), (25, 12331), (26, 12334), (29, 12388), (38, 12481), (42, 12529), (44, 12541), (48, 12565), (53, 12622), (54, 12661), (55, 12670),

Gene: Kale_18 Start: 11936, Stop: 12709, Start Num: 2

Candidate Starts for Kale_18:

(Start: 2 @11936 has 145 MA's), (7, 12008), (10, 12029), (12, 12077), (13, 12095), (14, 12125), (15, 12134), (22, 12215), (27, 12275), (34, 12368), (40, 12431), (43, 12452), (52, 12524), (53, 12542), (55, 12590), (60, 12647),

Gene: KannH_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for KannH_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: Kauala_18 Start: 11991, Stop: 12761, Start Num: 2

Candidate Starts for Kauala_18:

(Start: 2 @11991 has 145 MA's), (5, 12048), (8, 12072), (12, 12132), (15, 12189), (18, 12210), (24, 12291), (31, 12375), (32, 12378), (37, 12444), (39, 12453), (41, 12483), (54, 12630),

Gene: KingJulien_18 Start: 12026, Stop: 12802, Start Num: 2

Candidate Starts for KingJulien_18:

(Start: 2 @12026 has 145 MA's), (12, 12167), (13, 12185), (14, 12215), (15, 12224), (16, 12227), (17, 12242), (19, 12251), (23, 12317), (26, 12344), (36, 12482), (43, 12542), (49, 12581), (52, 12614), (53, 12632), (54, 12671), (63, 12782),

Gene: Klimt_18 Start: 11914, Stop: 12687, Start Num: 2

Candidate Starts for Klimt_18:

(Start: 2 @11914 has 145 MA's), (7, 11986), (12, 12055), (13, 12073), (14, 12103), (15, 12112), (22, 12193), (34, 12346), (40, 12409), (43, 12430), (52, 12502), (53, 12520), (55, 12568), (60, 12625),

Gene: Knox_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Knox_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Koji_18 Start: 12123, Stop: 12893, Start Num: 2

Candidate Starts for Koji_18:

(Start: 2 @12123 has 145 MA's), (8, 12204), (12, 12264), (15, 12321), (18, 12342), (31, 12507), (41, 12615), (48, 12666), (53, 12723), (54, 12762), (61, 12837),

Gene: Kurt1_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Kurt1_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Leafus_18 Start: 12173, Stop: 12949, Start Num: 2

Candidate Starts for Leafus_18:

(Start: 2 @12173 has 145 MA's), (12, 12314), (13, 12332), (14, 12362), (15, 12371), (16, 12374), (17, 12389), (18, 12392), (19, 12398), (23, 12464), (36, 12629), (43, 12689), (49, 12728), (52, 12761), (53,

12779), (54, 12818), (63, 12929),

Gene: Lovelyunicorn_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Lovelyunicorn_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Lucky3_18 Start: 12073, Stop: 12846, Start Num: 2

Candidate Starts for Lucky3_18:

(Start: 2 @12073 has 145 MA's), (12, 12214), (15, 12271), (18, 12292), (31, 12460), (32, 12463), (37, 12529), (39, 12538), (41, 12568), (42, 12583), (44, 12595), (48, 12619), (49, 12625), (53, 12676), (54, 12715),

Gene: Ludgate_18 Start: 11625, Stop: 12398, Start Num: 2

Candidate Starts for Ludgate_18:

(Start: 2 @11625 has 145 MA's), (7, 11697), (10, 11718), (12, 11766), (13, 11784), (14, 11814), (15, 11823), (22, 11904), (34, 12057), (40, 12120), (43, 12141), (52, 12213), (53, 12231), (55, 12279), (60, 12336),

Gene: MCubed_17 Start: 11864, Stop: 12637, Start Num: 2

Candidate Starts for MCubed_17:

(Start: 2 @11864 has 145 MA's), (7, 11936), (8, 11945), (11, 11987), (12, 12005), (15, 12062), (16, 12065), (22, 12140), (23, 12152), (34, 12293), (35, 12296), (40, 12356), (42, 12374), (48, 12410), (53, 12467), (54, 12506), (55, 12515), (61, 12581), (62, 12608),

Gene: MaeLinda_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for MaeLinda_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: ManRay_18 Start: 11934, Stop: 12707, Start Num: 2

Candidate Starts for ManRay_18:

(Start: 2 @11934 has 145 MA's), (7, 12006), (10, 12027), (12, 12075), (13, 12093), (14, 12123), (15, 12132), (22, 12213), (27, 12273), (34, 12366), (40, 12429), (43, 12450), (52, 12522), (53, 12540), (55, 12588), (60, 12645),

Gene: Mandalorian_17 Start: 12037, Stop: 12810, Start Num: 2

Candidate Starts for Mandalorian_17:

(Start: 2 @12037 has 145 MA's), (7, 12109), (8, 12118), (9, 12124), (12, 12178), (14, 12226), (15, 12235), (22, 12316), (23, 12328), (28, 12379), (38, 12502), (40, 12532), (41, 12535), (42, 12550), (47, 12577), (48, 12586), (53, 12643), (54, 12682), (55, 12691), (57, 12730),

Gene: Martin_19 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Martin_19:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: McGalleon_19 Start: 12496, Stop: 13269, Start Num: 2

Candidate Starts for McGalleon_19:

(Start: 2 @12496 has 145 MA's), (4, 12532), (6, 12562), (8, 12577), (12, 12637), (14, 12685), (15, 12694), (19, 12721), (27, 12832), (36, 12949), (40, 12988), (43, 13009), (52, 13081), (53, 13099), (55, 13147), (56, 13162), (63, 13249),

Gene: MillyPhilly_18 Start: 11628, Stop: 12401, Start Num: 2

Candidate Starts for MillyPhilly_18:

(Start: 2 @11628 has 145 MA's), (7, 11700), (10, 11721), (12, 11769), (13, 11787), (14, 11817), (15, 11826), (22, 11907), (34, 12060), (40, 12123), (43, 12144), (52, 12216), (53, 12234), (55, 12282), (60, 12339),

Gene: MonChoix_17 Start: 11676, Stop: 12452, Start Num: 2

Candidate Starts for MonChoix_17:

(Start: 2 @11676 has 145 MA's), (8, 11757), (12, 11817), (13, 11835), (15, 11874), (16, 11877), (23, 11967), (26, 11994), (28, 12018), (36, 12132), (43, 12192), (49, 12231), (52, 12264), (53, 12282), (54, 12321),

Gene: MrWorldwide_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for MrWorldwide_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Nagem_18 Start: 11625, Stop: 12398, Start Num: 2

Candidate Starts for Nagem_18:

(Start: 2 @11625 has 145 MA's), (7, 11697), (10, 11718), (12, 11766), (13, 11784), (14, 11814), (15, 11823), (22, 11904), (34, 12057), (40, 12120), (43, 12141), (52, 12213), (53, 12231), (55, 12279), (60, 12336),

Gene: Nattles_18 Start: 11918, Stop: 12691, Start Num: 2

Candidate Starts for Nattles_18:

(Start: 2 @11918 has 145 MA's), (7, 11990), (12, 12059), (13, 12077), (14, 12107), (15, 12116), (22, 12197), (34, 12350), (40, 12413), (43, 12434), (46, 12455), (52, 12506), (53, 12524), (55, 12572), (60, 12629),

Gene: NickSell_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for NickSell_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Nucci_17 Start: 12026, Stop: 12799, Start Num: 2

Candidate Starts for Nucci_17:

(Start: 2 @12026 has 145 MA's), (7, 12098), (8, 12107), (9, 12113), (12, 12167), (14, 12215), (15, 12224), (22, 12305), (23, 12317), (28, 12368), (38, 12491), (40, 12521), (41, 12524), (42, 12539), (47, 12566), (48, 12575), (53, 12632), (54, 12671), (55, 12680), (57, 12719),

Gene: Oats_18 Start: 11934, Stop: 12707, Start Num: 2

Candidate Starts for Oats_18:

(Start: 2 @11934 has 145 MA's), (7, 12006), (10, 12027), (12, 12075), (13, 12093), (14, 12123), (15, 12132), (22, 12213), (27, 12273), (34, 12366), (40, 12429), (43, 12450), (52, 12522), (53, 12540), (55, 12588), (60, 12645),

Gene: OldNelly_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for OldNelly_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Oxtob96_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Oxtob96_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Pajaza_17 Start: 11991, Stop: 12770, Start Num: 2

Candidate Starts for Pajaza_17:

(Start: 2 @11991 has 145 MA's), (12, 12132), (27, 12330), (30, 12378), (31, 12381), (36, 12447), (48, 12540), (54, 12636), (60, 12708), (61, 12714),

Gene: Papafritta_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Papafritta_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: ParleG_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for ParleG_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Peep_18 Start: 11620, Stop: 12393, Start Num: 2

Candidate Starts for Peep_18:

(Start: 2 @11620 has 145 MA's), (7, 11692), (8, 11701), (12, 11761), (13, 11779), (14, 11809), (15, 11818), (22, 11899), (27, 11959), (34, 12052), (40, 12115), (43, 12136), (52, 12208), (53, 12226), (55, 12274), (60, 12331),

Gene: Peppino_18 Start: 12026, Stop: 12802, Start Num: 2

Candidate Starts for Peppino_18:

(Start: 2 @12026 has 145 MA's), (12, 12167), (13, 12185), (15, 12224), (16, 12227), (18, 12245), (19, 12251), (36, 12482), (43, 12542), (49, 12581), (53, 12632), (54, 12671), (63, 12782),

Gene: Pherbot_18 Start: 11989, Stop: 12759, Start Num: 2

Candidate Starts for Pherbot_18:

(Start: 2 @11989 has 145 MA's), (8, 12070), (12, 12130), (15, 12187), (18, 12208), (31, 12373), (37, 12442), (41, 12481), (48, 12532), (53, 12589), (54, 12628), (61, 12703),

Gene: Pherferi_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Pherferi_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Phiderman_18 Start: 11628, Stop: 12401, Start Num: 2

Candidate Starts for Phiderman_18:

(Start: 2 @11628 has 145 MA's), (7, 11700), (10, 11721), (12, 11769), (13, 11787), (14, 11817), (15, 11826), (22, 11907), (34, 12060), (40, 12123), (43, 12144), (52, 12216), (53, 12234), (55, 12282), (60,

12339),

Gene: Phireproof_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Phireproof_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: PhredFlintston_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for PhredFlintston_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Phriends_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Phriends_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Pikmin_17 Start: 11991, Stop: 12770, Start Num: 2

Candidate Starts for Pikmin_17:

(Start: 2 @11991 has 145 MA's), (12, 12132), (27, 12330), (30, 12378), (31, 12381), (36, 12447), (48, 12540), (54, 12636), (60, 12708), (61, 12714),

Gene: Pocket_18 Start: 11919, Stop: 12692, Start Num: 2

Candidate Starts for Pocket_18:

(Start: 2 @11919 has 145 MA's), (7, 11991), (10, 12012), (12, 12060), (13, 12078), (14, 12108), (15, 12117), (22, 12198), (27, 12258), (34, 12351), (40, 12414), (43, 12435), (52, 12507), (53, 12525), (55, 12573), (60, 12630),

Gene: PrincePhergus_18 Start: 11993, Stop: 12763, Start Num: 2

Candidate Starts for PrincePhergus_18:

(Start: 2 @11993 has 145 MA's), (8, 12074), (12, 12134), (15, 12191), (18, 12212), (31, 12377), (37, 12446), (41, 12485), (48, 12536), (53, 12593), (54, 12632), (61, 12707),

Gene: PuppyEggo_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for PuppyEggo_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Quartz_17 Start: 12038, Stop: 12811, Start Num: 2

Candidate Starts for Quartz_17:

(Start: 2 @12038 has 145 MA's), (7, 12110), (8, 12119), (9, 12125), (12, 12179), (14, 12227), (15, 12236), (22, 12317), (23, 12329), (28, 12380), (38, 12503), (40, 12533), (41, 12536), (42, 12551), (47, 12578), (48, 12587), (53, 12644), (54, 12683), (55, 12692), (57, 12731),

Gene: Raccoon_18 Start: 12032, Stop: 12808, Start Num: 2

Candidate Starts for Raccoon_18:

(Start: 2 @12032 has 145 MA's), (12, 12173), (13, 12191), (14, 12221), (15, 12230), (16, 12233), (17, 12248), (18, 12251), (19, 12257), (23, 12323), (26, 12350), (36, 12488), (43, 12548), (49, 12587), (52, 12620), (53, 12638), (54, 12677), (63, 12788),

Gene: Rapheph_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Rapheph_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Raptor_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Raptor_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Redfield_18 Start: 12034, Stop: 12810, Start Num: 2

Candidate Starts for Redfield_18:

(Start: 2 @12034 has 145 MA's), (12, 12175), (13, 12193), (14, 12223), (15, 12232), (16, 12235), (18, 12253), (19, 12259), (23, 12325), (36, 12490), (43, 12550), (49, 12589), (53, 12640), (54, 12679), (63, 12790),

Gene: Renzie_18 Start: 11620, Stop: 12393, Start Num: 2

Candidate Starts for Renzie_18:

(Start: 2 @11620 has 145 MA's), (7, 11692), (8, 11701), (12, 11761), (13, 11779), (14, 11809), (15, 11818), (22, 11899), (27, 11959), (34, 12052), (40, 12115), (43, 12136), (52, 12208), (53, 12226), (55, 12274), (60, 12331),

Gene: Riyhil_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Riyhil_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (16, 11832), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Robinson_18 Start: 11623, Stop: 12396, Start Num: 2

Candidate Starts for Robinson_18:

(Start: 2 @11623 has 145 MA's), (7, 11695), (8, 11704), (12, 11764), (13, 11782), (14, 11812), (15, 11821), (22, 11902), (27, 11962), (34, 12055), (40, 12118), (43, 12139), (52, 12211), (53, 12229), (55, 12277), (60, 12334),

Gene: Rog141_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Rog141_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: SJay_18 Start: 11626, Stop: 12399, Start Num: 2

Candidate Starts for SJay_18:

(Start: 2 @11626 has 145 MA's), (7, 11698), (10, 11719), (12, 11767), (13, 11785), (14, 11815), (15, 11824), (22, 11905), (34, 12058), (40, 12121), (43, 12142), (52, 12214), (53, 12232), (55, 12280), (60, 12337),

Gene: Sansa_16 Start: 11860, Stop: 12633, Start Num: 2

Candidate Starts for Sansa_16:

(Start: 2 @11860 has 145 MA's), (7, 11932), (8, 11941), (11, 11983), (12, 12001), (15, 12058), (16, 12061), (22, 12136), (23, 12148), (34, 12289), (35, 12292), (40, 12352), (42, 12370), (48, 12406), (52, 12445), (53, 12463), (54, 12502), (55, 12511), (61, 12577), (62, 12604),

Gene: Saratos_17 Start: 11837, Stop: 12610, Start Num: 2

Candidate Starts for Saratos_17:

(Start: 2 @11837 has 145 MA's), (7, 11909), (8, 11918), (11, 11960), (12, 11978), (15, 12035), (16, 12038), (22, 12113), (23, 12125), (34, 12266), (35, 12269), (40, 12329), (42, 12347), (48, 12383), (52, 12422), (53, 12440), (55, 12488), (61, 12554), (62, 12581),

Gene: Schnapsidee_18 Start: 12025, Stop: 12801, Start Num: 2

Candidate Starts for Schnapsidee_18:

(Start: 2 @12025 has 145 MA's), (12, 12166), (13, 12184), (14, 12214), (15, 12223), (16, 12226), (18, 12244), (19, 12250), (26, 12343), (36, 12481), (43, 12541), (49, 12580), (53, 12631), (54, 12670), (63, 12781),

Gene: Schubert_18 Start: 12175, Stop: 12948, Start Num: 2

Candidate Starts for Schubert_18:

(Start: 2 @12175 has 145 MA's), (7, 12247), (12, 12316), (15, 12373), (16, 12376), (20, 12418), (26, 12490), (34, 12604), (52, 12760), (59, 12880),

Gene: Sedgewig_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for Sedgewig_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: ShaiHulud_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for ShaiHulud_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Shamu_17 Start: 11849, Stop: 12622, Start Num: 2

Candidate Starts for Shamu_17:

(Start: 2 @11849 has 145 MA's), (7, 11921), (8, 11930), (11, 11972), (12, 11990), (15, 12047), (16, 12050), (22, 12125), (23, 12137), (34, 12278), (35, 12281), (40, 12341), (42, 12359), (48, 12395), (52, 12434), (53, 12452), (55, 12500), (61, 12566), (62, 12593),

Gene: Shee_18 Start: 11628, Stop: 12401, Start Num: 2

Candidate Starts for Shee_18:

(Start: 2 @11628 has 145 MA's), (7, 11700), (10, 11721), (12, 11769), (13, 11787), (14, 11817), (15, 11826), (22, 11907), (34, 12060), (40, 12123), (43, 12144), (52, 12216), (53, 12234), (55, 12282), (60, 12339),

Gene: Sinatra_18 Start: 11990, Stop: 12760, Start Num: 2

Candidate Starts for Sinatra_18:

(Start: 2 @11990 has 145 MA's), (8, 12071), (12, 12131), (15, 12188), (18, 12209), (31, 12374), (37, 12443), (41, 12482), (48, 12533), (53, 12590), (54, 12629), (61, 12704),

Gene: SirVictor_18 Start: 12067, Stop: 12840, Start Num: 2

Candidate Starts for SirVictor_18:

(Start: 2 @12067 has 145 MA's), (12, 12208), (15, 12265), (18, 12286), (31, 12454), (32, 12457), (37, 12523), (39, 12532), (41, 12562), (42, 12577), (44, 12589), (48, 12613), (53, 12670), (54, 12709),

Gene: SoilGremlin_18 Start: 11628, Stop: 12401, Start Num: 2

Candidate Starts for SoilGremlin_18:

(Start: 2 @11628 has 145 MA's), (7, 11700), (10, 11721), (12, 11769), (13, 11787), (14, 11817), (15, 11826), (22, 11907), (34, 12060), (43, 12144), (52, 12216), (53, 12234), (55, 12282), (60, 12339),

Gene: SonOfLevi_18 Start: 11914, Stop: 12687, Start Num: 2

Candidate Starts for SonOfLevi_18:

(Start: 2 @11914 has 145 MA's), (7, 11986), (12, 12055), (13, 12073), (14, 12103), (15, 12112), (22, 12193), (34, 12346), (40, 12409), (43, 12430), (52, 12502), (53, 12520), (55, 12568), (60, 12625),

Gene: Stanktossa_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for Stanktossa_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: StingRay_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for StingRay_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: StirfryIV_18 Start: 11921, Stop: 12694, Start Num: 2

Candidate Starts for StirfryIV_18:

(Start: 2 @11921 has 145 MA's), (7, 11993), (10, 12014), (12, 12062), (13, 12080), (14, 12110), (15, 12119), (22, 12200), (27, 12260), (34, 12353), (40, 12416), (43, 12437), (52, 12509), (53, 12527), (55, 12575), (60, 12632),

Gene: Stormbreaker8_18 Start: 12026, Stop: 12802, Start Num: 2

Candidate Starts for Stormbreaker8_18:

(Start: 2 @12026 has 145 MA's), (12, 12167), (13, 12185), (14, 12215), (15, 12224), (16, 12227), (17, 12242), (18, 12245), (19, 12251), (26, 12344), (36, 12482), (43, 12542), (49, 12581), (52, 12614), (53, 12632), (54, 12671), (63, 12782),

Gene: Strathdee_18 Start: 11630, Stop: 12403, Start Num: 2

Candidate Starts for Strathdee_18:

(Start: 2 @11630 has 145 MA's), (7, 11702), (10, 11723), (12, 11771), (13, 11789), (14, 11819), (15, 11828), (22, 11909), (34, 12062), (40, 12125), (43, 12146), (52, 12218), (53, 12236), (55, 12284), (60, 12341),

Gene: Superfresh_18 Start: 11620, Stop: 12393, Start Num: 2

Candidate Starts for Superfresh_18:

(Start: 2 @11620 has 145 MA's), (7, 11692), (8, 11701), (12, 11761), (13, 11779), (14, 11809), (15, 11818), (22, 11899), (27, 11959), (34, 12052), (40, 12115), (43, 12136), (52, 12208), (53, 12226), (55, 12274), (60, 12331),

Gene: TatarkaPM_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for TatarkaPM_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Teagan_18 Start: 11625, Stop: 12398, Start Num: 2

Candidate Starts for Teagan_18:

(Start: 2 @11625 has 145 MA's), (7, 11697), (10, 11718), (12, 11766), (13, 11784), (14, 11814), (15, 11823), (22, 11904), (34, 12057), (40, 12120), (43, 12141), (52, 12213), (53, 12231), (55, 12279), (60, 12336),

Gene: TeddyBear_18 Start: 11934, Stop: 12707, Start Num: 2

Candidate Starts for TeddyBear_18:

(Start: 2 @11934 has 145 MA's), (7, 12006), (10, 12027), (12, 12075), (13, 12093), (14, 12123), (15, 12132), (22, 12213), (27, 12273), (34, 12366), (40, 12429), (43, 12450), (52, 12522), (53, 12540), (55, 12588), (60, 12645),

Gene: Tenda_18 Start: 11932, Stop: 12705, Start Num: 2

Candidate Starts for Tenda_18:

(Start: 2 @11932 has 145 MA's), (7, 12004), (10, 12025), (12, 12073), (13, 12091), (14, 12121), (15, 12130), (22, 12211), (27, 12271), (34, 12364), (40, 12427), (43, 12448), (52, 12520), (53, 12538), (55, 12586), (60, 12643),

Gene: Theresita_18 Start: 11578, Stop: 12354, Start Num: 2

Candidate Starts for Theresita_18:

(Start: 2 @11578 has 145 MA's), (7, 11650), (8, 11659), (12, 11719), (13, 11737), (14, 11767), (16, 11779), (21, 11830), (27, 11917), (29, 11950), (32, 11971), (42, 12091), (55, 12232), (61, 12298), (62, 12325),

Gene: Thompsone_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Thompsone_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Thorongil_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Thorongil_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: TinSulphur_18 Start: 11631, Stop: 12404, Start Num: 2

Candidate Starts for TinSulphur_18:

(Start: 2 @11631 has 145 MA's), (7, 11703), (10, 11724), (12, 11772), (13, 11790), (14, 11820), (15, 11829), (22, 11910), (34, 12063), (40, 12126), (43, 12147), (52, 12219), (53, 12237), (55, 12285), (60, 12342),

Gene: Velene_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Velene_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Vispitious_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for Vispitious_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: WildNOut_18 Start: 11629, Stop: 12402, Start Num: 2

Candidate Starts for WildNOut_18:

(Start: 2 @11629 has 145 MA's), (7, 11701), (8, 11710), (12, 11770), (13, 11788), (14, 11818), (15, 11827), (22, 11908), (27, 11968), (34, 12061), (40, 12124), (43, 12145), (52, 12217), (53, 12235), (55, 12283), (60, 12340),

Gene: Winzigespinne_18 Start: 11920, Stop: 12693, Start Num: 2

Candidate Starts for Winzigespinne_18:

(Start: 2 @11920 has 145 MA's), (7, 11992), (10, 12013), (12, 12061), (13, 12079), (14, 12109), (15, 12118), (22, 12199), (27, 12259), (34, 12352), (40, 12415), (43, 12436), (52, 12508), (53, 12526), (55, 12574), (60, 12631),

Gene: YuuY_17 Start: 12033, Stop: 12806, Start Num: 2

Candidate Starts for YuuY_17:

(Start: 2 @12033 has 145 MA's), (3, 12045), (7, 12105), (8, 12114), (9, 12120), (10, 12126), (12, 12174), (13, 12192), (15, 12231), (29, 12402), (34, 12462), (44, 12555), (48, 12579), (53, 12636), (54, 12675),

Gene: Zada_18 Start: 11623, Stop: 12396, Start Num: 2

Candidate Starts for Zada_18:

(Start: 2 @11623 has 145 MA's), (7, 11695), (10, 11716), (12, 11764), (13, 11782), (14, 11812), (15, 11821), (22, 11902), (27, 11962), (34, 12055), (40, 12118), (43, 12139), (52, 12211), (53, 12229), (55, 12277), (60, 12334),

Gene: Zenitsu_17 Start: 11864, Stop: 12637, Start Num: 2

Candidate Starts for Zenitsu_17:

(Start: 2 @11864 has 145 MA's), (7, 11936), (8, 11945), (11, 11987), (12, 12005), (15, 12062), (16, 12065), (22, 12140), (23, 12152), (34, 12293), (35, 12296), (40, 12356), (42, 12374), (48, 12410), (53, 12467), (54, 12506), (55, 12515), (61, 12581), (62, 12608),