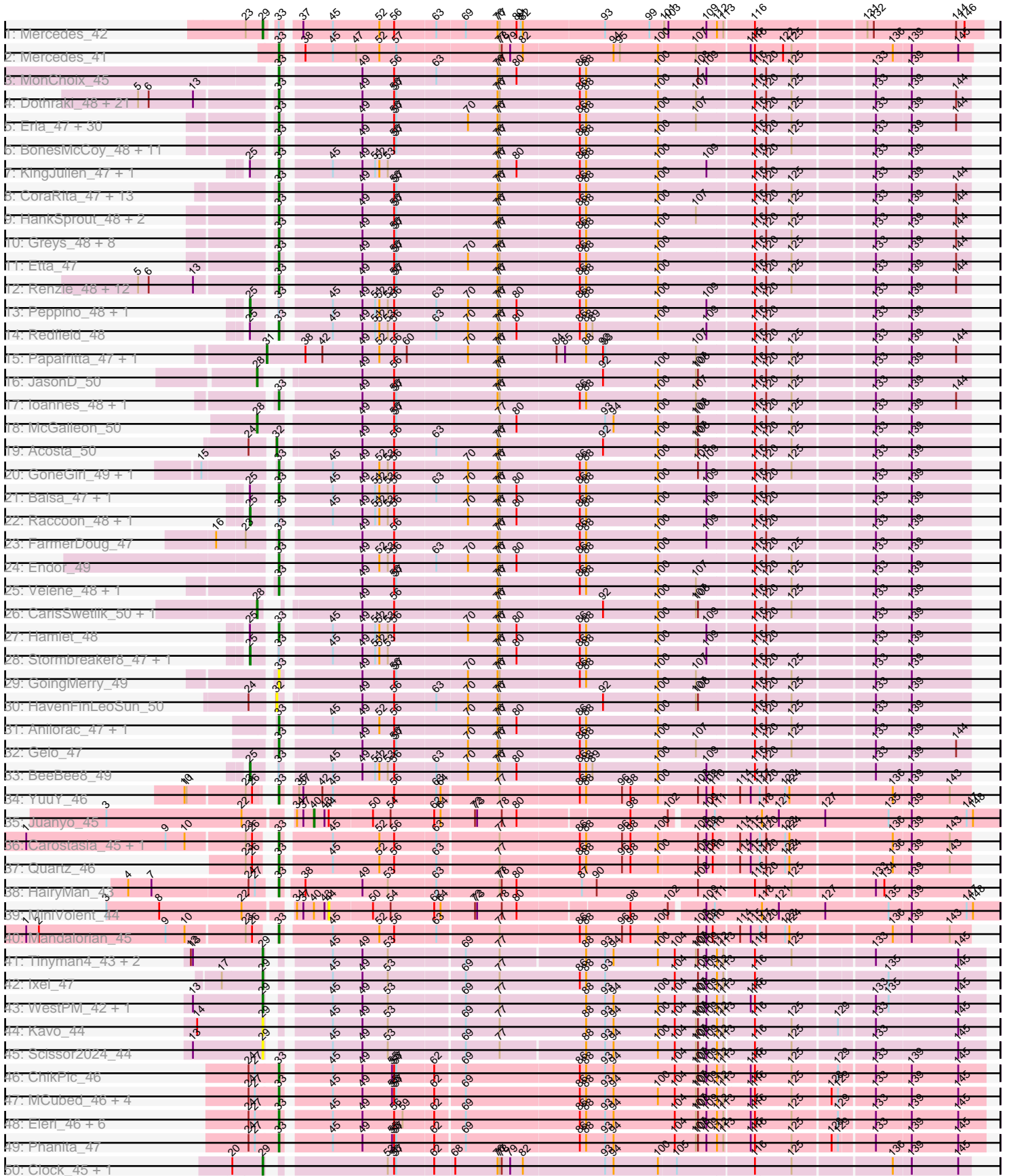
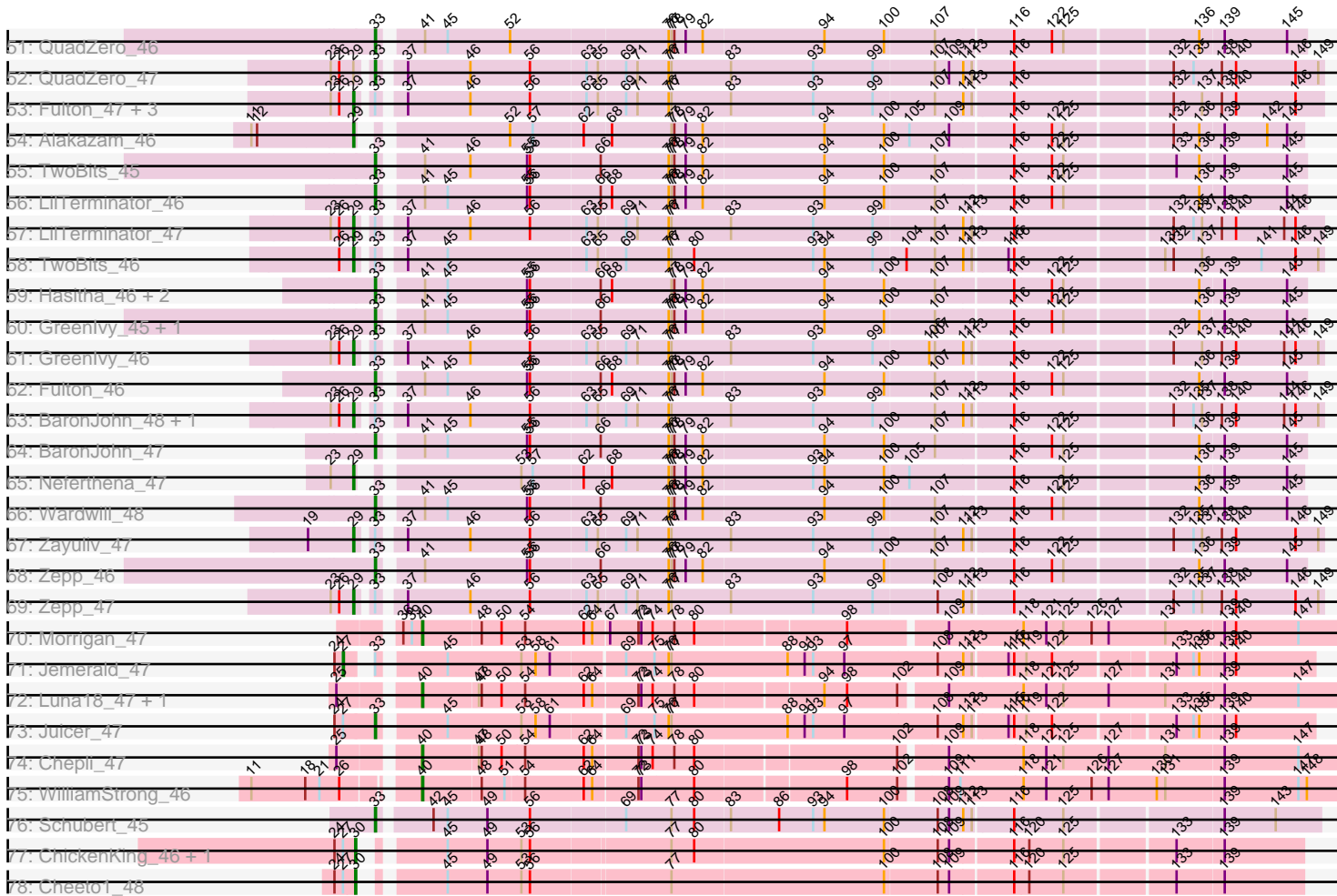


Pham 308089



Pham 308089



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 308089 Report

This analysis was run 06/27/26 on database version 652.

Pham number 308089 has 210 members, 13 are drafts.

Phages represented in each track:

- Track 1 : Mercedes_42
- Track 2 : Mercedes_41
- Track 3 : MonChoix_45
- Track 4 : Dothraki_48, Riyhil_48, Kurt1_48, Martin_49, Bandik_48, TatarkaPM_48, BeautPeep30_48, Inventa_48, Rapheph_48, ParleG_48, Stanktossa_48, MillyPhilly_48, Phireproof_48, MrWorldwide_48, Byron23_49, NickSell_48, Pherferi_48, Phiderman_48, Shee_48, PhredFlintston_48, MaeLinda_48, TinSulphur_49
- Track 5 : Erla_47, StingRay_47, Kouch_48, Garey24_48, Kale_47, KellyGreen_49, ManRay_47, Winzigespinne_47, TeddyBear_47, Aubergine_47, SJay_48, Klimt_48, Espinosa_47, Baines_47, Pocket_47, Exploradora_47, Bonino_47, Chamuel_47, Rog141_47, Asta_47, SonOfLevi_48, Nattles_47, Gershwin_47, Calix_47, RosieMae_47, Christoph_47, Nagem_48, Oats_47, Tenda_47, Jerbirus_49, Gubbabump_47
- Track 6 : BonesMcCoy_48, BigRedClifford_48, Convict_48, Oxtober96_49, Blage_48, WildNOut_48, Thompsone_48, Gargoyle_48, Knox_48, Raptor_48, Lovelyunicorn_48, Den3_48
- Track 7 : KingJulien_47, Etna_48
- Track 8 : CoraRita_47, StirfryIV_47, Benjalauen_48, HanSolo_47, AranulaLuti_47, Ilzat_47, KannH_47, JeriBeth_47, Clancy_47, Symere_47, HungryHenry_47, Sedgewig_47, Chako_47, JasperRussell_47
- Track 9 : HankSprout_48, Figueroism_48, Zada_49
- Track 10 : Greys_48, Ludgate_48, Thorongil_48, Vispistious_48, Alyxandracam_48, AxiPup_48, PuppyEggo_48, Strathdee_48, ShaiHulud_48
- Track 11 : Etta_47
- Track 12 : Renzie_48, Peep_48, Dave_48, Robinson_48, SolidSnake_50, Superfresh_48, OldNelly_49, AlexAdler_48, Delphidian_48, Merida02_50, SoilGremlin_49, Antoinette_48, Phriends_48
- Track 13 : Peppino_48, PhillyPhantom_48
- Track 14 : Redfield_48
- Track 15 : Papafritta_47, Janus167_47
- Track 16 : JasonD_50
- Track 17 : Ioannes_48, Duocatuli_47
- Track 18 : McGalleon_50
- Track 19 : Acosta_50
- Track 20 : GoneGirl_49, GardenB_48
- Track 21 : Balsa_47, Schnapsidee_48

- Track 22 : Raccoon_48, Leafus_48
- Track 23 : FarmerDoug_47
- Track 24 : Endor_49
- Track 25 : Velene_48, Teagan_48
- Track 26 : CarisSwetlik_50, Jenos_51
- Track 27 : Hamlet_48
- Track 28 : Stormbreaker8_47, Soror1_47
- Track 29 : GoingMerry_49
- Track 30 : HavenFinLeoSun_50
- Track 31 : Anilorac_47, Agente005_48
- Track 32 : Gelo_47
- Track 33 : BeeBee8_49
- Track 34 : YuuY_46
- Track 35 : Juanyo_45
- Track 36 : Carostasia_45, Nucci_45
- Track 37 : Quartz_46
- Track 38 : HairyMan_43
- Track 39 : MiniVolent_44
- Track 40 : Mandalorian_45
- Track 41 : Tinyman4_43, Schimmels22_43, HerculesXL_44
- Track 42 : Ixel_47
- Track 43 : WestPM_42, Penta_42
- Track 44 : Kavo_44
- Track 45 : Scissor2024_44
- Track 46 : ChikPic_46
- Track 47 : MCubed_46, Zenitsu_46, Shamu_47, Sansa_45, Finny_47
- Track 48 : Eleri_46, ColaCorta_46, Glamour_46, Xebius_46, Andromedas_46, PSirce_46, Saratos_46
- Track 49 : Phanita_47
- Track 50 : Clock_45, Nebulous_44
- Track 51 : QuadZero_46
- Track 52 : QuadZero_47
- Track 53 : Fulton_47, Librie_47, Hasitha_47, CaptainRex_47
- Track 54 : Alakazam_46
- Track 55 : TwoBits_45
- Track 56 : LilTerminator_46
- Track 57 : LilTerminator_47
- Track 58 : TwoBits_46
- Track 59 : Hasitha_46, CaptainRex_46, Librie_46
- Track 60 : Greenlvy_45, Zayuliv_46
- Track 61 : Greenlvy_46
- Track 62 : Fulton_46
- Track 63 : BaronJohn_48, Wardwill_49
- Track 64 : BaronJohn_47
- Track 65 : Neferthema_47
- Track 66 : Wardwill_48
- Track 67 : Zayuliv_47
- Track 68 : Zepp_46
- Track 69 : Zepp_47
- Track 70 : Morigan_47
- Track 71 : Jemerald_47
- Track 72 : Luna18_47, KatChan_47
- Track 73 : Juicer_47

- Track 74 : Chepli_47
- Track 75 : WilliamStrong_46
- Track 76 : Schubert_45
- Track 77 : ChickenKing_46, GaeCeo_48
- Track 78 : Cheeto1_48

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

The start number called the most often in the published annotations is 33, it was called in 153 of the 197 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Agente005_48, AlexAdler_48, Alyxandracam_48, Andromedas_46, Anilorac_47, Antoinette_48, AranulaLuti_47, Asta_47, Aubergine_47, AxiPup_48, Baines_47, Balsa_47, Bandik_48, BaronJohn_47, BeautPeep30_48, Benjalauren_48, BigRedClifford_48, Blage_48, BonesMcCoy_48, Bonino_47, Byron23_49, Calix_47, CaptainRex_46, Carostasia_45, Chako_47, Chamuel_47, ChikPic_46, Christoph_47, Clancy_47, ColaCorta_46, Convict_48, CoraRita_47, Dave_48, Delphidian_48, Den3_48, Dothraki_48, Duocatuli_47, Eleri_46, Endor_49, Erla_47, Espinosa_47, Etna_48, Etta_47, Exploradora_47, FarmerDoug_47, Figueroism_48, Finny_47, Fulton_46, GardenB_48, Garey24_48, Gargoyle_48, Gelo_47, Gershwin_47, Glamour_46, GoingMerry_49, GoneGirl_49, Greenlvy_45, Greys_48, Gubbabump_47, HairyMan_43, Hamlet_48, HanSolo_47, HankSprout_48, Hasitha_46, HungryHenry_47, Ilzat_47, Inventa_48, Ioannes_48, JasperRussell_47, Jerbirus_49, JeriBeth_47, Juicer_47, Kale_47, KannH_47, KellyGreen_49, KingJulien_47, Klimt_48, Knox_48, Kouch_48, Kurt1_48, Librie_46, LilTerminator_46, Lovelyunicorn_48, Ludgate_48, MCubed_46, MaeLinda_48, ManRay_47, Mandalorian_45, Martin_49, Mercedes_41, Merida02_50, MillyPhilly_48, MonChoix_45, MrWorldwide_48, Nagem_48, Nattles_47, NickSell_48, Nucci_45, Oats_47, OldNelly_49, Oxtober96_49, PSirce_46, ParleG_48, Peep_48, Phanita_47, Pherferi_48, Phiderman_48, Phireproof_48, PhredFlintston_48, Phriends_48, Pocket_47, PuppyEggo_48, QuadZero_46, QuadZero_47, Quartz_46, Rapheph_48, Raptor_48, Redfield_48, Renzie_48, Riyhil_48, Robinson_48, Rog141_47, RosieMae_47, SJay_48, Sansa_45, Saratos_46, Schnapsidee_48, Schubert_45, Sedgewig_47, ShaiHulud_48, Shamu_47, Shee_48, SoilGremlin_49, SolidSnake_50, SonOfLevi_48, Stanktossa_48, StingRay_47, StirfryIV_47, Strathdee_48, Superfresh_48, Symere_47, TatarkaPM_48, Teagan_48, TeddyBear_47, Tenda_47, Thompsone_48, Thorongil_48, TinSulphur_49, TwoBits_45, Velene_48, Vispistious_48, Wardwill_48, WildNOut_48, Winzigespinne_47, Xebius_46, YuuY_46, Zada_49, Zayuliv_46, Zenitsu_46, Zepp_46,

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

- BaronJohn_48, BeeBee8_49, CaptainRex_47, Fulton_47, Greenlvy_46, Hasitha_47, Jemerald_47, Leafus_48, Librie_47, LilTerminator_47, Mercedes_42, Peppino_48, PhillyPhantom_48, Raccoon_48, Soror1_47, Stormbreaker8_47, TwoBits_46, Wardwill_49, Zayuliv_47, Zepp_47,

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

- Acosta_50, Alakazam_46, CarisSwetlik_50, Cheeto1_48, Chepli_47, ChickenKing_46, Clock_45, GaeCeo_48, HavenFinLeoSun_50, HerculesXL_44,

Ixel_47, Janus167_47, JasonD_50, Jenos_51, Juanyo_45, KatChan_47, Kavo_44, Luna18_47, McGalleon_50, MiniVolent_44, Morrigan_47, Nebulous_44, Neferthema_47, Papafritta_47, Penta_42, Schimmels22_43, Scissor2024_44, Tinyman4_43, WestPM_42, WilliamStrong_46,

Summary by start number:

Start 25:

- Found in 16 of 210 (7.6%) of genes in pham
- Manual Annotations of this start: 6 of 197
- Called 43.8% of time when present
- Phage (with cluster) where this start called: BeeBee8_49 (EA1), Leafus_48 (EA1), Peppino_48 (EA1), PhillyPhantom_48 (EA1), Raccoon_48 (EA1), Soror1_47 (EA1), Stormbreaker8_47 (EA1),

Start 27:

- Found in 20 of 210 (9.5%) of genes in pham
- Manual Annotations of this start: 1 of 197
- Called 5.0% of time when present
- Phage (with cluster) where this start called: Jemerald_47 (EA6),

Start 28:

- Found in 4 of 210 (1.9%) of genes in pham
- Manual Annotations of this start: 4 of 197
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CarisSwetlik_50 (EA1), JasonD_50 (EA1), Jenos_51 (EA1), McGalleon_50 (EA1),

Start 29:

- Found in 25 of 210 (11.9%) of genes in pham
- Manual Annotations of this start: 21 of 197
- Called 96.0% of time when present
- Phage (with cluster) where this start called: Alakazam_46 (EA5), BaronJohn_48 (EA5), CaptainRex_47 (EA5), Clock_45 (EA5), Fulton_47 (EA5), GreenIvy_46 (EA5), Hasitha_47 (EA5), HerculesXL_44 (EA11), Ixel_47 (EA11), Kavo_44 (EA11), Librie_47 (EA5), LilTerminator_47 (EA5), Mercedes_42 (EA), Nebulous_44 (EA5), Neferthema_47 (EA5), Penta_42 (EA11), Schimmels22_43 (EA11), Scissor2024_44 (EA11), Tinyman4_43 (EA11), TwoBits_46 (EA5), Wardwill_49 (EA5), WestPM_42 (EA11), Zayuliv_47 (EA5), Zepp_47 (EA5),

Start 30:

- Found in 3 of 210 (1.4%) of genes in pham
- Manual Annotations of this start: 3 of 197
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cheeto1_48 (EA9), ChickenKing_46 (EA9), GaeCeo_48 (EA9),

Start 31:

- Found in 2 of 210 (1.0%) of genes in pham
- Manual Annotations of this start: 2 of 197
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Janus167_47 (EA1), Papafritta_47 (EA1),

Start 32:

- Found in 2 of 210 (1.0%) of genes in pham
- Manual Annotations of this start: 1 of 197
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_50 (EA1), HavenFinLeoSun_50 (EA1),

Start 33:

- Found in 180 of 210 (85.7%) of genes in pham
- Manual Annotations of this start: 153 of 197
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Agente005_48 (EA1), AlexAdler_48 (EA1), Alyxandracam_48 (EA1), Andromedas_46 (EA2), Anilorac_47 (EA1), Antoinette_48 (EA1), AranulaLuti_47 (EA1), Asta_47 (EA1), Aubergine_47 (EA1), AxiPup_48 (EA1), Baines_47 (EA1), Balsa_47 (EA1), Bandik_48 (EA1), BaronJohn_47 (EA5), BeautPeep30_48 (EA1), Benjalauren_48 (EA1), BigRedClifford_48 (EA1), Blage_48 (EA1), BonesMcCoy_48 (EA1), Bonino_47 (EA1), Byron23_49 (EA1), Calix_47 (EA1), CaptainRex_46 (EA5), Carostasia_45 (EA10), Chako_47 (EA1), Chamuel_47 (EA1), ChikPic_46 (EA2), Christoph_47 (EA1), Clancy_47 (EA1), ColaCorta_46 (EA2), Convict_48 (EA1), CoraRita_47 (EA1), Dave_48 (EA1), Delphidian_48 (EA1), Den3_48 (EA1), Dothraki_48 (EA1), Duocatuli_47 (EA1), Eleri_46 (EA2), Endor_49 (EA1), Erla_47 (EA1), Espinosa_47 (EA1), Etna_48 (EA1), Etta_47 (EA1), Exploradora_47 (EA1), FarmerDoug_47 (EA1), Figueroism_48 (EA1), Finny_47 (EA2), Fulton_46 (EA5), GardenB_48 (EA1), Garey24_48 (EA1), Gargoyle_48 (EA1), Gelo_47 (EA1), Gershwin_47 (EA1), Glamour_46 (EA2), GoingMerry_49 (EA1), GoneGirl_49 (EA1), Greenlvy_45 (EA5), Greys_48 (EA1), Gubbabump_47 (EA1), HairyMan_43 (EA10), Hamlet_48 (EA1), HanSolo_47 (EA1), HankSprout_48 (EA1), Hasitha_46 (EA5), HungryHenry_47 (EA1), Ilzat_47 (EA1), Inventa_48 (EA1), Ioannes_48 (EA1), JasperRussell_47 (EA1), Jerbirus_49 (EA1), JeriBeth_47 (EA1), Juicer_47 (EA6), Kale_47 (EA1), KannH_47 (EA1), KellyGreen_49 (EA1), KingJulien_47 (EA1), Klimt_48 (EA1), Knox_48 (EA1), Kouch_48 (EA1), Kurt1_48 (EA1), Librie_46 (EA5), LilTerminator_46 (EA5), Lovelyunicorn_48 (EA1), Ludgate_48 (EA1), MCubed_46 (EA2), MaeLinda_48 (EA1), ManRay_47 (EA1), Mandalorian_45 (EA10), Martin_49 (EA1), Mercedes_41 (EA), Merida02_50 (EA1), MillyPhilly_48 (EA1), MonChoix_45 (EA1), MrWorldwide_48 (EA1), Nagem_48 (EA1), Nattles_47 (EA1), NickSell_48 (EA1), Nucci_45 (EA10), Oats_47 (EA1), OldNelly_49 (EA1), Oxtober96_49 (EA1), PSirce_46 (EA2), ParleG_48 (EA1), Peep_48 (EA1), Phanita_47 (EA2), Pherferi_48 (EA1), Phiderman_48 (EA1), Phireproof_48 (EA1), PhredFlintston_48 (EA1), Phriends_48 (EA1), Pocket_47 (EA1), PuppyEggo_48 (EA1), QuadZero_46 (EA5), QuadZero_47 (EA5), Quartz_46 (EA10), Rapheph_48 (EA1), Raptor_48 (EA1), Redfield_48 (EA1), Renzie_48 (EA1), Riyhil_48 (EA1), Robinson_48 (EA1), Rog141_47 (EA1), RosieMae_47 (EA1), SJay_48 (EA1), Sansa_45 (EA2), Saratos_46 (EA2), Schnapsidee_48 (EA1), Schubert_45 (EA8), Sedgewig_47 (EA1), ShaiHulud_48 (EA1), Shamu_47 (EA2), Shee_48 (EA1), SoilGremlin_49 (EA1), SolidSnake_50 (EA1), SonOfLevi_48 (EA1), Stanktossa_48 (EA1), StingRay_47 (EA1), StirfryIV_47 (EA1), Strathdee_48 (EA1), Superfresh_48 (EA1), Symere_47 (EA1), TatarkaPM_48 (EA1), Teagan_48 (EA1), TeddyBear_47 (EA1), Tenda_47 (EA1), Thompsone_48 (EA1), Thorongil_48 (EA1), TinSulphur_49 (EA1), TwoBits_45 (EA5), Velene_48 (EA1), Vispistious_48 (EA1), Wardwill_48 (EA5), WildNOut_48 (EA1), Winzigespinne_47 (EA1), Xebius_46 (EA2), YuuY_46 (EA10), Zada_49 (EA1), Zayuliv_46 (EA5), Zenitsu_46 (EA2), Zepp_46 (EA5),

Start 40:

- Found in 7 of 210 (3.3%) of genes in pham
- Manual Annotations of this start: 6 of 197
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Chepli_47 (EA6), Juanyo_45 (EA10), KatChan_47 (EA6), Luna18_47 (EA6), Morigan_47 (EA6), WilliamStrong_46 (EA6),

Start 44:

- Found in 2 of 210 (1.0%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MiniVolent_44 (EA10),

Summary by clusters:

There are 9 clusters represented in this pham: EA11, EA10, EA, EA9, EA8, EA1, EA2, EA5, EA6,

Info for manual annotations of cluster EA:

- Start number 29 was manually annotated 1 time for cluster EA.
- Start number 33 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA1:

- Start number 25 was manually annotated 6 times for cluster EA1.
- Start number 28 was manually annotated 4 times for cluster EA1.
- Start number 31 was manually annotated 2 times for cluster EA1.
- Start number 32 was manually annotated 1 time for cluster EA1.
- Start number 33 was manually annotated 118 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 33 was manually annotated 6 times for cluster EA10.
- Start number 40 was manually annotated 1 time for cluster EA10.

Info for manual annotations of cluster EA11:

- Start number 29 was manually annotated 5 times for cluster EA11.

Info for manual annotations of cluster EA2:

- Start number 33 was manually annotated 13 times for cluster EA2.

Info for manual annotations of cluster EA5:

- Start number 29 was manually annotated 15 times for cluster EA5.
- Start number 33 was manually annotated 13 times for cluster EA5.

Info for manual annotations of cluster EA6:

- Start number 27 was manually annotated 1 time for cluster EA6.
- Start number 33 was manually annotated 1 time for cluster EA6.
- Start number 40 was manually annotated 5 times for cluster EA6.

Info for manual annotations of cluster EA8:

- Start number 33 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 30 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_50 Start: 35485, Stop: 34550, Start Num: 32

Candidate Starts for Acosta_50:

(24, 35509), (Start: 32 @35485 has 1 MA's), (49, 35380), (56, 35335), (63, 35278), (76, 35194), (77, 35191), (92, 35047), (100, 34969), (107, 34918), (108, 34915), (116, 34840), (120, 34825), (125, 34789), (133, 34681), (139, 34633),

Gene: Agente005_48 Start: 35301, Stop: 34369, Start Num: 33

Candidate Starts for Agente005_48:

(Start: 33 @35301 has 153 MA's), (45, 35241), (49, 35199), (52, 35175), (56, 35154), (70, 35055), (76, 35013), (77, 35010), (80, 34986), (86, 34899), (88, 34890), (100, 34788), (116, 34659), (120, 34644), (125, 34608), (133, 34500), (139, 34452),

Gene: Alakazam_46 Start: 34714, Stop: 33779, Start Num: 29

Candidate Starts for Alakazam_46:

(11, 34819), (12, 34813), (Start: 29 @34714 has 21 MA's), (52, 34585), (57, 34561), (62, 34510), (68, 34483), (77, 34420), (78, 34417), (79, 34405), (82, 34387), (94, 34261), (100, 34198), (105, 34174), (109, 34132), (116, 34069), (122, 34030), (125, 34018), (132, 33913), (136, 33886), (139, 33862), (142, 33817), (145, 33796),

Gene: AlexAdler_48 Start: 35308, Stop: 34376, Start Num: 33

Candidate Starts for AlexAdler_48:

(5, 35488), (6, 35473), (13, 35410), (Start: 33 @35308 has 153 MA's), (49, 35206), (56, 35161), (57, 35158), (76, 35020), (77, 35017), (86, 34906), (88, 34897), (100, 34795), (116, 34666), (120, 34651), (125, 34615), (133, 34507), (139, 34459), (144, 34396),

Gene: Alyxandracam_48 Start: 35318, Stop: 34386, Start Num: 33

Candidate Starts for Alyxandracam_48:

(Start: 33 @35318 has 153 MA's), (49, 35216), (56, 35171), (57, 35168), (76, 35030), (77, 35027), (86, 34916), (88, 34907), (100, 34805), (116, 34676), (120, 34661), (125, 34625), (133, 34517), (139, 34469), (144, 34406),

Gene: Andromedas_46 Start: 34244, Stop: 33294, Start Num: 33

Candidate Starts for Andromedas_46:

(24, 34265), (Start: 27 @34256 has 1 MA's), (Start: 33 @34244 has 153 MA's), (45, 34184), (49, 34142), (56, 34097), (59, 34085), (62, 34043), (69, 34004), (86, 33845), (88, 33836), (93, 33809), (94, 33797), (104, 33710), (107, 33680), (108, 33677), (109, 33665), (112, 33650), (113, 33641), (115, 33608), (116, 33602), (125, 33551), (129, 33491), (133, 33446), (139, 33398), (145, 33332),

Gene: Anilorac_47 Start: 35243, Stop: 34311, Start Num: 33

Candidate Starts for Anilorac_47:

(Start: 33 @35243 has 153 MA's), (45, 35183), (49, 35141), (52, 35117), (56, 35096), (70, 34997), (76, 34955), (77, 34952), (80, 34928), (86, 34841), (88, 34832), (100, 34730), (116, 34601), (120, 34586), (125, 34550), (133, 34442), (139, 34394),

Gene: Antoinette_48 Start: 35308, Stop: 34376, Start Num: 33

Candidate Starts for Antoinette_48:

(5, 35488), (6, 35473), (13, 35410), (Start: 33 @35308 has 153 MA's), (49, 35206), (56, 35161), (57, 35158), (76, 35020), (77, 35017), (86, 34906), (88, 34897), (100, 34795), (116, 34666), (120, 34651), (125, 34615), (133, 34507), (139, 34459), (144, 34396),

Gene: AranulaLuti_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for AranulaLuti_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: Asta_47 Start: 35030, Stop: 34098, Start Num: 33

Candidate Starts for Asta_47:

(Start: 33 @35030 has 153 MA's), (49, 34928), (56, 34883), (57, 34880), (70, 34784), (76, 34742), (77, 34739), (86, 34628), (88, 34619), (100, 34517), (107, 34466), (116, 34388), (120, 34373), (125, 34337), (133, 34229), (139, 34181), (144, 34118),

Gene: Aubergine_47 Start: 35030, Stop: 34098, Start Num: 33

Candidate Starts for Aubergine_47:

(Start: 33 @35030 has 153 MA's), (49, 34928), (56, 34883), (57, 34880), (70, 34784), (76, 34742), (77, 34739), (86, 34628), (88, 34619), (100, 34517), (107, 34466), (116, 34388), (120, 34373), (125, 34337), (133, 34229), (139, 34181), (144, 34118),

Gene: AxiPup_48 Start: 35287, Stop: 34355, Start Num: 33

Candidate Starts for AxiPup_48:

(Start: 33 @35287 has 153 MA's), (49, 35185), (56, 35140), (57, 35137), (76, 34999), (77, 34996), (86, 34885), (88, 34876), (100, 34774), (116, 34645), (120, 34630), (125, 34594), (133, 34486), (139, 34438), (144, 34375),

Gene: Baines_47 Start: 35023, Stop: 34091, Start Num: 33

Candidate Starts for Baines_47:

(Start: 33 @35023 has 153 MA's), (49, 34921), (56, 34876), (57, 34873), (70, 34777), (76, 34735), (77, 34732), (86, 34621), (88, 34612), (100, 34510), (107, 34459), (116, 34381), (120, 34366), (125, 34330), (133, 34222), (139, 34174), (144, 34111),

Gene: Balsa_47 Start: 35285, Stop: 34353, Start Num: 33

Candidate Starts for Balsa_47:

(Start: 25 @35306 has 6 MA's), (Start: 33 @35285 has 153 MA's), (45, 35225), (49, 35183), (51, 35165), (52, 35159), (53, 35147), (56, 35138), (63, 35081), (70, 35039), (76, 34997), (77, 34994), (80, 34970), (86, 34883), (88, 34874), (100, 34772), (109, 34706), (116, 34643), (120, 34628), (133, 34484), (139, 34436),

Gene: Bandik_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Bandik_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: BaronJohn_48 Start: 34463, Stop: 33489, Start Num: 29

Candidate Starts for BaronJohn_48:

(23, 34487), (26, 34478), (Start: 29 @34463 has 21 MA's), (Start: 33 @34451 has 153 MA's), (37, 34430), (46, 34364), (56, 34301), (63, 34244), (65, 34232), (69, 34205), (71, 34193), (76, 34160), (77, 34157), (83, 34094), (93, 34007), (99, 33944), (107, 33881), (112, 33851), (113, 33842), (116, 33803), (132, 33647), (135, 33626), (137, 33617), (138, 33596), (140, 33581), (144, 33530), (146, 33518),

(149, 33494),

Gene: BaronJohn_47 Start: 33492, Stop: 32554, Start Num: 33

Candidate Starts for BaronJohn_47:

(Start: 33 @33492 has 153 MA's), (41, 33456), (45, 33432), (55, 33348), (56, 33345), (66, 33273), (76, 33201), (77, 33198), (78, 33195), (79, 33183), (82, 33165), (94, 33039), (100, 32976), (107, 32925), (116, 32847), (122, 32808), (125, 32796), (136, 32664), (139, 32640), (145, 32574),

Gene: BeautPeep30_48 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for BeautPeep30_48:

(5, 35499), (6, 35484), (13, 35421), (Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (107, 34755), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: BeeBee8_49 Start: 35477, Stop: 34524, Start Num: 25

Candidate Starts for BeeBee8_49:

(Start: 25 @35477 has 6 MA's), (Start: 33 @35456 has 153 MA's), (45, 35396), (49, 35354), (51, 35336), (52, 35330), (53, 35318), (56, 35309), (63, 35252), (70, 35210), (76, 35168), (77, 35165), (80, 35141), (86, 35054), (88, 35045), (89, 35036), (100, 34943), (109, 34877), (116, 34814), (120, 34799), (133, 34655), (139, 34607),

Gene: Benjalauren_48 Start: 35036, Stop: 34104, Start Num: 33

Candidate Starts for Benjalauren_48:

(Start: 33 @35036 has 153 MA's), (49, 34934), (56, 34889), (57, 34886), (76, 34748), (77, 34745), (86, 34634), (88, 34625), (100, 34523), (116, 34394), (120, 34379), (125, 34343), (133, 34235), (139, 34187), (144, 34124),

Gene: BigRedClifford_48 Start: 35314, Stop: 34382, Start Num: 33

Candidate Starts for BigRedClifford_48:

(Start: 33 @35314 has 153 MA's), (49, 35212), (56, 35167), (57, 35164), (76, 35026), (77, 35023), (86, 34912), (88, 34903), (100, 34801), (116, 34672), (120, 34657), (125, 34621), (133, 34513), (139, 34465),

Gene: Blage_48 Start: 35314, Stop: 34382, Start Num: 33

Candidate Starts for Blage_48:

(Start: 33 @35314 has 153 MA's), (49, 35212), (56, 35167), (57, 35164), (76, 35026), (77, 35023), (86, 34912), (88, 34903), (100, 34801), (116, 34672), (120, 34657), (125, 34621), (133, 34513), (139, 34465),

Gene: BonesMcCoy_48 Start: 35314, Stop: 34382, Start Num: 33

Candidate Starts for BonesMcCoy_48:

(Start: 33 @35314 has 153 MA's), (49, 35212), (56, 35167), (57, 35164), (76, 35026), (77, 35023), (86, 34912), (88, 34903), (100, 34801), (116, 34672), (120, 34657), (125, 34621), (133, 34513), (139, 34465),

Gene: Bonino_47 Start: 35009, Stop: 34077, Start Num: 33

Candidate Starts for Bonino_47:

(Start: 33 @35009 has 153 MA's), (49, 34907), (56, 34862), (57, 34859), (70, 34763), (76, 34721), (77, 34718), (86, 34607), (88, 34598), (100, 34496), (107, 34445), (116, 34367), (120, 34352), (125, 34316), (133, 34208), (139, 34160), (144, 34097),

Gene: Byron23_49 Start: 35316, Stop: 34384, Start Num: 33

Candidate Starts for Byron23_49:

(5, 35496), (6, 35481), (13, 35418), (Start: 33 @35316 has 153 MA's), (49, 35214), (56, 35169), (57, 35166), (76, 35028), (77, 35025), (86, 34914), (88, 34905), (100, 34803), (107, 34752), (116, 34674), (120, 34659), (125, 34623), (133, 34515), (139, 34467), (144, 34404),

Gene: Calix_47 Start: 35016, Stop: 34084, Start Num: 33

Candidate Starts for Calix_47:

(Start: 33 @35016 has 153 MA's), (49, 34914), (56, 34869), (57, 34866), (70, 34770), (76, 34728), (77, 34725), (86, 34614), (88, 34605), (100, 34503), (107, 34452), (116, 34374), (120, 34359), (125, 34323), (133, 34215), (139, 34167), (144, 34104),

Gene: CaptainRex_46 Start: 32725, Stop: 31787, Start Num: 33

Candidate Starts for CaptainRex_46:

(Start: 33 @32725 has 153 MA's), (41, 32689), (45, 32665), (55, 32581), (56, 32578), (66, 32506), (68, 32494), (77, 32431), (78, 32428), (79, 32416), (82, 32398), (94, 32272), (100, 32209), (107, 32158), (116, 32080), (122, 32041), (125, 32029), (136, 31897), (139, 31873), (145, 31807),

Gene: CaptainRex_47 Start: 33696, Stop: 32722, Start Num: 29

Candidate Starts for CaptainRex_47:

(23, 33720), (26, 33711), (Start: 29 @33696 has 21 MA's), (Start: 33 @33684 has 153 MA's), (37, 33663), (46, 33597), (56, 33534), (63, 33477), (65, 33465), (69, 33438), (71, 33426), (76, 33393), (77, 33390), (83, 33327), (93, 33240), (99, 33177), (107, 33114), (112, 33084), (113, 33075), (116, 33036), (132, 32880), (137, 32850), (138, 32829), (140, 32814), (146, 32751),

Gene: CarisSwetlik_50 Start: 35865, Stop: 34930, Start Num: 28

Candidate Starts for CarisSwetlik_50:

(Start: 28 @35865 has 4 MA's), (49, 35760), (56, 35715), (76, 35574), (77, 35571), (92, 35427), (100, 35349), (107, 35298), (108, 35295), (116, 35220), (120, 35205), (125, 35169), (133, 35061), (139, 35013),

Gene: Carostasia_45 Start: 33807, Stop: 32875, Start Num: 33

Candidate Starts for Carostasia_45:

(1, 34137), (9, 33939), (10, 33912), (23, 33831), (26, 33822), (Start: 33 @33807 has 153 MA's), (45, 33744), (52, 33678), (56, 33657), (63, 33600), (77, 33516), (86, 33405), (88, 33396), (96, 33345), (98, 33333), (100, 33294), (108, 33240), (109, 33228), (110, 33219), (114, 33186), (115, 33171), (117, 33159), (120, 33150), (123, 33123), (124, 33117), (136, 32982), (139, 32958), (143, 32904),

Gene: Chako_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for Chako_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: Chamuel_47 Start: 35042, Stop: 34110, Start Num: 33

Candidate Starts for Chamuel_47:

(Start: 33 @35042 has 153 MA's), (49, 34940), (56, 34895), (57, 34892), (70, 34796), (76, 34754), (77, 34751), (86, 34640), (88, 34631), (100, 34529), (107, 34478), (116, 34400), (120, 34385), (125, 34349), (133, 34241), (139, 34193), (144, 34130),

Gene: Cheeto1_48 Start: 34781, Stop: 33852, Start Num: 30

Candidate Starts for Cheeto1_48:

(24, 34802), (Start: 27 @34793 has 1 MA's), (Start: 30 @34781 has 3 MA's), (45, 34721), (49, 34679), (53, 34643), (56, 34634), (77, 34493), (100, 34271), (108, 34217), (109, 34205), (116, 34142), (120, 34127), (125, 34091), (133, 33983), (139, 33935),

Gene: Chepli_47 Start: 33609, Stop: 32677, Start Num: 40

Candidate Starts for Chepli_47:

(Start: 25 @33681 has 6 MA's), (Start: 40 @33609 has 6 MA's), (47, 33552), (48, 33549), (50, 33528), (54, 33504), (62, 33444), (64, 33435), (72, 33390), (73, 33387), (74, 33375), (78, 33354), (80, 33333), (102, 33132), (109, 33090), (118, 33012), (121, 32988), (125, 32970), (127, 32922), (131, 32862), (139, 32802), (147, 32724),

Gene: ChickenKing_46 Start: 34674, Stop: 33745, Start Num: 30

Candidate Starts for ChickenKing_46:

(24, 34695), (Start: 27 @34686 has 1 MA's), (Start: 30 @34674 has 3 MA's), (45, 34614), (49, 34572), (53, 34536), (56, 34527), (77, 34386), (80, 34362), (100, 34164), (108, 34110), (109, 34098), (116, 34035), (120, 34020), (125, 33984), (133, 33876), (139, 33828),

Gene: ChikPic_46 Start: 34098, Stop: 33148, Start Num: 33

Candidate Starts for ChikPic_46:

(24, 34119), (Start: 27 @34110 has 1 MA's), (Start: 33 @34098 has 153 MA's), (45, 34038), (49, 33996), (55, 33954), (56, 33951), (57, 33948), (62, 33897), (69, 33858), (86, 33699), (88, 33690), (93, 33663), (94, 33651), (104, 33564), (107, 33534), (108, 33531), (109, 33519), (112, 33504), (113, 33495), (115, 33462), (116, 33456), (125, 33405), (129, 33345), (133, 33300), (139, 33252), (145, 33186),

Gene: Christoph_47 Start: 35029, Stop: 34097, Start Num: 33

Candidate Starts for Christoph_47:

(Start: 33 @35029 has 153 MA's), (49, 34927), (56, 34882), (57, 34879), (70, 34783), (76, 34741), (77, 34738), (86, 34627), (88, 34618), (100, 34516), (107, 34465), (116, 34387), (120, 34372), (125, 34336), (133, 34228), (139, 34180), (144, 34117),

Gene: Clancy_47 Start: 35065, Stop: 34133, Start Num: 33

Candidate Starts for Clancy_47:

(Start: 33 @35065 has 153 MA's), (49, 34963), (56, 34918), (57, 34915), (76, 34777), (77, 34774), (86, 34663), (88, 34654), (100, 34552), (116, 34423), (120, 34408), (125, 34372), (133, 34264), (139, 34216), (144, 34153),

Gene: Clock_45 Start: 35450, Stop: 34515, Start Num: 29

Candidate Starts for Clock_45:

(20, 35492), (Start: 29 @35450 has 21 MA's), (53, 35309), (56, 35300), (57, 35297), (62, 35246), (68, 35219), (76, 35159), (77, 35156), (78, 35153), (79, 35141), (82, 35123), (93, 35009), (94, 34997), (100, 34934), (105, 34910), (116, 34805), (125, 34754), (136, 34622), (139, 34598), (145, 34532),

Gene: ColaCorta_46 Start: 34244, Stop: 33294, Start Num: 33

Candidate Starts for ColaCorta_46:

(24, 34265), (Start: 27 @34256 has 1 MA's), (Start: 33 @34244 has 153 MA's), (45, 34184), (49, 34142), (56, 34097), (59, 34085), (62, 34043), (69, 34004), (86, 33845), (88, 33836), (93, 33809), (94, 33797), (104, 33710), (107, 33680), (108, 33677), (109, 33665), (112, 33650), (113, 33641), (115, 33608), (116, 33602), (125, 33551), (129, 33491), (133, 33446), (139, 33398), (145, 33332),

Gene: Convict_48 Start: 35314, Stop: 34382, Start Num: 33

Candidate Starts for Convict_48:

(Start: 33 @35314 has 153 MA's), (49, 35212), (56, 35167), (57, 35164), (76, 35026), (77, 35023), (86, 34912), (88, 34903), (100, 34801), (116, 34672), (120, 34657), (125, 34621), (133, 34513), (139, 34465),

Gene: CoraRita_47 Start: 35035, Stop: 34103, Start Num: 33

Candidate Starts for CoraRita_47:

(Start: 33 @35035 has 153 MA's), (49, 34933), (56, 34888), (57, 34885), (76, 34747), (77, 34744), (86, 34633), (88, 34624), (100, 34522), (116, 34393), (120, 34378), (125, 34342), (133, 34234), (139, 34186), (144, 34123),

Gene: Dave_48 Start: 35308, Stop: 34376, Start Num: 33

Candidate Starts for Dave_48:

(5, 35488), (6, 35473), (13, 35410), (Start: 33 @35308 has 153 MA's), (49, 35206), (56, 35161), (57, 35158), (76, 35020), (77, 35017), (86, 34906), (88, 34897), (100, 34795), (116, 34666), (120, 34651), (125, 34615), (133, 34507), (139, 34459), (144, 34396),

Gene: Delphidian_48 Start: 35316, Stop: 34384, Start Num: 33

Candidate Starts for Delphidian_48:

(5, 35496), (6, 35481), (13, 35418), (Start: 33 @35316 has 153 MA's), (49, 35214), (56, 35169), (57, 35166), (76, 35028), (77, 35025), (86, 34914), (88, 34905), (100, 34803), (116, 34674), (120, 34659), (125, 34623), (133, 34515), (139, 34467), (144, 34404),

Gene: Den3_48 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for Den3_48:

(Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470),

Gene: Dothraki_48 Start: 35316, Stop: 34384, Start Num: 33

Candidate Starts for Dothraki_48:

(5, 35496), (6, 35481), (13, 35418), (Start: 33 @35316 has 153 MA's), (49, 35214), (56, 35169), (57, 35166), (76, 35028), (77, 35025), (86, 34914), (88, 34905), (100, 34803), (107, 34752), (116, 34674), (120, 34659), (125, 34623), (133, 34515), (139, 34467), (144, 34404),

Gene: Duocatuli_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for Duocatuli_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (107, 34456), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: Eleri_46 Start: 34088, Stop: 33138, Start Num: 33

Candidate Starts for Eleri_46:

(24, 34109), (Start: 27 @34100 has 1 MA's), (Start: 33 @34088 has 153 MA's), (45, 34028), (49, 33986), (56, 33941), (59, 33929), (62, 33887), (69, 33848), (86, 33689), (88, 33680), (93, 33653), (94, 33641), (104, 33554), (107, 33524), (108, 33521), (109, 33509), (112, 33494), (113, 33485), (115, 33452), (116, 33446), (125, 33395), (129, 33335), (133, 33290), (139, 33242), (145, 33176),

Gene: Endor_49 Start: 35511, Stop: 34579, Start Num: 33

Candidate Starts for Endor_49:

(Start: 33 @35511 has 153 MA's), (49, 35409), (52, 35385), (53, 35373), (56, 35364), (63, 35307), (70, 35265), (76, 35223), (77, 35220), (80, 35196), (86, 35109), (88, 35100), (100, 34998), (116, 34869), (120, 34854), (125, 34818), (133, 34710), (139, 34662),

Gene: Erla_47 Start: 35013, Stop: 34081, Start Num: 33

Candidate Starts for Erla_47:

(Start: 33 @35013 has 153 MA's), (49, 34911), (56, 34866), (57, 34863), (70, 34767), (76, 34725), (77, 34722), (86, 34611), (88, 34602), (100, 34500), (107, 34449), (116, 34371), (120, 34356), (125,

34320), (133, 34212), (139, 34164), (144, 34101),

Gene: Espinosa_47 Start: 35028, Stop: 34096, Start Num: 33

Candidate Starts for Espinosa_47:

(Start: 33 @35028 has 153 MA's), (49, 34926), (56, 34881), (57, 34878), (70, 34782), (76, 34740), (77, 34737), (86, 34626), (88, 34617), (100, 34515), (107, 34464), (116, 34386), (120, 34371), (125, 34335), (133, 34227), (139, 34179), (144, 34116),

Gene: Etna_48 Start: 35332, Stop: 34400, Start Num: 33

Candidate Starts for Etna_48:

(Start: 25 @35353 has 6 MA's), (Start: 33 @35332 has 153 MA's), (45, 35272), (49, 35230), (51, 35212), (52, 35206), (53, 35194), (76, 35044), (77, 35041), (80, 35017), (86, 34930), (88, 34921), (100, 34819), (109, 34753), (116, 34690), (120, 34675), (133, 34531), (139, 34483),

Gene: Etta_47 Start: 35017, Stop: 34085, Start Num: 33

Candidate Starts for Etta_47:

(Start: 33 @35017 has 153 MA's), (49, 34915), (56, 34870), (57, 34867), (70, 34771), (76, 34729), (77, 34726), (86, 34615), (88, 34606), (100, 34504), (116, 34375), (120, 34360), (125, 34324), (133, 34216), (139, 34168), (144, 34105),

Gene: Exploradora_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for Exploradora_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (70, 34774), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (107, 34456), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: FarmerDoug_47 Start: 35017, Stop: 34085, Start Num: 33

Candidate Starts for FarmerDoug_47:

(16, 35086), (23, 35047), (Start: 33 @35017 has 153 MA's), (49, 34915), (56, 34870), (76, 34729), (77, 34726), (86, 34615), (88, 34606), (100, 34504), (109, 34438), (116, 34375), (120, 34360), (133, 34216), (139, 34168),

Gene: Figueroism_48 Start: 35307, Stop: 34375, Start Num: 33

Candidate Starts for Figueroism_48:

(Start: 33 @35307 has 153 MA's), (49, 35205), (56, 35160), (57, 35157), (76, 35019), (77, 35016), (86, 34905), (88, 34896), (100, 34794), (107, 34743), (116, 34665), (120, 34650), (125, 34614), (133, 34506), (139, 34458), (144, 34395),

Gene: Finny_47 Start: 34082, Stop: 33132, Start Num: 33

Candidate Starts for Finny_47:

(24, 34103), (Start: 27 @34094 has 1 MA's), (Start: 33 @34082 has 153 MA's), (45, 34022), (49, 33980), (55, 33938), (56, 33935), (57, 33932), (62, 33881), (69, 33842), (86, 33683), (88, 33674), (93, 33647), (94, 33635), (100, 33572), (104, 33548), (107, 33518), (108, 33515), (109, 33503), (112, 33488), (113, 33479), (115, 33446), (116, 33440), (125, 33389), (128, 33338), (129, 33329), (133, 33284), (139, 33236), (145, 33170),

Gene: Fulton_47 Start: 33697, Stop: 32723, Start Num: 29

Candidate Starts for Fulton_47:

(23, 33721), (26, 33712), (Start: 29 @33697 has 21 MA's), (Start: 33 @33685 has 153 MA's), (37, 33664), (46, 33598), (56, 33535), (63, 33478), (65, 33466), (69, 33439), (71, 33427), (76, 33394), (77, 33391), (83, 33328), (93, 33241), (99, 33178), (107, 33115), (112, 33085), (113, 33076), (116, 33037), (132, 32881), (137, 32851), (138, 32830), (140, 32815), (146, 32752),

Gene: Fulton_46 Start: 32726, Stop: 31788, Start Num: 33

Candidate Starts for Fulton_46:

(Start: 33 @32726 has 153 MA's), (41, 32690), (45, 32666), (55, 32582), (56, 32579), (66, 32507), (68, 32495), (76, 32435), (77, 32432), (78, 32429), (79, 32417), (82, 32399), (94, 32273), (100, 32210), (107, 32159), (116, 32081), (122, 32042), (125, 32030), (136, 31898), (139, 31874), (145, 31808),

Gene: GaeCeo_48 Start: 34907, Stop: 33978, Start Num: 30

Candidate Starts for GaeCeo_48:

(24, 34928), (Start: 27 @34919 has 1 MA's), (Start: 30 @34907 has 3 MA's), (45, 34847), (49, 34805), (53, 34769), (56, 34760), (77, 34619), (80, 34595), (100, 34397), (108, 34343), (109, 34331), (116, 34268), (120, 34253), (125, 34217), (133, 34109), (139, 34061),

Gene: GardenB_48 Start: 35273, Stop: 34341, Start Num: 33

Candidate Starts for GardenB_48:

(15, 35363), (Start: 33 @35273 has 153 MA's), (45, 35213), (49, 35171), (52, 35147), (53, 35135), (56, 35126), (70, 35027), (76, 34985), (77, 34982), (86, 34871), (88, 34862), (100, 34760), (108, 34706), (109, 34694), (116, 34631), (120, 34616), (125, 34580), (133, 34472), (139, 34424),

Gene: Garey24_48 Start: 34996, Stop: 34064, Start Num: 33

Candidate Starts for Garey24_48:

(Start: 33 @34996 has 153 MA's), (49, 34894), (56, 34849), (57, 34846), (70, 34750), (76, 34708), (77, 34705), (86, 34594), (88, 34585), (100, 34483), (107, 34432), (116, 34354), (120, 34339), (125, 34303), (133, 34195), (139, 34147), (144, 34084),

Gene: Gargoyle_48 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for Gargoyle_48:

(Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470),

Gene: Gelo_47 Start: 35023, Stop: 34091, Start Num: 33

Candidate Starts for Gelo_47:

(Start: 33 @35023 has 153 MA's), (49, 34921), (56, 34876), (57, 34873), (70, 34777), (76, 34735), (77, 34732), (86, 34621), (88, 34612), (100, 34510), (107, 34459), (116, 34381), (120, 34366), (125, 34330), (133, 34222), (139, 34174), (144, 34111),

Gene: Gershwin_47 Start: 35030, Stop: 34098, Start Num: 33

Candidate Starts for Gershwin_47:

(Start: 33 @35030 has 153 MA's), (49, 34928), (56, 34883), (57, 34880), (70, 34784), (76, 34742), (77, 34739), (86, 34628), (88, 34619), (100, 34517), (107, 34466), (116, 34388), (120, 34373), (125, 34337), (133, 34229), (139, 34181), (144, 34118),

Gene: Glamour_46 Start: 34236, Stop: 33286, Start Num: 33

Candidate Starts for Glamour_46:

(24, 34257), (Start: 27 @34248 has 1 MA's), (Start: 33 @34236 has 153 MA's), (45, 34176), (49, 34134), (56, 34089), (59, 34077), (62, 34035), (69, 33996), (86, 33837), (88, 33828), (93, 33801), (94, 33789), (104, 33702), (107, 33672), (108, 33669), (109, 33657), (112, 33642), (113, 33633), (115, 33600), (116, 33594), (125, 33543), (129, 33483), (133, 33438), (139, 33390), (145, 33324),

Gene: GoingMerry_49 Start: 35297, Stop: 34365, Start Num: 33

Candidate Starts for GoingMerry_49:

(Start: 33 @35297 has 153 MA's), (49, 35195), (56, 35150), (57, 35147), (70, 35051), (76, 35009), (77, 35006), (86, 34895), (88, 34886), (100, 34784), (107, 34733), (116, 34655), (120, 34640), (125,

34604), (133, 34496), (139, 34448),

Gene: GoneGirl_49 Start: 35266, Stop: 34334, Start Num: 33

Candidate Starts for GoneGirl_49:

(15, 35356), (Start: 33 @35266 has 153 MA's), (45, 35206), (49, 35164), (52, 35140), (53, 35128), (56, 35119), (70, 35020), (76, 34978), (77, 34975), (86, 34864), (88, 34855), (100, 34753), (108, 34699), (109, 34687), (116, 34624), (120, 34609), (125, 34573), (133, 34465), (139, 34417),

Gene: Greenlvy_45 Start: 33081, Stop: 32143, Start Num: 33

Candidate Starts for Greenlvy_45:

(Start: 33 @33081 has 153 MA's), (41, 33045), (45, 33021), (55, 32937), (56, 32934), (66, 32862), (76, 32790), (77, 32787), (78, 32784), (79, 32772), (82, 32754), (94, 32628), (100, 32565), (107, 32514), (116, 32436), (122, 32397), (125, 32385), (136, 32253), (139, 32229), (145, 32163),

Gene: Greenlvy_46 Start: 34052, Stop: 33078, Start Num: 29

Candidate Starts for Greenlvy_46:

(23, 34076), (26, 34067), (Start: 29 @34052 has 21 MA's), (Start: 33 @34040 has 153 MA's), (37, 34019), (46, 33953), (56, 33890), (63, 33833), (65, 33821), (69, 33794), (71, 33782), (76, 33749), (77, 33746), (83, 33683), (93, 33596), (99, 33533), (106, 33476), (107, 33470), (112, 33440), (113, 33431), (116, 33392), (132, 33236), (137, 33206), (138, 33185), (140, 33170), (144, 33119), (146, 33107), (149, 33083),

Gene: Greys_48 Start: 35315, Stop: 34383, Start Num: 33

Candidate Starts for Greys_48:

(Start: 33 @35315 has 153 MA's), (49, 35213), (56, 35168), (57, 35165), (76, 35027), (77, 35024), (86, 34913), (88, 34904), (100, 34802), (116, 34673), (120, 34658), (125, 34622), (133, 34514), (139, 34466), (144, 34403),

Gene: Gubbabump_47 Start: 35010, Stop: 34078, Start Num: 33

Candidate Starts for Gubbabump_47:

(Start: 33 @35010 has 153 MA's), (49, 34908), (56, 34863), (57, 34860), (70, 34764), (76, 34722), (77, 34719), (86, 34608), (88, 34599), (100, 34497), (107, 34446), (116, 34368), (120, 34353), (125, 34317), (133, 34209), (139, 34161), (144, 34098),

Gene: HairyMan_43 Start: 33680, Stop: 32742, Start Num: 33

Candidate Starts for HairyMan_43:

(4, 33872), (7, 33839), (24, 33704), (Start: 27 @33695 has 1 MA's), (Start: 33 @33680 has 153 MA's), (38, 33653), (49, 33572), (53, 33536), (63, 33470), (77, 33383), (78, 33380), (80, 33359), (87, 33269), (90, 33248), (108, 33107), (116, 33032), (120, 33017), (125, 32981), (133, 32873), (134, 32861), (139, 32825),

Gene: Hamlet_48 Start: 35277, Stop: 34345, Start Num: 33

Candidate Starts for Hamlet_48:

(Start: 25 @35298 has 6 MA's), (Start: 33 @35277 has 153 MA's), (45, 35217), (49, 35175), (51, 35157), (52, 35151), (53, 35139), (56, 35130), (70, 35031), (76, 34989), (77, 34986), (80, 34962), (86, 34875), (88, 34866), (100, 34764), (109, 34698), (116, 34635), (120, 34620), (133, 34476), (139, 34428),

Gene: HanSolo_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for HanSolo_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: HankSprout_48 Start: 34897, Stop: 33965, Start Num: 33

Candidate Starts for HankSprout_48:

(Start: 33 @34897 has 153 MA's), (49, 34795), (56, 34750), (57, 34747), (76, 34609), (77, 34606), (86, 34495), (88, 34486), (100, 34384), (107, 34333), (116, 34255), (120, 34240), (125, 34204), (133, 34096), (139, 34048), (144, 33985),

Gene: Hasitha_46 Start: 32738, Stop: 31800, Start Num: 33

Candidate Starts for Hasitha_46:

(Start: 33 @32738 has 153 MA's), (41, 32702), (45, 32678), (55, 32594), (56, 32591), (66, 32519), (68, 32507), (77, 32444), (78, 32441), (79, 32429), (82, 32411), (94, 32285), (100, 32222), (107, 32171), (116, 32093), (122, 32054), (125, 32042), (136, 31910), (139, 31886), (145, 31820),

Gene: Hasitha_47 Start: 33709, Stop: 32735, Start Num: 29

Candidate Starts for Hasitha_47:

(23, 33733), (26, 33724), (Start: 29 @33709 has 21 MA's), (Start: 33 @33697 has 153 MA's), (37, 33676), (46, 33610), (56, 33547), (63, 33490), (65, 33478), (69, 33451), (71, 33439), (76, 33406), (77, 33403), (83, 33340), (93, 33253), (99, 33190), (107, 33127), (112, 33097), (113, 33088), (116, 33049), (132, 32893), (137, 32863), (138, 32842), (140, 32827), (146, 32764),

Gene: HavenFinLeoSun_50 Start: 35431, Stop: 34496, Start Num: 32

Candidate Starts for HavenFinLeoSun_50:

(24, 35455), (Start: 32 @35431 has 1 MA's), (49, 35326), (56, 35281), (63, 35224), (70, 35182), (76, 35140), (77, 35137), (92, 34993), (100, 34915), (107, 34864), (108, 34861), (116, 34786), (120, 34771), (125, 34735), (133, 34627), (139, 34579),

Gene: HerculesXL_44 Start: 32838, Stop: 31888, Start Num: 29

Candidate Starts for HerculesXL_44:

(12, 32940), (13, 32937), (Start: 29 @32838 has 21 MA's), (45, 32775), (49, 32733), (53, 32697), (69, 32595), (77, 32547), (88, 32430), (93, 32403), (94, 32391), (100, 32328), (104, 32304), (107, 32274), (108, 32271), (109, 32259), (112, 32244), (113, 32235), (116, 32196), (125, 32145), (133, 32040), (145, 31926),

Gene: HungryHenry_47 Start: 35025, Stop: 34093, Start Num: 33

Candidate Starts for HungryHenry_47:

(Start: 33 @35025 has 153 MA's), (49, 34923), (56, 34878), (57, 34875), (76, 34737), (77, 34734), (86, 34623), (88, 34614), (100, 34512), (116, 34383), (120, 34368), (125, 34332), (133, 34224), (139, 34176), (144, 34113),

Gene: Ilzat_47 Start: 35036, Stop: 34104, Start Num: 33

Candidate Starts for Ilzat_47:

(Start: 33 @35036 has 153 MA's), (49, 34934), (56, 34889), (57, 34886), (76, 34748), (77, 34745), (86, 34634), (88, 34625), (100, 34523), (116, 34394), (120, 34379), (125, 34343), (133, 34235), (139, 34187), (144, 34124),

Gene: Inventa_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Inventa_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: loannes_48 Start: 35317, Stop: 34385, Start Num: 33

Candidate Starts for loannes_48:

(Start: 33 @35317 has 153 MA's), (49, 35215), (56, 35170), (57, 35167), (76, 35029), (77, 35026), (86, 34915), (88, 34906), (100, 34804), (107, 34753), (116, 34675), (120, 34660), (125, 34624), (133, 34516), (139, 34468), (144, 34405),

Gene: Ixel_47 Start: 34521, Stop: 33565, Start Num: 29

Candidate Starts for Ixel_47:

(17, 34578), (Start: 29 @34521 has 21 MA's), (45, 34458), (49, 34416), (53, 34380), (69, 34278), (77, 34230), (86, 34116), (88, 34107), (93, 34080), (104, 33981), (108, 33948), (109, 33936), (112, 33921), (113, 33912), (116, 33873), (135, 33699), (145, 33603),

Gene: Janus167_47 Start: 35050, Stop: 34085, Start Num: 31

Candidate Starts for Janus167_47:

(Start: 31 @35050 has 2 MA's), (38, 34996), (42, 34972), (49, 34915), (52, 34891), (56, 34870), (60, 34852), (70, 34771), (76, 34729), (77, 34726), (84, 34648), (85, 34636), (88, 34606), (92, 34582), (93, 34579), (107, 34453), (116, 34375), (120, 34360), (125, 34324), (133, 34216), (139, 34168), (144, 34105),

Gene: JasonD_50 Start: 35414, Stop: 34479, Start Num: 28

Candidate Starts for JasonD_50:

(Start: 28 @35414 has 4 MA's), (49, 35309), (56, 35264), (76, 35123), (77, 35120), (92, 34976), (100, 34898), (107, 34847), (108, 34844), (116, 34769), (120, 34754), (125, 34718), (133, 34610), (139, 34562),

Gene: JasperRussell_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for JasperRussell_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: Jemerald_47 Start: 34687, Stop: 33734, Start Num: 27

Candidate Starts for Jemerald_47:

(24, 34696), (Start: 27 @34687 has 1 MA's), (Start: 33 @34675 has 153 MA's), (45, 34615), (53, 34537), (58, 34522), (61, 34507), (69, 34435), (75, 34405), (76, 34390), (77, 34387), (88, 34264), (91, 34246), (93, 34237), (97, 34204), (108, 34108), (112, 34081), (113, 34072), (115, 34039), (116, 34033), (119, 34021), (122, 33994), (133, 33877), (135, 33859), (136, 33853), (139, 33829), (140, 33817),

Gene: Jenos_51 Start: 36143, Stop: 35208, Start Num: 28

Candidate Starts for Jenos_51:

(Start: 28 @36143 has 4 MA's), (49, 36038), (56, 35993), (76, 35852), (77, 35849), (92, 35705), (100, 35627), (107, 35576), (108, 35573), (116, 35498), (120, 35483), (125, 35447), (133, 35339), (139, 35291),

Gene: Jerbirus_49 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for Jerbirus_49:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (70, 34774), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (107, 34456), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: JeriBeth_47 Start: 34883, Stop: 33951, Start Num: 33

Candidate Starts for JeriBeth_47:

(Start: 33 @34883 has 153 MA's), (49, 34781), (56, 34736), (57, 34733), (76, 34595), (77, 34592), (86, 34481), (88, 34472), (100, 34370), (116, 34241), (120, 34226), (125, 34190), (133, 34082), (139,

34034), (144, 33971),

Gene: Juanyo_45 Start: 33711, Stop: 32779, Start Num: 40

Candidate Starts for Juanyo_45:

(3, 33981), (22, 33789), (34, 33735), (37, 33726), (Start: 40 @33711 has 6 MA's), (43, 33696), (44, 33690), (50, 33630), (54, 33606), (62, 33546), (64, 33537), (72, 33492), (73, 33489), (78, 33456), (80, 33435), (98, 33285), (102, 33234), (109, 33192), (111, 33180), (118, 33114), (121, 33090), (127, 33024), (135, 32934), (139, 32904), (147, 32826), (148, 32817),

Gene: Juicer_47 Start: 34675, Stop: 33734, Start Num: 33

Candidate Starts for Juicer_47:

(24, 34696), (Start: 27 @34687 has 1 MA's), (Start: 33 @34675 has 153 MA's), (45, 34615), (53, 34537), (58, 34522), (61, 34507), (69, 34435), (75, 34405), (76, 34390), (77, 34387), (88, 34264), (91, 34246), (93, 34237), (97, 34204), (108, 34108), (112, 34081), (113, 34072), (115, 34039), (116, 34033), (119, 34021), (122, 33994), (133, 33877), (135, 33859), (136, 33853), (139, 33829), (140, 33817),

Gene: Kale_47 Start: 35032, Stop: 34100, Start Num: 33

Candidate Starts for Kale_47:

(Start: 33 @35032 has 153 MA's), (49, 34930), (56, 34885), (57, 34882), (70, 34786), (76, 34744), (77, 34741), (86, 34630), (88, 34621), (100, 34519), (107, 34468), (116, 34390), (120, 34375), (125, 34339), (133, 34231), (139, 34183), (144, 34120),

Gene: KannH_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for KannH_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: KatChan_47 Start: 33621, Stop: 32689, Start Num: 40

Candidate Starts for KatChan_47:

(Start: 25 @33693 has 6 MA's), (Start: 40 @33621 has 6 MA's), (47, 33564), (48, 33561), (50, 33540), (54, 33516), (62, 33456), (64, 33447), (72, 33402), (73, 33399), (74, 33387), (78, 33366), (80, 33345), (94, 33219), (98, 33195), (102, 33144), (109, 33102), (118, 33024), (121, 33000), (125, 32982), (127, 32934), (131, 32874), (139, 32814), (147, 32736),

Gene: Kavo_44 Start: 32888, Stop: 31932, Start Num: 29

Candidate Starts for Kavo_44:

(14, 32981), (Start: 29 @32888 has 21 MA's), (45, 32825), (49, 32783), (53, 32747), (69, 32645), (77, 32597), (88, 32474), (93, 32447), (94, 32435), (100, 32372), (104, 32348), (107, 32318), (108, 32315), (109, 32303), (112, 32288), (113, 32279), (116, 32240), (125, 32189), (129, 32129), (133, 32084), (145, 31970),

Gene: KellyGreen_49 Start: 35014, Stop: 34082, Start Num: 33

Candidate Starts for KellyGreen_49:

(Start: 33 @35014 has 153 MA's), (49, 34912), (56, 34867), (57, 34864), (70, 34768), (76, 34726), (77, 34723), (86, 34612), (88, 34603), (100, 34501), (107, 34450), (116, 34372), (120, 34357), (125, 34321), (133, 34213), (139, 34165), (144, 34102),

Gene: KingJulien_47 Start: 35168, Stop: 34236, Start Num: 33

Candidate Starts for KingJulien_47:

(Start: 25 @35189 has 6 MA's), (Start: 33 @35168 has 153 MA's), (45, 35108), (49, 35066), (51, 35048), (52, 35042), (53, 35030), (76, 34880), (77, 34877), (80, 34853), (86, 34766), (88, 34757), (100,

34655), (109, 34589), (116, 34526), (120, 34511), (133, 34367), (139, 34319),

Gene: Klimt_48 Start: 35048, Stop: 34116, Start Num: 33

Candidate Starts for Klimt_48:

(Start: 33 @35048 has 153 MA's), (49, 34946), (56, 34901), (57, 34898), (70, 34802), (76, 34760), (77, 34757), (86, 34646), (88, 34637), (100, 34535), (107, 34484), (116, 34406), (120, 34391), (125, 34355), (133, 34247), (139, 34199), (144, 34136),

Gene: Knox_48 Start: 35314, Stop: 34382, Start Num: 33

Candidate Starts for Knox_48:

(Start: 33 @35314 has 153 MA's), (49, 35212), (56, 35167), (57, 35164), (76, 35026), (77, 35023), (86, 34912), (88, 34903), (100, 34801), (116, 34672), (120, 34657), (125, 34621), (133, 34513), (139, 34465),

Gene: Kouch_48 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for Kouch_48:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (70, 34774), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (107, 34456), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: Kurt1_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Kurt1_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: Leafus_48 Start: 35452, Stop: 34499, Start Num: 25

Candidate Starts for Leafus_48:

(Start: 25 @35452 has 6 MA's), (Start: 33 @35431 has 153 MA's), (45, 35371), (49, 35329), (51, 35311), (52, 35305), (53, 35293), (56, 35284), (70, 35185), (76, 35143), (77, 35140), (80, 35116), (86, 35029), (88, 35020), (100, 34918), (109, 34852), (116, 34789), (120, 34774), (133, 34630), (139, 34582),

Gene: Librie_47 Start: 33696, Stop: 32722, Start Num: 29

Candidate Starts for Librie_47:

(23, 33720), (26, 33711), (Start: 29 @33696 has 21 MA's), (Start: 33 @33684 has 153 MA's), (37, 33663), (46, 33597), (56, 33534), (63, 33477), (65, 33465), (69, 33438), (71, 33426), (76, 33393), (77, 33390), (83, 33327), (93, 33240), (99, 33177), (107, 33114), (112, 33084), (113, 33075), (116, 33036), (132, 32880), (137, 32850), (138, 32829), (140, 32814), (146, 32751),

Gene: Librie_46 Start: 32725, Stop: 31787, Start Num: 33

Candidate Starts for Librie_46:

(Start: 33 @32725 has 153 MA's), (41, 32689), (45, 32665), (55, 32581), (56, 32578), (66, 32506), (68, 32494), (77, 32431), (78, 32428), (79, 32416), (82, 32398), (94, 32272), (100, 32209), (107, 32158), (116, 32080), (122, 32041), (125, 32029), (136, 31897), (139, 31873), (145, 31807),

Gene: LilTerminator_46 Start: 32747, Stop: 31809, Start Num: 33

Candidate Starts for LilTerminator_46:

(Start: 33 @32747 has 153 MA's), (41, 32711), (45, 32687), (55, 32603), (56, 32600), (66, 32528), (68, 32516), (76, 32456), (77, 32453), (78, 32450), (79, 32438), (82, 32420), (94, 32294), (100, 32231), (107, 32180), (116, 32102), (122, 32063), (125, 32051), (136, 31919), (139, 31895), (145, 31829),

Gene: LilTerminator_47 Start: 33718, Stop: 32744, Start Num: 29

Candidate Starts for LilTerminator_47:

(23, 33742), (26, 33733), (Start: 29 @33718 has 21 MA's), (Start: 33 @33706 has 153 MA's), (37, 33685), (46, 33619), (56, 33556), (63, 33499), (65, 33487), (69, 33460), (71, 33448), (76, 33415), (77, 33412), (83, 33349), (93, 33262), (99, 33199), (107, 33136), (112, 33106), (113, 33097), (116, 33058), (132, 32902), (135, 32881), (137, 32872), (138, 32851), (140, 32836), (144, 32785), (146, 32773),

Gene: Lovelyunicorn_48 Start: 35315, Stop: 34383, Start Num: 33

Candidate Starts for Lovelyunicorn_48:

(Start: 33 @35315 has 153 MA's), (49, 35213), (56, 35168), (57, 35165), (76, 35027), (77, 35024), (86, 34913), (88, 34904), (100, 34802), (116, 34673), (120, 34658), (125, 34622), (133, 34514), (139, 34466),

Gene: Ludgate_48 Start: 35316, Stop: 34384, Start Num: 33

Candidate Starts for Ludgate_48:

(Start: 33 @35316 has 153 MA's), (49, 35214), (56, 35169), (57, 35166), (76, 35028), (77, 35025), (86, 34914), (88, 34905), (100, 34803), (116, 34674), (120, 34659), (125, 34623), (133, 34515), (139, 34467), (144, 34404),

Gene: Luna18_47 Start: 33621, Stop: 32689, Start Num: 40

Candidate Starts for Luna18_47:

(Start: 25 @33693 has 6 MA's), (Start: 40 @33621 has 6 MA's), (47, 33564), (48, 33561), (50, 33540), (54, 33516), (62, 33456), (64, 33447), (72, 33402), (73, 33399), (74, 33387), (78, 33366), (80, 33345), (94, 33219), (98, 33195), (102, 33144), (109, 33102), (118, 33024), (121, 33000), (125, 32982), (127, 32934), (131, 32874), (139, 32814), (147, 32736),

Gene: MCubed_46 Start: 34113, Stop: 33163, Start Num: 33

Candidate Starts for MCubed_46:

(24, 34134), (Start: 27 @34125 has 1 MA's), (Start: 33 @34113 has 153 MA's), (45, 34053), (49, 34011), (55, 33969), (56, 33966), (57, 33963), (62, 33912), (69, 33873), (86, 33714), (88, 33705), (93, 33678), (94, 33666), (100, 33603), (104, 33579), (107, 33549), (108, 33546), (109, 33534), (112, 33519), (113, 33510), (115, 33477), (116, 33471), (125, 33420), (128, 33369), (129, 33360), (133, 33315), (139, 33267), (145, 33201),

Gene: MaeLinda_48 Start: 35317, Stop: 34385, Start Num: 33

Candidate Starts for MaeLinda_48:

(5, 35497), (6, 35482), (13, 35419), (Start: 33 @35317 has 153 MA's), (49, 35215), (56, 35170), (57, 35167), (76, 35029), (77, 35026), (86, 34915), (88, 34906), (100, 34804), (107, 34753), (116, 34675), (120, 34660), (125, 34624), (133, 34516), (139, 34468), (144, 34405),

Gene: ManRay_47 Start: 35030, Stop: 34098, Start Num: 33

Candidate Starts for ManRay_47:

(Start: 33 @35030 has 153 MA's), (49, 34928), (56, 34883), (57, 34880), (70, 34784), (76, 34742), (77, 34739), (86, 34628), (88, 34619), (100, 34517), (107, 34466), (116, 34388), (120, 34373), (125, 34337), (133, 34229), (139, 34181), (144, 34118),

Gene: Mandalorian_45 Start: 33817, Stop: 32885, Start Num: 33

Candidate Starts for Mandalorian_45:

(1, 34147), (2, 34129), (9, 33949), (10, 33922), (23, 33841), (26, 33832), (Start: 33 @33817 has 153 MA's), (45, 33754), (52, 33688), (56, 33667), (63, 33610), (77, 33526), (86, 33415), (88, 33406), (96, 33355), (98, 33343), (100, 33304), (108, 33250), (109, 33238), (110, 33229), (114, 33196), (115, 33181), (117, 33169), (120, 33160), (123, 33133), (124, 33127), (136, 32992), (139, 32968), (143, 32914),

Gene: Martin_49 Start: 35322, Stop: 34390, Start Num: 33

Candidate Starts for Martin_49:

(5, 35502), (6, 35487), (13, 35424), (Start: 33 @35322 has 153 MA's), (49, 35220), (56, 35175), (57, 35172), (76, 35034), (77, 35031), (86, 34920), (88, 34911), (100, 34809), (107, 34758), (116, 34680), (120, 34665), (125, 34629), (133, 34521), (139, 34473), (144, 34410),

Gene: McGalleon_50 Start: 36335, Stop: 35370, Start Num: 28

Candidate Starts for McGalleon_50:

(Start: 28 @36335 has 4 MA's), (49, 36200), (56, 36155), (57, 36152), (77, 36011), (80, 35987), (93, 35864), (94, 35852), (100, 35789), (107, 35738), (108, 35735), (116, 35660), (120, 35645), (125, 35609), (133, 35501), (139, 35453),

Gene: Mercedes_42 Start: 33681, Stop: 32713, Start Num: 29

Candidate Starts for Mercedes_42:

(23, 33705), (Start: 29 @33681 has 21 MA's), (Start: 33 @33669 has 153 MA's), (37, 33648), (45, 33606), (52, 33540), (56, 33519), (63, 33462), (69, 33423), (76, 33378), (77, 33375), (80, 33351), (81, 33345), (82, 33342), (93, 33228), (99, 33165), (101, 33147), (103, 33141), (109, 33087), (112, 33072), (113, 33063), (116, 33024), (131, 32877), (132, 32868), (144, 32751), (146, 32739),

Gene: Mercedes_41 Start: 32713, Stop: 31778, Start Num: 33

Candidate Starts for Mercedes_41:

(Start: 33 @32713 has 153 MA's), (38, 32692), (45, 32653), (47, 32620), (52, 32587), (57, 32563), (77, 32422), (78, 32419), (79, 32407), (82, 32389), (94, 32263), (95, 32254), (100, 32200), (107, 32149), (115, 32077), (116, 32071), (122, 32032), (125, 32020), (136, 31888), (139, 31864), (145, 31798),

Gene: Merida02_50 Start: 35316, Stop: 34384, Start Num: 33

Candidate Starts for Merida02_50:

(5, 35496), (6, 35481), (13, 35418), (Start: 33 @35316 has 153 MA's), (49, 35214), (56, 35169), (57, 35166), (76, 35028), (77, 35025), (86, 34914), (88, 34905), (100, 34803), (116, 34674), (120, 34659), (125, 34623), (133, 34515), (139, 34467), (144, 34404),

Gene: MillyPhilly_48 Start: 35310, Stop: 34378, Start Num: 33

Candidate Starts for MillyPhilly_48:

(5, 35490), (6, 35475), (13, 35412), (Start: 33 @35310 has 153 MA's), (49, 35208), (56, 35163), (57, 35160), (76, 35022), (77, 35019), (86, 34908), (88, 34899), (100, 34797), (107, 34746), (116, 34668), (120, 34653), (125, 34617), (133, 34509), (139, 34461), (144, 34398),

Gene: MiniVolent_44 Start: 33652, Stop: 32741, Start Num: 44

Candidate Starts for MiniVolent_44:

(3, 33943), (8, 33868), (22, 33751), (34, 33697), (37, 33688), (Start: 40 @33673 has 6 MA's), (43, 33658), (44, 33652), (50, 33592), (54, 33568), (62, 33508), (64, 33499), (72, 33454), (73, 33451), (78, 33418), (80, 33397), (98, 33247), (102, 33196), (109, 33154), (111, 33142), (118, 33076), (121, 33052), (127, 32986), (135, 32896), (139, 32866), (147, 32788), (148, 32779),

Gene: MonChoix_45 Start: 34865, Stop: 33933, Start Num: 33

Candidate Starts for MonChoix_45:

(Start: 33 @34865 has 153 MA's), (49, 34763), (56, 34718), (63, 34661), (76, 34577), (77, 34574), (80, 34550), (86, 34463), (88, 34454), (100, 34352), (108, 34298), (109, 34286), (116, 34223), (120, 34208), (125, 34172), (133, 34064), (139, 34016),

Gene: Morrigan_47 Start: 33573, Stop: 32641, Start Num: 40

Candidate Starts for Morrigan_47:

(36, 33591), (39, 33582), (Start: 40 @33573 has 6 MA's), (48, 33513), (50, 33492), (54, 33468), (62, 33408), (64, 33399), (67, 33384), (72, 33354), (73, 33351), (74, 33339), (78, 33318), (80, 33297), (98, 33147), (109, 33054), (118, 32976), (121, 32952), (125, 32934), (126, 32904), (127, 32886), (131, 32826), (139, 32766), (140, 32754), (147, 32688),

Gene: MrWorldwide_48 Start: 35320, Stop: 34388, Start Num: 33

Candidate Starts for MrWorldwide_48:

(5, 35500), (6, 35485), (13, 35422), (Start: 33 @35320 has 153 MA's), (49, 35218), (56, 35173), (57, 35170), (76, 35032), (77, 35029), (86, 34918), (88, 34909), (100, 34807), (107, 34756), (116, 34678), (120, 34663), (125, 34627), (133, 34519), (139, 34471), (144, 34408),

Gene: Nagem_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Nagem_48:

(Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (70, 35067), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: Nattles_47 Start: 35017, Stop: 34085, Start Num: 33

Candidate Starts for Nattles_47:

(Start: 33 @35017 has 153 MA's), (49, 34915), (56, 34870), (57, 34867), (70, 34771), (76, 34729), (77, 34726), (86, 34615), (88, 34606), (100, 34504), (107, 34453), (116, 34375), (120, 34360), (125, 34324), (133, 34216), (139, 34168), (144, 34105),

Gene: Nebulous_44 Start: 35631, Stop: 34696, Start Num: 29

Candidate Starts for Nebulous_44:

(20, 35673), (Start: 29 @35631 has 21 MA's), (53, 35490), (56, 35481), (57, 35478), (62, 35427), (68, 35400), (76, 35340), (77, 35337), (78, 35334), (79, 35322), (82, 35304), (93, 35190), (94, 35178), (100, 35115), (105, 35091), (116, 34986), (125, 34935), (136, 34803), (139, 34779), (145, 34713),

Gene: Neferthema_47 Start: 34968, Stop: 34033, Start Num: 29

Candidate Starts for Neferthema_47:

(23, 34992), (Start: 29 @34968 has 21 MA's), (53, 34827), (57, 34815), (62, 34764), (68, 34737), (76, 34677), (77, 34674), (78, 34671), (79, 34659), (82, 34641), (93, 34527), (94, 34515), (100, 34452), (105, 34428), (116, 34323), (125, 34272), (136, 34140), (139, 34116), (145, 34050),

Gene: NickSell_48 Start: 35323, Stop: 34391, Start Num: 33

Candidate Starts for NickSell_48:

(5, 35503), (6, 35488), (13, 35425), (Start: 33 @35323 has 153 MA's), (49, 35221), (56, 35176), (57, 35173), (76, 35035), (77, 35032), (86, 34921), (88, 34912), (100, 34810), (107, 34759), (116, 34681), (120, 34666), (125, 34630), (133, 34522), (139, 34474), (144, 34411),

Gene: Nucci_45 Start: 33800, Stop: 32868, Start Num: 33

Candidate Starts for Nucci_45:

(1, 34130), (9, 33932), (10, 33905), (23, 33824), (26, 33815), (Start: 33 @33800 has 153 MA's), (45, 33737), (52, 33671), (56, 33650), (63, 33593), (77, 33509), (86, 33398), (88, 33389), (96, 33338), (98, 33326), (100, 33287), (108, 33233), (109, 33221), (110, 33212), (114, 33179), (115, 33164), (117, 33152), (120, 33143), (123, 33116), (124, 33110), (136, 32975), (139, 32951), (143, 32897),

Gene: Oats_47 Start: 35030, Stop: 34098, Start Num: 33

Candidate Starts for Oats_47:

(Start: 33 @35030 has 153 MA's), (49, 34928), (56, 34883), (57, 34880), (70, 34784), (76, 34742), (77, 34739), (86, 34628), (88, 34619), (100, 34517), (107, 34466), (116, 34388), (120, 34373), (125, 34337), (133, 34229), (139, 34181), (144, 34118),

Gene: OldNelly_49 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for OldNelly_49:

(5, 35499), (6, 35484), (13, 35421), (Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: Oxtober96_49 Start: 35315, Stop: 34383, Start Num: 33

Candidate Starts for Oxtober96_49:

(Start: 33 @35315 has 153 MA's), (49, 35213), (56, 35168), (57, 35165), (76, 35027), (77, 35024), (86, 34913), (88, 34904), (100, 34802), (116, 34673), (120, 34658), (125, 34622), (133, 34514), (139, 34466),

Gene: PSirce_46 Start: 34243, Stop: 33293, Start Num: 33

Candidate Starts for PSirce_46:

(24, 34264), (Start: 27 @34255 has 1 MA's), (Start: 33 @34243 has 153 MA's), (45, 34183), (49, 34141), (56, 34096), (59, 34084), (62, 34042), (69, 34003), (86, 33844), (88, 33835), (93, 33808), (94, 33796), (104, 33709), (107, 33679), (108, 33676), (109, 33664), (112, 33649), (113, 33640), (115, 33607), (116, 33601), (125, 33550), (129, 33490), (133, 33445), (139, 33397), (145, 33331),

Gene: Papafritta_47 Start: 35074, Stop: 34109, Start Num: 31

Candidate Starts for Papafritta_47:

(Start: 31 @35074 has 2 MA's), (38, 35020), (42, 34996), (49, 34939), (52, 34915), (56, 34894), (60, 34876), (70, 34795), (76, 34753), (77, 34750), (84, 34672), (85, 34660), (88, 34630), (92, 34606), (93, 34603), (107, 34477), (116, 34399), (120, 34384), (125, 34348), (133, 34240), (139, 34192), (144, 34129),

Gene: ParleG_48 Start: 35320, Stop: 34388, Start Num: 33

Candidate Starts for ParleG_48:

(5, 35500), (6, 35485), (13, 35422), (Start: 33 @35320 has 153 MA's), (49, 35218), (56, 35173), (57, 35170), (76, 35032), (77, 35029), (86, 34918), (88, 34909), (100, 34807), (107, 34756), (116, 34678), (120, 34663), (125, 34627), (133, 34519), (139, 34471), (144, 34408),

Gene: Peep_48 Start: 35305, Stop: 34373, Start Num: 33

Candidate Starts for Peep_48:

(5, 35485), (6, 35470), (13, 35407), (Start: 33 @35305 has 153 MA's), (49, 35203), (56, 35158), (57, 35155), (76, 35017), (77, 35014), (86, 34903), (88, 34894), (100, 34792), (116, 34663), (120, 34648), (125, 34612), (133, 34504), (139, 34456), (144, 34393),

Gene: Penta_42 Start: 32747, Stop: 31791, Start Num: 29

Candidate Starts for Penta_42:

(13, 32846), (Start: 29 @32747 has 21 MA's), (45, 32684), (49, 32642), (53, 32606), (69, 32504), (77, 32456), (88, 32333), (93, 32306), (94, 32294), (100, 32231), (104, 32207), (107, 32177), (108, 32174), (109, 32162), (112, 32147), (113, 32138), (115, 32105), (116, 32099), (133, 31943), (135, 31925), (145, 31829),

Gene: Peppino_48 Start: 35298, Stop: 34345, Start Num: 25

Candidate Starts for Peppino_48:

(Start: 25 @35298 has 6 MA's), (Start: 33 @35277 has 153 MA's), (45, 35217), (49, 35175), (51, 35157), (52, 35151), (53, 35139), (56, 35130), (63, 35073), (70, 35031), (76, 34989), (77, 34986), (80, 34962), (86, 34875), (88, 34866), (100, 34764), (109, 34698), (116, 34635), (120, 34620), (133, 34476), (139, 34428),

Gene: Phanita_47 Start: 34025, Stop: 33075, Start Num: 33

Candidate Starts for Phanita_47:

(24, 34046), (Start: 27 @34037 has 1 MA's), (Start: 33 @34025 has 153 MA's), (45, 33965), (49, 33923), (55, 33881), (56, 33878), (57, 33875), (62, 33824), (69, 33785), (86, 33626), (88, 33617), (93, 33590), (94, 33578), (104, 33491), (107, 33461), (108, 33458), (109, 33446), (112, 33431), (113, 33422), (115, 33389), (116, 33383), (125, 33332), (128, 33281), (129, 33272), (133, 33227), (139, 33179), (145, 33113),

Gene: Pherferi_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Pherferi_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: Phiderman_48 Start: 35310, Stop: 34378, Start Num: 33

Candidate Starts for Phiderman_48:

(5, 35490), (6, 35475), (13, 35412), (Start: 33 @35310 has 153 MA's), (49, 35208), (56, 35163), (57, 35160), (76, 35022), (77, 35019), (86, 34908), (88, 34899), (100, 34797), (107, 34746), (116, 34668), (120, 34653), (125, 34617), (133, 34509), (139, 34461), (144, 34398),

Gene: PhillyPhantom_48 Start: 35288, Stop: 34335, Start Num: 25

Candidate Starts for PhillyPhantom_48:

(Start: 25 @35288 has 6 MA's), (Start: 33 @35267 has 153 MA's), (45, 35207), (49, 35165), (51, 35147), (52, 35141), (53, 35129), (56, 35120), (63, 35063), (70, 35021), (76, 34979), (77, 34976), (80, 34952), (86, 34865), (88, 34856), (100, 34754), (109, 34688), (116, 34625), (120, 34610), (133, 34466), (139, 34418),

Gene: Phireproof_48 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for Phireproof_48:

(5, 35499), (6, 35484), (13, 35421), (Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (107, 34755), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: PhredFlintston_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for PhredFlintston_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: Phriends_48 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for Phriends_48:

(5, 35499), (6, 35484), (13, 35421), (Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: Pocket_47 Start: 35057, Stop: 34125, Start Num: 33

Candidate Starts for Pocket_47:

(Start: 33 @35057 has 153 MA's), (49, 34955), (56, 34910), (57, 34907), (70, 34811), (76, 34769), (77, 34766), (86, 34655), (88, 34646), (100, 34544), (107, 34493), (116, 34415), (120, 34400), (125, 34364), (133, 34256), (139, 34208), (144, 34145),

Gene: PuppyEggo_48 Start: 35320, Stop: 34388, Start Num: 33

Candidate Starts for PuppyEggo_48:

(Start: 33 @35320 has 153 MA's), (49, 35218), (56, 35173), (57, 35170), (76, 35032), (77, 35029), (86, 34918), (88, 34909), (100, 34807), (116, 34678), (120, 34663), (125, 34627), (133, 34519), (139, 34471), (144, 34408),

Gene: QuadZero_46 Start: 32889, Stop: 31954, Start Num: 33

Candidate Starts for QuadZero_46:

(Start: 33 @32889 has 153 MA's), (41, 32853), (45, 32829), (52, 32763), (76, 32601), (77, 32598), (78, 32595), (79, 32583), (82, 32565), (94, 32439), (100, 32376), (107, 32325), (116, 32247), (122, 32208), (125, 32196), (136, 32064), (139, 32040), (145, 31974),

Gene: QuadZero_47 Start: 33848, Stop: 32886, Start Num: 33

Candidate Starts for QuadZero_47:

(23, 33884), (26, 33875), (Start: 29 @33860 has 21 MA's), (Start: 33 @33848 has 153 MA's), (37, 33827), (46, 33761), (56, 33698), (63, 33641), (65, 33629), (69, 33602), (71, 33590), (76, 33557), (77, 33554), (83, 33491), (93, 33404), (99, 33341), (107, 33278), (109, 33263), (112, 33248), (113, 33239), (116, 33200), (132, 33044), (135, 33023), (138, 32993), (140, 32978), (146, 32915), (149, 32891),

Gene: Quartz_46 Start: 33930, Stop: 32998, Start Num: 33

Candidate Starts for Quartz_46:

(23, 33954), (26, 33945), (Start: 33 @33930 has 153 MA's), (45, 33867), (52, 33801), (56, 33780), (63, 33723), (77, 33639), (86, 33528), (88, 33519), (96, 33468), (98, 33456), (100, 33417), (108, 33363), (109, 33351), (110, 33342), (114, 33309), (115, 33294), (117, 33282), (120, 33273), (123, 33246), (124, 33240), (136, 33105), (139, 33081), (143, 33027),

Gene: Raccoon_48 Start: 35255, Stop: 34302, Start Num: 25

Candidate Starts for Raccoon_48:

(Start: 25 @35255 has 6 MA's), (Start: 33 @35234 has 153 MA's), (45, 35174), (49, 35132), (51, 35114), (52, 35108), (53, 35096), (56, 35087), (70, 34988), (76, 34946), (77, 34943), (80, 34919), (86, 34832), (88, 34823), (100, 34721), (109, 34655), (116, 34592), (120, 34577), (133, 34433), (139, 34385),

Gene: Rapheph_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Rapheph_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: Raptor_48 Start: 35317, Stop: 34385, Start Num: 33

Candidate Starts for Raptor_48:

(Start: 33 @35317 has 153 MA's), (49, 35215), (56, 35170), (57, 35167), (76, 35029), (77, 35026), (86, 34915), (88, 34906), (100, 34804), (116, 34675), (120, 34660), (125, 34624), (133, 34516), (139, 34468),

Gene: Redfield_48 Start: 35285, Stop: 34353, Start Num: 33

Candidate Starts for Redfield_48:

(Start: 25 @35306 has 6 MA's), (Start: 33 @35285 has 153 MA's), (45, 35225), (49, 35183), (51, 35165), (52, 35159), (53, 35147), (56, 35138), (63, 35081), (70, 35039), (76, 34997), (77, 34994), (80, 34970), (86, 34883), (88, 34874), (89, 34865), (100, 34772), (109, 34706), (116, 34643), (120, 34628), (133, 34484), (139, 34436),

Gene: Renzie_48 Start: 35308, Stop: 34376, Start Num: 33

Candidate Starts for Renzie_48:

(5, 35488), (6, 35473), (13, 35410), (Start: 33 @35308 has 153 MA's), (49, 35206), (56, 35161), (57, 35158), (76, 35020), (77, 35017), (86, 34906), (88, 34897), (100, 34795), (116, 34666), (120, 34651), (125, 34615), (133, 34507), (139, 34459), (144, 34396),

Gene: Riyhil_48 Start: 35323, Stop: 34391, Start Num: 33

Candidate Starts for Riyhil_48:

(5, 35503), (6, 35488), (13, 35425), (Start: 33 @35323 has 153 MA's), (49, 35221), (56, 35176), (57, 35173), (76, 35035), (77, 35032), (86, 34921), (88, 34912), (100, 34810), (107, 34759), (116, 34681), (120, 34666), (125, 34630), (133, 34522), (139, 34474), (144, 34411),

Gene: Robinson_48 Start: 35311, Stop: 34379, Start Num: 33

Candidate Starts for Robinson_48:

(5, 35491), (6, 35476), (13, 35413), (Start: 33 @35311 has 153 MA's), (49, 35209), (56, 35164), (57, 35161), (76, 35023), (77, 35020), (86, 34909), (88, 34900), (100, 34798), (116, 34669), (120, 34654), (125, 34618), (133, 34510), (139, 34462), (144, 34399),

Gene: Rog141_47 Start: 35020, Stop: 34088, Start Num: 33

Candidate Starts for Rog141_47:

(Start: 33 @35020 has 153 MA's), (49, 34918), (56, 34873), (57, 34870), (70, 34774), (76, 34732), (77, 34729), (86, 34618), (88, 34609), (100, 34507), (107, 34456), (116, 34378), (120, 34363), (125, 34327), (133, 34219), (139, 34171), (144, 34108),

Gene: RosieMae_47 Start: 35075, Stop: 34143, Start Num: 33

Candidate Starts for RosieMae_47:

(Start: 33 @35075 has 153 MA's), (49, 34973), (56, 34928), (57, 34925), (70, 34829), (76, 34787), (77, 34784), (86, 34673), (88, 34664), (100, 34562), (107, 34511), (116, 34433), (120, 34418), (125, 34382), (133, 34274), (139, 34226), (144, 34163),

Gene: SJay_48 Start: 35314, Stop: 34382, Start Num: 33

Candidate Starts for SJay_48:

(Start: 33 @35314 has 153 MA's), (49, 35212), (56, 35167), (57, 35164), (70, 35068), (76, 35026), (77, 35023), (86, 34912), (88, 34903), (100, 34801), (107, 34750), (116, 34672), (120, 34657), (125, 34621), (133, 34513), (139, 34465), (144, 34402),

Gene: Sansa_45 Start: 34318, Stop: 33368, Start Num: 33

Candidate Starts for Sansa_45:

(24, 34339), (Start: 27 @34330 has 1 MA's), (Start: 33 @34318 has 153 MA's), (45, 34258), (49, 34216), (55, 34174), (56, 34171), (57, 34168), (62, 34117), (69, 34078), (86, 33919), (88, 33910), (93, 33883), (94, 33871), (100, 33808), (104, 33784), (107, 33754), (108, 33751), (109, 33739), (112, 33724), (113, 33715), (115, 33682), (116, 33676), (125, 33625), (128, 33574), (129, 33565), (133, 33520), (139, 33472), (145, 33406),

Gene: Saratos_46 Start: 34073, Stop: 33123, Start Num: 33

Candidate Starts for Saratos_46:

(24, 34094), (Start: 27 @34085 has 1 MA's), (Start: 33 @34073 has 153 MA's), (45, 34013), (49, 33971), (56, 33926), (59, 33914), (62, 33872), (69, 33833), (86, 33674), (88, 33665), (93, 33638), (94, 33626), (104, 33539), (107, 33509), (108, 33506), (109, 33494), (112, 33479), (113, 33470), (115, 33437), (116, 33431), (125, 33380), (129, 33320), (133, 33275), (139, 33227), (145, 33161),

Gene: Schimmels22_43 Start: 33137, Stop: 32187, Start Num: 29

Candidate Starts for Schimmels22_43:

(12, 33239), (13, 33236), (Start: 29 @33137 has 21 MA's), (45, 33074), (49, 33032), (53, 32996), (69, 32894), (77, 32846), (88, 32729), (93, 32702), (94, 32690), (100, 32627), (104, 32603), (107, 32573),

(108, 32570), (109, 32558), (112, 32543), (113, 32534), (116, 32495), (125, 32444), (133, 32339), (145, 32225),

Gene: Schnapsidee_48 Start: 35292, Stop: 34360, Start Num: 33

Candidate Starts for Schnapsidee_48:

(Start: 25 @35313 has 6 MA's), (Start: 33 @35292 has 153 MA's), (45, 35232), (49, 35190), (51, 35172), (52, 35166), (53, 35154), (56, 35145), (63, 35088), (70, 35046), (76, 35004), (77, 35001), (80, 34977), (86, 34890), (88, 34881), (100, 34779), (109, 34713), (116, 34650), (120, 34635), (133, 34491), (139, 34443),

Gene: Schubert_45 Start: 33948, Stop: 32995, Start Num: 33

Candidate Starts for Schubert_45:

(Start: 33 @33948 has 153 MA's), (42, 33900), (45, 33885), (49, 33843), (56, 33798), (69, 33702), (77, 33654), (80, 33630), (83, 33594), (86, 33543), (93, 33507), (94, 33495), (100, 33432), (108, 33378), (109, 33366), (112, 33351), (113, 33342), (116, 33303), (125, 33252), (139, 33096), (143, 33042),

Gene: Scissor2024_44 Start: 32784, Stop: 31834, Start Num: 29

Candidate Starts for Scissor2024_44:

(13, 32883), (Start: 29 @32784 has 21 MA's), (45, 32721), (49, 32679), (53, 32643), (69, 32541), (77, 32493), (88, 32376), (93, 32349), (94, 32337), (100, 32274), (104, 32250), (107, 32220), (108, 32217), (109, 32205), (112, 32190), (113, 32181), (116, 32142), (125, 32091), (133, 31986), (145, 31872),

Gene: Sedgewig_47 Start: 35018, Stop: 34086, Start Num: 33

Candidate Starts for Sedgewig_47:

(Start: 33 @35018 has 153 MA's), (49, 34916), (56, 34871), (57, 34868), (76, 34730), (77, 34727), (86, 34616), (88, 34607), (100, 34505), (116, 34376), (120, 34361), (125, 34325), (133, 34217), (139, 34169), (144, 34106),

Gene: ShaiHulud_48 Start: 35329, Stop: 34397, Start Num: 33

Candidate Starts for ShaiHulud_48:

(Start: 33 @35329 has 153 MA's), (49, 35227), (56, 35182), (57, 35179), (76, 35041), (77, 35038), (86, 34927), (88, 34918), (100, 34816), (116, 34687), (120, 34672), (125, 34636), (133, 34528), (139, 34480), (144, 34417),

Gene: Shamu_47 Start: 34252, Stop: 33302, Start Num: 33

Candidate Starts for Shamu_47:

(24, 34273), (Start: 27 @34264 has 1 MA's), (Start: 33 @34252 has 153 MA's), (45, 34192), (49, 34150), (55, 34108), (56, 34105), (57, 34102), (62, 34051), (69, 34012), (86, 33853), (88, 33844), (93, 33817), (94, 33805), (100, 33742), (104, 33718), (107, 33688), (108, 33685), (109, 33673), (112, 33658), (113, 33649), (115, 33616), (116, 33610), (125, 33559), (128, 33508), (129, 33499), (133, 33454), (139, 33406), (145, 33340),

Gene: Shee_48 Start: 35310, Stop: 34378, Start Num: 33

Candidate Starts for Shee_48:

(5, 35490), (6, 35475), (13, 35412), (Start: 33 @35310 has 153 MA's), (49, 35208), (56, 35163), (57, 35160), (76, 35022), (77, 35019), (86, 34908), (88, 34899), (100, 34797), (107, 34746), (116, 34668), (120, 34653), (125, 34617), (133, 34509), (139, 34461), (144, 34398),

Gene: SoilGremlin_49 Start: 35316, Stop: 34384, Start Num: 33

Candidate Starts for SoilGremlin_49:

(5, 35496), (6, 35481), (13, 35418), (Start: 33 @35316 has 153 MA's), (49, 35214), (56, 35169), (57, 35166), (76, 35028), (77, 35025), (86, 34914), (88, 34905), (100, 34803), (116, 34674), (120, 34659), (125, 34623), (133, 34515), (139, 34467), (144, 34404),

Gene: SolidSnake_50 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for SolidSnake_50:

(5, 35499), (6, 35484), (13, 35421), (Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: SonOfLevi_48 Start: 35048, Stop: 34116, Start Num: 33

Candidate Starts for SonOfLevi_48:

(Start: 33 @35048 has 153 MA's), (49, 34946), (56, 34901), (57, 34898), (70, 34802), (76, 34760), (77, 34757), (86, 34646), (88, 34637), (100, 34535), (107, 34484), (116, 34406), (120, 34391), (125, 34355), (133, 34247), (139, 34199), (144, 34136),

Gene: Soror1_47 Start: 35204, Stop: 34251, Start Num: 25

Candidate Starts for Soror1_47:

(Start: 25 @35204 has 6 MA's), (Start: 33 @35183 has 153 MA's), (45, 35123), (49, 35081), (51, 35063), (52, 35057), (53, 35045), (76, 34895), (77, 34892), (80, 34868), (86, 34781), (88, 34772), (100, 34670), (109, 34604), (116, 34541), (120, 34526), (133, 34382), (139, 34334),

Gene: Stanktossa_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for Stanktossa_48:

(5, 35493), (6, 35478), (13, 35415), (Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (107, 34749), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464), (144, 34401),

Gene: StingRay_47 Start: 35033, Stop: 34101, Start Num: 33

Candidate Starts for StingRay_47:

(Start: 33 @35033 has 153 MA's), (49, 34931), (56, 34886), (57, 34883), (70, 34787), (76, 34745), (77, 34742), (86, 34631), (88, 34622), (100, 34520), (107, 34469), (116, 34391), (120, 34376), (125, 34340), (133, 34232), (139, 34184), (144, 34121),

Gene: StirfryIV_47 Start: 35029, Stop: 34097, Start Num: 33

Candidate Starts for StirfryIV_47:

(Start: 33 @35029 has 153 MA's), (49, 34927), (56, 34882), (57, 34879), (76, 34741), (77, 34738), (86, 34627), (88, 34618), (100, 34516), (116, 34387), (120, 34372), (125, 34336), (133, 34228), (139, 34180), (144, 34117),

Gene: Stormbreaker8_47 Start: 35189, Stop: 34236, Start Num: 25

Candidate Starts for Stormbreaker8_47:

(Start: 25 @35189 has 6 MA's), (Start: 33 @35168 has 153 MA's), (45, 35108), (49, 35066), (51, 35048), (52, 35042), (53, 35030), (76, 34880), (77, 34877), (80, 34853), (86, 34766), (88, 34757), (100, 34655), (109, 34589), (116, 34526), (120, 34511), (133, 34367), (139, 34319),

Gene: Strathdee_48 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for Strathdee_48:

(Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: Superfresh_48 Start: 35308, Stop: 34376, Start Num: 33

Candidate Starts for Superfresh_48:

(5, 35488), (6, 35473), (13, 35410), (Start: 33 @35308 has 153 MA's), (49, 35206), (56, 35161), (57, 35158), (76, 35020), (77, 35017), (86, 34906), (88, 34897), (100, 34795), (116, 34666), (120, 34651),

(125, 34615), (133, 34507), (139, 34459), (144, 34396),

Gene: Symere_47 Start: 35028, Stop: 34096, Start Num: 33

Candidate Starts for Symere_47:

(Start: 33 @35028 has 153 MA's), (49, 34926), (56, 34881), (57, 34878), (76, 34740), (77, 34737), (86, 34626), (88, 34617), (100, 34515), (116, 34386), (120, 34371), (125, 34335), (133, 34227), (139, 34179), (144, 34116),

Gene: TatarkaPM_48 Start: 35323, Stop: 34391, Start Num: 33

Candidate Starts for TatarkaPM_48:

(5, 35503), (6, 35488), (13, 35425), (Start: 33 @35323 has 153 MA's), (49, 35221), (56, 35176), (57, 35173), (76, 35035), (77, 35032), (86, 34921), (88, 34912), (100, 34810), (107, 34759), (116, 34681), (120, 34666), (125, 34630), (133, 34522), (139, 34474), (144, 34411),

Gene: Teagan_48 Start: 35310, Stop: 34378, Start Num: 33

Candidate Starts for Teagan_48:

(Start: 33 @35310 has 153 MA's), (49, 35208), (56, 35163), (57, 35160), (76, 35022), (77, 35019), (86, 34908), (88, 34899), (100, 34797), (107, 34746), (116, 34668), (120, 34653), (125, 34617), (133, 34509), (139, 34461),

Gene: TeddyBear_47 Start: 35030, Stop: 34098, Start Num: 33

Candidate Starts for TeddyBear_47:

(Start: 33 @35030 has 153 MA's), (49, 34928), (56, 34883), (57, 34880), (70, 34784), (76, 34742), (77, 34739), (86, 34628), (88, 34619), (100, 34517), (107, 34466), (116, 34388), (120, 34373), (125, 34337), (133, 34229), (139, 34181), (144, 34118),

Gene: Tenda_47 Start: 35028, Stop: 34096, Start Num: 33

Candidate Starts for Tenda_47:

(Start: 33 @35028 has 153 MA's), (49, 34926), (56, 34881), (57, 34878), (70, 34782), (76, 34740), (77, 34737), (86, 34626), (88, 34617), (100, 34515), (107, 34464), (116, 34386), (120, 34371), (125, 34335), (133, 34227), (139, 34179), (144, 34116),

Gene: Thompsone_48 Start: 35317, Stop: 34385, Start Num: 33

Candidate Starts for Thompsone_48:

(Start: 33 @35317 has 153 MA's), (49, 35215), (56, 35170), (57, 35167), (76, 35029), (77, 35026), (86, 34915), (88, 34906), (100, 34804), (116, 34675), (120, 34660), (125, 34624), (133, 34516), (139, 34468),

Gene: Thorongil_48 Start: 34834, Stop: 33902, Start Num: 33

Candidate Starts for Thorongil_48:

(Start: 33 @34834 has 153 MA's), (49, 34732), (56, 34687), (57, 34684), (76, 34546), (77, 34543), (86, 34432), (88, 34423), (100, 34321), (116, 34192), (120, 34177), (125, 34141), (133, 34033), (139, 33985), (144, 33922),

Gene: TinSulphur_49 Start: 35319, Stop: 34387, Start Num: 33

Candidate Starts for TinSulphur_49:

(5, 35499), (6, 35484), (13, 35421), (Start: 33 @35319 has 153 MA's), (49, 35217), (56, 35172), (57, 35169), (76, 35031), (77, 35028), (86, 34917), (88, 34908), (100, 34806), (107, 34755), (116, 34677), (120, 34662), (125, 34626), (133, 34518), (139, 34470), (144, 34407),

Gene: Tinyman4_43 Start: 32838, Stop: 31888, Start Num: 29

Candidate Starts for Tinyman4_43:

(12, 32940), (13, 32937), (Start: 29 @32838 has 21 MA's), (45, 32775), (49, 32733), (53, 32697), (69, 32595), (77, 32547), (88, 32430), (93, 32403), (94, 32391), (100, 32328), (104, 32304), (107, 32274), (108, 32271), (109, 32259), (112, 32244), (113, 32235), (116, 32196), (125, 32145), (133, 32040), (145, 31926),

Gene: TwoBits_45 Start: 33227, Stop: 32289, Start Num: 33

Candidate Starts for TwoBits_45:

(Start: 33 @33227 has 153 MA's), (41, 33191), (46, 33143), (55, 33083), (56, 33080), (66, 33008), (76, 32936), (77, 32933), (78, 32930), (79, 32918), (82, 32900), (94, 32774), (100, 32711), (107, 32660), (116, 32582), (122, 32543), (125, 32531), (133, 32423), (136, 32399), (139, 32375), (145, 32309),

Gene: TwoBits_46 Start: 34198, Stop: 33224, Start Num: 29

Candidate Starts for TwoBits_46:

(26, 34213), (Start: 29 @34198 has 21 MA's), (Start: 33 @34186 has 153 MA's), (37, 34165), (45, 34123), (63, 33979), (65, 33967), (69, 33940), (76, 33895), (77, 33892), (80, 33868), (93, 33742), (94, 33730), (99, 33679), (104, 33646), (107, 33616), (112, 33586), (113, 33577), (115, 33544), (116, 33538), (131, 33391), (132, 33382), (137, 33352), (141, 33289), (146, 33253), (149, 33229),

Gene: Velene_48 Start: 35315, Stop: 34383, Start Num: 33

Candidate Starts for Velene_48:

(Start: 33 @35315 has 153 MA's), (49, 35213), (56, 35168), (57, 35165), (76, 35027), (77, 35024), (86, 34913), (88, 34904), (100, 34802), (107, 34751), (116, 34673), (120, 34658), (125, 34622), (133, 34514), (139, 34466),

Gene: Vispistious_48 Start: 35320, Stop: 34388, Start Num: 33

Candidate Starts for Vispistious_48:

(Start: 33 @35320 has 153 MA's), (49, 35218), (56, 35173), (57, 35170), (76, 35032), (77, 35029), (86, 34918), (88, 34909), (100, 34807), (116, 34678), (120, 34663), (125, 34627), (133, 34519), (139, 34471), (144, 34408),

Gene: Wardwill_49 Start: 33895, Stop: 32921, Start Num: 29

Candidate Starts for Wardwill_49:

(23, 33919), (26, 33910), (Start: 29 @33895 has 21 MA's), (Start: 33 @33883 has 153 MA's), (37, 33862), (46, 33796), (56, 33733), (63, 33676), (65, 33664), (69, 33637), (71, 33625), (76, 33592), (77, 33589), (83, 33526), (93, 33439), (99, 33376), (107, 33313), (112, 33283), (113, 33274), (116, 33235), (132, 33079), (135, 33058), (137, 33049), (138, 33028), (140, 33013), (144, 32962), (146, 32950), (149, 32926),

Gene: Wardwill_48 Start: 32924, Stop: 31986, Start Num: 33

Candidate Starts for Wardwill_48:

(Start: 33 @32924 has 153 MA's), (41, 32888), (45, 32864), (55, 32780), (56, 32777), (66, 32705), (76, 32633), (77, 32630), (78, 32627), (79, 32615), (82, 32597), (94, 32471), (100, 32408), (107, 32357), (116, 32279), (122, 32240), (125, 32228), (136, 32096), (139, 32072), (145, 32006),

Gene: WestPM_42 Start: 32910, Stop: 31954, Start Num: 29

Candidate Starts for WestPM_42:

(13, 33009), (Start: 29 @32910 has 21 MA's), (45, 32847), (49, 32805), (53, 32769), (69, 32667), (77, 32619), (88, 32496), (93, 32469), (94, 32457), (100, 32394), (104, 32370), (107, 32340), (108, 32337), (109, 32325), (112, 32310), (113, 32301), (115, 32268), (116, 32262), (133, 32106), (135, 32088), (145, 31992),

Gene: WildNOut_48 Start: 35313, Stop: 34381, Start Num: 33

Candidate Starts for WildNOut_48:

(Start: 33 @35313 has 153 MA's), (49, 35211), (56, 35166), (57, 35163), (76, 35025), (77, 35022), (86, 34911), (88, 34902), (100, 34800), (116, 34671), (120, 34656), (125, 34620), (133, 34512), (139, 34464),

Gene: WilliamStrong_46 Start: 34165, Stop: 33236, Start Num: 40

Candidate Starts for WilliamStrong_46:

(11, 34321), (18, 34264), (21, 34249), (26, 34228), (Start: 40 @34165 has 6 MA's), (48, 34105), (51, 34081), (54, 34063), (62, 34003), (64, 33994), (72, 33949), (73, 33946), (80, 33892), (98, 33742), (102, 33691), (109, 33649), (111, 33637), (118, 33571), (121, 33547), (126, 33499), (127, 33481), (130, 33430), (131, 33421), (139, 33361), (147, 33283), (148, 33274),

Gene: Winzigespinne_47 Start: 35016, Stop: 34084, Start Num: 33

Candidate Starts for Winzigespinne_47:

(Start: 33 @35016 has 153 MA's), (49, 34914), (56, 34869), (57, 34866), (70, 34770), (76, 34728), (77, 34725), (86, 34614), (88, 34605), (100, 34503), (107, 34452), (116, 34374), (120, 34359), (125, 34323), (133, 34215), (139, 34167), (144, 34104),

Gene: Xebius_46 Start: 34076, Stop: 33126, Start Num: 33

Candidate Starts for Xebius_46:

(24, 34097), (Start: 27 @34088 has 1 MA's), (Start: 33 @34076 has 153 MA's), (45, 34016), (49, 33974), (56, 33929), (59, 33917), (62, 33875), (69, 33836), (86, 33677), (88, 33668), (93, 33641), (94, 33629), (104, 33542), (107, 33512), (108, 33509), (109, 33497), (112, 33482), (113, 33473), (115, 33440), (116, 33434), (125, 33383), (129, 33323), (133, 33278), (139, 33230), (145, 33164),

Gene: YuuY_46 Start: 34393, Stop: 33461, Start Num: 33

Candidate Starts for YuuY_46:

(10, 34495), (11, 34492), (23, 34414), (26, 34405), (Start: 33 @34393 has 153 MA's), (35, 34378), (37, 34372), (42, 34345), (45, 34330), (56, 34243), (63, 34186), (64, 34180), (77, 34102), (86, 33991), (88, 33982), (96, 33931), (98, 33919), (100, 33880), (108, 33826), (109, 33814), (110, 33805), (114, 33772), (115, 33757), (117, 33745), (120, 33736), (123, 33709), (124, 33703), (136, 33568), (139, 33544), (143, 33490),

Gene: Zada_49 Start: 35289, Stop: 34357, Start Num: 33

Candidate Starts for Zada_49:

(Start: 33 @35289 has 153 MA's), (49, 35187), (56, 35142), (57, 35139), (76, 35001), (77, 34998), (86, 34887), (88, 34878), (100, 34776), (107, 34725), (116, 34647), (120, 34632), (125, 34596), (133, 34488), (139, 34440), (144, 34377),

Gene: Zayuliv_47 Start: 34334, Stop: 33360, Start Num: 29

Candidate Starts for Zayuliv_47:

(19, 34382), (Start: 29 @34334 has 21 MA's), (Start: 33 @34322 has 153 MA's), (37, 34301), (46, 34235), (56, 34172), (63, 34115), (65, 34103), (69, 34076), (71, 34064), (76, 34031), (77, 34028), (83, 33965), (93, 33878), (99, 33815), (107, 33752), (112, 33722), (113, 33713), (116, 33674), (132, 33518), (135, 33497), (137, 33488), (138, 33467), (140, 33452), (146, 33389), (149, 33365),

Gene: Zayuliv_46 Start: 33363, Stop: 32425, Start Num: 33

Candidate Starts for Zayuliv_46:

(Start: 33 @33363 has 153 MA's), (41, 33327), (45, 33303), (55, 33219), (56, 33216), (66, 33144), (76, 33072), (77, 33069), (78, 33066), (79, 33054), (82, 33036), (94, 32910), (100, 32847), (107, 32796), (116, 32718), (122, 32679), (125, 32667), (136, 32535), (139, 32511), (145, 32445),

Gene: Zenitsu_46 Start: 34118, Stop: 33168, Start Num: 33

Candidate Starts for Zenitsu_46:

(24, 34139), (Start: 27 @34130 has 1 MA's), (Start: 33 @34118 has 153 MA's), (45, 34058), (49, 34016), (55, 33974), (56, 33971), (57, 33968), (62, 33917), (69, 33878), (86, 33719), (88, 33710), (93, 33683), (94, 33671), (100, 33608), (104, 33584), (107, 33554), (108, 33551), (109, 33539), (112, 33524), (113, 33515), (115, 33482), (116, 33476), (125, 33425), (128, 33374), (129, 33365), (133, 33320), (139, 33272), (145, 33206),

Gene: Zepp_46 Start: 32797, Stop: 31859, Start Num: 33

Candidate Starts for Zepp_46:

(Start: 33 @32797 has 153 MA's), (41, 32761), (55, 32653), (56, 32650), (66, 32578), (76, 32506), (77, 32503), (78, 32500), (79, 32488), (82, 32470), (94, 32344), (100, 32281), (107, 32230), (116, 32152), (122, 32113), (125, 32101), (136, 31969), (139, 31945), (145, 31879),

Gene: Zepp_47 Start: 33768, Stop: 32794, Start Num: 29

Candidate Starts for Zepp_47:

(23, 33792), (26, 33783), (Start: 29 @33768 has 21 MA's), (Start: 33 @33756 has 153 MA's), (37, 33735), (46, 33669), (56, 33606), (63, 33549), (65, 33537), (69, 33510), (71, 33498), (76, 33465), (77, 33462), (83, 33399), (93, 33312), (99, 33249), (108, 33183), (112, 33156), (113, 33147), (116, 33108), (132, 32952), (135, 32931), (137, 32922), (138, 32901), (140, 32886), (146, 32823), (149, 32799),