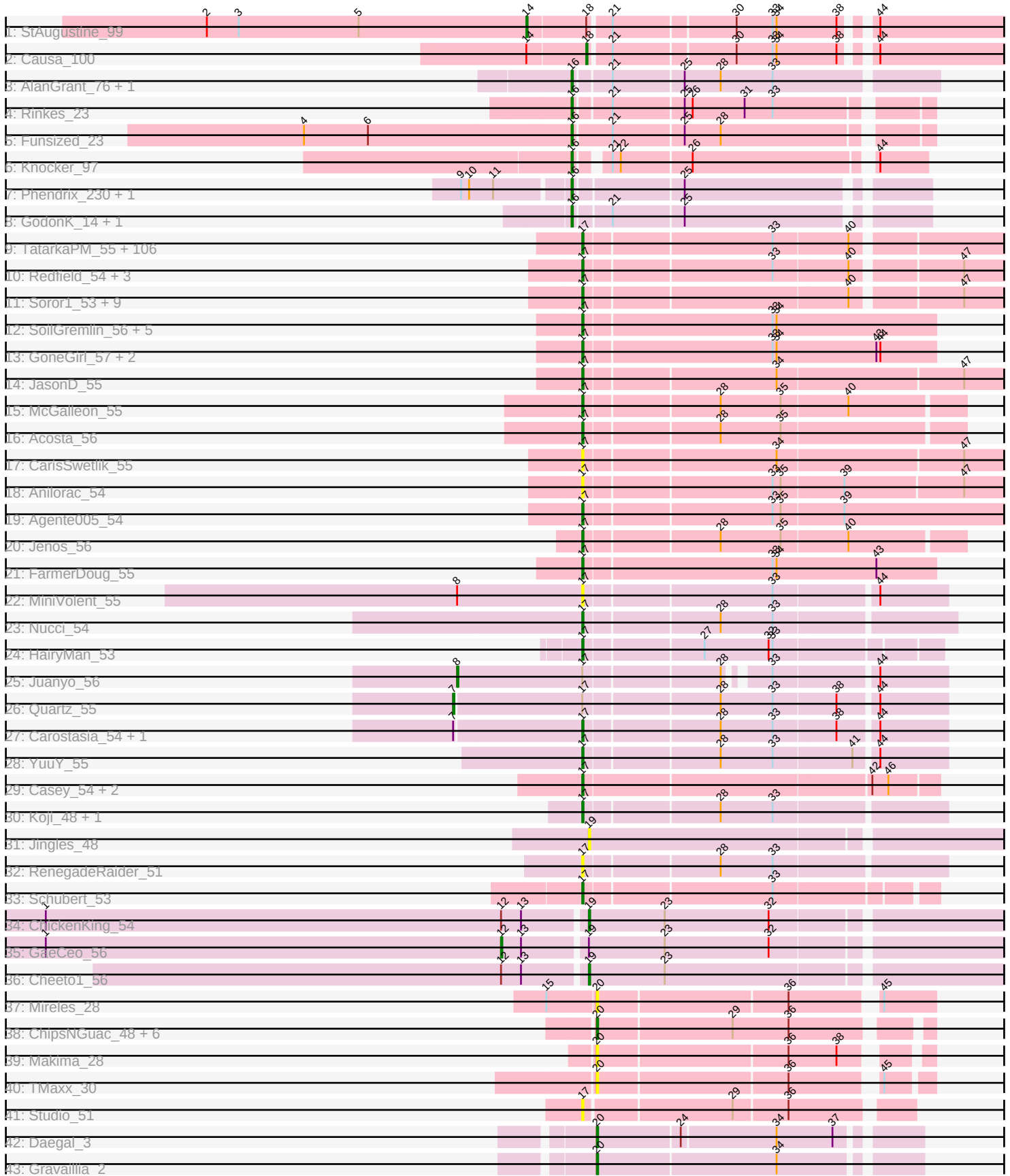


Pham 280126



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 280126 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280126 has 181 members, 26 are drafts.

Phages represented in each track:

- Track 1 : StAugustine_99
- Track 2 : Causa_100
- Track 3 : AlanGrant_76, Vincenzo_75
- Track 4 : Rinkes_23
- Track 5 : Funsized_23
- Track 6 : Knocker_97
- Track 7 : Phendrix_230, Phendrix_14
- Track 8 : GodonK_14, GodonK_240
- Track 9 : TatarkaPM_55, Renzie_55, Lovelyunicorn_55, Den3_55, Vispistious_55, Benjalauren_55, Ioannes_55, PhredFlintston_55, Klimt_55, AranulaLuti_54, Erla_54, Kouch_56, Inventa_55, Dothraki_55, Stanktossa_54, Aubergine_54, BonesMcCoy_55, Antoinette_55, Exploradora_54, Garey24_55, Bonino_54, Chamuel_54, Greys_55, Asta_54, SonOfLevi_55, Nattles_54, StirfryIV_54, Winzigespinne_54, TeddyBear_54, Gershwin_54, Alyxandracam_55, BeautPeep30_55, Peep_55, Pherferi_55, Superfresh_55, BigRedClifford_55, JeriBeth_56, Velene_55, AxiPup_55, Oxtober96_56, Phireproof_55, Baines_54, Symere_54, Convict_55, MillyPhilly_55, Raptor_55, HungryHenry_54, Dave_55, Papafritta_54, SJay_55, KellyGreen_56, Calix_54, Robinson_55, Rog141_54, RosieMae_54, WildNOut_55, Rapheph_55, HanSolo_54, Sedgewig_54, Ilzat_54, Gelo_54, Thompsone_55, Knox_55, KannH_54, Janus167_54, Strathdee_55, Clancy_54, Martin_56, Espinosa_54, Oats_54, GoingMerry_56, Christoph_54, Thorongil_55, TinSulphur_56, Pocket_54, Teagan_55, Byron23_56, ManRay_54, Zada_56, Figueroism_55, Gargoyle_55, Duocatuli_54, Phiderman_55, MrWorldwide_55, Blage_55, AlexAdler_55, ShaiHulud_55, Etta_54, Shee_55, HankSprout_55, PuppyEggo_55, JasperRussell_54, Gubbabump_54, MaeLinda_55, CoraRita_56, StingRay_54, Kale_54, Riyhil_55, NickSell_55, Tenda_54, ParleG_55, Jerbirus_56, Ludgate_55, Kurt1_55, Bandik_55, Chako_54, Nagem_55
- Track 10 : Redfield_54, Etna_54, MonChoix_52, BeeBee8_55
- Track 11 : Soror1_53, Leafus_54, KingJulien_53, Raccoon_54, Balsa_53, Stormbreaker8_53, Hamlet_54, Schnapsidee_54, PhillyPhantom_54, Peppino_54
- Track 12 : SoilGremlin_56, SolidSnake_57, Phriends_55, OldNelly_56, Merida02_57, Delphidian_55
- Track 13 : GoneGirl_57, Endor_57, GardenB_56
- Track 14 : JasonD_55
- Track 15 : McGalleon_55
- Track 16 : Acosta_56
- Track 17 : CarisSwetlik_55

- Track 18 : Anilorac_54
- Track 19 : Agente005_54
- Track 20 : Jenos_56
- Track 21 : FarmerDoug_55
- Track 22 : MiniVolent_55
- Track 23 : Nucci_54
- Track 24 : HairyMan_53
- Track 25 : Juanyo_56
- Track 26 : Quartz_55
- Track 27 : Carostasia_54, Mandalorian_54
- Track 28 : YuuY_55
- Track 29 : Casey_54, Pajaza_54, Pikmin_54
- Track 30 : Koji_48, Kauala_48
- Track 31 : Jingles_48
- Track 32 : RenegadeRaider_51
- Track 33 : Schubert_53
- Track 34 : ChickenKing_54
- Track 35 : GaeCeo_56
- Track 36 : Cheeto1_56
- Track 37 : Mireles_28
- Track 38 : ChipsNGuac_48, Neuville_47, CardboardBox_48, ChamoyPickle_49, AnnabelleLee_48, Roberts_47, Gerri43_48
- Track 39 : Makima_28
- Track 40 : TMaxx_30
- Track 41 : Studio_51
- Track 42 : Daegal_3
- Track 43 : Gravaillia_2

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

The start number called the most often in the published annotations is 17, it was called in 136 of the 155 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_56, Agente005_54, AlexAdler_55, Alyxandracam_55, Anilorac_54, Antoinette_55, AranulaLuti_54, Asta_54, Aubergine_54, AxiPup_55, Baines_54, Balsa_53, Bandik_55, BeautPeep30_55, BeeBee8_55, Benjalauren_55, BigRedClifford_55, Blage_55, BonesMcCoy_55, Bonino_54, Byron23_56, Calix_54, CarisSwetlik_55, Carostasia_54, Casey_54, Chako_54, Chamuel_54, Christoph_54, Clancy_54, Convict_55, CoraRita_56, Dave_55, Delphidian_55, Den3_55, Dothraki_55, Duocatuli_54, Endor_57, Erla_54, Espinosa_54, Etna_54, Etta_54, Exploradora_54, FarmerDoug_55, Figueroism_55, GardenB_56, Garey24_55, Gargoyle_55, Gelo_54, Gershwin_54, GoingMerry_56, GoneGirl_57, Greys_55, Gubbabump_54, HairyMan_53, Hamlet_54, HanSolo_54, HankSprout_55, HungryHenry_54, Ilzat_54, Inventa_55, Ioannes_55, Janus167_54, JasonD_55, JasperRussell_54, Jenos_56, Jerbirus_56, JeriBeth_56, Kale_54, KannH_54, Kauala_48, KellyGreen_56, KingJulien_53, Klimt_55, Knox_55, Koji_48, Kouch_56, Kurt1_55, Leafus_54, Lovelyunicorn_55, Ludgate_55, MaeLinda_55, ManRay_54, Mandalorian_54, Martin_56, McGalleon_55, Merida02_57, MillyPhilly_55, MiniVolent_55, MonChoix_52, MrWorldwide_55, Nagem_55, Nattles_54, NickSell_55,

Nucci_54, Oats_54, OldNelly_56, Oxtober96_56, Pajaza_54, Papafritta_54, ParleG_55, Peep_55, Peppino_54, Pherferi_55, Phiderman_55, PhillyPhantom_54, Phireproof_55, PhredFlintston_55, Phriends_55, Pikmin_54, Pocket_54, PuppyEggo_55, Raccoon_54, Rapheph_55, Raptor_55, Redfield_54, RenegadeRaider_51, Renzie_55, Riyhil_55, Robinson_55, Rog141_54, RosieMae_54, SJay_55, Schnapsidee_54, Schubert_53, Sedgewig_54, ShaiHulud_55, Shee_55, SoilGremlin_56, SolidSnake_57, SonOfLevi_55, Soror1_53, Stanktossa_54, StingRay_54, StirfryIV_54, Stormbreaker8_53, Strathdee_55, Studio_51, Superfresh_55, Symere_54, TatarkaPM_55, Teagan_55, TeddyBear_54, Tenda_54, Thompsone_55, Thorongil_55, TinSulphur_56, Velene_55, Vispistious_55, WildNOut_55, Winzigespinne_54, YuyuY_55, Zada_56,

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

- Juanyo_56, Quartz_55,

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

- AlanGrant_76, AnnabelLee_48, CardboardBox_48, Causa_100, ChamoyPickle_49, Cheeto1_56, ChickenKing_54, ChipsNGuac_48, Daegal_3, Funsized_23, GaeCeo_56, Gerri43_48, GodonK_14, GodonK_240, Gravallia_2, Jingles_48, Knocker_97, Makima_28, Mireles_28, Neuville_47, Phendrix_14, Phendrix_230, Rinkes_23, Roberts_47, StAugustine_99, TMaxx_30, Vincenzo_75,

Summary by start number:

Start 7:

- Found in 3 of 181 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Quartz_55 (EA10),

Start 8:

- Found in 2 of 181 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Juanyo_56 (EA10),

Start 12:

- Found in 3 of 181 (1.7%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 33.3% of time when present
- Phage (with cluster) where this start called: GaeCeo_56 (EA9),

Start 14:

- Found in 2 of 181 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 50.0% of time when present
- Phage (with cluster) where this start called: StAugustine_99 (AI),

Start 16:

- Found in 9 of 181 (5.0%) of genes in pham
- Manual Annotations of this start: 9 of 155
- Called 100.0% of time when present

- Phage (with cluster) where this start called: AlanGrant_76 (B4), Funsized_23 (B9), GodonK_14 (DK), GodonK_240 (DK), Knocker_97 (B9), Phendrix_14 (DK), Phendrix_230 (DK), Rinkes_23 (B9), Vincenzo_75 (B4),

Start 17:

- Found in 154 of 181 (85.1%) of genes in pham
- Manual Annotations of this start: 136 of 155
- Called 98.7% of time when present
- Phage (with cluster) where this start called: Acosta_56 (EA1), Agente005_54 (EA1), AlexAdler_55 (EA1), Alyxandracam_55 (EA1), Anilorac_54 (EA1), Antoinette_55 (EA1), AranulaLuti_54 (EA1), Asta_54 (EA1), Aubergine_54 (EA1), AxiPup_55 (EA1), Baines_54 (EA1), Balsa_53 (EA1), Bandik_55 (EA1), BeautPeep30_55 (EA1), BeeBee8_55 (EA1), Benjalauren_55 (EA1), BigRedClifford_55 (EA1), Blage_55 (EA1), BonesMcCoy_55 (EA1), Bonino_54 (EA1), Byron23_56 (EA1), Calix_54 (EA1), CarisSwetlik_55 (EA1), Carostasia_54 (EA10), Casey_54 (EA3), Chako_54 (EA1), Chamuel_54 (EA1), Christoph_54 (EA1), Clancy_54 (EA1), Convict_55 (EA1), CoraRita_56 (EA1), Dave_55 (EA1), Delphidian_55 (EA1), Den3_55 (EA1), Dothraki_55 (EA1), Duocatuli_54 (EA1), Endor_57 (EA1), Erla_54 (EA1), Espinosa_54 (EA1), Etna_54 (EA1), Etta_54 (EA1), Exploradora_54 (EA1), FarmerDoug_55 (EA1), Figueroism_55 (EA1), GardenB_56 (EA1), Garey24_55 (EA1), Gargoyle_55 (EA1), Gelo_54 (EA1), Gershwin_54 (EA1), GoingMerry_56 (EA1), GoneGirl_57 (EA1), Greys_55 (EA1), Gubbabump_54 (EA1), HairyMan_53 (EA10), Hamlet_54 (EA1), HanSolo_54 (EA1), HankSprout_55 (EA1), HungryHenry_54 (EA1), Ilzat_54 (EA1), Inventa_55 (EA1), Ioannes_55 (EA1), Janus167_54 (EA1), JasonD_55 (EA1), JasperRussell_54 (EA1), Jenos_56 (EA1), Jerbirus_56 (EA1), JeriBeth_56 (EA1), Kale_54 (EA1), KannH_54 (EA1), Kauala_48 (EA4), KellyGreen_56 (EA1), KingJulien_53 (EA1), Klimt_55 (EA1), Knox_55 (EA1), Koji_48 (EA4), Kouch_56 (EA1), Kurt1_55 (EA1), Leafus_54 (EA1), Lovelyunicorn_55 (EA1), Ludgate_55 (EA1), MaeLinda_55 (EA1), ManRay_54 (EA1), Mandalorian_54 (EA10), Martin_56 (EA1), McGalleon_55 (EA1), Merida02_57 (EA1), MillyPhilly_55 (EA1), MiniVolent_55 (EA10), MonChoix_52 (EA1), MrWorldwide_55 (EA1), Nagem_55 (EA1), Nattles_54 (EA1), NickSell_55 (EA1), Nucci_54 (EA10), Oats_54 (EA1), OldNelly_56 (EA1), Oxtobor96_56 (EA1), Pajaza_54 (EA3), Papafritta_54 (EA1), ParleG_55 (EA1), Peep_55 (EA1), Peppino_54 (EA1), Pherferi_55 (EA1), Phiderman_55 (EA1), PhillyPhantom_54 (EA1), Phireproof_55 (EA1), PhredFlintston_55 (EA1), Phriends_55 (EA1), Pikmin_54 (EA3), Pocket_54 (EA1), PuppyEggo_55 (EA1), Raccoon_54 (EA1), Rapheph_55 (EA1), Raptor_55 (EA1), Redfield_54 (EA1), RenegadeRaider_51 (EA4), Renzie_55 (EA1), Rihhil_55 (EA1), Robinson_55 (EA1), Rog141_54 (EA1), RosieMae_54 (EA1), SJay_55 (EA1), Schnapsidee_54 (EA1), Schubert_53 (EA8), Sedgewig_54 (EA1), ShaiHulud_55 (EA1), Shee_55 (EA1), SoilGremlin_56 (EA1), SolidSnake_57 (EA1), SonOfLevi_55 (EA1), Soror1_53 (EA1), Stanktossa_54 (EA1), StingRay_54 (EA1), StirfryIV_54 (EA1), Stormbreaker8_53 (EA1), Strathdee_55 (EA1), Studio_51 (FR), Superfresh_55 (EA1), Symere_54 (EA1), TatarkaPM_55 (EA1), Teagan_55 (EA1), TeddyBear_54 (EA1), Tenda_54 (EA1), Thompsone_55 (EA1), Thorongil_55 (EA1), TinSulphur_56 (EA1), Velene_55 (EA1), Vispistious_55 (EA1), WildNOut_55 (EA1), Winzigespinne_54 (EA1), YuyuY_55 (EA10), Zada_56 (EA1),

Start 18:

- Found in 2 of 181 (1.1%) of genes in pham
- Manual Annotations of this start: 1 of 155
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Causa_100 (AI),

Start 19:

- Found in 4 of 181 (2.2%) of genes in pham
- Manual Annotations of this start: 2 of 155
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cheeto1_56 (EA9), ChickenKing_54 (EA9), Jingles_48 (EA4),

Start 20:

- Found in 12 of 181 (6.6%) of genes in pham
- Manual Annotations of this start: 3 of 155
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AnnabelLee_48 (FR), CardboardBox_48 (FR), ChamoyPickle_49 (FR), ChipsNGuac_48 (FR), Daegal_3 (Q), Gerri43_48 (FR), Gravaillia_2 (Q), Makima_28 (FR), Mireles_28 (FR), Neuville_47 (FR), Roberts_47 (FR), TMaxx_30 (FR),

Summary by clusters:

There are 12 clusters represented in this pham: Q, FR, EA9, DK, AI, EA4, B4, EA8, EA1, EA3, B9, EA10,

Info for manual annotations of cluster AI:

- Start number 14 was manually annotated 1 time for cluster AI.
- Start number 18 was manually annotated 1 time for cluster AI.

Info for manual annotations of cluster B4:

- Start number 16 was manually annotated 2 times for cluster B4.

Info for manual annotations of cluster B9:

- Start number 16 was manually annotated 3 times for cluster B9.

Info for manual annotations of cluster DK:

- Start number 16 was manually annotated 4 times for cluster DK.

Info for manual annotations of cluster EA1:

- Start number 17 was manually annotated 125 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 7 was manually annotated 1 time for cluster EA10.
- Start number 8 was manually annotated 1 time for cluster EA10.
- Start number 17 was manually annotated 5 times for cluster EA10.

Info for manual annotations of cluster EA3:

- Start number 17 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 17 was manually annotated 2 times for cluster EA4.

Info for manual annotations of cluster EA8:

- Start number 17 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

- Start number 12 was manually annotated 1 time for cluster EA9.
- Start number 19 was manually annotated 2 times for cluster EA9.

Info for manual annotations of cluster FR:

- Start number 20 was manually annotated 1 time for cluster FR.

Info for manual annotations of cluster Q:

- Start number 20 was manually annotated 2 times for cluster Q.

Gene Information:

Gene: Acosta_56 Start: 37827, Stop: 37555, Start Num: 17

Candidate Starts for Acosta_56:

(Start: 17 @37827 has 136 MA's), (28, 37731), (35, 37686),

Gene: Agente005_54 Start: 37813, Stop: 37499, Start Num: 17

Candidate Starts for Agente005_54:

(Start: 17 @37813 has 136 MA's), (33, 37678), (35, 37672), (39, 37627),

Gene: AlanGrant_76 Start: 63236, Stop: 62979, Start Num: 16

Candidate Starts for AlanGrant_76:

(Start: 16 @63236 has 9 MA's), (21, 63212), (25, 63161), (28, 63134), (33, 63095),

Gene: AlexAdler_55 Start: 38033, Stop: 37737, Start Num: 17

Candidate Starts for AlexAdler_55:

(Start: 17 @38033 has 136 MA's), (33, 37898), (40, 37844),

Gene: Alyxandracam_55 Start: 38007, Stop: 37705, Start Num: 17

Candidate Starts for Alyxandracam_55:

(Start: 17 @38007 has 136 MA's), (33, 37872), (40, 37818),

Gene: Anilorac_54 Start: 37720, Stop: 37409, Start Num: 17

Candidate Starts for Anilorac_54:

(Start: 17 @37720 has 136 MA's), (33, 37585), (35, 37579), (39, 37534), (47, 37447),

Gene: AnnabelLee_48 Start: 31169, Stop: 30939, Start Num: 20

Candidate Starts for AnnabelLee_48:

(Start: 20 @31169 has 3 MA's), (29, 31070), (36, 31028),

Gene: Antoinette_55 Start: 38058, Stop: 37762, Start Num: 17

Candidate Starts for Antoinette_55:

(Start: 17 @38058 has 136 MA's), (33, 37923), (40, 37869),

Gene: AranulaLuti_54 Start: 37751, Stop: 37449, Start Num: 17

Candidate Starts for AranulaLuti_54:

(Start: 17 @37751 has 136 MA's), (33, 37616), (40, 37562),

Gene: Asta_54 Start: 37755, Stop: 37459, Start Num: 17

Candidate Starts for Asta_54:

(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: Aubergine_54 Start: 37755, Stop: 37459, Start Num: 17
Candidate Starts for Aubergine_54:
(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: AxiPup_55 Start: 37970, Stop: 37674, Start Num: 17
Candidate Starts for AxiPup_55:
(Start: 17 @37970 has 136 MA's), (33, 37835), (40, 37781),

Gene: Baines_54 Start: 37755, Stop: 37453, Start Num: 17
Candidate Starts for Baines_54:
(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: Balsa_53 Start: 37838, Stop: 37536, Start Num: 17
Candidate Starts for Balsa_53:
(Start: 17 @37838 has 136 MA's), (40, 37649), (47, 37574),

Gene: Bandik_55 Start: 38002, Stop: 37700, Start Num: 17
Candidate Starts for Bandik_55:
(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: BeautPeep30_55 Start: 38008, Stop: 37706, Start Num: 17
Candidate Starts for BeautPeep30_55:
(Start: 17 @38008 has 136 MA's), (33, 37873), (40, 37819),

Gene: BeeBee8_55 Start: 38012, Stop: 37710, Start Num: 17
Candidate Starts for BeeBee8_55:
(Start: 17 @38012 has 136 MA's), (33, 37877), (40, 37823), (47, 37748),

Gene: Benjalauren_55 Start: 37761, Stop: 37465, Start Num: 17
Candidate Starts for Benjalauren_55:
(Start: 17 @37761 has 136 MA's), (33, 37626), (40, 37572),

Gene: BigRedClifford_55 Start: 37997, Stop: 37701, Start Num: 17
Candidate Starts for BigRedClifford_55:
(Start: 17 @37997 has 136 MA's), (33, 37862), (40, 37808),

Gene: Blage_55 Start: 37997, Stop: 37701, Start Num: 17
Candidate Starts for Blage_55:
(Start: 17 @37997 has 136 MA's), (33, 37862), (40, 37808),

Gene: BonesMcCoy_55 Start: 37997, Stop: 37701, Start Num: 17
Candidate Starts for BonesMcCoy_55:
(Start: 17 @37997 has 136 MA's), (33, 37862), (40, 37808),

Gene: Bonino_54 Start: 37734, Stop: 37438, Start Num: 17
Candidate Starts for Bonino_54:
(Start: 17 @37734 has 136 MA's), (33, 37599), (40, 37545),

Gene: Byron23_56 Start: 38005, Stop: 37703, Start Num: 17
Candidate Starts for Byron23_56:
(Start: 17 @38005 has 136 MA's), (33, 37870), (40, 37816),

Gene: Calix_54 Start: 37741, Stop: 37445, Start Num: 17

Candidate Starts for Calix_54:

(Start: 17 @37741 has 136 MA's), (33, 37606), (40, 37552),

Gene: CardboardBox_48 Start: 31172, Stop: 30942, Start Num: 20

Candidate Starts for CardboardBox_48:

(Start: 20 @31172 has 3 MA's), (29, 31073), (36, 31031),

Gene: CarisSwetlik_55 Start: 37811, Stop: 37500, Start Num: 17

Candidate Starts for CarisSwetlik_55:

(Start: 17 @37811 has 136 MA's), (34, 37673), (47, 37538),

Gene: Carostasia_54 Start: 36652, Stop: 36395, Start Num: 17

Candidate Starts for Carostasia_54:

(Start: 7 @36745 has 1 MA's), (Start: 17 @36652 has 136 MA's), (28, 36556), (33, 36517), (38, 36472), (44, 36445),

Gene: Casey_54 Start: 36538, Stop: 36284, Start Num: 17

Candidate Starts for Casey_54:

(Start: 17 @36538 has 136 MA's), (42, 36331), (46, 36319),

Gene: Causa_100 Start: 71095, Stop: 70808, Start Num: 18

Candidate Starts for Causa_100:

(Start: 14 @71137 has 1 MA's), (Start: 18 @71095 has 1 MA's), (21, 71080), (30, 70993), (33, 70966), (34, 70963), (38, 70918), (44, 70903),

Gene: Chako_54 Start: 37751, Stop: 37449, Start Num: 17

Candidate Starts for Chako_54:

(Start: 17 @37751 has 136 MA's), (33, 37616), (40, 37562),

Gene: ChamoyPickle_49 Start: 31712, Stop: 31482, Start Num: 20

Candidate Starts for ChamoyPickle_49:

(Start: 20 @31712 has 3 MA's), (29, 31613), (36, 31571),

Gene: Chamuel_54 Start: 37767, Stop: 37471, Start Num: 17

Candidate Starts for Chamuel_54:

(Start: 17 @37767 has 136 MA's), (33, 37632), (40, 37578),

Gene: Cheeto1_56 Start: 38137, Stop: 37841, Start Num: 19

Candidate Starts for Cheeto1_56:

(Start: 12 @38197 has 1 MA's), (13, 38182), (Start: 19 @38137 has 2 MA's), (23, 38080),

Gene: ChickenKing_54 Start: 38291, Stop: 37995, Start Num: 19

Candidate Starts for ChickenKing_54:

(1, 38693), (Start: 12 @38351 has 1 MA's), (13, 38336), (Start: 19 @38291 has 2 MA's), (23, 38234), (32, 38156),

Gene: ChipsNGuac_48 Start: 31172, Stop: 30942, Start Num: 20

Candidate Starts for ChipsNGuac_48:

(Start: 20 @31172 has 3 MA's), (29, 31073), (36, 31031),

Gene: Christoph_54 Start: 37754, Stop: 37458, Start Num: 17

Candidate Starts for Christoph_54:

(Start: 17 @37754 has 136 MA's), (33, 37619), (40, 37565),

Gene: Clancy_54 Start: 37754, Stop: 37452, Start Num: 17
Candidate Starts for Clancy_54:
(Start: 17 @37754 has 136 MA's), (33, 37619), (40, 37565),

Gene: Convict_55 Start: 37997, Stop: 37701, Start Num: 17
Candidate Starts for Convict_55:
(Start: 17 @37997 has 136 MA's), (33, 37862), (40, 37808),

Gene: CoraRita_56 Start: 37724, Stop: 37422, Start Num: 17
Candidate Starts for CoraRita_56:
(Start: 17 @37724 has 136 MA's), (33, 37589), (40, 37535),

Gene: Daegal_3 Start: 1154, Stop: 930, Start Num: 20
Candidate Starts for Daegal_3:
(Start: 20 @1154 has 3 MA's), (24, 1094), (34, 1025), (37, 983),

Gene: Dave_55 Start: 38058, Stop: 37762, Start Num: 17
Candidate Starts for Dave_55:
(Start: 17 @38058 has 136 MA's), (33, 37923), (40, 37869),

Gene: Delphidian_55 Start: 37991, Stop: 37731, Start Num: 17
Candidate Starts for Delphidian_55:
(Start: 17 @37991 has 136 MA's), (33, 37853), (34, 37850),

Gene: Den3_55 Start: 38002, Stop: 37706, Start Num: 17
Candidate Starts for Den3_55:
(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Dothraki_55 Start: 38005, Stop: 37703, Start Num: 17
Candidate Starts for Dothraki_55:
(Start: 17 @38005 has 136 MA's), (33, 37870), (40, 37816),

Gene: Duocatuli_54 Start: 37751, Stop: 37449, Start Num: 17
Candidate Starts for Duocatuli_54:
(Start: 17 @37751 has 136 MA's), (33, 37616), (40, 37562),

Gene: Endor_57 Start: 38543, Stop: 38283, Start Num: 17
Candidate Starts for Endor_57:
(Start: 17 @38543 has 136 MA's), (33, 38405), (34, 38402), (43, 38327), (44, 38324),

Gene: Erla_54 Start: 37738, Stop: 37442, Start Num: 17
Candidate Starts for Erla_54:
(Start: 17 @37738 has 136 MA's), (33, 37603), (40, 37549),

Gene: Espinosa_54 Start: 37753, Stop: 37457, Start Num: 17
Candidate Starts for Espinosa_54:
(Start: 17 @37753 has 136 MA's), (33, 37618), (40, 37564),

Gene: Etna_54 Start: 37891, Stop: 37589, Start Num: 17
Candidate Starts for Etna_54:
(Start: 17 @37891 has 136 MA's), (33, 37756), (40, 37702), (47, 37627),

Gene: Etta_54 Start: 37742, Stop: 37446, Start Num: 17

Candidate Starts for Etta_54:

(Start: 17 @37742 has 136 MA's), (33, 37607), (40, 37553),

Gene: Exploradora_54 Start: 37703, Stop: 37407, Start Num: 17

Candidate Starts for Exploradora_54:

(Start: 17 @37703 has 136 MA's), (33, 37568), (40, 37514),

Gene: FarmerDoug_55 Start: 38067, Stop: 37807, Start Num: 17

Candidate Starts for FarmerDoug_55:

(Start: 17 @38067 has 136 MA's), (33, 37929), (34, 37926), (43, 37851),

Gene: Figueroism_55 Start: 37998, Stop: 37696, Start Num: 17

Candidate Starts for Figueroism_55:

(Start: 17 @37998 has 136 MA's), (33, 37863), (40, 37809),

Gene: Funsized_23 Start: 19544, Stop: 19296, Start Num: 16

Candidate Starts for Funsized_23:

(4, 19742), (6, 19694), (Start: 16 @19544 has 9 MA's), (21, 19517), (25, 19466), (28, 19439),

Gene: GaeCeo_56 Start: 38584, Stop: 38228, Start Num: 12

Candidate Starts for GaeCeo_56:

(1, 38926), (Start: 12 @38584 has 1 MA's), (13, 38569), (Start: 19 @38524 has 2 MA's), (23, 38467), (32, 38389),

Gene: GardenB_56 Start: 38320, Stop: 38060, Start Num: 17

Candidate Starts for GardenB_56:

(Start: 17 @38320 has 136 MA's), (33, 38182), (34, 38179), (43, 38104), (44, 38101),

Gene: Garey24_55 Start: 37721, Stop: 37425, Start Num: 17

Candidate Starts for Garey24_55:

(Start: 17 @37721 has 136 MA's), (33, 37586), (40, 37532),

Gene: Gargoyle_55 Start: 38002, Stop: 37706, Start Num: 17

Candidate Starts for Gargoyle_55:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Gelo_54 Start: 37748, Stop: 37452, Start Num: 17

Candidate Starts for Gelo_54:

(Start: 17 @37748 has 136 MA's), (33, 37613), (40, 37559),

Gene: Gerri43_48 Start: 31172, Stop: 30942, Start Num: 20

Candidate Starts for Gerri43_48:

(Start: 20 @31172 has 3 MA's), (29, 31073), (36, 31031),

Gene: Gershwin_54 Start: 37755, Stop: 37459, Start Num: 17

Candidate Starts for Gershwin_54:

(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: GodonK_14 Start: 5550, Stop: 5308, Start Num: 16

Candidate Starts for GodonK_14:

(Start: 16 @5550 has 9 MA's), (21, 5526), (25, 5475),

Gene: GodonK_240 Start: 120532, Stop: 120290, Start Num: 16
Candidate Starts for GodonK_240:
(Start: 16 @120532 has 9 MA's), (21, 120508), (25, 120457),

Gene: GoingMerry_56 Start: 37980, Stop: 37684, Start Num: 17
Candidate Starts for GoingMerry_56:
(Start: 17 @37980 has 136 MA's), (33, 37845), (40, 37791),

Gene: GoneGirl_57 Start: 38307, Stop: 38047, Start Num: 17
Candidate Starts for GoneGirl_57:
(Start: 17 @38307 has 136 MA's), (33, 38169), (34, 38166), (43, 38091), (44, 38088),

Gene: Gravaillia_2 Start: 866, Stop: 639, Start Num: 20
Candidate Starts for Gravaillia_2:
(Start: 20 @866 has 3 MA's), (34, 734),

Gene: Greys_55 Start: 37998, Stop: 37702, Start Num: 17
Candidate Starts for Greys_55:
(Start: 17 @37998 has 136 MA's), (33, 37863), (40, 37809),

Gene: Gubbabump_54 Start: 37693, Stop: 37397, Start Num: 17
Candidate Starts for Gubbabump_54:
(Start: 17 @37693 has 136 MA's), (33, 37558), (40, 37504),

Gene: HairyMan_53 Start: 37770, Stop: 37519, Start Num: 17
Candidate Starts for HairyMan_53:
(Start: 17 @37770 has 136 MA's), (27, 37686), (32, 37638), (33, 37635),

Gene: Hamlet_54 Start: 37931, Stop: 37629, Start Num: 17
Candidate Starts for Hamlet_54:
(Start: 17 @37931 has 136 MA's), (40, 37742), (47, 37667),

Gene: HanSolo_54 Start: 37703, Stop: 37407, Start Num: 17
Candidate Starts for HanSolo_54:
(Start: 17 @37703 has 136 MA's), (33, 37568), (40, 37514),

Gene: HankSprout_55 Start: 37622, Stop: 37326, Start Num: 17
Candidate Starts for HankSprout_55:
(Start: 17 @37622 has 136 MA's), (33, 37487), (40, 37433),

Gene: HungryHenry_54 Start: 37715, Stop: 37413, Start Num: 17
Candidate Starts for HungryHenry_54:
(Start: 17 @37715 has 136 MA's), (33, 37580), (40, 37526),

Gene: Ilzat_54 Start: 37725, Stop: 37423, Start Num: 17
Candidate Starts for Ilzat_54:
(Start: 17 @37725 has 136 MA's), (33, 37590), (40, 37536),

Gene: Inventa_55 Start: 38002, Stop: 37700, Start Num: 17
Candidate Starts for Inventa_55:
(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Ioannes_55 Start: 38080, Stop: 37784, Start Num: 17

Candidate Starts for Ioannes_55:

(Start: 17 @38080 has 136 MA's), (33, 37945), (40, 37891),

Gene: Janus167_54 Start: 37730, Stop: 37434, Start Num: 17

Candidate Starts for Janus167_54:

(Start: 17 @37730 has 136 MA's), (33, 37595), (40, 37541),

Gene: JasonD_55 Start: 37644, Stop: 37333, Start Num: 17

Candidate Starts for JasonD_55:

(Start: 17 @37644 has 136 MA's), (34, 37506), (47, 37371),

Gene: JasperRussell_54 Start: 37751, Stop: 37449, Start Num: 17

Candidate Starts for JasperRussell_54:

(Start: 17 @37751 has 136 MA's), (33, 37616), (40, 37562),

Gene: Jenos_56 Start: 38342, Stop: 38070, Start Num: 17

Candidate Starts for Jenos_56:

(Start: 17 @38342 has 136 MA's), (28, 38246), (35, 38201), (40, 38153),

Gene: Jerbirus_56 Start: 37745, Stop: 37449, Start Num: 17

Candidate Starts for Jerbirus_56:

(Start: 17 @37745 has 136 MA's), (33, 37610), (40, 37556),

Gene: JeriBeth_56 Start: 37633, Stop: 37337, Start Num: 17

Candidate Starts for JeriBeth_56:

(Start: 17 @37633 has 136 MA's), (33, 37498), (40, 37444),

Gene: Jingles_48 Start: 35268, Stop: 34969, Start Num: 19

Candidate Starts for Jingles_48:

(Start: 19 @35268 has 2 MA's),

Gene: Juanyo_56 Start: 37419, Stop: 37084, Start Num: 8

Candidate Starts for Juanyo_56:

(Start: 8 @37419 has 1 MA's), (Start: 17 @37326 has 136 MA's), (28, 37230), (33, 37206), (44, 37134),

Gene: Kale_54 Start: 37757, Stop: 37461, Start Num: 17

Candidate Starts for Kale_54:

(Start: 17 @37757 has 136 MA's), (33, 37622), (40, 37568),

Gene: KannH_54 Start: 37751, Stop: 37449, Start Num: 17

Candidate Starts for KannH_54:

(Start: 17 @37751 has 136 MA's), (33, 37616), (40, 37562),

Gene: Kauala_48 Start: 35372, Stop: 35127, Start Num: 17

Candidate Starts for Kauala_48:

(Start: 17 @35372 has 136 MA's), (28, 35276), (33, 35237),

Gene: KellyGreen_56 Start: 37739, Stop: 37443, Start Num: 17

Candidate Starts for KellyGreen_56:

(Start: 17 @37739 has 136 MA's), (33, 37604), (40, 37550),

Gene: KingJulien_53 Start: 37729, Stop: 37427, Start Num: 17

Candidate Starts for KingJulien_53:

(Start: 17 @37729 has 136 MA's), (40, 37540), (47, 37465),

Gene: Klimt_55 Start: 37773, Stop: 37477, Start Num: 17

Candidate Starts for Klimt_55:

(Start: 17 @37773 has 136 MA's), (33, 37638), (40, 37584),

Gene: Klocker_97 Start: 70879, Stop: 70643, Start Num: 16

Candidate Starts for Klocker_97:

(Start: 16 @70879 has 9 MA's), (21, 70861), (22, 70855), (26, 70804), (44, 70678),

Gene: Knox_55 Start: 37997, Stop: 37701, Start Num: 17

Candidate Starts for Knox_55:

(Start: 17 @37997 has 136 MA's), (33, 37862), (40, 37808),

Gene: Koji_48 Start: 35362, Stop: 35105, Start Num: 17

Candidate Starts for Koji_48:

(Start: 17 @35362 has 136 MA's), (28, 35266), (33, 35227),

Gene: Kouch_56 Start: 37703, Stop: 37407, Start Num: 17

Candidate Starts for Kouch_56:

(Start: 17 @37703 has 136 MA's), (33, 37568), (40, 37514),

Gene: Kurt1_55 Start: 38002, Stop: 37700, Start Num: 17

Candidate Starts for Kurt1_55:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Leafus_54 Start: 37994, Stop: 37692, Start Num: 17

Candidate Starts for Leafus_54:

(Start: 17 @37994 has 136 MA's), (40, 37805), (47, 37730),

Gene: Lovelyunicorn_55 Start: 37998, Stop: 37702, Start Num: 17

Candidate Starts for Lovelyunicorn_55:

(Start: 17 @37998 has 136 MA's), (33, 37863), (40, 37809),

Gene: Ludgate_55 Start: 37999, Stop: 37703, Start Num: 17

Candidate Starts for Ludgate_55:

(Start: 17 @37999 has 136 MA's), (33, 37864), (40, 37810),

Gene: MaeLinda_55 Start: 38006, Stop: 37704, Start Num: 17

Candidate Starts for MaeLinda_55:

(Start: 17 @38006 has 136 MA's), (33, 37871), (40, 37817),

Gene: Makima_28 Start: 19515, Stop: 19291, Start Num: 20

Candidate Starts for Makima_28:

(Start: 20 @19515 has 3 MA's), (36, 19377), (38, 19341),

Gene: ManRay_54 Start: 37755, Stop: 37459, Start Num: 17

Candidate Starts for ManRay_54:

(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: Mandalorian_54 Start: 36663, Stop: 36406, Start Num: 17

Candidate Starts for Mandalorian_54:

(Start: 7 @36756 has 1 MA's), (Start: 17 @36663 has 136 MA's), (28, 36567), (33, 36528), (38, 36483), (44, 36456),

Gene: Martin_56 Start: 38011, Stop: 37709, Start Num: 17

Candidate Starts for Martin_56:

(Start: 17 @38011 has 136 MA's), (33, 37876), (40, 37822),

Gene: McGalleon_55 Start: 38480, Stop: 38208, Start Num: 17

Candidate Starts for McGalleon_55:

(Start: 17 @38480 has 136 MA's), (28, 38384), (35, 38339), (40, 38291),

Gene: Merida02_57 Start: 37998, Stop: 37738, Start Num: 17

Candidate Starts for Merida02_57:

(Start: 17 @37998 has 136 MA's), (33, 37860), (34, 37857),

Gene: MillyPhilly_55 Start: 37999, Stop: 37697, Start Num: 17

Candidate Starts for MillyPhilly_55:

(Start: 17 @37999 has 136 MA's), (33, 37864), (40, 37810),

Gene: MiniVolent_55 Start: 37294, Stop: 37037, Start Num: 17

Candidate Starts for MiniVolent_55:

(Start: 8 @37387 has 1 MA's), (Start: 17 @37294 has 136 MA's), (33, 37159), (44, 37087),

Gene: Mireles_28 Start: 18449, Stop: 18216, Start Num: 20

Candidate Starts for Mireles_28:

(15, 18485), (Start: 20 @18449 has 3 MA's), (36, 18311), (45, 18254),

Gene: MonChoix_52 Start: 37644, Stop: 37339, Start Num: 17

Candidate Starts for MonChoix_52:

(Start: 17 @37644 has 136 MA's), (33, 37509), (40, 37455), (47, 37377),

Gene: MrWorldwide_55 Start: 38009, Stop: 37707, Start Num: 17

Candidate Starts for MrWorldwide_55:

(Start: 17 @38009 has 136 MA's), (33, 37874), (40, 37820),

Gene: Nagem_55 Start: 38045, Stop: 37743, Start Num: 17

Candidate Starts for Nagem_55:

(Start: 17 @38045 has 136 MA's), (33, 37910), (40, 37856),

Gene: Nattles_54 Start: 37742, Stop: 37446, Start Num: 17

Candidate Starts for Nattles_54:

(Start: 17 @37742 has 136 MA's), (33, 37607), (40, 37553),

Gene: Neuville_47 Start: 31172, Stop: 30942, Start Num: 20

Candidate Starts for Neuville_47:

(Start: 20 @31172 has 3 MA's), (29, 31073), (36, 31031),

Gene: NickSell_55 Start: 38012, Stop: 37710, Start Num: 17

Candidate Starts for NickSell_55:

(Start: 17 @38012 has 136 MA's), (33, 37877), (40, 37823),

Gene: Nucci_54 Start: 36629, Stop: 36366, Start Num: 17

Candidate Starts for Nucci_54:

(Start: 17 @36629 has 136 MA's), (28, 36533), (33, 36494),

Gene: Oats_54 Start: 37755, Stop: 37459, Start Num: 17

Candidate Starts for Oats_54:

(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: OldNelly_56 Start: 37995, Stop: 37735, Start Num: 17

Candidate Starts for OldNelly_56:

(Start: 17 @37995 has 136 MA's), (33, 37857), (34, 37854),

Gene: Oxtob96_56 Start: 37998, Stop: 37702, Start Num: 17

Candidate Starts for Oxtob96_56:

(Start: 17 @37998 has 136 MA's), (33, 37863), (40, 37809),

Gene: Pajaza_54 Start: 36538, Stop: 36284, Start Num: 17

Candidate Starts for Pajaza_54:

(Start: 17 @36538 has 136 MA's), (42, 36331), (46, 36319),

Gene: Papafritta_54 Start: 37760, Stop: 37458, Start Num: 17

Candidate Starts for Papafritta_54:

(Start: 17 @37760 has 136 MA's), (33, 37625), (40, 37571),

Gene: ParleG_55 Start: 38009, Stop: 37707, Start Num: 17

Candidate Starts for ParleG_55:

(Start: 17 @38009 has 136 MA's), (33, 37874), (40, 37820),

Gene: Peep_55 Start: 38055, Stop: 37759, Start Num: 17

Candidate Starts for Peep_55:

(Start: 17 @38055 has 136 MA's), (33, 37920), (40, 37866),

Gene: Peppino_54 Start: 37824, Stop: 37522, Start Num: 17

Candidate Starts for Peppino_54:

(Start: 17 @37824 has 136 MA's), (40, 37635), (47, 37560),

Gene: Phendrix_230 Start: 119315, Stop: 119073, Start Num: 16

Candidate Starts for Phendrix_230:

(9, 119390), (10, 119384), (11, 119366), (Start: 16 @119315 has 9 MA's), (25, 119240),

Gene: Phendrix_14 Start: 5717, Stop: 5475, Start Num: 16

Candidate Starts for Phendrix_14:

(9, 5792), (10, 5786), (11, 5768), (Start: 16 @5717 has 9 MA's), (25, 5642),

Gene: Pherferi_55 Start: 38002, Stop: 37700, Start Num: 17

Candidate Starts for Pherferi_55:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Phiderman_55 Start: 37999, Stop: 37697, Start Num: 17

Candidate Starts for Phiderman_55:

(Start: 17 @37999 has 136 MA's), (33, 37864), (40, 37810),

Gene: PhillyPhantom_54 Start: 37825, Stop: 37523, Start Num: 17

Candidate Starts for PhillyPhantom_54:

(Start: 17 @37825 has 136 MA's), (40, 37636), (47, 37561),

Gene: Phireproof_55 Start: 38008, Stop: 37706, Start Num: 17

Candidate Starts for Phireproof_55:

(Start: 17 @38008 has 136 MA's), (33, 37873), (40, 37819),

Gene: PhredFlintston_55 Start: 38002, Stop: 37700, Start Num: 17

Candidate Starts for PhredFlintston_55:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Phriends_55 Start: 37999, Stop: 37739, Start Num: 17

Candidate Starts for Phriends_55:

(Start: 17 @37999 has 136 MA's), (33, 37861), (34, 37858),

Gene: Pikmin_54 Start: 36538, Stop: 36284, Start Num: 17

Candidate Starts for Pikmin_54:

(Start: 17 @36538 has 136 MA's), (42, 36331), (46, 36319),

Gene: Pocket_54 Start: 37782, Stop: 37486, Start Num: 17

Candidate Starts for Pocket_54:

(Start: 17 @37782 has 136 MA's), (33, 37647), (40, 37593),

Gene: PuppyEggo_55 Start: 38003, Stop: 37707, Start Num: 17

Candidate Starts for PuppyEggo_55:

(Start: 17 @38003 has 136 MA's), (33, 37868), (40, 37814),

Gene: Quartz_55 Start: 36869, Stop: 36519, Start Num: 7

Candidate Starts for Quartz_55:

(Start: 7 @36869 has 1 MA's), (Start: 17 @36776 has 136 MA's), (28, 36680), (33, 36641), (38, 36596), (44, 36569),

Gene: Raccoon_54 Start: 37795, Stop: 37493, Start Num: 17

Candidate Starts for Raccoon_54:

(Start: 17 @37795 has 136 MA's), (40, 37606), (47, 37531),

Gene: Rapheph_55 Start: 38002, Stop: 37700, Start Num: 17

Candidate Starts for Rapheph_55:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Raptor_55 Start: 38000, Stop: 37704, Start Num: 17

Candidate Starts for Raptor_55:

(Start: 17 @38000 has 136 MA's), (33, 37865), (40, 37811),

Gene: Redfield_54 Start: 37837, Stop: 37535, Start Num: 17

Candidate Starts for Redfield_54:

(Start: 17 @37837 has 136 MA's), (33, 37702), (40, 37648), (47, 37573),

Gene: RenegadeRaider_51 Start: 35067, Stop: 34810, Start Num: 17

Candidate Starts for RenegadeRaider_51:

(Start: 17 @35067 has 136 MA's), (28, 34971), (33, 34932),

Gene: Renzie_55 Start: 38058, Stop: 37762, Start Num: 17

Candidate Starts for Renzie_55:

(Start: 17 @38058 has 136 MA's), (33, 37923), (40, 37869),

Gene: Rinkes_23 Start: 19467, Stop: 19222, Start Num: 16
Candidate Starts for Rinkes_23:
(Start: 16 @19467 has 9 MA's), (21, 19443), (25, 19392), (26, 19386), (31, 19347), (33, 19326),

Gene: Riyhil_55 Start: 38012, Stop: 37710, Start Num: 17
Candidate Starts for Riyhil_55:
(Start: 17 @38012 has 136 MA's), (33, 37877), (40, 37823),

Gene: Roberts_47 Start: 31172, Stop: 30942, Start Num: 20
Candidate Starts for Roberts_47:
(Start: 20 @31172 has 3 MA's), (29, 31073), (36, 31031),

Gene: Robinson_55 Start: 38074, Stop: 37778, Start Num: 17
Candidate Starts for Robinson_55:
(Start: 17 @38074 has 136 MA's), (33, 37939), (40, 37885),

Gene: Rog141_54 Start: 37745, Stop: 37449, Start Num: 17
Candidate Starts for Rog141_54:
(Start: 17 @37745 has 136 MA's), (33, 37610), (40, 37556),

Gene: RosieMae_54 Start: 37806, Stop: 37504, Start Num: 17
Candidate Starts for RosieMae_54:
(Start: 17 @37806 has 136 MA's), (33, 37671), (40, 37617),

Gene: SJay_55 Start: 38046, Stop: 37744, Start Num: 17
Candidate Starts for SJay_55:
(Start: 17 @38046 has 136 MA's), (33, 37911), (40, 37857),

Gene: Schnapsidee_54 Start: 37869, Stop: 37567, Start Num: 17
Candidate Starts for Schnapsidee_54:
(Start: 17 @37869 has 136 MA's), (40, 37680), (47, 37605),

Gene: Schubert_53 Start: 37310, Stop: 37065, Start Num: 17
Candidate Starts for Schubert_53:
(Start: 17 @37310 has 136 MA's), (33, 37175),

Gene: Sedgewig_54 Start: 37707, Stop: 37405, Start Num: 17
Candidate Starts for Sedgewig_54:
(Start: 17 @37707 has 136 MA's), (33, 37572), (40, 37518),

Gene: ShaiHulud_55 Start: 38012, Stop: 37716, Start Num: 17
Candidate Starts for ShaiHulud_55:
(Start: 17 @38012 has 136 MA's), (33, 37877), (40, 37823),

Gene: Shee_55 Start: 37999, Stop: 37697, Start Num: 17
Candidate Starts for Shee_55:
(Start: 17 @37999 has 136 MA's), (33, 37864), (40, 37810),

Gene: SoilGremlin_56 Start: 37992, Stop: 37732, Start Num: 17
Candidate Starts for SoilGremlin_56:
(Start: 17 @37992 has 136 MA's), (33, 37854), (34, 37851),

Gene: SolidSnake_57 Start: 37991, Stop: 37731, Start Num: 17

Candidate Starts for SolidSnake_57:

(Start: 17 @37991 has 136 MA's), (33, 37853), (34, 37850),

Gene: SonOfLevi_55 Start: 37773, Stop: 37477, Start Num: 17

Candidate Starts for SonOfLevi_55:

(Start: 17 @37773 has 136 MA's), (33, 37638), (40, 37584),

Gene: Soror1_53 Start: 37744, Stop: 37442, Start Num: 17

Candidate Starts for Soror1_53:

(Start: 17 @37744 has 136 MA's), (40, 37555), (47, 37480),

Gene: StAugustine_99 Start: 72844, Stop: 72515, Start Num: 14

Candidate Starts for StAugustine_99:

(2, 73084), (3, 73060), (5, 72970), (Start: 14 @72844 has 1 MA's), (Start: 18 @72802 has 1 MA's), (21, 72787), (30, 72700), (33, 72673), (34, 72670), (38, 72625), (44, 72610),

Gene: Stanktossa_54 Start: 38002, Stop: 37700, Start Num: 17

Candidate Starts for Stanktossa_54:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: StingRay_54 Start: 37797, Stop: 37501, Start Num: 17

Candidate Starts for StingRay_54:

(Start: 17 @37797 has 136 MA's), (33, 37662), (40, 37608),

Gene: StirfryIV_54 Start: 37718, Stop: 37416, Start Num: 17

Candidate Starts for StirfryIV_54:

(Start: 17 @37718 has 136 MA's), (33, 37583), (40, 37529),

Gene: Stormbreaker8_53 Start: 37730, Stop: 37428, Start Num: 17

Candidate Starts for Stormbreaker8_53:

(Start: 17 @37730 has 136 MA's), (40, 37541), (47, 37466),

Gene: Strathdee_55 Start: 38002, Stop: 37706, Start Num: 17

Candidate Starts for Strathdee_55:

(Start: 17 @38002 has 136 MA's), (33, 37867), (40, 37813),

Gene: Studio_51 Start: 32697, Stop: 32470, Start Num: 17

Candidate Starts for Studio_51:

(Start: 17 @32697 has 136 MA's), (29, 32592), (36, 32553),

Gene: Superfresh_55 Start: 38058, Stop: 37762, Start Num: 17

Candidate Starts for Superfresh_55:

(Start: 17 @38058 has 136 MA's), (33, 37923), (40, 37869),

Gene: Symere_54 Start: 37717, Stop: 37415, Start Num: 17

Candidate Starts for Symere_54:

(Start: 17 @37717 has 136 MA's), (33, 37582), (40, 37528),

Gene: TMaxx_30 Start: 18671, Stop: 18444, Start Num: 20

Candidate Starts for TMaxx_30:

(Start: 20 @18671 has 3 MA's), (36, 18533), (45, 18476),

Gene: TatarkaPM_55 Start: 38012, Stop: 37710, Start Num: 17
Candidate Starts for TatarkaPM_55:
(Start: 17 @38012 has 136 MA's), (33, 37877), (40, 37823),

Gene: Teagan_55 Start: 37993, Stop: 37697, Start Num: 17
Candidate Starts for Teagan_55:
(Start: 17 @37993 has 136 MA's), (33, 37858), (40, 37804),

Gene: TeddyBear_54 Start: 37755, Stop: 37459, Start Num: 17
Candidate Starts for TeddyBear_54:
(Start: 17 @37755 has 136 MA's), (33, 37620), (40, 37566),

Gene: Tenda_54 Start: 37753, Stop: 37457, Start Num: 17
Candidate Starts for Tenda_54:
(Start: 17 @37753 has 136 MA's), (33, 37618), (40, 37564),

Gene: Thompsone_55 Start: 38000, Stop: 37704, Start Num: 17
Candidate Starts for Thompsone_55:
(Start: 17 @38000 has 136 MA's), (33, 37865), (40, 37811),

Gene: Thorongil_55 Start: 37517, Stop: 37221, Start Num: 17
Candidate Starts for Thorongil_55:
(Start: 17 @37517 has 136 MA's), (33, 37382), (40, 37328),

Gene: TinSulphur_56 Start: 38008, Stop: 37706, Start Num: 17
Candidate Starts for TinSulphur_56:
(Start: 17 @38008 has 136 MA's), (33, 37873), (40, 37819),

Gene: Velene_55 Start: 37998, Stop: 37702, Start Num: 17
Candidate Starts for Velene_55:
(Start: 17 @37998 has 136 MA's), (33, 37863), (40, 37809),

Gene: Vincenzo_75 Start: 63266, Stop: 63009, Start Num: 16
Candidate Starts for Vincenzo_75:
(Start: 16 @63266 has 9 MA's), (21, 63242), (25, 63191), (28, 63164), (33, 63125),

Gene: Vispistious_55 Start: 38003, Stop: 37707, Start Num: 17
Candidate Starts for Vispistious_55:
(Start: 17 @38003 has 136 MA's), (33, 37868), (40, 37814),

Gene: WildNOut_55 Start: 37996, Stop: 37700, Start Num: 17
Candidate Starts for WildNOut_55:
(Start: 17 @37996 has 136 MA's), (33, 37861), (40, 37807),

Gene: Winzigespinne_54 Start: 37741, Stop: 37445, Start Num: 17
Candidate Starts for Winzigespinne_54:
(Start: 17 @37741 has 136 MA's), (33, 37606), (40, 37552),

Gene: YuuY_55 Start: 37195, Stop: 36938, Start Num: 17
Candidate Starts for YuuY_55:
(Start: 17 @37195 has 136 MA's), (28, 37099), (33, 37060), (41, 37003), (44, 36988),

Gene: Zada_56 Start: 38015, Stop: 37719, Start Num: 17

Candidate Starts for Zada_56:

(Start: 17 @38015 has 136 MA's), (33, 37880), (40, 37826),