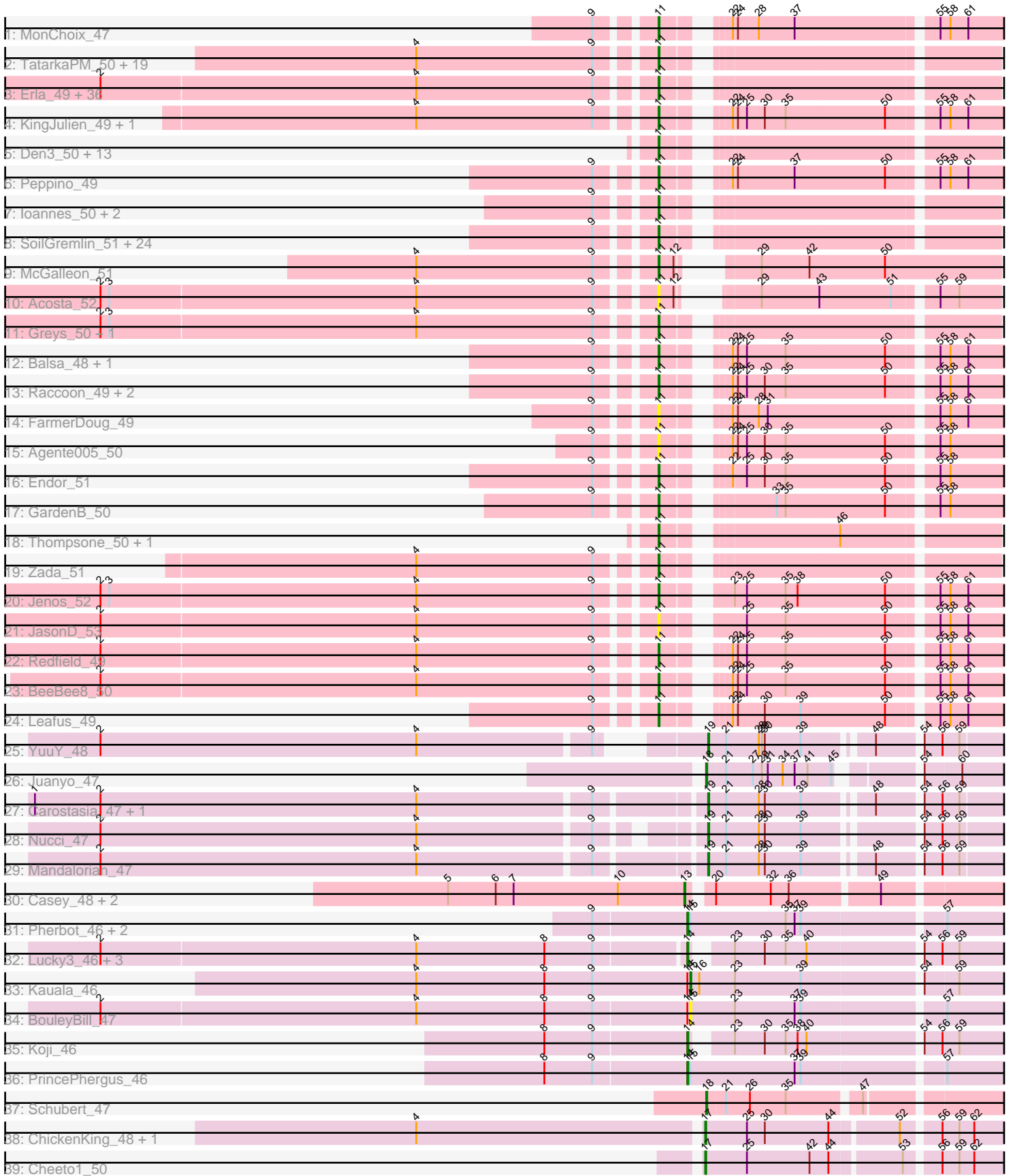


Pham 163405



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 163405 Report

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

Pham number 163405 has 148 members, 22 are drafts.

Phages represented in each track:

- Track 1 : MonChoix_47
- Track 2 : TatarkaPM_50, PhredFlintston_50, TinSulphur_51, Dothraki_50, Inventa_50, ParleG_50, BeautPeep30_50, MillyPhilly_50, Stanktossa_49, Rappheph_50, Byron23_51, Phiderman_52, MrWorldwide_50, Shee_50, Riyhil_50, NickSell_52, Martin_51, Bandik_50, Kurt1_50, Pherferi_50
- Track 3 : Erla_49, StingRay_49, Pocket_49, Aubergine_49, SJay_50, ManRay_49, Klimt_50, Kale_49, TeddyBear_49, Papafritta_49, Winzigespinne_49, Benjalauren_50, Garey24_50, Espinosa_49, Asta_52, Baines_49, Chamuel_49, JeriBeth_51, Nattles_49, SonOfLevi_50, Gershwin_49, KannH_49, AranulaLuti_49, Rog141_51, Calix_49, Christoph_49, Etta_49, Gelo_49, Janus167_49, JasperRussell_49, Oats_49, HankSprout_52, Nagem_50, Tenda_49, Chako_49, Bonino_49, Jerbirus_51
- Track 4 : KingJulien_49, Stormbreaker8_48
- Track 5 : Den3_50, BonesMcCoy_50, Blage_50, Oxtober96_51, BigRedClifford_50, Velene_50, AxiPup_50, Convict_50, WildNOut_50, Knox_50, Lovelyunicorn_50, Teagan_50, Raptor_50, Phireproof_50
- Track 6 : Peppino_49
- Track 7 : Ioannes_50, Duocatuli_49, HanSolo_49
- Track 8 : SoilGremlin_51, Renzie_50, Thorongil_50, Strathdee_50, StirfryIV_51, Alyxandracam_50, Superfresh_50, Peep_50, Ilzat_49, HungryHenry_51, Dave_50, Clancy_49, Robinson_50, Antoinette_50, Phriends_50, Delphidian_52, Figueroism_50, AlexAdler_50, ShaiHulud_51, PuppyEggo_50, Ludgate_50, MaeLinda_50, OldNelly_51, Gubbabump_49, Vispistious_51
- Track 9 : McGalleon_51
- Track 10 : Acosta_52
- Track 11 : Greys_50, Sedgewig_49
- Track 12 : Balsa_48, Schnapsidee_49
- Track 13 : Raccoon_49, Etna_49, Hamlet_49
- Track 14 : FarmerDoug_49
- Track 15 : Agente005_50
- Track 16 : Endor_51
- Track 17 : GardenB_50
- Track 18 : Thompsone_50, Gargoyle_50
- Track 19 : Zada_51
- Track 20 : Jenos_52
- Track 21 : JasonD_53
- Track 22 : Redfield_49

- Track 23 : BeeBee8_50
- Track 24 : Leafus_49
- Track 25 : YuuY_48
- Track 26 : Juanyo_47
- Track 27 : Carostasia_47, Quartz_48
- Track 28 : Nucci_47
- Track 29 : Mandalorian_47
- Track 30 : Casey_48, Pajaza_48, Pikmin_48
- Track 31 : Pherbot_46, Bustleton_46, Sinatra_47
- Track 32 : Lucky3_46, SirVictor_47, Golden_46, Guetzie_47
- Track 33 : Kauala_46
- Track 34 : BouleyBill_47
- Track 35 : Koji_46
- Track 36 : PrincePhergus_46
- Track 37 : Schubert_47
- Track 38 : ChickenKing_48, GaeCeo_50
- Track 39 : Cheeto1_50

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

The start number called the most often in the published annotations is 11, it was called in 104 of the 126 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Acosta_52, Agente005_50, AlexAdler_50, Alyxandracam_50, Antoinette_50, AranulaLuti_49, Asta_52, Aubergine_49, AxiPup_50, Baines_49, Balsa_48, Bandik_50, BeautPeep30_50, BeeBee8_50, Benjalauren_50, BigRedClifford_50, Blage_50, BonesMcCoy_50, Bonino_49, Byron23_51, Calix_49, Chako_49, Chamuel_49, Christoph_49, Clancy_49, Convict_50, Dave_50, Delphidian_52, Den3_50, Dothraki_50, Duocatuli_49, Endor_51, Erla_49, Espinosa_49, Etna_49, Etta_49, FarmerDoug_49, Figueroism_50, GardenB_50, Garey24_50, Gargoyle_50, Gelo_49, Gershwin_49, Greys_50, Gubbabump_49, Hamlet_49, HanSolo_49, HankSprout_52, HungryHenry_51, Ilzat_49, Inventa_50, Ioannes_50, Janus167_49, JasonD_53, JasperRussell_49, Jenos_52, Jerbirus_51, JeriBeth_51, Kale_49, KannH_49, KingJulien_49, Klimt_50, Knox_50, Kurt1_50, Leafus_49, Lovelyunicorn_50, Ludgate_50, MaeLinda_50, ManRay_49, Martin_51, McGalleon_51, MillyPhilly_50, MonChoix_47, MrWorldwide_50, Nagem_50, Nattles_49, NickSell_52, Oats_49, OldNelly_51, Oxtober96_51, Papafritta_49, ParleG_50, Peep_50, Peppino_49, Pherferi_50, Phiderman_52, Phireproof_50, PhredFlintston_50, Phriends_50, Pocket_49, PuppyEggo_50, Raccoon_49, Rappheph_50, Raptor_50, Redfield_49, Renzie_50, Rihhil_50, Robinson_50, Rog141_51, SJay_50, Schnapsidee_49, Sedgewig_49, ShaiHulud_51, Shee_50, SoilGremlin_51, SonOfLevi_50, Stanktossa_49, StingRay_49, StirfryIV_51, Stormbreaker8_48, Strathdee_50, Superfresh_50, TatarkaPM_50, Teagan_50, TeddyBear_49, Tenda_49, Thompsone_50, Thorongil_50, TinSulphur_51, Velene_50, Vispistious_51, WildNOut_50, Winzigespinne_49, Zada_51,

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

-

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

- BouleyBill_47, Bustleton_46, Carostasia_47, Casey_48, Cheeto1_50, ChickenKing_48, GaeCeo_50, Golden_46, Guetzie_47, Juanyo_47, Kauala_46, Koji_46, Lucky3_46, Mandalorian_47, Nucci_47, Pajaza_48, Pherbot_46, Pikmin_48, PrincePhergus_46, Quartz_48, Schubert_47, Sinatra_47, SirVictor_47, YuuY_48,

Summary by start number:

Start 11:

- Found in 124 of 148 (83.8%) of genes in pham
- Manual Annotations of this start: 104 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Acosta_52 (EA1), Agente005_50 (EA1), AlexAdler_50 (EA1), Alyxandracam_50 (EA1), Antoinette_50 (EA1), AranulaLuti_49 (EA1), Asta_52 (EA1), Aubergine_49 (EA1), AxiPup_50 (EA1), Baines_49 (EA1), Balsa_48 (EA1), Bandik_50 (EA1), BeautPeep30_50 (EA1), BeeBee8_50 (EA1), Benjalauen_50 (EA1), BigRedClifford_50 (EA1), Blage_50 (EA1), BonesMcCoy_50 (EA1), Bonino_49 (EA1), Byron23_51 (EA1), Calix_49 (EA1), Chako_49 (EA1), Chamuel_49 (EA1), Christoph_49 (EA1), Clancy_49 (EA1), Convict_50 (EA1), Dave_50 (EA1), Delphidian_52 (EA1), Den3_50 (EA1), Dothraki_50 (EA1), Duocatuli_49 (EA1), Endor_51 (EA1), Erla_49 (EA1), Espinosa_49 (EA1), Etna_49 (EA1), Etta_49 (EA1), FarmerDoug_49 (EA1), Figueroism_50 (EA1), GardenB_50 (EA1), Garey24_50 (EA1), Gargoyle_50 (EA1), Gelo_49 (EA1), Gershwin_49 (EA1), Greys_50 (EA1), Gubbabump_49 (EA1), Hamlet_49 (EA1), HanSolo_49 (EA1), HankSprout_52 (EA1), HungryHenry_51 (EA1), Ilzat_49 (EA1), Inventa_50 (EA1), Ioannes_50 (EA1), Janus167_49 (EA1), JasonD_53 (EA1), JasperRussell_49 (EA1), Jenos_52 (EA1), Jerbirus_51 (EA1), JeriBeth_51 (EA1), Kale_49 (EA1), KannH_49 (EA1), KingJulien_49 (EA1), Klimt_50 (EA1), Knox_50 (EA1), Kurt1_50 (EA1), Leafus_49 (EA1), Lovelyunicorn_50 (EA1), Ludgate_50 (EA1), MaeLinda_50 (EA1), ManRay_49 (EA1), Martin_51 (EA1), McGalleon_51 (EA1), MillyPhilly_50 (EA1), MonChoix_47 (EA1), MrWorldwide_50 (EA1), Nagem_50 (EA1), Nattles_49 (EA1), NickSell_52 (EA1), Oats_49 (EA1), OldNelly_51 (EA1), Oxtober96_51 (EA1), Papafritta_49 (EA1), ParleG_50 (EA1), Peep_50 (EA1), Peppino_49 (EA1), Pherferi_50 (EA1), Phiderman_52 (EA1), Phireproof_50 (EA1), PhredFlintston_50 (EA1), Phriends_50 (EA1), Pocket_49 (EA1), PuppyEggo_50 (EA1), Raccoon_49 (EA1), Rapheph_50 (EA1), Raptor_50 (EA1), Redfield_49 (EA1), Renzie_50 (EA1), Riyhil_50 (EA1), Robinson_50 (EA1), Rog141_51 (EA1), SJay_50 (EA1), Schnapsidee_49 (EA1), Sedgewig_49 (EA1), ShaiHulud_51 (EA1), Shee_50 (EA1), SoilGremlin_51 (EA1), SonOfLevi_50 (EA1), Stanktossa_49 (EA1), StingRay_49 (EA1), StirfryIV_51 (EA1), Stormbreaker8_48 (EA1), Strathdee_50 (EA1), Superfresh_50 (EA1), TatarkaPM_50 (EA1), Teagan_50 (EA1), TeddyBear_49 (EA1), Tenda_49 (EA1), Thompsone_50 (EA1), Thorongil_50 (EA1), TinSulphur_51 (EA1), Velene_50 (EA1), Vispistious_51 (EA1), WildNOut_50 (EA1), Winzigespinne_49 (EA1), Zada_51 (EA1),

Start 13:

- Found in 3 of 148 (2.0%) of genes in pham
- Manual Annotations of this start: 3 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Casey_48 (EA3), Pajaza_48 (EA3), Pikmin_48 (EA3),

Start 14:

- Found in 11 of 148 (7.4%) of genes in pham
- Manual Annotations of this start: 9 of 126
- Called 81.8% of time when present
- Phage (with cluster) where this start called: Bustleton_46 (EA4), Golden_46 (EA4), Guetzie_47 (EA4), Koji_46 (EA4), Lucky3_46 (EA4), Pherbot_46 (EA4), PrincePhergus_46 (EA4), Sinatra_47 (EA4), SirVictor_47 (EA4),

Start 15:

- Found in 6 of 148 (4.1%) of genes in pham
- Manual Annotations of this start: 1 of 126
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BouleyBill_47 (EA4), Kauala_46 (EA4),

Start 17:

- Found in 3 of 148 (2.0%) of genes in pham
- Manual Annotations of this start: 3 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cheeto1_50 (EA9), ChickenKing_48 (EA9), GaeCeo_50 (EA9),

Start 18:

- Found in 2 of 148 (1.4%) of genes in pham
- Manual Annotations of this start: 2 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juanyo_47 (EA10), Schubert_47 (EA8),

Start 19:

- Found in 5 of 148 (3.4%) of genes in pham
- Manual Annotations of this start: 4 of 126
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Carostasia_47 (EA10), Mandalorian_47 (EA10), Nucci_47 (EA10), Quartz_48 (EA10), YuuY_48 (EA10),

Summary by clusters:

There are 6 clusters represented in this pham: EA10, EA9, EA8, EA1, EA3, EA4,

Info for manual annotations of cluster EA1:

- Start number 11 was manually annotated 104 times for cluster EA1.

Info for manual annotations of cluster EA10:

- Start number 18 was manually annotated 1 time for cluster EA10.
- Start number 19 was manually annotated 4 times for cluster EA10.

Info for manual annotations of cluster EA3:

- Start number 13 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

- Start number 14 was manually annotated 9 times for cluster EA4.
- Start number 15 was manually annotated 1 time for cluster EA4.

Info for manual annotations of cluster EA8:

- Start number 18 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:

•Start number 17 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_52 Start: 36041, Stop: 35763, Start Num: 11

Candidate Starts for Acosta_52:

(2, 36581), (3, 36572), (4, 36266), (9, 36089), (Start: 11 @36041 has 104 MA's), (12, 36026), (29, 35987), (43, 35930), (51, 35858), (55, 35822), (59, 35804),

Gene: Agente005_50 Start: 35925, Stop: 35587, Start Num: 11

Candidate Starts for Agente005_50:

(9, 35973), (Start: 11 @35925 has 104 MA's), (22, 35880), (24, 35877), (25, 35868), (30, 35850), (35, 35829), (50, 35730), (55, 35688), (58, 35679),

Gene: AlexAdler_50 Start: 35893, Stop: 35597, Start Num: 11

Candidate Starts for AlexAdler_50:

(9, 35941), (Start: 11 @35893 has 104 MA's),

Gene: Alyxandracam_50 Start: 35903, Stop: 35607, Start Num: 11

Candidate Starts for Alyxandracam_50:

(9, 35951), (Start: 11 @35903 has 104 MA's),

Gene: Antoinette_50 Start: 35893, Stop: 35597, Start Num: 11

Candidate Starts for Antoinette_50:

(9, 35941), (Start: 11 @35893 has 104 MA's),

Gene: AranulaLuti_49 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for AranulaLuti_49:

(2, 36145), (4, 35830), (9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: Asta_52 Start: 35615, Stop: 35319, Start Num: 11

Candidate Starts for Asta_52:

(2, 36155), (4, 35840), (9, 35663), (Start: 11 @35615 has 104 MA's),

Gene: Aubergine_49 Start: 35615, Stop: 35319, Start Num: 11

Candidate Starts for Aubergine_49:

(2, 36155), (4, 35840), (9, 35663), (Start: 11 @35615 has 104 MA's),

Gene: AxiPup_50 Start: 35872, Stop: 35576, Start Num: 11

Candidate Starts for AxiPup_50:

(Start: 11 @35872 has 104 MA's),

Gene: Baines_49 Start: 35608, Stop: 35312, Start Num: 11

Candidate Starts for Baines_49:

(2, 36148), (4, 35833), (9, 35656), (Start: 11 @35608 has 104 MA's),

Gene: Balsa_48 Start: 35687, Stop: 35349, Start Num: 11

Candidate Starts for Balsa_48:

(9, 35735), (Start: 11 @35687 has 104 MA's), (22, 35642), (24, 35639), (25, 35630), (35, 35591), (50, 35492), (55, 35450), (58, 35441), (61, 35423),

Gene: Bandik_50 Start: 35898, Stop: 35602, Start Num: 11
Candidate Starts for Bandik_50:
(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: BeautPeep30_50 Start: 35904, Stop: 35608, Start Num: 11
Candidate Starts for BeautPeep30_50:
(4, 36129), (9, 35952), (Start: 11 @35904 has 104 MA's),

Gene: BeeBee8_50 Start: 35858, Stop: 35520, Start Num: 11
Candidate Starts for BeeBee8_50:
(2, 36398), (4, 36083), (9, 35906), (Start: 11 @35858 has 104 MA's), (22, 35813), (24, 35810), (25, 35801), (35, 35762), (50, 35663), (55, 35621), (58, 35612), (61, 35594),

Gene: Benjalauren_50 Start: 35621, Stop: 35325, Start Num: 11
Candidate Starts for Benjalauren_50:
(2, 36161), (4, 35846), (9, 35669), (Start: 11 @35621 has 104 MA's),

Gene: BigRedClifford_50 Start: 35899, Stop: 35603, Start Num: 11
Candidate Starts for BigRedClifford_50:
(Start: 11 @35899 has 104 MA's),

Gene: Blage_50 Start: 35899, Stop: 35603, Start Num: 11
Candidate Starts for Blage_50:
(Start: 11 @35899 has 104 MA's),

Gene: BonesMcCoy_50 Start: 35899, Stop: 35603, Start Num: 11
Candidate Starts for BonesMcCoy_50:
(Start: 11 @35899 has 104 MA's),

Gene: Bonino_49 Start: 35594, Stop: 35298, Start Num: 11
Candidate Starts for Bonino_49:
(2, 36134), (4, 35819), (9, 35642), (Start: 11 @35594 has 104 MA's),

Gene: BouleyBill_47 Start: 34037, Stop: 33723, Start Num: 15
Candidate Starts for BouleyBill_47:
(2, 34625), (4, 34310), (8, 34181), (9, 34133), (Start: 14 @34040 has 9 MA's), (Start: 15 @34037 has 1 MA's), (23, 33992), (37, 33932), (39, 33926), (57, 33794),

Gene: Bustleton_46 Start: 33834, Stop: 33517, Start Num: 14
Candidate Starts for Bustleton_46:
(9, 33927), (Start: 14 @33834 has 9 MA's), (Start: 15 @33831 has 1 MA's), (35, 33735), (37, 33726), (39, 33720), (57, 33588),

Gene: Byron23_51 Start: 35901, Stop: 35605, Start Num: 11
Candidate Starts for Byron23_51:
(4, 36126), (9, 35949), (Start: 11 @35901 has 104 MA's),

Gene: Calix_49 Start: 35601, Stop: 35305, Start Num: 11
Candidate Starts for Calix_49:
(2, 36141), (4, 35826), (9, 35649), (Start: 11 @35601 has 104 MA's),

Gene: Carostasia_47 Start: 34378, Stop: 34094, Start Num: 19

Candidate Starts for Carostasia_47:

(1, 35029), (2, 34963), (4, 34645), (9, 34477), (Start: 19 @34378 has 4 MA's), (21, 34360), (28, 34327), (30, 34321), (39, 34285), (48, 34228), (54, 34189), (56, 34171), (59, 34156),

Gene: Casey_48 Start: 34605, Stop: 34303, Start Num: 13

Candidate Starts for Casey_48:

(5, 34842), (6, 34794), (7, 34776), (10, 34671), (Start: 13 @34605 has 3 MA's), (20, 34587), (32, 34533), (36, 34515), (49, 34431),

Gene: Chako_49 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for Chako_49:

(2, 36145), (4, 35830), (9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: Chamuel_49 Start: 35627, Stop: 35331, Start Num: 11

Candidate Starts for Chamuel_49:

(2, 36167), (4, 35852), (9, 35675), (Start: 11 @35627 has 104 MA's),

Gene: Cheeto1_50 Start: 35303, Stop: 35010, Start Num: 17

Candidate Starts for Cheeto1_50:

(Start: 17 @35303 has 3 MA's), (25, 35261), (42, 35198), (44, 35180), (53, 35114), (56, 35084), (59, 35069), (62, 35054),

Gene: ChickenKing_48 Start: 35196, Stop: 34903, Start Num: 17

Candidate Starts for ChickenKing_48:

(4, 35475), (Start: 17 @35196 has 3 MA's), (25, 35154), (30, 35136), (44, 35073), (52, 35010), (56, 34977), (59, 34962), (62, 34947),

Gene: Christoph_49 Start: 35614, Stop: 35318, Start Num: 11

Candidate Starts for Christoph_49:

(2, 36154), (4, 35839), (9, 35662), (Start: 11 @35614 has 104 MA's),

Gene: Clancy_49 Start: 35650, Stop: 35354, Start Num: 11

Candidate Starts for Clancy_49:

(9, 35698), (Start: 11 @35650 has 104 MA's),

Gene: Convict_50 Start: 35899, Stop: 35603, Start Num: 11

Candidate Starts for Convict_50:

(Start: 11 @35899 has 104 MA's),

Gene: Dave_50 Start: 35893, Stop: 35597, Start Num: 11

Candidate Starts for Dave_50:

(9, 35941), (Start: 11 @35893 has 104 MA's),

Gene: Delphidian_52 Start: 35901, Stop: 35605, Start Num: 11

Candidate Starts for Delphidian_52:

(9, 35949), (Start: 11 @35901 has 104 MA's),

Gene: Den3_50 Start: 35904, Stop: 35608, Start Num: 11

Candidate Starts for Den3_50:

(Start: 11 @35904 has 104 MA's),

Gene: Dothraki_50 Start: 35901, Stop: 35605, Start Num: 11

Candidate Starts for Dothraki_50:

(4, 36126), (9, 35949), (Start: 11 @35901 has 104 MA's),

Gene: Duocatuli_49 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for Duocatuli_49:

(9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: Endor_51 Start: 36129, Stop: 35791, Start Num: 11

Candidate Starts for Endor_51:

(9, 36177), (Start: 11 @36129 has 104 MA's), (22, 36084), (25, 36072), (30, 36054), (35, 36033), (50, 35934), (55, 35892), (58, 35883),

Gene: Erla_49 Start: 35598, Stop: 35302, Start Num: 11

Candidate Starts for Erla_49:

(2, 36138), (4, 35823), (9, 35646), (Start: 11 @35598 has 104 MA's),

Gene: Espinosa_49 Start: 35613, Stop: 35317, Start Num: 11

Candidate Starts for Espinosa_49:

(2, 36153), (4, 35838), (9, 35661), (Start: 11 @35613 has 104 MA's),

Gene: Etna_49 Start: 35734, Stop: 35396, Start Num: 11

Candidate Starts for Etna_49:

(9, 35782), (Start: 11 @35734 has 104 MA's), (22, 35689), (24, 35686), (25, 35677), (30, 35659), (35, 35638), (50, 35539), (55, 35497), (58, 35488), (61, 35470),

Gene: Etta_49 Start: 35602, Stop: 35306, Start Num: 11

Candidate Starts for Etta_49:

(2, 36142), (4, 35827), (9, 35650), (Start: 11 @35602 has 104 MA's),

Gene: FarmerDoug_49 Start: 35636, Stop: 35298, Start Num: 11

Candidate Starts for FarmerDoug_49:

(9, 35684), (Start: 11 @35636 has 104 MA's), (22, 35591), (24, 35588), (28, 35567), (31, 35558), (55, 35399), (58, 35390), (61, 35372),

Gene: Figueroism_50 Start: 35892, Stop: 35596, Start Num: 11

Candidate Starts for Figueroism_50:

(9, 35940), (Start: 11 @35892 has 104 MA's),

Gene: GaeCeo_50 Start: 35429, Stop: 35136, Start Num: 17

Candidate Starts for GaeCeo_50:

(4, 35708), (Start: 17 @35429 has 3 MA's), (25, 35387), (30, 35369), (44, 35306), (52, 35243), (56, 35210), (59, 35195), (62, 35180),

Gene: GardenB_50 Start: 35899, Stop: 35561, Start Num: 11

Candidate Starts for GardenB_50:

(9, 35947), (Start: 11 @35899 has 104 MA's), (33, 35812), (35, 35803), (50, 35704), (55, 35662), (58, 35653),

Gene: Garey24_50 Start: 35581, Stop: 35285, Start Num: 11

Candidate Starts for Garey24_50:

(2, 36121), (4, 35806), (9, 35629), (Start: 11 @35581 has 104 MA's),

Gene: Gargoyle_50 Start: 35904, Stop: 35608, Start Num: 11

Candidate Starts for Gargoyle_50:

(Start: 11 @35904 has 104 MA's), (46, 35754),

Gene: Gelo_49 Start: 35608, Stop: 35312, Start Num: 11

Candidate Starts for Gelo_49:

(2, 36148), (4, 35833), (9, 35656), (Start: 11 @35608 has 104 MA's),

Gene: Gershwin_49 Start: 35615, Stop: 35319, Start Num: 11

Candidate Starts for Gershwin_49:

(2, 36155), (4, 35840), (9, 35663), (Start: 11 @35615 has 104 MA's),

Gene: Golden_46 Start: 33894, Stop: 33598, Start Num: 14

Candidate Starts for Golden_46:

(2, 34473), (4, 34158), (8, 34029), (9, 33981), (Start: 14 @33894 has 9 MA's), (23, 33867), (30, 33837), (35, 33816), (40, 33795), (54, 33690), (56, 33672), (59, 33657),

Gene: Greys_50 Start: 35900, Stop: 35604, Start Num: 11

Candidate Starts for Greys_50:

(2, 36440), (3, 36431), (4, 36125), (9, 35948), (Start: 11 @35900 has 104 MA's),

Gene: Gubbabump_49 Start: 35595, Stop: 35299, Start Num: 11

Candidate Starts for Gubbabump_49:

(9, 35643), (Start: 11 @35595 has 104 MA's),

Gene: Guetzie_47 Start: 33879, Stop: 33583, Start Num: 14

Candidate Starts for Guetzie_47:

(2, 34458), (4, 34143), (8, 34014), (9, 33966), (Start: 14 @33879 has 9 MA's), (23, 33852), (30, 33822), (35, 33801), (40, 33780), (54, 33675), (56, 33657), (59, 33642),

Gene: Hamlet_49 Start: 35679, Stop: 35341, Start Num: 11

Candidate Starts for Hamlet_49:

(9, 35727), (Start: 11 @35679 has 104 MA's), (22, 35634), (24, 35631), (25, 35622), (30, 35604), (35, 35583), (50, 35484), (55, 35442), (58, 35433), (61, 35415),

Gene: HanSolo_49 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for HanSolo_49:

(9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: HankSprout_52 Start: 35482, Stop: 35186, Start Num: 11

Candidate Starts for HankSprout_52:

(2, 36022), (4, 35707), (9, 35530), (Start: 11 @35482 has 104 MA's),

Gene: HungryHenry_51 Start: 35610, Stop: 35314, Start Num: 11

Candidate Starts for HungryHenry_51:

(9, 35658), (Start: 11 @35610 has 104 MA's),

Gene: Ilzat_49 Start: 35621, Stop: 35325, Start Num: 11

Candidate Starts for Ilzat_49:

(9, 35669), (Start: 11 @35621 has 104 MA's),

Gene: Inventa_50 Start: 35898, Stop: 35602, Start Num: 11

Candidate Starts for Inventa_50:

(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: loannes_50 Start: 35902, Stop: 35606, Start Num: 11

Candidate Starts for loannes_50:

(9, 35950), (Start: 11 @35902 has 104 MA's),

Gene: Janus167_49 Start: 35632, Stop: 35336, Start Num: 11

Candidate Starts for Janus167_49:

(2, 36172), (4, 35857), (9, 35680), (Start: 11 @35632 has 104 MA's),

Gene: JasonD_53 Start: 35820, Stop: 35476, Start Num: 11

Candidate Starts for JasonD_53:

(2, 36360), (4, 36045), (9, 35868), (Start: 11 @35820 has 104 MA's), (25, 35757), (35, 35718), (50, 35619), (55, 35577), (58, 35568), (61, 35550),

Gene: JasperRussell_49 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for JasperRussell_49:

(2, 36145), (4, 35830), (9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: Jenos_52 Start: 36555, Stop: 36211, Start Num: 11

Candidate Starts for Jenos_52:

(2, 37095), (3, 37086), (4, 36780), (9, 36603), (Start: 11 @36555 has 104 MA's), (23, 36504), (25, 36492), (35, 36453), (38, 36441), (50, 36354), (55, 36312), (58, 36303), (61, 36285),

Gene: Jerbirus_51 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for Jerbirus_51:

(2, 36145), (4, 35830), (9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: JeriBeth_51 Start: 35468, Stop: 35172, Start Num: 11

Candidate Starts for JeriBeth_51:

(2, 36008), (4, 35693), (9, 35516), (Start: 11 @35468 has 104 MA's),

Gene: Juanyo_47 Start: 34226, Stop: 33948, Start Num: 18

Candidate Starts for Juanyo_47:

(Start: 18 @34226 has 2 MA's), (21, 34208), (27, 34181), (29, 34172), (31, 34166), (34, 34151), (37, 34139), (41, 34127), (45, 34103), (54, 34040), (60, 34007),

Gene: Kale_49 Start: 35617, Stop: 35321, Start Num: 11

Candidate Starts for Kale_49:

(2, 36157), (4, 35842), (9, 35665), (Start: 11 @35617 has 104 MA's),

Gene: KannH_49 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for KannH_49:

(2, 36145), (4, 35830), (9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: Kauala_46 Start: 34203, Stop: 33889, Start Num: 15

Candidate Starts for Kauala_46:

(4, 34479), (8, 34350), (9, 34302), (Start: 14 @34206 has 9 MA's), (Start: 15 @34203 has 1 MA's), (16, 34194), (23, 34158), (39, 34092), (54, 33981), (59, 33948),

Gene: KingJulien_49 Start: 35570, Stop: 35232, Start Num: 11

Candidate Starts for KingJulien_49:

(4, 35795), (9, 35618), (Start: 11 @35570 has 104 MA's), (22, 35525), (24, 35522), (25, 35513), (30, 35495), (35, 35474), (50, 35375), (55, 35333), (58, 35324), (61, 35306),

Gene: Klimt_50 Start: 35633, Stop: 35337, Start Num: 11
Candidate Starts for Klimt_50:
(2, 36173), (4, 35858), (9, 35681), (Start: 11 @35633 has 104 MA's),

Gene: Knox_50 Start: 35899, Stop: 35603, Start Num: 11
Candidate Starts for Knox_50:
(Start: 11 @35899 has 104 MA's),

Gene: Koji_46 Start: 34187, Stop: 33891, Start Num: 14
Candidate Starts for Koji_46:
(8, 34328), (9, 34280), (Start: 14 @34187 has 9 MA's), (23, 34160), (30, 34130), (35, 34109), (38, 34097), (40, 34088), (54, 33983), (56, 33965), (59, 33950),

Gene: Kurt1_50 Start: 35898, Stop: 35602, Start Num: 11
Candidate Starts for Kurt1_50:
(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: Leafus_49 Start: 35833, Stop: 35495, Start Num: 11
Candidate Starts for Leafus_49:
(9, 35881), (Start: 11 @35833 has 104 MA's), (22, 35788), (24, 35785), (30, 35758), (39, 35722), (50, 35638), (55, 35596), (58, 35587), (61, 35569),

Gene: Lovelyunicorn_50 Start: 35900, Stop: 35604, Start Num: 11
Candidate Starts for Lovelyunicorn_50:
(Start: 11 @35900 has 104 MA's),

Gene: Lucky3_46 Start: 33894, Stop: 33598, Start Num: 14
Candidate Starts for Lucky3_46:
(2, 34473), (4, 34158), (8, 34029), (9, 33981), (Start: 14 @33894 has 9 MA's), (23, 33867), (30, 33837), (35, 33816), (40, 33795), (54, 33690), (56, 33672), (59, 33657),

Gene: Ludgate_50 Start: 35901, Stop: 35605, Start Num: 11
Candidate Starts for Ludgate_50:
(9, 35949), (Start: 11 @35901 has 104 MA's),

Gene: MaeLinda_50 Start: 35902, Stop: 35606, Start Num: 11
Candidate Starts for MaeLinda_50:
(9, 35950), (Start: 11 @35902 has 104 MA's),

Gene: ManRay_49 Start: 35615, Stop: 35319, Start Num: 11
Candidate Starts for ManRay_49:
(2, 36155), (4, 35840), (9, 35663), (Start: 11 @35615 has 104 MA's),

Gene: Mandalorian_47 Start: 34388, Stop: 34104, Start Num: 19
Candidate Starts for Mandalorian_47:
(2, 34973), (4, 34655), (9, 34487), (Start: 19 @34388 has 4 MA's), (21, 34370), (28, 34337), (30, 34331), (39, 34295), (48, 34238), (54, 34199), (56, 34181), (59, 34166),

Gene: Martin_51 Start: 35907, Stop: 35611, Start Num: 11
Candidate Starts for Martin_51:

(4, 36132), (9, 35955), (Start: 11 @35907 has 104 MA's),

Gene: McGalleon_51 Start: 36692, Stop: 36399, Start Num: 11

Candidate Starts for McGalleon_51:

(4, 36917), (9, 36740), (Start: 11 @36692 has 104 MA's), (12, 36677), (29, 36638), (42, 36590), (50, 36515),

Gene: MillyPhilly_50 Start: 35895, Stop: 35599, Start Num: 11

Candidate Starts for MillyPhilly_50:

(4, 36120), (9, 35943), (Start: 11 @35895 has 104 MA's),

Gene: MonChoix_47 Start: 35482, Stop: 35144, Start Num: 11

Candidate Starts for MonChoix_47:

(9, 35530), (Start: 11 @35482 has 104 MA's), (22, 35437), (24, 35434), (28, 35413), (37, 35377), (55, 35245), (58, 35236), (61, 35218),

Gene: MrWorldwide_50 Start: 35905, Stop: 35609, Start Num: 11

Candidate Starts for MrWorldwide_50:

(4, 36130), (9, 35953), (Start: 11 @35905 has 104 MA's),

Gene: Nagem_50 Start: 35898, Stop: 35602, Start Num: 11

Candidate Starts for Nagem_50:

(2, 36438), (4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: Nattles_49 Start: 35602, Stop: 35306, Start Num: 11

Candidate Starts for Nattles_49:

(2, 36142), (4, 35827), (9, 35650), (Start: 11 @35602 has 104 MA's),

Gene: NickSell_52 Start: 35908, Stop: 35612, Start Num: 11

Candidate Starts for NickSell_52:

(4, 36133), (9, 35956), (Start: 11 @35908 has 104 MA's),

Gene: Nucci_47 Start: 34371, Stop: 34087, Start Num: 19

Candidate Starts for Nucci_47:

(2, 34938), (4, 34620), (9, 34452), (Start: 19 @34371 has 4 MA's), (21, 34353), (28, 34320), (30, 34314), (39, 34278), (54, 34182), (56, 34164), (59, 34149),

Gene: Oats_49 Start: 35615, Stop: 35319, Start Num: 11

Candidate Starts for Oats_49:

(2, 36155), (4, 35840), (9, 35663), (Start: 11 @35615 has 104 MA's),

Gene: OldNelly_51 Start: 35904, Stop: 35608, Start Num: 11

Candidate Starts for OldNelly_51:

(9, 35952), (Start: 11 @35904 has 104 MA's),

Gene: Oxtober96_51 Start: 35900, Stop: 35604, Start Num: 11

Candidate Starts for Oxtober96_51:

(Start: 11 @35900 has 104 MA's),

Gene: Pajaza_48 Start: 34605, Stop: 34303, Start Num: 13

Candidate Starts for Pajaza_48:

(5, 34842), (6, 34794), (7, 34776), (10, 34671), (Start: 13 @34605 has 3 MA's), (20, 34587), (32, 34533), (36, 34515), (49, 34431),

Gene: Papafritta_49 Start: 35656, Stop: 35360, Start Num: 11
Candidate Starts for Papafritta_49:
(2, 36196), (4, 35881), (9, 35704), (Start: 11 @35656 has 104 MA's),

Gene: ParleG_50 Start: 35905, Stop: 35609, Start Num: 11
Candidate Starts for ParleG_50:
(4, 36130), (9, 35953), (Start: 11 @35905 has 104 MA's),

Gene: Peep_50 Start: 35890, Stop: 35594, Start Num: 11
Candidate Starts for Peep_50:
(9, 35938), (Start: 11 @35890 has 104 MA's),

Gene: Peppino_49 Start: 35679, Stop: 35341, Start Num: 11
Candidate Starts for Peppino_49:
(9, 35727), (Start: 11 @35679 has 104 MA's), (22, 35634), (24, 35631), (37, 35574), (50, 35484), (55, 35442), (58, 35433), (61, 35415),

Gene: Pherbot_46 Start: 33821, Stop: 33504, Start Num: 14
Candidate Starts for Pherbot_46:
(9, 33914), (Start: 14 @33821 has 9 MA's), (Start: 15 @33818 has 1 MA's), (35, 33722), (37, 33713), (39, 33707), (57, 33575),

Gene: Pherferi_50 Start: 35898, Stop: 35602, Start Num: 11
Candidate Starts for Pherferi_50:
(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: Phiderman_52 Start: 35895, Stop: 35599, Start Num: 11
Candidate Starts for Phiderman_52:
(4, 36120), (9, 35943), (Start: 11 @35895 has 104 MA's),

Gene: Phireproof_50 Start: 35904, Stop: 35608, Start Num: 11
Candidate Starts for Phireproof_50:
(Start: 11 @35904 has 104 MA's),

Gene: PhredFlintston_50 Start: 35898, Stop: 35602, Start Num: 11
Candidate Starts for PhredFlintston_50:
(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: Phriends_50 Start: 35904, Stop: 35608, Start Num: 11
Candidate Starts for Phriends_50:
(9, 35952), (Start: 11 @35904 has 104 MA's),

Gene: Pikmin_48 Start: 34605, Stop: 34303, Start Num: 13
Candidate Starts for Pikmin_48:
(5, 34842), (6, 34794), (7, 34776), (10, 34671), (Start: 13 @34605 has 3 MA's), (20, 34587), (32, 34533), (36, 34515), (49, 34431),

Gene: Pocket_49 Start: 35642, Stop: 35346, Start Num: 11
Candidate Starts for Pocket_49:
(2, 36182), (4, 35867), (9, 35690), (Start: 11 @35642 has 104 MA's),

Gene: PrincePhergus_46 Start: 33837, Stop: 33520, Start Num: 14

Candidate Starts for PrincePhergus_46:

(8, 33978), (9, 33930), (Start: 14 @33837 has 9 MA's), (Start: 15 @33834 has 1 MA's), (37, 33729), (39, 33723), (57, 33591),

Gene: PuppyEggo_50 Start: 35905, Stop: 35609, Start Num: 11

Candidate Starts for PuppyEggo_50:

(9, 35953), (Start: 11 @35905 has 104 MA's),

Gene: Quartz_48 Start: 34501, Stop: 34217, Start Num: 19

Candidate Starts for Quartz_48:

(1, 35152), (2, 35086), (4, 34768), (9, 34600), (Start: 19 @34501 has 4 MA's), (21, 34483), (28, 34450), (30, 34444), (39, 34408), (48, 34351), (54, 34312), (56, 34294), (59, 34279),

Gene: Raccoon_49 Start: 35636, Stop: 35298, Start Num: 11

Candidate Starts for Raccoon_49:

(9, 35684), (Start: 11 @35636 has 104 MA's), (22, 35591), (24, 35588), (25, 35579), (30, 35561), (35, 35540), (50, 35441), (55, 35399), (58, 35390), (61, 35372),

Gene: Rapheph_50 Start: 35898, Stop: 35602, Start Num: 11

Candidate Starts for Rapheph_50:

(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: Raptor_50 Start: 35902, Stop: 35606, Start Num: 11

Candidate Starts for Raptor_50:

(Start: 11 @35902 has 104 MA's),

Gene: Redfield_49 Start: 35687, Stop: 35349, Start Num: 11

Candidate Starts for Redfield_49:

(2, 36227), (4, 35912), (9, 35735), (Start: 11 @35687 has 104 MA's), (22, 35642), (24, 35639), (25, 35630), (35, 35591), (50, 35492), (55, 35450), (58, 35441), (61, 35423),

Gene: Renzie_50 Start: 35893, Stop: 35597, Start Num: 11

Candidate Starts for Renzie_50:

(9, 35941), (Start: 11 @35893 has 104 MA's),

Gene: Riyhil_50 Start: 35908, Stop: 35612, Start Num: 11

Candidate Starts for Riyhil_50:

(4, 36133), (9, 35956), (Start: 11 @35908 has 104 MA's),

Gene: Robinson_50 Start: 35896, Stop: 35600, Start Num: 11

Candidate Starts for Robinson_50:

(9, 35944), (Start: 11 @35896 has 104 MA's),

Gene: Rog141_51 Start: 35605, Stop: 35309, Start Num: 11

Candidate Starts for Rog141_51:

(2, 36145), (4, 35830), (9, 35653), (Start: 11 @35605 has 104 MA's),

Gene: SJay_50 Start: 35899, Stop: 35603, Start Num: 11

Candidate Starts for SJay_50:

(2, 36439), (4, 36124), (9, 35947), (Start: 11 @35899 has 104 MA's),

Gene: Schnapsidee_49 Start: 35694, Stop: 35356, Start Num: 11

Candidate Starts for Schnapsidee_49:

(9, 35742), (Start: 11 @35694 has 104 MA's), (22, 35649), (24, 35646), (25, 35637), (35, 35598), (50, 35499), (55, 35457), (58, 35448), (61, 35430),

Gene: Schubert_47 Start: 34593, Stop: 34306, Start Num: 18

Candidate Starts for Schubert_47:

(Start: 18 @34593 has 2 MA's), (21, 34575), (26, 34551), (35, 34515), (47, 34449),

Gene: Sedgewig_49 Start: 35603, Stop: 35307, Start Num: 11

Candidate Starts for Sedgewig_49:

(2, 36143), (3, 36134), (4, 35828), (9, 35651), (Start: 11 @35603 has 104 MA's),

Gene: ShaiHulud_51 Start: 35914, Stop: 35618, Start Num: 11

Candidate Starts for ShaiHulud_51:

(9, 35962), (Start: 11 @35914 has 104 MA's),

Gene: Shee_50 Start: 35895, Stop: 35599, Start Num: 11

Candidate Starts for Shee_50:

(4, 36120), (9, 35943), (Start: 11 @35895 has 104 MA's),

Gene: Sinatra_47 Start: 33832, Stop: 33515, Start Num: 14

Candidate Starts for Sinatra_47:

(9, 33925), (Start: 14 @33832 has 9 MA's), (Start: 15 @33829 has 1 MA's), (35, 33733), (37, 33724), (39, 33718), (57, 33586),

Gene: SirVictor_47 Start: 33879, Stop: 33583, Start Num: 14

Candidate Starts for SirVictor_47:

(2, 34458), (4, 34143), (8, 34014), (9, 33966), (Start: 14 @33879 has 9 MA's), (23, 33852), (30, 33822), (35, 33801), (40, 33780), (54, 33675), (56, 33657), (59, 33642),

Gene: SoilGremlin_51 Start: 35901, Stop: 35605, Start Num: 11

Candidate Starts for SoilGremlin_51:

(9, 35949), (Start: 11 @35901 has 104 MA's),

Gene: SonOfLevi_50 Start: 35633, Stop: 35337, Start Num: 11

Candidate Starts for SonOfLevi_50:

(2, 36173), (4, 35858), (9, 35681), (Start: 11 @35633 has 104 MA's),

Gene: Stanktossa_49 Start: 35898, Stop: 35602, Start Num: 11

Candidate Starts for Stanktossa_49:

(4, 36123), (9, 35946), (Start: 11 @35898 has 104 MA's),

Gene: StingRay_49 Start: 35619, Stop: 35323, Start Num: 11

Candidate Starts for StingRay_49:

(2, 36159), (4, 35844), (9, 35667), (Start: 11 @35619 has 104 MA's),

Gene: StirfryIV_51 Start: 35614, Stop: 35318, Start Num: 11

Candidate Starts for StirfryIV_51:

(9, 35662), (Start: 11 @35614 has 104 MA's),

Gene: Stormbreaker8_48 Start: 35571, Stop: 35233, Start Num: 11

Candidate Starts for Stormbreaker8_48:

(4, 35796), (9, 35619), (Start: 11 @35571 has 104 MA's), (22, 35526), (24, 35523), (25, 35514), (30, 35496), (35, 35475), (50, 35376), (55, 35334), (58, 35325), (61, 35307),

Gene: Strathdee_50 Start: 35904, Stop: 35608, Start Num: 11
Candidate Starts for Strathdee_50:
(9, 35952), (Start: 11 @35904 has 104 MA's),

Gene: Superfresh_50 Start: 35893, Stop: 35597, Start Num: 11
Candidate Starts for Superfresh_50:
(9, 35941), (Start: 11 @35893 has 104 MA's),

Gene: TatarkaPM_50 Start: 35908, Stop: 35612, Start Num: 11
Candidate Starts for TatarkaPM_50:
(4, 36133), (9, 35956), (Start: 11 @35908 has 104 MA's),

Gene: Teagan_50 Start: 35895, Stop: 35599, Start Num: 11
Candidate Starts for Teagan_50:
(Start: 11 @35895 has 104 MA's),

Gene: TeddyBear_49 Start: 35615, Stop: 35319, Start Num: 11
Candidate Starts for TeddyBear_49:
(2, 36155), (4, 35840), (9, 35663), (Start: 11 @35615 has 104 MA's),

Gene: Tenda_49 Start: 35613, Stop: 35317, Start Num: 11
Candidate Starts for Tenda_49:
(2, 36153), (4, 35838), (9, 35661), (Start: 11 @35613 has 104 MA's),

Gene: Thompsone_50 Start: 35902, Stop: 35606, Start Num: 11
Candidate Starts for Thompsone_50:
(Start: 11 @35902 has 104 MA's), (46, 35752),

Gene: Thorongil_50 Start: 35419, Stop: 35123, Start Num: 11
Candidate Starts for Thorongil_50:
(9, 35467), (Start: 11 @35419 has 104 MA's),

Gene: TinSulphur_51 Start: 35904, Stop: 35608, Start Num: 11
Candidate Starts for TinSulphur_51:
(4, 36129), (9, 35952), (Start: 11 @35904 has 104 MA's),

Gene: Velene_50 Start: 35900, Stop: 35604, Start Num: 11
Candidate Starts for Velene_50:
(Start: 11 @35900 has 104 MA's),

Gene: Vispitious_51 Start: 35905, Stop: 35609, Start Num: 11
Candidate Starts for Vispitious_51:
(9, 35953), (Start: 11 @35905 has 104 MA's),

Gene: WildNOOut_50 Start: 35898, Stop: 35602, Start Num: 11
Candidate Starts for WildNOOut_50:
(Start: 11 @35898 has 104 MA's),

Gene: Winzigespinne_49 Start: 35601, Stop: 35305, Start Num: 11
Candidate Starts for Winzigespinne_49:
(2, 36141), (4, 35826), (9, 35649), (Start: 11 @35601 has 104 MA's),

Gene: YuuY_48 Start: 34957, Stop: 34676, Start Num: 19

Candidate Starts for YuuY_48:

(2, 35509), (4, 35191), (9, 35023), (Start: 19 @34957 has 4 MA's), (21, 34939), (28, 34906), (29, 34903), (30, 34900), (39, 34864), (48, 34807), (54, 34768), (56, 34750), (59, 34735),

Gene: Zada_51 Start: 35874, Stop: 35578, Start Num: 11

Candidate Starts for Zada_51:

(4, 36099), (9, 35922), (Start: 11 @35874 has 104 MA's),