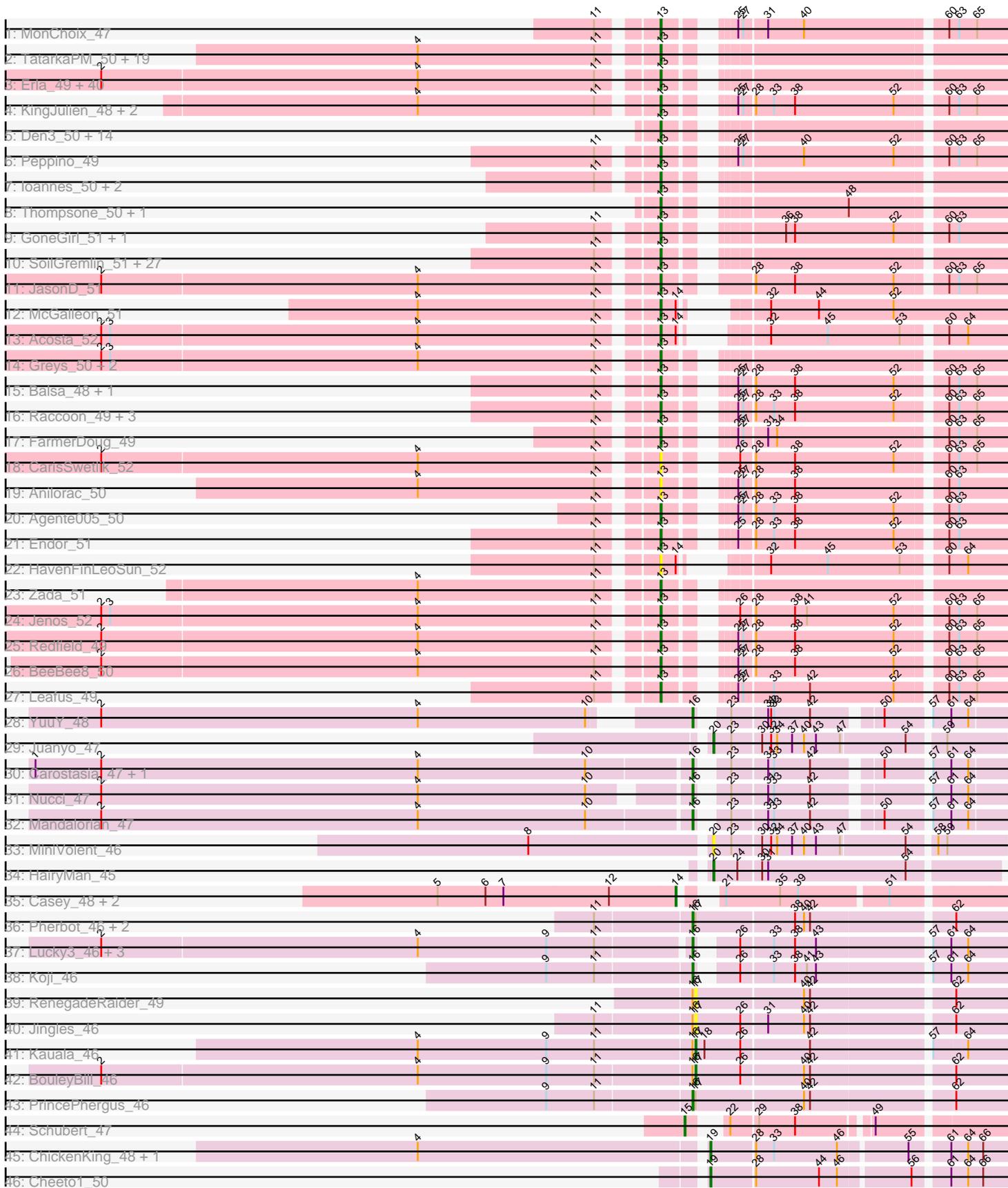# Pham 290892

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 290892 Report

This analysis was run 03/28/26 on database version 641.

Pham number 290892 has 167 members, 16 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, Rapheph_50, Byron23_51, Phiderman_50, MrWorldwide_50, Shee_50, Riyhil_50, NickSell_50, Martin_51, Kurt1_50, Pherferi_50, Bandik_50
• Track 3 : Erla_49, StingRay_49, Pocket_49, Aubergine_49, SJay_50, ManRay_49, Kale_49, Kouch_50, TeddyBear_49, Papafritta_49, Winzigespinne_49, Benjalauren_50, Garey24_50, KellyGreen_51, Espinosa_49, Baines_49, Exploradora_49, Chamuel_49, JeriBeth_51, Nattles_49, SonOfLevi_50, Rog141_49, Asta_49, Gershwin_49, KannH_49, AranulaLuti_49, Calix_49, JasperRussell_49, Klimt_50, Christoph_49, RosieMae_49, Etta_49, Gelo_49, Janus167_49, Oats_49, Tenda_49, Nagem_50, Chako_49, HankSprout_50, Bonino_49, Jerbirus_51
• Track 4 : KingJulien_48, Stormbreaker8_48, Soror1_48
• Track 5 : Den3_50, BonesMcCoy_50, Blage_50, Oxtober96_51, BigRedClifford_50, Velene_50, AxiPup_50, Convict_50, WildNOut_50, Knox_50, GoingMerry_51, Lovelyunicorn_50, Teagan_50, Raptor_50, Phireproof_50
• Track 6 : Peppino_49
• Track 7 : Ioannes_50, Duocatuli_49, HanSolo_49
• Track 8 : Thompsone_50, Gargoyle_50
• Track 9 : GoneGirl_51, GardenB_50
• Track 10 : SoilGremlin_51, Renzie_50, StirfryIV_49, MaeLinda_50, SolidSnake_52, Thorongil_50, HungryHenry_49, Strathdee_50, Alyxandracam_50, Superfresh_50, Peep_50, Ilzat_49, Dave_50, Clancy_49, Robinson_50, Antoinette_50, Phriends_50, Delphidian_50, Merida02_52, Figueroism_50, AlexAdler_50, ShaiHulud_50, Vispistious_50, PuppyEggo_50, Ludgate_50, CoraRita_51, OldNelly_51, Gubbabump_49
• Track 11 : JasonD_51
• Track 12 : McGalleon_51
• Track 13 : Acosta_52
• Track 14 : Greys_50, Symere_49, Sedgewig_49
• Track 15 : Balsa_48, Schnapsidee_49
• Track 16 : Raccoon_49, Etna_49, Hamlet_49, PhillyPhantom_49
• Track 17 : FarmerDoug_49
• Track 18 : CarisSwetlik_52
• Track 19 : Anilorac_50
• Track 20 : Agente005_50
• Track 21 : Endor_51

- Track 22 : HavenFinLeoSun_52
- Track 23 : Zada_51
- Track 24 : Jenos_52
- Track 25 : Redfield_49
- Track 26 : BeeBee8_50
- Track 27 : Leafus_49
- Track 28 : YuuY_48
- Track 29 : Juanyo_47
- Track 30 : Carostasia_47, Quartz_48
- Track 31 : Nucci_47
- Track 32 : Mandalorian_47
- Track 33 : MiniVolent_46
- Track 34 : HairyMan_45
- Track 35 : Casey_48, Pajaza_48, Pikmin_48
- Track 36 : Pherbot_46, Bustleton_46, Sinatra_47
- Track 37 : Lucky3_46, SirVictor_47, Golden_46, Guetzie_47
- Track 38 : Koji_46
- Track 39 : RenegadeRaider_49
- Track 40 : Jingles_46
- Track 41 : Kauala_46
- Track 42 : BouleyBill_46
- Track 43 : PrincePhergus_46
- Track 44 : Schubert_47
- Track 45 : ChickenKing_48, GaeCeo_50
- Track 46 : 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 13, it was called in 126 of the 151 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
- Acosta_52, Agente005_50, AlexAdler_50, Alyxandracam_50, Anilorac_50, Antoinette_50, AranulaLuti_49, Asta_49, 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, CarisSwetlik_52, Chako_49, Chamuel_49, Christoph_49, Clancy_49, Convict_50, CoraRita_51, Dave_50, Delphidian_50, Den3_50, Dothraki_50, Duocatuli_49, Endor_51, Erla_49, Espinosa_49, Etna_49, Etta_49, Exploradora_49, FarmerDoug_49, Figueroism_50, GardenB_50, Garey24_50, Gargoyle_50, Gelo_49, Gershwin_49, GoingMerry_51, GoneGirl_51, Greys_50, Gubbabump_49, Hamlet_49, HanSolo_49, HankSprout_50, HavenFinLeoSun_52, HungryHenry_49, Ilzat_49, Inventa_50, Ioannes_50, Janus167_49, JasonD_51, JasperRussell_49, Jenos_52, Jerbirus_51, JeriBeth_51, Kale_49, KannH_49, KellyGreen_51, KingJulien_48, Klimt_50, Knox_50, Kouch_50, Kurt1_50, Leafus_49, Lovelyunicorn_50, Ludgate_50, MaeLinda_50, ManRay_49, Martin_51, McGalleon_51, Merida02_52, MillyPhilly_50, MonChoix_47, MrWorldwide_50, Nagem_50, Nattles_49, NickSell_50, Oats_49, OldNelly_51, Oxtober96_51, Papafritta_49, ParleG_50, Peep_50, Peppino_49, Pherferi_50, Phiderman_50, PhillyPhantom_49, Phireproof_50, PhredFlintston_50, Phriends_50, Pocket_49, PuppyEggo_50, Raccoon_49, Rapheph_50, Raptor_50,

Redfield_49, Renzie_50, Riyhil_50, Robinson_50, Rog141_49, RosieMae_49, SJay_50, Schnapsidee_49, Sedgewig_49, ShaiHulud_50, Shee_50, SoilGremlin_51, SolidSnake_52, SonOfLevi_50, Soror1_48, Stanktossa_49, StingRay_49, StirfryIV_49, Stormbreaker8_48, Strathdee_50, Superfresh_50, Symere_49, TatarkaPM_50, Teagan_50, TeddyBear_49, Tenda_49, Thompsone_50, Thorongil_50, TinSulphur_51, Velene_50, Vispistious_50, 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_46, Bustleton_46, Carostasia_47, Casey_48, Cheeto1_50, ChickenKing_48, GaeCeo_50, Golden_46, Guetzie_47, HairyMan_45, Jingles_46, Juanyo_47, Kauala_46, Koji_46, Lucky3_46, Mandalorian_47, MiniVolent_46, Nucci_47, Pajaza_48, Pherbot_46, Pikmin_48, PrincePhergus_46, Quartz_48, RenegadeRaider_49, Schubert_47, Sinatra_47, SirVictor_47, YuuY_48,

Summary by start number:

Start 13:
• Found in 139 of 167 (83.2%) of genes in pham
• Manual Annotations of this start: 126 of 151
• 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), Anilorac_50 (EA1), Antoinette_50 (EA1), AranulaLuti_49 (EA1), Asta_49 (EA1), Aubergine_49 (EA1), AxiPup_50 (EA1), Baines_49 (EA1), Balsa_48 (EA1), Bandik_50 (EA1), BeautPeep30_50 (EA1), BeeBee8_50 (EA1), Benjalauren_50 (EA1), BigRedClifford_50 (EA1), Blage_50 (EA1), BonesMcCoy_50 (EA1), Bonino_49 (EA1), Byron23_51 (EA1), Calix_49 (EA1), CarisSwetlik_52 (EA1), Chako_49 (EA1), Chamuel_49 (EA1), Christoph_49 (EA1), Clancy_49 (EA1), Convict_50 (EA1), CoraRita_51 (EA1), Dave_50 (EA1), Delphidian_50 (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), Exploradora_49 (EA1), FarmerDoug_49 (EA1), Figueroism_50 (EA1), GardenB_50 (EA1), Garey24_50 (EA1), Gargoyle_50 (EA1), Gelo_49 (EA1), Gershwin_49 (EA1), GoingMerry_51 (EA1), GoneGirl_51 (EA1), Greys_50 (EA1), Gubbabump_49 (EA1), Hamlet_49 (EA1), HanSolo_49 (EA1), HankSprout_50 (EA1), HavenFinLeoSun_52 (EA1), HungryHenry_49 (EA1), Ilzat_49 (EA1), Inventa_50 (EA1), Ioannes_50 (EA1), Janus167_49 (EA1), JasonD_51 (EA1), JasperRussell_49 (EA1), Jenos_52 (EA1), Jerbirus_51 (EA1), JeriBeth_51 (EA1), Kale_49 (EA1), KannH_49 (EA1), KellyGreen_51 (EA1), KingJulien_48 (EA1), Klimt_50 (EA1), Knox_50 (EA1), Kouch_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), Merida02_52 (EA1), MillyPhilly_50 (EA1), MonChoix_47 (EA1), MrWorldwide_50 (EA1), Nagem_50 (EA1), Nattles_49 (EA1), NickSell_50 (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_50 (EA1), PhillyPhantom_49 (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_49 (EA1), RosieMae_49 (EA1), SJay_50 (EA1), Schnapsidee_49 (EA1), Sedgewig_49 (EA1),

ShaiHulud_50 (EA1), Shee_50 (EA1), SoilGremlin_51 (EA1), SolidSnake_52 (EA1), SonOfLevi_50 (EA1), Soror1_48 (EA1), Stanktossa_49 (EA1), StingRay_49 (EA1), StirfryIV_49 (EA1), Stormbreaker8_48 (EA1), Strathdee_50 (EA1), Superfresh_50 (EA1), Symere_49 (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_50 (EA1), WildNOut_50 (EA1), Winzigespinne_49 (EA1), Zada_51 (EA1),

Start 14:
• Found in 6 of 167 (3.6%) of genes in pham
• Manual Annotations of this start: 3 of 151
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Casey_48 (EA3), Pajaza_48 (EA3), Pikmin_48 (EA3),

Start 15:
• Found in 1 of 167 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 151
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Schubert_47 (EA8),

Start 16:
• Found in 18 of 167 (10.8%) of genes in pham
• Manual Annotations of this start: 14 of 151
• Called 77.8% of time when present
• Phage (with cluster) where this start called: Bustleton_46 (EA4), Carostasia_47 (EA10), Golden_46 (EA4), Guetzie_47 (EA4), Koji_46 (EA4), Lucky3_46 (EA4), Mandalorian_47 (EA10), Nucci_47 (EA10), Pherbot_46 (EA4), PrincePhergus_46 (EA4), Quartz_48 (EA10), Sinatra_47 (EA4), SirVictor_47 (EA4), YuuY_48 (EA10),

Start 17:
• Found in 8 of 167 (4.8%) of genes in pham
• Manual Annotations of this start: 2 of 151
• Called 50.0% of time when present
• Phage (with cluster) where this start called: BouleyBill_46 (EA4), Jingles_46 (EA4), Kauala_46 (EA4), RenegadeRaider_49 (EA4),

Start 19:
• Found in 3 of 167 (1.8%) of genes in pham
• Manual Annotations of this start: 3 of 151
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cheeto1_50 (EA9), ChickenKing_48 (EA9), GaeCeo_50 (EA9),

Start 20:
• Found in 3 of 167 (1.8%) of genes in pham
• Manual Annotations of this start: 2 of 151
• Called 100.0% of time when present
• Phage (with cluster) where this start called: HairyMan_45 (EA10), Juanyo_47 (EA10), MiniVolent_46 (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 13 was manually annotated 126 times for cluster EA1.

Info for manual annotations of cluster EA10:
•Start number 16 was manually annotated 5 times for cluster EA10.
•Start number 20 was manually annotated 2 times for cluster EA10.

Info for manual annotations of cluster EA3:
•Start number 14 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:
•Start number 16 was manually annotated 9 times for cluster EA4.
•Start number 17 was manually annotated 2 times for cluster EA4.

Info for manual annotations of cluster EA8:
•Start number 15 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:
•Start number 19 was manually annotated 3 times for cluster EA9.

Gene Information:
Gene: Acosta_52 Start: 36041, Stop: 35763, Start Num: 13
Candidate Starts for Acosta_52:
(2, 36581), (3, 36572), (4, 36266), (11, 36089), (Start: 13 @36041 has 126 MA's), (Start: 14 @36026 has 3 MA's), (32, 35987), (45, 35930), (53, 35858), (60, 35822), (64, 35804),

Gene: Agente005_50 Start: 35925, Stop: 35587, Start Num: 13
Candidate Starts for Agente005_50:
(11, 35973), (Start: 13 @35925 has 126 MA's), (25, 35880), (27, 35877), (28, 35868), (33, 35850), (38, 35829), (52, 35730), (60, 35688), (63, 35679),

Gene: AlexAdler_50 Start: 35893, Stop: 35597, Start Num: 13
Candidate Starts for AlexAdler_50:
(11, 35941), (Start: 13 @35893 has 126 MA's),

Gene: Alyxandracam_50 Start: 35903, Stop: 35607, Start Num: 13
Candidate Starts for Alyxandracam_50:
(11, 35951), (Start: 13 @35903 has 126 MA's),

Gene: Anilorac_50 Start: 35867, Stop: 35529, Start Num: 13
Candidate Starts for Anilorac_50:
(4, 36092), (11, 35915), (Start: 13 @35867 has 126 MA's), (25, 35822), (27, 35819), (28, 35810), (38, 35771), (60, 35630), (63, 35621),

Gene: Antoinette_50 Start: 35893, Stop: 35597, Start Num: 13
Candidate Starts for Antoinette_50:
(11, 35941), (Start: 13 @35893 has 126 MA's),

Gene: AranulaLuti_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for AranulaLuti_49:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: Asta_49 Start: 35615, Stop: 35319, Start Num: 13
Candidate Starts for Asta_49:
(2, 36155), (4, 35840), (11, 35663), (Start: 13 @35615 has 126 MA's),

Gene: Aubergine_49 Start: 35615, Stop: 35319, Start Num: 13
Candidate Starts for Aubergine_49:
(2, 36155), (4, 35840), (11, 35663), (Start: 13 @35615 has 126 MA's),

Gene: AxiPup_50 Start: 35872, Stop: 35576, Start Num: 13
Candidate Starts for AxiPup_50:
(Start: 13 @35872 has 126 MA's),

Gene: Baines_49 Start: 35608, Stop: 35312, Start Num: 13
Candidate Starts for Baines_49:
(2, 36148), (4, 35833), (11, 35656), (Start: 13 @35608 has 126 MA's),

Gene: Balsa_48 Start: 35687, Stop: 35349, Start Num: 13
Candidate Starts for Balsa_48:
(11, 35735), (Start: 13 @35687 has 126 MA's), (25, 35642), (27, 35639), (28, 35630), (38, 35591), (52, 35492), (60, 35450), (63, 35441), (65, 35423),

Gene: Bandik_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Bandik_50:
(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: BeautPeep30_50 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for BeautPeep30_50:
(4, 36129), (11, 35952), (Start: 13 @35904 has 126 MA's),

Gene: BeeBee8_50 Start: 35858, Stop: 35520, Start Num: 13
Candidate Starts for BeeBee8_50:
(2, 36398), (4, 36083), (11, 35906), (Start: 13 @35858 has 126 MA's), (25, 35813), (27, 35810), (28, 35801), (38, 35762), (52, 35663), (60, 35621), (63, 35612), (65, 35594),

Gene: Benjalauren_50 Start: 35621, Stop: 35325, Start Num: 13
Candidate Starts for Benjalauren_50:
(2, 36161), (4, 35846), (11, 35669), (Start: 13 @35621 has 126 MA's),

Gene: BigRedClifford_50 Start: 35899, Stop: 35603, Start Num: 13
Candidate Starts for BigRedClifford_50:
(Start: 13 @35899 has 126 MA's),

Gene: Blage_50 Start: 35899, Stop: 35603, Start Num: 13
Candidate Starts for Blage_50:
(Start: 13 @35899 has 126 MA's),

Gene: BonesMcCoy_50 Start: 35899, Stop: 35603, Start Num: 13
Candidate Starts for BonesMcCoy_50:
(Start: 13 @35899 has 126 MA's),

Gene: Bonino_49 Start: 35594, Stop: 35298, Start Num: 13
Candidate Starts for Bonino_49:
(2, 36134), (4, 35819), (11, 35642), (Start: 13 @35594 has 126 MA's),

Gene: BouleyBill_46 Start: 34037, Stop: 33723, Start Num: 17
Candidate Starts for BouleyBill_46:
(2, 34625), (4, 34310), (9, 34181), (11, 34133), (Start: 16 @34040 has 14 MA's), (Start: 17 @34037 has 2 MA's), (26, 33992), (40, 33932), (42, 33926), (62, 33794),

Gene: Bustleton_46 Start: 33834, Stop: 33517, Start Num: 16
Candidate Starts for Bustleton_46:
(11, 33927), (Start: 16 @33834 has 14 MA's), (Start: 17 @33831 has 2 MA's), (38, 33735), (40, 33726), (42, 33720), (62, 33588),

Gene: Byron23_51 Start: 35901, Stop: 35605, Start Num: 13
Candidate Starts for Byron23_51:
(4, 36126), (11, 35949), (Start: 13 @35901 has 126 MA's),

Gene: Calix_49 Start: 35601, Stop: 35305, Start Num: 13
Candidate Starts for Calix_49:
(2, 36141), (4, 35826), (11, 35649), (Start: 13 @35601 has 126 MA's),

Gene: CarisSwetlik_52 Start: 36277, Stop: 35933, Start Num: 13
Candidate Starts for CarisSwetlik_52:
(2, 36817), (4, 36502), (11, 36325), (Start: 13 @36277 has 126 MA's), (26, 36226), (28, 36214), (38, 36175), (52, 36076), (60, 36034), (63, 36025), (65, 36007),

Gene: Carostasia_47 Start: 34378, Stop: 34094, Start Num: 16
Candidate Starts for Carostasia_47:
(1, 35029), (2, 34963), (4, 34645), (10, 34477), (Start: 16 @34378 has 14 MA's), (23, 34360), (31, 34327), (33, 34321), (42, 34285), (50, 34228), (57, 34189), (61, 34171), (64, 34156),

Gene: Casey_48 Start: 34605, Stop: 34303, Start Num: 14
Candidate Starts for Casey_48:
(5, 34842), (6, 34794), (7, 34776), (12, 34671), (Start: 14 @34605 has 3 MA's), (21, 34587), (35, 34533), (39, 34515), (51, 34431),

Gene: Chako_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for Chako_49:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: Chamuel_49 Start: 35627, Stop: 35331, Start Num: 13
Candidate Starts for Chamuel_49:
(2, 36167), (4, 35852), (11, 35675), (Start: 13 @35627 has 126 MA's),

Gene: Cheeto1_50 Start: 35303, Stop: 35010, Start Num: 19
Candidate Starts for Cheeto1_50:
(Start: 19 @35303 has 3 MA's), (28, 35261), (44, 35198), (46, 35180), (56, 35114), (61, 35084), (64, 35069), (66, 35054),

Gene: ChickenKing_48 Start: 35196, Stop: 34903, Start Num: 19
Candidate Starts for ChickenKing_48:

(4, 35475), (Start: 19 @35196 has 3 MA's), (28, 35154), (33, 35136), (46, 35073), (55, 35010), (61, 34977), (64, 34962), (66, 34947),

Gene: Christoph_49 Start: 35614, Stop: 35318, Start Num: 13
Candidate Starts for Christoph_49:
(2, 36154), (4, 35839), (11, 35662), (Start: 13 @35614 has 126 MA's),

Gene: Clancy_49 Start: 35650, Stop: 35354, Start Num: 13
Candidate Starts for Clancy_49:
(11, 35698), (Start: 13 @35650 has 126 MA's),

Gene: Convict_50 Start: 35899, Stop: 35603, Start Num: 13
Candidate Starts for Convict_50:
(Start: 13 @35899 has 126 MA's),

Gene: CoraRita_51 Start: 35620, Stop: 35324, Start Num: 13
Candidate Starts for CoraRita_51:
(11, 35668), (Start: 13 @35620 has 126 MA's),

Gene: Dave_50 Start: 35893, Stop: 35597, Start Num: 13
Candidate Starts for Dave_50:
(11, 35941), (Start: 13 @35893 has 126 MA's),

Gene: Delphidian_50 Start: 35901, Stop: 35605, Start Num: 13
Candidate Starts for Delphidian_50:
(11, 35949), (Start: 13 @35901 has 126 MA's),

Gene: Den3_50 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for Den3_50:
(Start: 13 @35904 has 126 MA's),

Gene: Dothraki_50 Start: 35901, Stop: 35605, Start Num: 13
Candidate Starts for Dothraki_50:
(4, 36126), (11, 35949), (Start: 13 @35901 has 126 MA's),

Gene: Duocatuli_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for Duocatuli_49:
(11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: Endor_51 Start: 36129, Stop: 35791, Start Num: 13
Candidate Starts for Endor_51:
(11, 36177), (Start: 13 @36129 has 126 MA's), (25, 36084), (28, 36072), (33, 36054), (38, 36033), (52, 35934), (60, 35892), (63, 35883),

Gene: Erla_49 Start: 35598, Stop: 35302, Start Num: 13
Candidate Starts for Erla_49:
(2, 36138), (4, 35823), (11, 35646), (Start: 13 @35598 has 126 MA's),

Gene: Espinosa_49 Start: 35613, Stop: 35317, Start Num: 13
Candidate Starts for Espinosa_49:
(2, 36153), (4, 35838), (11, 35661), (Start: 13 @35613 has 126 MA's),

Gene: Etna_49 Start: 35734, Stop: 35396, Start Num: 13

Candidate Starts for Etna_49:
(11, 35782), (Start: 13 @35734 has 126 MA's), (25, 35689), (27, 35686), (28, 35677), (33, 35659), (38, 35638), (52, 35539), (60, 35497), (63, 35488), (65, 35470),

Gene: Etta_49 Start: 35602, Stop: 35306, Start Num: 13
Candidate Starts for Etta_49:
(2, 36142), (4, 35827), (11, 35650), (Start: 13 @35602 has 126 MA's),

Gene: Exploradora_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for Exploradora_49:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: FarmerDoug_49 Start: 35636, Stop: 35298, Start Num: 13
Candidate Starts for FarmerDoug_49:
(11, 35684), (Start: 13 @35636 has 126 MA's), (25, 35591), (27, 35588), (31, 35567), (34, 35558), (60, 35399), (63, 35390), (65, 35372),

Gene: Figueroism_50 Start: 35892, Stop: 35596, Start Num: 13
Candidate Starts for Figueroism_50:
(11, 35940), (Start: 13 @35892 has 126 MA's),

Gene: GaeCeo_50 Start: 35429, Stop: 35136, Start Num: 19
Candidate Starts for GaeCeo_50:
(4, 35708), (Start: 19 @35429 has 3 MA's), (28, 35387), (33, 35369), (46, 35306), (55, 35243), (61, 35210), (64, 35195), (66, 35180),

Gene: GardenB_50 Start: 35899, Stop: 35561, Start Num: 13
Candidate Starts for GardenB_50:
(11, 35947), (Start: 13 @35899 has 126 MA's), (36, 35812), (38, 35803), (52, 35704), (60, 35662), (63, 35653),

Gene: Garey24_50 Start: 35581, Stop: 35285, Start Num: 13
Candidate Starts for Garey24_50:
(2, 36121), (4, 35806), (11, 35629), (Start: 13 @35581 has 126 MA's),

Gene: Gargoyle_50 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for Gargoyle_50:
(Start: 13 @35904 has 126 MA's), (48, 35754),

Gene: Gelo_49 Start: 35608, Stop: 35312, Start Num: 13
Candidate Starts for Gelo_49:
(2, 36148), (4, 35833), (11, 35656), (Start: 13 @35608 has 126 MA's),

Gene: Gershwin_49 Start: 35615, Stop: 35319, Start Num: 13
Candidate Starts for Gershwin_49:
(2, 36155), (4, 35840), (11, 35663), (Start: 13 @35615 has 126 MA's),

Gene: GoingMerry_51 Start: 35882, Stop: 35586, Start Num: 13
Candidate Starts for GoingMerry_51:
(Start: 13 @35882 has 126 MA's),

Gene: Golden_46 Start: 33894, Stop: 33598, Start Num: 16
Candidate Starts for Golden_46:

(2, 34473), (4, 34158), (9, 34029), (11, 33981), (Start: 16 @33894 has 14 MA's), (26, 33867), (33, 33837), (38, 33816), (43, 33795), (57, 33690), (61, 33672), (64, 33657),

Gene: GoneGirl_51 Start: 35892, Stop: 35554, Start Num: 13
Candidate Starts for GoneGirl_51:
(11, 35940), (Start: 13 @35892 has 126 MA's), (36, 35805), (38, 35796), (52, 35697), (60, 35655), (63, 35646),

Gene: Greys_50 Start: 35900, Stop: 35604, Start Num: 13
Candidate Starts for Greys_50:
(2, 36440), (3, 36431), (4, 36125), (11, 35948), (Start: 13 @35900 has 126 MA's),

Gene: Gubbabump_49 Start: 35595, Stop: 35299, Start Num: 13
Candidate Starts for Gubbabump_49:
(11, 35643), (Start: 13 @35595 has 126 MA's),

Gene: Guetzie_47 Start: 33879, Stop: 33583, Start Num: 16
Candidate Starts for Guetzie_47:
(2, 34458), (4, 34143), (9, 34014), (11, 33966), (Start: 16 @33879 has 14 MA's), (26, 33852), (33, 33822), (38, 33801), (43, 33780), (57, 33675), (61, 33657), (64, 33642),

Gene: HairyMan_45 Start: 34255, Stop: 33980, Start Num: 20
Candidate Starts for HairyMan_45:
(Start: 20 @34255 has 2 MA's), (24, 34231), (30, 34210), (31, 34204), (54, 34066),

Gene: Hamlet_49 Start: 35679, Stop: 35341, Start Num: 13
Candidate Starts for Hamlet_49:
(11, 35727), (Start: 13 @35679 has 126 MA's), (25, 35634), (27, 35631), (28, 35622), (33, 35604), (38, 35583), (52, 35484), (60, 35442), (63, 35433), (65, 35415),

Gene: HanSolo_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for HanSolo_49:
(11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: HankSprout_50 Start: 35482, Stop: 35186, Start Num: 13
Candidate Starts for HankSprout_50:
(2, 36022), (4, 35707), (11, 35530), (Start: 13 @35482 has 126 MA's),

Gene: HavenFinLeoSun_52 Start: 35987, Stop: 35709, Start Num: 13
Candidate Starts for HavenFinLeoSun_52:
(11, 36035), (Start: 13 @35987 has 126 MA's), (Start: 14 @35972 has 3 MA's), (32, 35933), (45, 35876), (53, 35804), (60, 35768), (64, 35750),

Gene: HungryHenry_49 Start: 35610, Stop: 35314, Start Num: 13
Candidate Starts for HungryHenry_49:
(11, 35658), (Start: 13 @35610 has 126 MA's),

Gene: Ilzat_49 Start: 35621, Stop: 35325, Start Num: 13
Candidate Starts for Ilzat_49:
(11, 35669), (Start: 13 @35621 has 126 MA's),

Gene: Inventa_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Inventa_50:

(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: Ioannes_50 Start: 35902, Stop: 35606, Start Num: 13
Candidate Starts for Ioannes_50:
(11, 35950), (Start: 13 @35902 has 126 MA's),

Gene: Janus167_49 Start: 35632, Stop: 35336, Start Num: 13
Candidate Starts for Janus167_49:
(2, 36172), (4, 35857), (11, 35680), (Start: 13 @35632 has 126 MA's),

Gene: JasonD_51 Start: 35820, Stop: 35476, Start Num: 13
Candidate Starts for JasonD_51:
(2, 36360), (4, 36045), (11, 35868), (Start: 13 @35820 has 126 MA's), (28, 35757), (38, 35718), (52, 35619), (60, 35577), (63, 35568), (65, 35550),

Gene: JasperRussell_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for JasperRussell_49:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: Jenos_52 Start: 36555, Stop: 36211, Start Num: 13
Candidate Starts for Jenos_52:
(2, 37095), (3, 37086), (4, 36780), (11, 36603), (Start: 13 @36555 has 126 MA's), (26, 36504), (28, 36492), (38, 36453), (41, 36441), (52, 36354), (60, 36312), (63, 36303), (65, 36285),

Gene: Jerbirus_51 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for Jerbirus_51:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: JeriBeth_51 Start: 35468, Stop: 35172, Start Num: 13
Candidate Starts for JeriBeth_51:
(2, 36008), (4, 35693), (11, 35516), (Start: 13 @35468 has 126 MA's),

Gene: Jingles_46 Start: 34046, Stop: 33732, Start Num: 17
Candidate Starts for Jingles_46:
(11, 34142), (Start: 16 @34049 has 14 MA's), (Start: 17 @34046 has 2 MA's), (26, 34001), (31, 33977), (40, 33941), (42, 33935), (62, 33803),

Gene: Juanyo_47 Start: 34226, Stop: 33948, Start Num: 20
Candidate Starts for Juanyo_47:
(Start: 20 @34226 has 2 MA's), (23, 34208), (30, 34181), (32, 34172), (34, 34166), (37, 34151), (40, 34139), (43, 34127), (47, 34103), (54, 34040), (59, 34007),

Gene: Kale_49 Start: 35617, Stop: 35321, Start Num: 13
Candidate Starts for Kale_49:
(2, 36157), (4, 35842), (11, 35665), (Start: 13 @35617 has 126 MA's),

Gene: KannH_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for KannH_49:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: Kauala_46 Start: 34203, Stop: 33889, Start Num: 17
Candidate Starts for Kauala_46:

(4, 34479), (9, 34350), (11, 34302), (Start: 16 @34206 has 14 MA's), (Start: 17 @34203 has 2 MA's), (18, 34194), (26, 34158), (42, 34092), (57, 33981), (64, 33948),

Gene: KellyGreen_51 Start: 35599, Stop: 35303, Start Num: 13
Candidate Starts for KellyGreen_51:
(2, 36139), (4, 35824), (11, 35647), (Start: 13 @35599 has 126 MA's),

Gene: KingJulien_48 Start: 35570, Stop: 35232, Start Num: 13
Candidate Starts for KingJulien_48:
(4, 35795), (11, 35618), (Start: 13 @35570 has 126 MA's), (25, 35525), (27, 35522), (28, 35513), (33, 35495), (38, 35474), (52, 35375), (60, 35333), (63, 35324), (65, 35306),

Gene: Klimt_50 Start: 35633, Stop: 35337, Start Num: 13
Candidate Starts for Klimt_50:
(2, 36173), (4, 35858), (11, 35681), (Start: 13 @35633 has 126 MA's),

Gene: Knox_50 Start: 35899, Stop: 35603, Start Num: 13
Candidate Starts for Knox_50:
(Start: 13 @35899 has 126 MA's),

Gene: Koji_46 Start: 34187, Stop: 33891, Start Num: 16
Candidate Starts for Koji_46:
(9, 34328), (11, 34280), (Start: 16 @34187 has 14 MA's), (26, 34160), (33, 34130), (38, 34109), (41, 34097), (43, 34088), (57, 33983), (61, 33965), (64, 33950),

Gene: Kouch_50 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for Kouch_50:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: Kurt1_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Kurt1_50:
(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: Leafus_49 Start: 35833, Stop: 35495, Start Num: 13
Candidate Starts for Leafus_49:
(11, 35881), (Start: 13 @35833 has 126 MA's), (25, 35788), (27, 35785), (33, 35758), (42, 35722), (52, 35638), (60, 35596), (63, 35587), (65, 35569),

Gene: Lovelyunicorn_50 Start: 35900, Stop: 35604, Start Num: 13
Candidate Starts for Lovelyunicorn_50:
(Start: 13 @35900 has 126 MA's),

Gene: Lucky3_46 Start: 33894, Stop: 33598, Start Num: 16
Candidate Starts for Lucky3_46:
(2, 34473), (4, 34158), (9, 34029), (11, 33981), (Start: 16 @33894 has 14 MA's), (26, 33867), (33, 33837), (38, 33816), (43, 33795), (57, 33690), (61, 33672), (64, 33657),

Gene: Ludgate_50 Start: 35901, Stop: 35605, Start Num: 13
Candidate Starts for Ludgate_50:
(11, 35949), (Start: 13 @35901 has 126 MA's),

Gene: MaeLinda_50 Start: 35902, Stop: 35606, Start Num: 13
Candidate Starts for MaeLinda_50:

(11, 35950), (Start: 13 @35902 has 126 MA's),

Gene: ManRay_49 Start: 35615, Stop: 35319, Start Num: 13
Candidate Starts for ManRay_49:
(2, 36155), (4, 35840), (11, 35663), (Start: 13 @35615 has 126 MA's),

Gene: Mandalorian_47 Start: 34388, Stop: 34104, Start Num: 16
Candidate Starts for Mandalorian_47:
(2, 34973), (4, 34655), (10, 34487), (Start: 16 @34388 has 14 MA's), (23, 34370), (31, 34337), (33, 34331), (42, 34295), (50, 34238), (57, 34199), (61, 34181), (64, 34166),

Gene: Martin_51 Start: 35907, Stop: 35611, Start Num: 13
Candidate Starts for Martin_51:
(4, 36132), (11, 35955), (Start: 13 @35907 has 126 MA's),

Gene: McGalleon_51 Start: 36692, Stop: 36399, Start Num: 13
Candidate Starts for McGalleon_51:
(4, 36917), (11, 36740), (Start: 13 @36692 has 126 MA's), (Start: 14 @36677 has 3 MA's), (32, 36638), (44, 36590), (52, 36515),

Gene: Merida02_52 Start: 35901, Stop: 35605, Start Num: 13
Candidate Starts for Merida02_52:
(11, 35949), (Start: 13 @35901 has 126 MA's),

Gene: MillyPhilly_50 Start: 35895, Stop: 35599, Start Num: 13
Candidate Starts for MillyPhilly_50:
(4, 36120), (11, 35943), (Start: 13 @35895 has 126 MA's),

Gene: MiniVolent_46 Start: 34188, Stop: 33910, Start Num: 20
Candidate Starts for MiniVolent_46:
(8, 34362), (Start: 20 @34188 has 2 MA's), (23, 34170), (30, 34143), (32, 34134), (34, 34128), (37, 34113), (40, 34101), (43, 34089), (47, 34065), (54, 34002), (58, 33978), (59, 33969),

Gene: MonChoix_47 Start: 35482, Stop: 35144, Start Num: 13
Candidate Starts for MonChoix_47:
(11, 35530), (Start: 13 @35482 has 126 MA's), (25, 35437), (27, 35434), (31, 35413), (40, 35377), (60, 35245), (63, 35236), (65, 35218),

Gene: MrWorldwide_50 Start: 35905, Stop: 35609, Start Num: 13
Candidate Starts for MrWorldwide_50:
(4, 36130), (11, 35953), (Start: 13 @35905 has 126 MA's),

Gene: Nagem_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Nagem_50:
(2, 36438), (4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: Nattles_49 Start: 35602, Stop: 35306, Start Num: 13
Candidate Starts for Nattles_49:
(2, 36142), (4, 35827), (11, 35650), (Start: 13 @35602 has 126 MA's),

Gene: NickSell_50 Start: 35908, Stop: 35612, Start Num: 13
Candidate Starts for NickSell_50:
(4, 36133), (11, 35956), (Start: 13 @35908 has 126 MA's),

Gene: Nucci_47 Start: 34371, Stop: 34087, Start Num: 16
Candidate Starts for Nucci_47:
(2, 34938), (4, 34620), (10, 34452), (Start: 16 @34371 has 14 MA's), (23, 34353), (31, 34320), (33, 34314), (42, 34278), (57, 34182), (61, 34164), (64, 34149),

Gene: Oats_49 Start: 35615, Stop: 35319, Start Num: 13
Candidate Starts for Oats_49:
(2, 36155), (4, 35840), (11, 35663), (Start: 13 @35615 has 126 MA's),

Gene: OldNelly_51 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for OldNelly_51:
(11, 35952), (Start: 13 @35904 has 126 MA's),

Gene: Oxtober96_51 Start: 35900, Stop: 35604, Start Num: 13
Candidate Starts for Oxtober96_51:
(Start: 13 @35900 has 126 MA's),

Gene: Pajaza_48 Start: 34605, Stop: 34303, Start Num: 14
Candidate Starts for Pajaza_48:
(5, 34842), (6, 34794), (7, 34776), (12, 34671), (Start: 14 @34605 has 3 MA's), (21, 34587), (35, 34533), (39, 34515), (51, 34431),

Gene: Papafritta_49 Start: 35656, Stop: 35360, Start Num: 13
Candidate Starts for Papafritta_49:
(2, 36196), (4, 35881), (11, 35704), (Start: 13 @35656 has 126 MA's),

Gene: ParleG_50 Start: 35905, Stop: 35609, Start Num: 13
Candidate Starts for ParleG_50:
(4, 36130), (11, 35953), (Start: 13 @35905 has 126 MA's),

Gene: Peep_50 Start: 35890, Stop: 35594, Start Num: 13
Candidate Starts for Peep_50:
(11, 35938), (Start: 13 @35890 has 126 MA's),

Gene: Peppino_49 Start: 35679, Stop: 35341, Start Num: 13
Candidate Starts for Peppino_49:
(11, 35727), (Start: 13 @35679 has 126 MA's), (25, 35634), (27, 35631), (40, 35574), (52, 35484), (60, 35442), (63, 35433), (65, 35415),

Gene: Pherbot_46 Start: 33821, Stop: 33504, Start Num: 16
Candidate Starts for Pherbot_46:
(11, 33914), (Start: 16 @33821 has 14 MA's), (Start: 17 @33818 has 2 MA's), (38, 33722), (40, 33713), (42, 33707), (62, 33575),

Gene: Pherferi_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Pherferi_50:
(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: Phiderman_50 Start: 35895, Stop: 35599, Start Num: 13
Candidate Starts for Phiderman_50:
(4, 36120), (11, 35943), (Start: 13 @35895 has 126 MA's),

Gene: PhillyPhantom_49 Start: 35669, Stop: 35331, Start Num: 13
Candidate Starts for PhillyPhantom_49:
(11, 35717), (Start: 13 @35669 has 126 MA's), (25, 35624), (27, 35621), (28, 35612), (33, 35594), (38, 35573), (52, 35474), (60, 35432), (63, 35423), (65, 35405),

Gene: Phireproof_50 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for Phireproof_50:
(Start: 13 @35904 has 126 MA's),

Gene: PhredFlintston_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for PhredFlintston_50:
(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: Phriends_50 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for Phriends_50:
(11, 35952), (Start: 13 @35904 has 126 MA's),

Gene: Pikmin_48 Start: 34605, Stop: 34303, Start Num: 14
Candidate Starts for Pikmin_48:
(5, 34842), (6, 34794), (7, 34776), (12, 34671), (Start: 14 @34605 has 3 MA's), (21, 34587), (35, 34533), (39, 34515), (51, 34431),

Gene: Pocket_49 Start: 35642, Stop: 35346, Start Num: 13
Candidate Starts for Pocket_49:
(2, 36182), (4, 35867), (11, 35690), (Start: 13 @35642 has 126 MA's),

Gene: PrincePhergus_46 Start: 33837, Stop: 33520, Start Num: 16
Candidate Starts for PrincePhergus_46:
(9, 33978), (11, 33930), (Start: 16 @33837 has 14 MA's), (Start: 17 @33834 has 2 MA's), (40, 33729), (42, 33723), (62, 33591),

Gene: PuppyEggo_50 Start: 35905, Stop: 35609, Start Num: 13
Candidate Starts for PuppyEggo_50:
(11, 35953), (Start: 13 @35905 has 126 MA's),

Gene: Quartz_48 Start: 34501, Stop: 34217, Start Num: 16
Candidate Starts for Quartz_48:
(1, 35152), (2, 35086), (4, 34768), (10, 34600), (Start: 16 @34501 has 14 MA's), (23, 34483), (31, 34450), (33, 34444), (42, 34408), (50, 34351), (57, 34312), (61, 34294), (64, 34279),

Gene: Raccoon_49 Start: 35636, Stop: 35298, Start Num: 13
Candidate Starts for Raccoon_49:
(11, 35684), (Start: 13 @35636 has 126 MA's), (25, 35591), (27, 35588), (28, 35579), (33, 35561), (38, 35540), (52, 35441), (60, 35399), (63, 35390), (65, 35372),

Gene: Rapheph_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Rapheph_50:
(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: Raptor_50 Start: 35902, Stop: 35606, Start Num: 13
Candidate Starts for Raptor_50:
(Start: 13 @35902 has 126 MA's),

Gene: Redfield_49 Start: 35687, Stop: 35349, Start Num: 13
Candidate Starts for Redfield_49:
(2, 36227), (4, 35912), (11, 35735), (Start: 13 @35687 has 126 MA's), (25, 35642), (27, 35639), (28, 35630), (38, 35591), (52, 35492), (60, 35450), (63, 35441), (65, 35423),

Gene: RenegadeRaider_49 Start: 33889, Stop: 33575, Start Num: 17
Candidate Starts for RenegadeRaider_49:
(Start: 16 @33892 has 14 MA's), (Start: 17 @33889 has 2 MA's), (40, 33784), (42, 33778), (62, 33646),

Gene: Renzie_50 Start: 35893, Stop: 35597, Start Num: 13
Candidate Starts for Renzie_50:
(11, 35941), (Start: 13 @35893 has 126 MA's),

Gene: Riyhil_50 Start: 35908, Stop: 35612, Start Num: 13
Candidate Starts for Riyhil_50:
(4, 36133), (11, 35956), (Start: 13 @35908 has 126 MA's),

Gene: Robinson_50 Start: 35896, Stop: 35600, Start Num: 13
Candidate Starts for Robinson_50:
(11, 35944), (Start: 13 @35896 has 126 MA's),

Gene: Rog141_49 Start: 35605, Stop: 35309, Start Num: 13
Candidate Starts for Rog141_49:
(2, 36145), (4, 35830), (11, 35653), (Start: 13 @35605 has 126 MA's),

Gene: RosieMae_49 Start: 35660, Stop: 35364, Start Num: 13
Candidate Starts for RosieMae_49:
(2, 36200), (4, 35885), (11, 35708), (Start: 13 @35660 has 126 MA's),

Gene: SJay_50 Start: 35899, Stop: 35603, Start Num: 13
Candidate Starts for SJay_50:
(2, 36439), (4, 36124), (11, 35947), (Start: 13 @35899 has 126 MA's),

Gene: Schnapsidee_49 Start: 35694, Stop: 35356, Start Num: 13
Candidate Starts for Schnapsidee_49:
(11, 35742), (Start: 13 @35694 has 126 MA's), (25, 35649), (27, 35646), (28, 35637), (38, 35598), (52, 35499), (60, 35457), (63, 35448), (65, 35430),

Gene: Schubert_47 Start: 34593, Stop: 34306, Start Num: 15
Candidate Starts for Schubert_47:
(Start: 15 @34593 has 1 MA's), (22, 34575), (29, 34551), (38, 34515), (49, 34449),

Gene: Sedgewig_49 Start: 35603, Stop: 35307, Start Num: 13
Candidate Starts for Sedgewig_49:
(2, 36143), (3, 36134), (4, 35828), (11, 35651), (Start: 13 @35603 has 126 MA's),

Gene: ShaiHulud_50 Start: 35914, Stop: 35618, Start Num: 13
Candidate Starts for ShaiHulud_50:
(11, 35962), (Start: 13 @35914 has 126 MA's),

Gene: Shee_50 Start: 35895, Stop: 35599, Start Num: 13
Candidate Starts for Shee_50:
(4, 36120), (11, 35943), (Start: 13 @35895 has 126 MA's),

Gene: Sinatra_47 Start: 33832, Stop: 33515, Start Num: 16
Candidate Starts for Sinatra_47:
(11, 33925), (Start: 16 @33832 has 14 MA's), (Start: 17 @33829 has 2 MA's), (38, 33733), (40, 33724), (42, 33718), (62, 33586),

Gene: SirVictor_47 Start: 33879, Stop: 33583, Start Num: 16
Candidate Starts for SirVictor_47:
(2, 34458), (4, 34143), (9, 34014), (11, 33966), (Start: 16 @33879 has 14 MA's), (26, 33852), (33, 33822), (38, 33801), (43, 33780), (57, 33675), (61, 33657), (64, 33642),

Gene: SoilGremlin_51 Start: 35901, Stop: 35605, Start Num: 13
Candidate Starts for SoilGremlin_51:
(11, 35949), (Start: 13 @35901 has 126 MA's),

Gene: SolidSnake_52 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for SolidSnake_52:
(11, 35952), (Start: 13 @35904 has 126 MA's),

Gene: SonOfLevi_50 Start: 35633, Stop: 35337, Start Num: 13
Candidate Starts for SonOfLevi_50:
(2, 36173), (4, 35858), (11, 35681), (Start: 13 @35633 has 126 MA's),

Gene: Soror1_48 Start: 35585, Stop: 35247, Start Num: 13
Candidate Starts for Soror1_48:
(4, 35810), (11, 35633), (Start: 13 @35585 has 126 MA's), (25, 35540), (27, 35537), (28, 35528), (33, 35510), (38, 35489), (52, 35390), (60, 35348), (63, 35339), (65, 35321),

Gene: Stanktossa_49 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for Stanktossa_49:
(4, 36123), (11, 35946), (Start: 13 @35898 has 126 MA's),

Gene: StingRay_49 Start: 35619, Stop: 35323, Start Num: 13
Candidate Starts for StingRay_49:
(2, 36159), (4, 35844), (11, 35667), (Start: 13 @35619 has 126 MA's),

Gene: StirfryIV_49 Start: 35614, Stop: 35318, Start Num: 13
Candidate Starts for StirfryIV_49:
(11, 35662), (Start: 13 @35614 has 126 MA's),

Gene: Stormbreaker8_48 Start: 35571, Stop: 35233, Start Num: 13
Candidate Starts for Stormbreaker8_48:
(4, 35796), (11, 35619), (Start: 13 @35571 has 126 MA's), (25, 35526), (27, 35523), (28, 35514), (33, 35496), (38, 35475), (52, 35376), (60, 35334), (63, 35325), (65, 35307),

Gene: Strathdee_50 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for Strathdee_50:
(11, 35952), (Start: 13 @35904 has 126 MA's),

Gene: Superfresh_50 Start: 35893, Stop: 35597, Start Num: 13
Candidate Starts for Superfresh_50:
(11, 35941), (Start: 13 @35893 has 126 MA's),

Gene: Symere_49 Start: 35613, Stop: 35317, Start Num: 13
Candidate Starts for Symere_49:
(2, 36153), (3, 36144), (4, 35838), (11, 35661), (Start: 13 @35613 has 126 MA's),

Gene: TatarkaPM_50 Start: 35908, Stop: 35612, Start Num: 13
Candidate Starts for TatarkaPM_50:
(4, 36133), (11, 35956), (Start: 13 @35908 has 126 MA's),

Gene: Teagan_50 Start: 35895, Stop: 35599, Start Num: 13
Candidate Starts for Teagan_50:
(Start: 13 @35895 has 126 MA's),

Gene: TeddyBear_49 Start: 35615, Stop: 35319, Start Num: 13
Candidate Starts for TeddyBear_49:
(2, 36155), (4, 35840), (11, 35663), (Start: 13 @35615 has 126 MA's),

Gene: Tenda_49 Start: 35613, Stop: 35317, Start Num: 13
Candidate Starts for Tenda_49:
(2, 36153), (4, 35838), (11, 35661), (Start: 13 @35613 has 126 MA's),

Gene: Thompsone_50 Start: 35902, Stop: 35606, Start Num: 13
Candidate Starts for Thompsone_50:
(Start: 13 @35902 has 126 MA's), (48, 35752),

Gene: Thorongil_50 Start: 35419, Stop: 35123, Start Num: 13
Candidate Starts for Thorongil_50:
(11, 35467), (Start: 13 @35419 has 126 MA's),

Gene: TinSulphur_51 Start: 35904, Stop: 35608, Start Num: 13
Candidate Starts for TinSulphur_51:
(4, 36129), (11, 35952), (Start: 13 @35904 has 126 MA's),

Gene: Velene_50 Start: 35900, Stop: 35604, Start Num: 13
Candidate Starts for Velene_50:
(Start: 13 @35900 has 126 MA's),

Gene: Vispistious_50 Start: 35905, Stop: 35609, Start Num: 13
Candidate Starts for Vispistious_50:
(11, 35953), (Start: 13 @35905 has 126 MA's),

Gene: WildNOut_50 Start: 35898, Stop: 35602, Start Num: 13
Candidate Starts for WildNOut_50:
(Start: 13 @35898 has 126 MA's),

Gene: Winzigespinne_49 Start: 35601, Stop: 35305, Start Num: 13
Candidate Starts for Winzigespinne_49:
(2, 36141), (4, 35826), (11, 35649), (Start: 13 @35601 has 126 MA's),

Gene: YuuY_48 Start: 34957, Stop: 34676, Start Num: 16
Candidate Starts for YuuY_48:
(2, 35509), (4, 35191), (10, 35023), (Start: 16 @34957 has 14 MA's), (23, 34939), (31, 34906), (32, 34903), (33, 34900), (42, 34864), (50, 34807), (57, 34768), (61, 34750), (64, 34735),

Gene: Zada_51 Start: 35874, Stop: 35578, Start Num: 13
Candidate Starts for Zada_51:
(4, 36099), (11, 35922), (Start: 13 @35874 has 126 MA's),