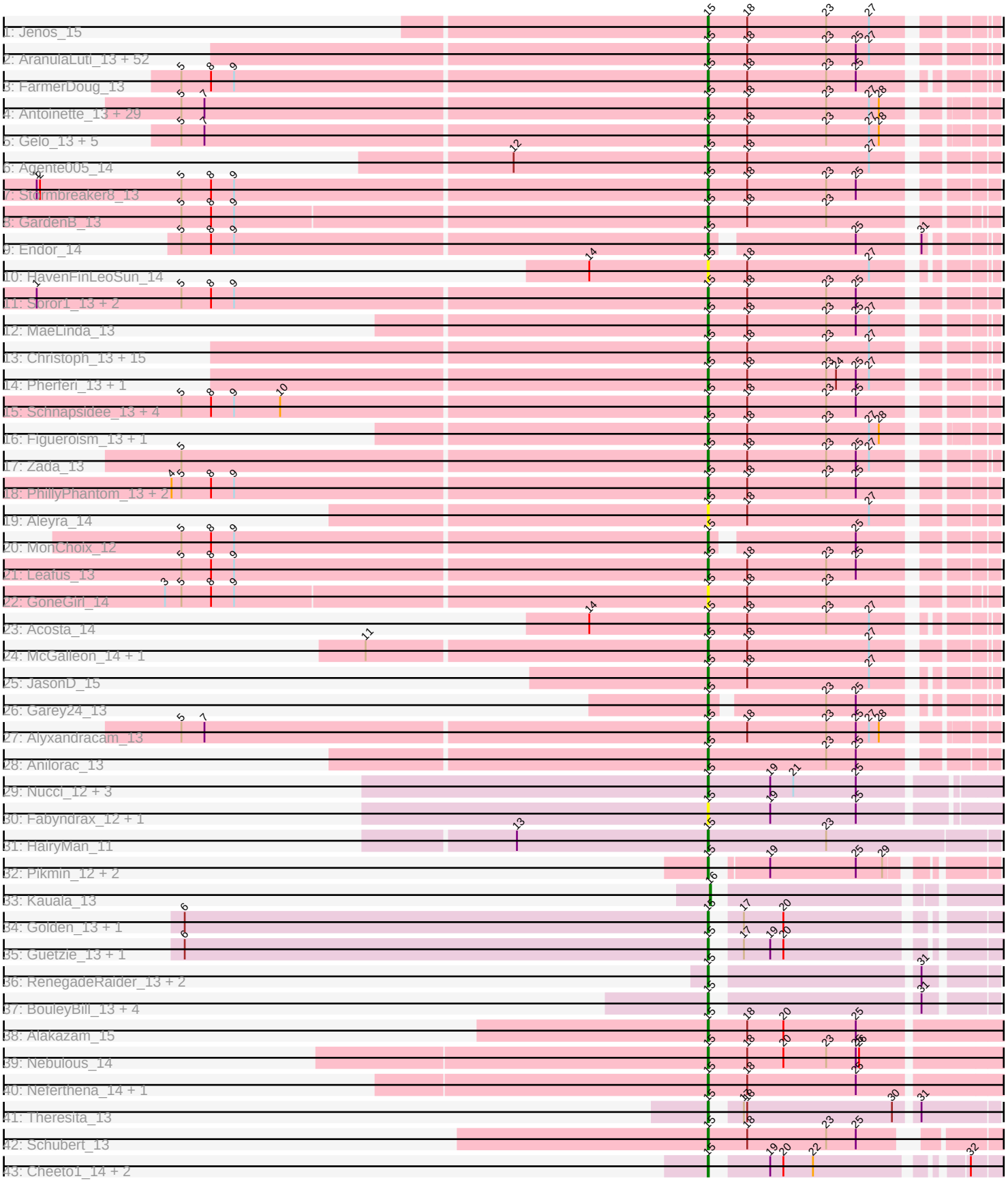
Pham 347308


1: Jenos_15
2: AranulaLuti_13 + 52
3: FarmerDoug_13
4: Antoinette_13 + 29
6: Gelo_13 + 5
6: Agente005_14
7: Stormbreaker8_13
8: GardenB_13
9: Endor_14
10: HavenFinLeoSun_14
11: Sbror1_13 + 2
12: MaeLinda_13
13: Christoph_13 + 15
14: Pherferi_13 + 1
15: Schnapsidee_13 + 4
16: Figueroism_13 + 1
17: Zada_13
18: PhillyPhantom_13 + 2
19: Aleyra_14
20: MonChoix_12
21: Leafus_13
22: GoneGirl_14
23: Acosta_14
24: McGalleon_14 + 1
25: JasonD_15
26: Garey24_13
27: Alyxandracam_13
28: Anilorac_13
29: Nucci_12 + 3
30: Fabyndrax_12 + 1
31: HairyMan_11
32: Pikmin_12 + 2
33: Kauala_13
34: Golden_13 + 1
35: Guetzie_13 + 1
36: RenegadeRaider_13 + 2
37: BouleyBill_13 + 4
38: Alakazam_15
39: Nebulous_14
40: Neferthena_14 + 1
41: Theresita_13
42: Schubert_13
43: Cheeto1_14 + 2

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 347308 Report

This analysis was run 11/14/26 on database version 672.

Pham number 347308 has 172 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Jenos_15
• Track 2 : AranulaLuti_13, Ilzat_13, Byron23_13, Teagan_13, Janus167_13, KannH_13, Duocatuli_13, Phriends_13, JasperRussell_13, HanSolo_13, RosieMae_13, Rog141_13, Sedgewig_13, MrWorldwide_13, Rapheph_13, Nagem_13, Shee_13, Gargoyle_13, Gubbabump_13, NickSell_13, CoraRita_13, Martin_14, Jerbirus_13, HankSprout_14, Chako_13, Bandik_13, Ludgate_13, TatarkaPM_13, Exploradora_13, SJay_13, PhredFlintston_13, Benjalauren_13, TinSulphur_13, StingRay_13, Riyhil_13, Inventa_13, Kouch_13, KellyGreen_13, Dothraki_13, SolidSnake_13, OldNelly_13, JeriBeth_13, Papafritta_13, StirfryIV_13, ParleG_13, BeautPeep30_13, Stanktossa_13, Symere_13, Clancy_13, Winzigespinne_13, HungryHenry_13, Phireproof_13, Phiderman_13
• Track 3 : FarmerDoug_13
• Track 4 : Antoinette_13, GoingMerry_13, WildNOut_13, PuppyEggo_13, ShaiHulud_13, AlexAdler_13, Etta_13, Lovelyunicorn_13, Convict_13, Renzie_13, Ioannes_13, Den3_13, Blage_13, Knox_13, Thompsone_13, AxiPup_13, Superfresh_13, Greys_13, Strathdee_13, Nattles_13, BonesMcCoy_13, Peep_13, Velene_13, Vispistious_13, Thorongil_13, Baines_13, BigRedClifford_13, Dave_13, Raptor_13, Oxtober96_13
• Track 5 : Gelo_13, Chamuel_13, Calix_13, SonOfLevi_13, Erla_13, Klimt_13
• Track 6 : Agente005_14
• Track 7 : Stormbreaker8_13
• Track 8 : GardenB_13
• Track 9 : Endor_14
• Track 10 : HavenFinLeoSun_14
• Track 11 : Soror1_13, Etna_13, KingJulien_13
• Track 12 : MaeLinda_13
• Track 13 : Christoph_13, Merida02_13, Delphidian_13, Tenda_13, Oats_13, Kale_13, Bonino_13, SoilGremlin_13, Asta_13, ManRay_13, Gershwin_13, TeddyBear_13, Aubergine_13, MillyPhilly_13, Espinosa_13, Pocket_13
• Track 14 : Pherferi_13, Kurt1_13
• Track 15 : Schnapsidee_13, Peppino_13, BeeBee8_14, Raccoon_13, Redfield_13
• Track 16 : Figueroism_13, Robinson_13
• Track 17 : Zada_13
• Track 18 : PhillyPhantom_13, Balsa_13, Hamlet_13
• Track 19 : Aleyra_14
• Track 20 : MonChoix_12
• Track 21 : Leafus_13

• Track 22 : GoneGirl_14
• Track 23 : Acosta_14
• Track 24 : McGalleon_14, CarisSwetlik_15
• Track 25 : JasonD_15
• Track 26 : Garey24_13
• Track 27 : Alyxandracam_13
• Track 28 : Anilorac_13
• Track 29 : Nucci_12, Carostasia_12, Mandalorian_12, Quartz_12
• Track 30 : Fabyndrax_12, Cidela_12
• Track 31 : HairyMan_11
• Track 32 : Pikmin_12, Pajaza_12, Casey_12
• Track 33 : Kauala_13
• Track 34 : Golden_13, Lucky3_13
• Track 35 : Guetzie_13, SirVictor_13
• Track 36 : RenegadeRaider_13, PrincePhergus_13, Koji_13
• Track 37 : BouleyBill_13, Jingles_13, Sinatra_13, Pherbot_13, Bustleton_13
• Track 38 : Alakazam_15
• Track 39 : Nebulous_14
• Track 40 : Neferthena_14, Clock_14
• Track 41 : Theresita_13
• Track 42 : Schubert_13
• Track 43 : Cheeto1_14, ChickenKing_13, GaeCeo_14

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

The start number called the most often in the published annotations is 15, it was called in 160 of the 161 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acosta_14, Agente005_14, Alakazam_15, AlexAdler_13, Aleyra_14, Alyxandracam_13, Anilorac_13, Antoinette_13, AranulaLuti_13, Asta_13, Aubergine_13, AxiPup_13, Baines_13, Balsa_13, Bandik_13, BeautPeep30_13, BeeBee8_14, Benjalauren_13, BigRedClifford_13, Blage_13, BonesMcCoy_13, Bonino_13, BouleyBill_13, Bustleton_13, Byron23_13, Calix_13, CarisSwetlik_15, Carostasia_12, Casey_12, Chako_13, Chamuel_13, Cheeto1_14, ChickenKing_13, Christoph_13, Cidela_12, Clancy_13, Clock_14, Convict_13, CoraRita_13, Dave_13, Delphidian_13, Den3_13, Dothraki_13, Duocatuli_13, Endor_14, Erla_13, Espinosa_13, Etna_13, Etta_13, Exploradora_13, Fabyndrax_12, FarmerDoug_13, Figueroism_13, GaeCeo_14, GardenB_13, Garey24_13, Gargoyle_13, Gelo_13, Gershwin_13, GoingMerry_13, Golden_13, GoneGirl_14, Greys_13, Gubbabump_13, Guetzie_13, HairyMan_11, Hamlet_13, HanSolo_13, HankSprout_14, HavenFinLeoSun_14, HungryHenry_13, Ilzat_13, Inventa_13, Ioannes_13, Janus167_13, JasonD_15, JasperRussell_13, Jenos_15, Jerbirus_13, JeriBeth_13, Jingles_13, Kale_13, KannH_13, KellyGreen_13, KingJulien_13, Klimt_13, Knox_13, Koji_13, Kouch_13, Kurt1_13, Leafus_13, Lovelyunicorn_13, Lucky3_13, Ludgate_13, MaeLinda_13, ManRay_13, Mandalorian_12, Martin_14, McGalleon_14, Merida02_13, MillyPhilly_13, MonChoix_12, MrWorldwide_13, Nagem_13, Nattles_13, Nebulous_14, Neferthena_14, NickSell_13, Nucci_12, Oats_13, OldNelly_13, Oxtober96_13, Pajaza_12, Papafritta_13, ParleG_13, Peep_13, Peppino_13, Pherbot_13, Pherferi_13, Phiderman_13, PhillyPhantom_13,

Phireproof_13, PhredFlintston_13, Phriends_13, Pikmin_12, Pocket_13, PrincePhergus_13, PuppyEggo_13, Quartz_12, Raccoon_13, Rapheph_13, Raptor_13, Redfield_13, RenegadeRaider_13, Renzie_13, Riyhil_13, Robinson_13, Rog141_13, RosieMae_13, SJay_13, Schnapsidee_13, Schubert_13, Sedgewig_13, ShaiHulud_13, Shee_13, Sinatra_13, SirVictor_13, SoilGremlin_13, SolidSnake_13, SonOfLevi_13, Soror1_13, Stanktossa_13, StingRay_13, StirfryIV_13, Stormbreaker8_13, Strathdee_13, Superfresh_13, Symere_13, TatarkaPM_13, Teagan_13, TeddyBear_13, Tenda_13, Theresita_13, Thompsone_13, Thorongil_13, TinSulphur_13, Velene_13, Vispistious_13, WildNOut_13, Winzigespinne_13, Zada_13,

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

Genes that do not have the "Most Annotated" start:
• Kauala_13,

Summary by start number:

Start 15:
• Found in 171 of 172 (99.4%) of genes in pham
• Manual Annotations of this start: 160 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Acosta_14 (EA1), Agente005_14 (EA1), Alakazam_15 (EA5), AlexAdler_13 (EA1), Aleyra_14 (EA1), Alyxandracam_13 (EA1), Anilorac_13 (EA1), Antoinette_13 (EA1), AranulaLuti_13 (EA1), Asta_13 (EA1), Aubergine_13 (EA1), AxiPup_13 (EA1), Baines_13 (EA1), Balsa_13 (EA1), Bandik_13 (EA1), BeautPeep30_13 (EA1), BeeBee8_14 (EA1), Benjalauren_13 (EA1), BigRedClifford_13 (EA1), Blage_13 (EA1), BonesMcCoy_13 (EA1), Bonino_13 (EA1), BouleyBill_13 (EA4), Bustleton_13 (EA4), Byron23_13 (EA1), Calix_13 (EA1), CarisSwetlik_15 (EA1), Carostasia_12 (EA10), Casey_12 (EA3), Chako_13 (EA1), Chamuel_13 (EA1), Cheeto1_14 (EA9), ChickenKing_13 (EA9), Christoph_13 (EA1), Cidela_12 (EA10), Clancy_13 (EA1), Clock_14 (EA5), Convict_13 (EA1), CoraRita_13 (EA1), Dave_13 (EA1), Delphidian_13 (EA1), Den3_13 (EA1), Dothraki_13 (EA1), Duocatuli_13 (EA1), Endor_14 (EA1), Erla_13 (EA1), Espinosa_13 (EA1), Etna_13 (EA1), Etta_13 (EA1), Exploradora_13 (EA1), Fabyndrax_12 (EA10), FarmerDoug_13 (EA1), Figueroism_13 (EA1), GaeCeo_14 (EA9), GardenB_13 (EA1), Garey24_13 (EA1), Gargoyle_13 (EA1), Gelo_13 (EA1), Gershwin_13 (EA1), GoingMerry_13 (EA1), Golden_13 (EA4), GoneGirl_14 (EA1), Greys_13 (EA1), Gubbabump_13 (EA1), Guetzie_13 (EA4), HairyMan_11 (EA10), Hamlet_13 (EA1), HanSolo_13 (EA1), HankSprout_14 (EA1), HavenFinLeoSun_14 (EA1), HungryHenry_13 (EA1), Ilzat_13 (EA1), Inventa_13 (EA1), Ioannes_13 (EA1), Janus167_13 (EA1), JasonD_15 (EA1), JasperRussell_13 (EA1), Jenos_15 (EA1), Jerbirus_13 (EA1), JeriBeth_13 (EA1), Jingles_13 (EA4), Kale_13 (EA1), KannH_13 (EA1), KellyGreen_13 (EA1), KingJulien_13 (EA1), Klimt_13 (EA1), Knox_13 (EA1), Koji_13 (EA4), Kouch_13 (EA1), Kurt1_13 (EA1), Leafus_13 (EA1), Lovelyunicorn_13 (EA1), Lucky3_13 (EA4), Ludgate_13 (EA1), MaeLinda_13 (EA1), ManRay_13 (EA1), Mandalorian_12 (EA10), Martin_14 (EA1), McGalleon_14 (EA1), Merida02_13 (EA1), MillyPhilly_13 (EA1), MonChoix_12 (EA1), MrWorldwide_13 (EA1), Nagem_13 (EA1), Nattles_13 (EA1), Nebulous_14 (EA5), Neferthena_14 (EA5), NickSell_13 (EA1), Nucci_12 (EA10), Oats_13 (EA1), OldNelly_13 (EA1), Oxtober96_13 (EA1), Pajaza_12 (EA3), Papafritta_13 (EA1), ParleG_13 (EA1), Peep_13 (EA1), Peppino_13 (EA1), Pherbot_13 (EA4), Pherferi_13 (EA1), Phiderman_13 (EA1),

PhillyPhantom_13 (EA1), Phireproof_13 (EA1), PhredFlintston_13 (EA1), Phriends_13 (EA1), Pikmin_12 (EA3), Pocket_13 (EA1), PrincePhergus_13 (EA4), PuppyEggo_13 (EA1), Quartz_12 (EA10), Raccoon_13 (EA1), Rapheph_13 (EA1), Raptor_13 (EA1), Redfield_13 (EA1), RenegadeRaider_13 (EA4), Renzie_13 (EA1), Riyhil_13 (EA1), Robinson_13 (EA1), Rog141_13 (EA1), RosieMae_13 (EA1), SJay_13 (EA1), Schnapsidee_13 (EA1), Schubert_13 (EA8), Sedgewig_13 (EA1), ShaiHulud_13 (EA1), Shee_13 (EA1), Sinatra_13 (EA4), SirVictor_13 (EA4), SoilGremlin_13 (EA1), SolidSnake_13 (EA1), SonOfLevi_13 (EA1), Soror1_13 (EA1), Stanktossa_13 (EA1), StingRay_13 (EA1), StirfryIV_13 (EA1), Stormbreaker8_13 (EA1), Strathdee_13 (EA1), Superfresh_13 (EA1), Symere_13 (EA1), TatarkaPM_13 (EA1), Teagan_13 (EA1), TeddyBear_13 (EA1), Tenda_13 (EA1), Theresita_13 (EA7), Thompsone_13 (EA1), Thorongil_13 (EA1), TinSulphur_13 (EA1), Velene_13 (EA1), Vispistious_13 (EA1), WildNOut_13 (EA1), Winzigespinne_13 (EA1), Zada_13 (EA1),

Start 16:
• Found in 1 of 172 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 161
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kauala_13 (EA4),

Summary by clusters:

There are 8 clusters represented in this pham: EA10, EA9, EA8, EA1, EA3, EA5, EA4, EA7,

Info for manual annotations of cluster EA1:
•Start number 15 was manually annotated 132 times for cluster EA1.

Info for manual annotations of cluster EA10:
•Start number 15 was manually annotated 5 times for cluster EA10.

Info for manual annotations of cluster EA3:
•Start number 15 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:
•Start number 15 was manually annotated 11 times for cluster EA4.
•Start number 16 was manually annotated 1 time for cluster EA4.

Info for manual annotations of cluster EA5:
•Start number 15 was manually annotated 4 times for cluster EA5.

Info for manual annotations of cluster EA7:
•Start number 15 was manually annotated 1 time for cluster EA7.

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 15 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_14 Start: 7873, Stop: 8103, Start Num: 15
Candidate Starts for Acosta_14:
(14, 7765), (Start: 15 @7873 has 160 MA's), (18, 7909), (23, 7981), (27, 8020),

Gene: Agente005_14 Start: 8160, Stop: 8399, Start Num: 15
Candidate Starts for Agente005_14:
(12, 7983), (Start: 15 @8160 has 160 MA's), (18, 8196), (27, 8307),

Gene: Alakazam_15 Start: 8832, Stop: 9137, Start Num: 15
Candidate Starts for Alakazam_15:
(Start: 15 @8832 has 160 MA's), (18, 8868), (20, 8901), (25, 8967),

Gene: AlexAdler_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for AlexAdler_13:
(5, 7120), (7, 7141), (Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: Aleyra_14 Start: 8165, Stop: 8404, Start Num: 15
Candidate Starts for Aleyra_14:
(Start: 15 @8165 has 160 MA's), (18, 8201), (27, 8312),

Gene: Alyxandracam_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Alyxandracam_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (25, 7738), (27, 7750), (28, 7759),

Gene: Anilorac_13 Start: 8005, Stop: 8244, Start Num: 15
Candidate Starts for Anilorac_13:
(Start: 15 @8005 has 160 MA's), (23, 8113), (25, 8140),

Gene: Antoinette_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for Antoinette_13:
(5, 7120), (7, 7141), (Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: AranulaLuti_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for AranulaLuti_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Asta_13 Start: 7909, Stop: 8145, Start Num: 15
Candidate Starts for Asta_13:
(Start: 15 @7909 has 160 MA's), (18, 7945), (23, 8017), (27, 8056),

Gene: Aubergine_13 Start: 7909, Stop: 8145, Start Num: 15
Candidate Starts for Aubergine_13:
(Start: 15 @7909 has 160 MA's), (18, 7945), (23, 8017), (27, 8056),

Gene: AxiPup_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for AxiPup_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Baines_13 Start: 7893, Stop: 8129, Start Num: 15
Candidate Starts for Baines_13:

(5, 7419), (7, 7440), (Start: 15 @7893 has 160 MA's), (18, 7929), (23, 8001), (27, 8040), (28, 8049),

Gene: Balsa_13 Start: 8011, Stop: 8250, Start Num: 15
Candidate Starts for Balsa_13:
(4, 7528), (5, 7537), (8, 7564), (9, 7585), (Start: 15 @8011 has 160 MA's), (18, 8047), (23, 8119), (25, 8146),

Gene: Bandik_13 Start: 7600, Stop: 7836, Start Num: 15
Candidate Starts for Bandik_13:
(Start: 15 @7600 has 160 MA's), (18, 7636), (23, 7708), (25, 7735), (27, 7747),

Gene: BeautPeep30_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for BeautPeep30_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: BeeBee8_14 Start: 8174, Stop: 8413, Start Num: 15
Candidate Starts for BeeBee8_14:
(5, 7700), (8, 7727), (9, 7748), (10, 7790), (Start: 15 @8174 has 160 MA's), (18, 8210), (23, 8282), (25, 8309),

Gene: Benjalauren_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Benjalauren_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: BigRedClifford_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for BigRedClifford_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Blage_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Blage_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: BonesMcCoy_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for BonesMcCoy_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Bonino_13 Start: 7886, Stop: 8122, Start Num: 15
Candidate Starts for Bonino_13:
(Start: 15 @7886 has 160 MA's), (18, 7922), (23, 7994), (27, 8033),

Gene: BouleyBill_13 Start: 7871, Stop: 8098, Start Num: 15
Candidate Starts for BouleyBill_13:
(Start: 15 @7871 has 160 MA's), (31, 8039),

Gene: Bustleton_13 Start: 7859, Stop: 8086, Start Num: 15
Candidate Starts for Bustleton_13:
(Start: 15 @7859 has 160 MA's), (31, 8027),

Gene: Byron23_13 Start: 7609, Stop: 7845, Start Num: 15
Candidate Starts for Byron23_13:
(Start: 15 @7609 has 160 MA's), (18, 7645), (23, 7717), (25, 7744), (27, 7756),

Gene: Calix_13 Start: 7886, Stop: 8122, Start Num: 15

Candidate Starts for Calix_13:
(5, 7412), (7, 7433), (Start: 15 @7886 has 160 MA's), (18, 7922), (23, 7994), (27, 8033), (28, 8042),

Gene: CarisSwetlik_15 Start: 8364, Stop: 8600, Start Num: 15
Candidate Starts for CarisSwetlik_15:
(11, 8058), (Start: 15 @8364 has 160 MA's), (18, 8400), (27, 8511),

Gene: Carostasia_12 Start: 7815, Stop: 8102, Start Num: 15
Candidate Starts for Carostasia_12:
(Start: 15 @7815 has 160 MA's), (19, 7872), (21, 7893), (25, 7950),

Gene: Casey_12 Start: 7906, Stop: 8121, Start Num: 15
Candidate Starts for Casey_12:
(Start: 15 @7906 has 160 MA's), (19, 7942), (25, 8020), (29, 8044),

Gene: Chako_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Chako_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Chamuel_13 Start: 7888, Stop: 8124, Start Num: 15
Candidate Starts for Chamuel_13:
(5, 7414), (7, 7435), (Start: 15 @7888 has 160 MA's), (18, 7924), (23, 7996), (27, 8035), (28, 8044),

Gene: Cheeto1_14 Start: 7774, Stop: 8001, Start Num: 15
Candidate Starts for Cheeto1_14:
(Start: 15 @7774 has 160 MA's), (19, 7813), (20, 7825), (22, 7852), (32, 7966),

Gene: ChickenKing_13 Start: 7594, Stop: 7821, Start Num: 15
Candidate Starts for ChickenKing_13:
(Start: 15 @7594 has 160 MA's), (19, 7633), (20, 7645), (22, 7672), (32, 7786),

Gene: Christoph_13 Start: 7907, Stop: 8143, Start Num: 15
Candidate Starts for Christoph_13:
(Start: 15 @7907 has 160 MA's), (18, 7943), (23, 8015), (27, 8054),

Gene: Cidela_12 Start: 8446, Stop: 8733, Start Num: 15
Candidate Starts for Cidela_12:
(Start: 15 @8446 has 160 MA's), (19, 8503), (25, 8581),

Gene: Clancy_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Clancy_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Clock_14 Start: 8762, Stop: 9085, Start Num: 15
Candidate Starts for Clock_14:
(Start: 15 @8762 has 160 MA's), (18, 8798), (25, 8897),

Gene: Convict_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Convict_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: CoraRita_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for CoraRita_13:

(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Dave_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for Dave_13:
(5, 7120), (7, 7141), (Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: Delphidian_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Delphidian_13:
(Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750),

Gene: Den3_13 Start: 7607, Stop: 7843, Start Num: 15
Candidate Starts for Den3_13:
(5, 7133), (7, 7154), (Start: 15 @7607 has 160 MA's), (18, 7643), (23, 7715), (27, 7754), (28, 7763),

Gene: Dothraki_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Dothraki_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Duocatuli_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Duocatuli_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Endor_14 Start: 8172, Stop: 8384, Start Num: 15
Candidate Starts for Endor_14:
(5, 7698), (8, 7725), (9, 7746), (Start: 15 @8172 has 160 MA's), (25, 8289), (31, 8334),

Gene: Erla_13 Start: 7886, Stop: 8122, Start Num: 15
Candidate Starts for Erla_13:
(5, 7412), (7, 7433), (Start: 15 @7886 has 160 MA's), (18, 7922), (23, 7994), (27, 8033), (28, 8042),

Gene: Espinosa_13 Start: 7907, Stop: 8143, Start Num: 15
Candidate Starts for Espinosa_13:
(Start: 15 @7907 has 160 MA's), (18, 7943), (23, 8015), (27, 8054),

Gene: Etna_13 Start: 8002, Stop: 8241, Start Num: 15
Candidate Starts for Etna_13:
(1, 7396), (5, 7528), (8, 7555), (9, 7576), (Start: 15 @8002 has 160 MA's), (18, 8038), (23, 8110), (25, 8137),

Gene: Etta_13 Start: 7890, Stop: 8126, Start Num: 15
Candidate Starts for Etta_13:
(5, 7416), (7, 7437), (Start: 15 @7890 has 160 MA's), (18, 7926), (23, 7998), (27, 8037), (28, 8046),

Gene: Exploradora_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Exploradora_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Fabyndrax_12 Start: 8446, Stop: 8733, Start Num: 15
Candidate Starts for Fabyndrax_12:
(Start: 15 @8446 has 160 MA's), (19, 8503), (25, 8581),

Gene: FarmerDoug_13 Start: 7731, Stop: 7961, Start Num: 15
Candidate Starts for FarmerDoug_13:

(5, 7257), (8, 7284), (9, 7305), (Start: 15 @7731 has 160 MA's), (18, 7767), (23, 7839), (25, 7866),

Gene: Figueroism_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for Figueroism_13:
(Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: GaeCeo_14 Start: 7764, Stop: 7991, Start Num: 15
Candidate Starts for GaeCeo_14:
(Start: 15 @7764 has 160 MA's), (19, 7803), (20, 7815), (22, 7842), (32, 7956),

Gene: GardenB_13 Start: 8002, Stop: 8238, Start Num: 15
Candidate Starts for GardenB_13:
(5, 7531), (8, 7558), (9, 7579), (Start: 15 @8002 has 160 MA's), (18, 8038), (23, 8110),

Gene: Garey24_13 Start: 7889, Stop: 8104, Start Num: 15
Candidate Starts for Garey24_13:
(Start: 15 @7889 has 160 MA's), (23, 7982), (25, 8009),

Gene: Gargoyle_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Gargoyle_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Gelo_13 Start: 7890, Stop: 8126, Start Num: 15
Candidate Starts for Gelo_13:
(5, 7416), (7, 7437), (Start: 15 @7890 has 160 MA's), (18, 7926), (23, 7998), (27, 8037), (28, 8046),

Gene: Gershwin_13 Start: 7909, Stop: 8145, Start Num: 15
Candidate Starts for Gershwin_13:
(Start: 15 @7909 has 160 MA's), (18, 7945), (23, 8017), (27, 8056),

Gene: GoingMerry_13 Start: 7616, Stop: 7852, Start Num: 15
Candidate Starts for GoingMerry_13:
(5, 7142), (7, 7163), (Start: 15 @7616 has 160 MA's), (18, 7652), (23, 7724), (27, 7763), (28, 7772),

Gene: Golden_13 Start: 7951, Stop: 8181, Start Num: 15
Candidate Starts for Golden_13:
(6, 7474), (Start: 15 @7951 has 160 MA's), (17, 7966), (20, 8002),

Gene: GoneGirl_14 Start: 8108, Stop: 8344, Start Num: 15
Candidate Starts for GoneGirl_14:
(3, 7622), (5, 7637), (8, 7664), (9, 7685), (Start: 15 @8108 has 160 MA's), (18, 8144), (23, 8216),

Gene: Greys_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Greys_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Gubbabump_13 Start: 7898, Stop: 8134, Start Num: 15
Candidate Starts for Gubbabump_13:
(Start: 15 @7898 has 160 MA's), (18, 7934), (23, 8006), (25, 8033), (27, 8045),

Gene: Guetzie_13 Start: 7945, Stop: 8175, Start Num: 15
Candidate Starts for Guetzie_13:
(6, 7468), (Start: 15 @7945 has 160 MA's), (17, 7960), (19, 7984), (20, 7996),

Gene: HairyMan_11 Start: 7390, Stop: 7650, Start Num: 15
Candidate Starts for HairyMan_11:
(13, 7216), (Start: 15 @7390 has 160 MA's), (23, 7498),

Gene: Hamlet_13 Start: 8011, Stop: 8250, Start Num: 15
Candidate Starts for Hamlet_13:
(4, 7528), (5, 7537), (8, 7564), (9, 7585), (Start: 15 @8011 has 160 MA's), (18, 8047), (23, 8119), (25, 8146),

Gene: HanSolo_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for HanSolo_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: HankSprout_14 Start: 7776, Stop: 8012, Start Num: 15
Candidate Starts for HankSprout_14:
(Start: 15 @7776 has 160 MA's), (18, 7812), (23, 7884), (25, 7911), (27, 7923),

Gene: HavenFinLeoSun_14 Start: 7850, Stop: 8080, Start Num: 15
Candidate Starts for HavenFinLeoSun_14:
(14, 7742), (Start: 15 @7850 has 160 MA's), (18, 7886), (27, 7997),

Gene: HungryHenry_13 Start: 7897, Stop: 8133, Start Num: 15
Candidate Starts for HungryHenry_13:
(Start: 15 @7897 has 160 MA's), (18, 7933), (23, 8005), (25, 8032), (27, 8044),

Gene: Ilzat_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Ilzat_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Inventa_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Inventa_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Ioannes_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Ioannes_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Janus167_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Janus167_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: JasonD_15 Start: 8034, Stop: 8264, Start Num: 15
Candidate Starts for JasonD_15:
(Start: 15 @8034 has 160 MA's), (18, 8070), (27, 8181),

Gene: JasperRussell_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for JasperRussell_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Jenos_15 Start: 8355, Stop: 8591, Start Num: 15
Candidate Starts for Jenos_15:
(Start: 15 @8355 has 160 MA's), (18, 8391), (23, 8463), (27, 8502),

Gene: Jerbirus_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Jerbirus_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: JeriBeth_13 Start: 7743, Stop: 7979, Start Num: 15
Candidate Starts for JeriBeth_13:
(Start: 15 @7743 has 160 MA's), (18, 7779), (23, 7851), (25, 7878), (27, 7890),

Gene: Jingles_13 Start: 7873, Stop: 8100, Start Num: 15
Candidate Starts for Jingles_13:
(Start: 15 @7873 has 160 MA's), (31, 8041),

Gene: Kale_13 Start: 7911, Stop: 8147, Start Num: 15
Candidate Starts for Kale_13:
(Start: 15 @7911 has 160 MA's), (18, 7947), (23, 8019), (27, 8058),

Gene: KannH_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for KannH_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Kauala_13 Start: 7869, Stop: 8105, Start Num: 16
Candidate Starts for Kauala_13:
(Start: 16 @7869 has 1 MA's),

Gene: KellyGreen_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for KellyGreen_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: KingJulien_13 Start: 8002, Stop: 8241, Start Num: 15
Candidate Starts for KingJulien_13:
(1, 7396), (5, 7528), (8, 7555), (9, 7576), (Start: 15 @8002 has 160 MA's), (18, 8038), (23, 8110), (25, 8137),

Gene: Klimt_13 Start: 7888, Stop: 8124, Start Num: 15
Candidate Starts for Klimt_13:
(5, 7414), (7, 7435), (Start: 15 @7888 has 160 MA's), (18, 7924), (23, 7996), (27, 8035), (28, 8044),

Gene: Knox_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Knox_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Koji_13 Start: 7992, Stop: 8219, Start Num: 15
Candidate Starts for Koji_13:
(Start: 15 @7992 has 160 MA's), (31, 8160),

Gene: Kouch_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Kouch_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Kurt1_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Kurt1_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (24, 7723), (25, 7741), (27, 7753),

Gene: Leafus_13 Start: 8149, Stop: 8388, Start Num: 15
Candidate Starts for Leafus_13:
(5, 7675), (8, 7702), (9, 7723), (Start: 15 @8149 has 160 MA's), (18, 8185), (23, 8257), (25, 8284),

Gene: Lovelyunicorn_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Lovelyunicorn_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Lucky3_13 Start: 7951, Stop: 8181, Start Num: 15
Candidate Starts for Lucky3_13:
(6, 7474), (Start: 15 @7951 has 160 MA's), (17, 7966), (20, 8002),

Gene: Ludgate_13 Start: 7600, Stop: 7836, Start Num: 15
Candidate Starts for Ludgate_13:
(Start: 15 @7600 has 160 MA's), (18, 7636), (23, 7708), (25, 7735), (27, 7747),

Gene: MaeLinda_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for MaeLinda_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: ManRay_13 Start: 7909, Stop: 8145, Start Num: 15
Candidate Starts for ManRay_13:
(Start: 15 @7909 has 160 MA's), (18, 7945), (23, 8017), (27, 8056),

Gene: Mandalorian_12 Start: 7814, Stop: 8101, Start Num: 15
Candidate Starts for Mandalorian_12:
(Start: 15 @7814 has 160 MA's), (19, 7871), (21, 7892), (25, 7949),

Gene: Martin_14 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Martin_14:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: McGalleon_14 Start: 8474, Stop: 8710, Start Num: 15
Candidate Starts for McGalleon_14:
(11, 8168), (Start: 15 @8474 has 160 MA's), (18, 8510), (27, 8621),

Gene: Merida02_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Merida02_13:
(Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750),

Gene: MillyPhilly_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for MillyPhilly_13:
(Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750),

Gene: MonChoix_12 Start: 7676, Stop: 7897, Start Num: 15
Candidate Starts for MonChoix_12:
(5, 7202), (8, 7229), (9, 7250), (Start: 15 @7676 has 160 MA's), (25, 7793),

Gene: MrWorldwide_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for MrWorldwide_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Nagem_13 Start: 7600, Stop: 7836, Start Num: 15
Candidate Starts for Nagem_13:
(Start: 15 @7600 has 160 MA's), (18, 7636), (23, 7708), (25, 7735), (27, 7747),

Gene: Nattles_13 Start: 7892, Stop: 8128, Start Num: 15
Candidate Starts for Nattles_13:
(5, 7418), (7, 7439), (Start: 15 @7892 has 160 MA's), (18, 7928), (23, 8000), (27, 8039), (28, 8048),

Gene: Nebulous_14 Start: 8771, Stop: 9094, Start Num: 15
Candidate Starts for Nebulous_14:
(Start: 15 @8771 has 160 MA's), (18, 8807), (20, 8840), (23, 8879), (25, 8906), (26, 8909),

Gene: Neferthena_14 Start: 8782, Stop: 9105, Start Num: 15
Candidate Starts for Neferthena_14:
(Start: 15 @8782 has 160 MA's), (18, 8818), (25, 8917),

Gene: NickSell_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for NickSell_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Nucci_12 Start: 7802, Stop: 8089, Start Num: 15
Candidate Starts for Nucci_12:
(Start: 15 @7802 has 160 MA's), (19, 7859), (21, 7880), (25, 7937),

Gene: Oats_13 Start: 7909, Stop: 8145, Start Num: 15
Candidate Starts for Oats_13:
(Start: 15 @7909 has 160 MA's), (18, 7945), (23, 8017), (27, 8056),

Gene: OldNelly_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for OldNelly_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Oxtober96_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Oxtober96_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Pajaza_12 Start: 7906, Stop: 8121, Start Num: 15
Candidate Starts for Pajaza_12:
(Start: 15 @7906 has 160 MA's), (19, 7942), (25, 8020), (29, 8044),

Gene: Papafritta_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Papafritta_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: ParleG_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for ParleG_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Peep_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for Peep_13:
(5, 7120), (7, 7141), (Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: Peppino_13 Start: 8002, Stop: 8241, Start Num: 15

Candidate Starts for Peppino_13:
(5, 7528), (8, 7555), (9, 7576), (10, 7618), (Start: 15 @8002 has 160 MA's), (18, 8038), (23, 8110), (25, 8137),

Gene: Pherbot_13 Start: 7858, Stop: 8085, Start Num: 15
Candidate Starts for Pherbot_13:
(Start: 15 @7858 has 160 MA's), (31, 8026),

Gene: Pherferi_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Pherferi_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (24, 7723), (25, 7741), (27, 7753),

Gene: Phiderman_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Phiderman_13:
(Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (25, 7738), (27, 7750),

Gene: PhillyPhantom_13 Start: 8011, Stop: 8250, Start Num: 15
Candidate Starts for PhillyPhantom_13:
(4, 7528), (5, 7537), (8, 7564), (9, 7585), (Start: 15 @8011 has 160 MA's), (18, 8047), (23, 8119), (25, 8146),

Gene: Phireproof_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Phireproof_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: PhredFlintston_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for PhredFlintston_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Phriends_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Phriends_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Pikmin_12 Start: 7906, Stop: 8121, Start Num: 15
Candidate Starts for Pikmin_12:
(Start: 15 @7906 has 160 MA's), (19, 7942), (25, 8020), (29, 8044),

Gene: Pocket_13 Start: 7894, Stop: 8130, Start Num: 15
Candidate Starts for Pocket_13:
(Start: 15 @7894 has 160 MA's), (18, 7930), (23, 8002), (27, 8041),

Gene: PrincePhergus_13 Start: 7862, Stop: 8089, Start Num: 15
Candidate Starts for PrincePhergus_13:
(Start: 15 @7862 has 160 MA's), (31, 8030),

Gene: PuppyEggo_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for PuppyEggo_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Quartz_12 Start: 7815, Stop: 8102, Start Num: 15
Candidate Starts for Quartz_12:
(Start: 15 @7815 has 160 MA's), (19, 7872), (21, 7893), (25, 7950),

Gene: Raccoon_13 Start: 8008, Stop: 8247, Start Num: 15
Candidate Starts for Raccoon_13:
(5, 7534), (8, 7561), (9, 7582), (10, 7624), (Start: 15 @8008 has 160 MA's), (18, 8044), (23, 8116), (25, 8143),

Gene: Rapheph_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Rapheph_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Raptor_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Raptor_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Redfield_13 Start: 8010, Stop: 8249, Start Num: 15
Candidate Starts for Redfield_13:
(5, 7536), (8, 7563), (9, 7584), (10, 7626), (Start: 15 @8010 has 160 MA's), (18, 8046), (23, 8118), (25, 8145),

Gene: RenegadeRaider_13 Start: 7861, Stop: 8088, Start Num: 15
Candidate Starts for RenegadeRaider_13:
(Start: 15 @7861 has 160 MA's), (31, 8029),

Gene: Renzie_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for Renzie_13:
(5, 7120), (7, 7141), (Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: Riyhil_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Riyhil_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Robinson_13 Start: 7597, Stop: 7833, Start Num: 15
Candidate Starts for Robinson_13:
(Start: 15 @7597 has 160 MA's), (18, 7633), (23, 7705), (27, 7744), (28, 7753),

Gene: Rog141_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Rog141_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: RosieMae_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for RosieMae_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: SJay_13 Start: 7601, Stop: 7837, Start Num: 15
Candidate Starts for SJay_13:
(Start: 15 @7601 has 160 MA's), (18, 7637), (23, 7709), (25, 7736), (27, 7748),

Gene: Schnapsidee_13 Start: 8001, Stop: 8240, Start Num: 15
Candidate Starts for Schnapsidee_13:
(5, 7527), (8, 7554), (9, 7575), (10, 7617), (Start: 15 @8001 has 160 MA's), (18, 8037), (23, 8109), (25, 8136),

Gene: Schubert_13 Start: 8046, Stop: 8288, Start Num: 15
Candidate Starts for Schubert_13:

(Start: 15 @8046 has 160 MA's), (18, 8082), (23, 8154), (25, 8181),

Gene: Sedgewig_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Sedgewig_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: ShaiHulud_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for ShaiHulud_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Shee_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Shee_13:
(Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (25, 7738), (27, 7750),

Gene: Sinatra_13 Start: 7859, Stop: 8086, Start Num: 15
Candidate Starts for Sinatra_13:
(Start: 15 @7859 has 160 MA's), (31, 8027),

Gene: SirVictor_13 Start: 7945, Stop: 8175, Start Num: 15
Candidate Starts for SirVictor_13:
(6, 7468), (Start: 15 @7945 has 160 MA's), (17, 7960), (19, 7984), (20, 7996),

Gene: SoilGremlin_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for SoilGremlin_13:
(Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750),

Gene: SolidSnake_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for SolidSnake_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: SonOfLevi_13 Start: 7888, Stop: 8124, Start Num: 15
Candidate Starts for SonOfLevi_13:
(5, 7414), (7, 7435), (Start: 15 @7888 has 160 MA's), (18, 7924), (23, 7996), (27, 8035), (28, 8044),

Gene: Soror1_13 Start: 8011, Stop: 8250, Start Num: 15
Candidate Starts for Soror1_13:
(1, 7405), (5, 7537), (8, 7564), (9, 7585), (Start: 15 @8011 has 160 MA's), (18, 8047), (23, 8119), (25, 8146),

Gene: Stanktossa_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for Stanktossa_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: StingRay_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for StingRay_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: StirfryIV_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for StirfryIV_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: Stormbreaker8_13 Start: 8002, Stop: 8241, Start Num: 15
Candidate Starts for Stormbreaker8_13:

(1, 7396), (2, 7399), (5, 7528), (8, 7555), (9, 7576), (Start: 15 @8002 has 160 MA's), (18, 8038), (23, 8110), (25, 8137),

Gene: Strathdee_13 Start: 7604, Stop: 7840, Start Num: 15
Candidate Starts for Strathdee_13:
(5, 7130), (7, 7151), (Start: 15 @7604 has 160 MA's), (18, 7640), (23, 7712), (27, 7751), (28, 7760),

Gene: Superfresh_13 Start: 7594, Stop: 7830, Start Num: 15
Candidate Starts for Superfresh_13:
(5, 7120), (7, 7141), (Start: 15 @7594 has 160 MA's), (18, 7630), (23, 7702), (27, 7741), (28, 7750),

Gene: Symere_13 Start: 7896, Stop: 8132, Start Num: 15
Candidate Starts for Symere_13:
(Start: 15 @7896 has 160 MA's), (18, 7932), (23, 8004), (25, 8031), (27, 8043),

Gene: TatarkaPM_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for TatarkaPM_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Teagan_13 Start: 7600, Stop: 7836, Start Num: 15
Candidate Starts for Teagan_13:
(Start: 15 @7600 has 160 MA's), (18, 7636), (23, 7708), (25, 7735), (27, 7747),

Gene: TeddyBear_13 Start: 7909, Stop: 8145, Start Num: 15
Candidate Starts for TeddyBear_13:
(Start: 15 @7909 has 160 MA's), (18, 7945), (23, 8017), (27, 8056),

Gene: Tenda_13 Start: 7907, Stop: 8143, Start Num: 15
Candidate Starts for Tenda_13:
(Start: 15 @7907 has 160 MA's), (18, 7943), (23, 8015), (27, 8054),

Gene: Theresita_13 Start: 7443, Stop: 7679, Start Num: 15
Candidate Starts for Theresita_13:
(Start: 15 @7443 has 160 MA's), (17, 7458), (18, 7461), (30, 7593), (31, 7611),

Gene: Thompsone_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Thompsone_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Thorongil_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Thorongil_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: TinSulphur_13 Start: 7606, Stop: 7842, Start Num: 15
Candidate Starts for TinSulphur_13:
(Start: 15 @7606 has 160 MA's), (18, 7642), (23, 7714), (25, 7741), (27, 7753),

Gene: Velene_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Velene_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Vispistious_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for Vispistious_13:

(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: WildNOut_13 Start: 7603, Stop: 7839, Start Num: 15
Candidate Starts for WildNOut_13:
(5, 7129), (7, 7150), (Start: 15 @7603 has 160 MA's), (18, 7639), (23, 7711), (27, 7750), (28, 7759),

Gene: Winzigespinne_13 Start: 7895, Stop: 8131, Start Num: 15
Candidate Starts for Winzigespinne_13:
(Start: 15 @7895 has 160 MA's), (18, 7931), (23, 8003), (25, 8030), (27, 8042),

Gene: Zada_13 Start: 7597, Stop: 7833, Start Num: 15
Candidate Starts for Zada_13:
(5, 7123), (Start: 15 @7597 has 160 MA's), (18, 7633), (23, 7705), (25, 7732), (27, 7744),