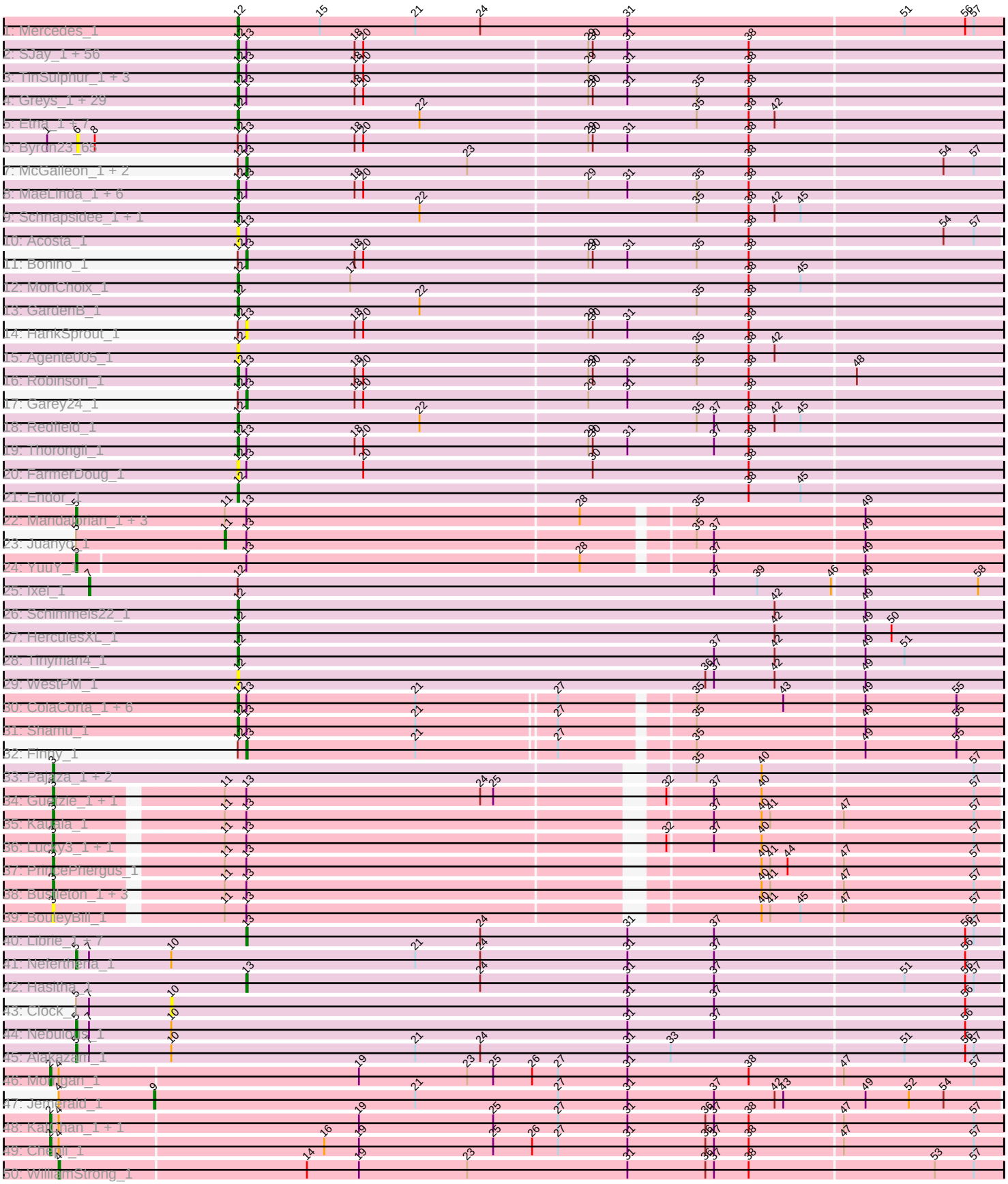
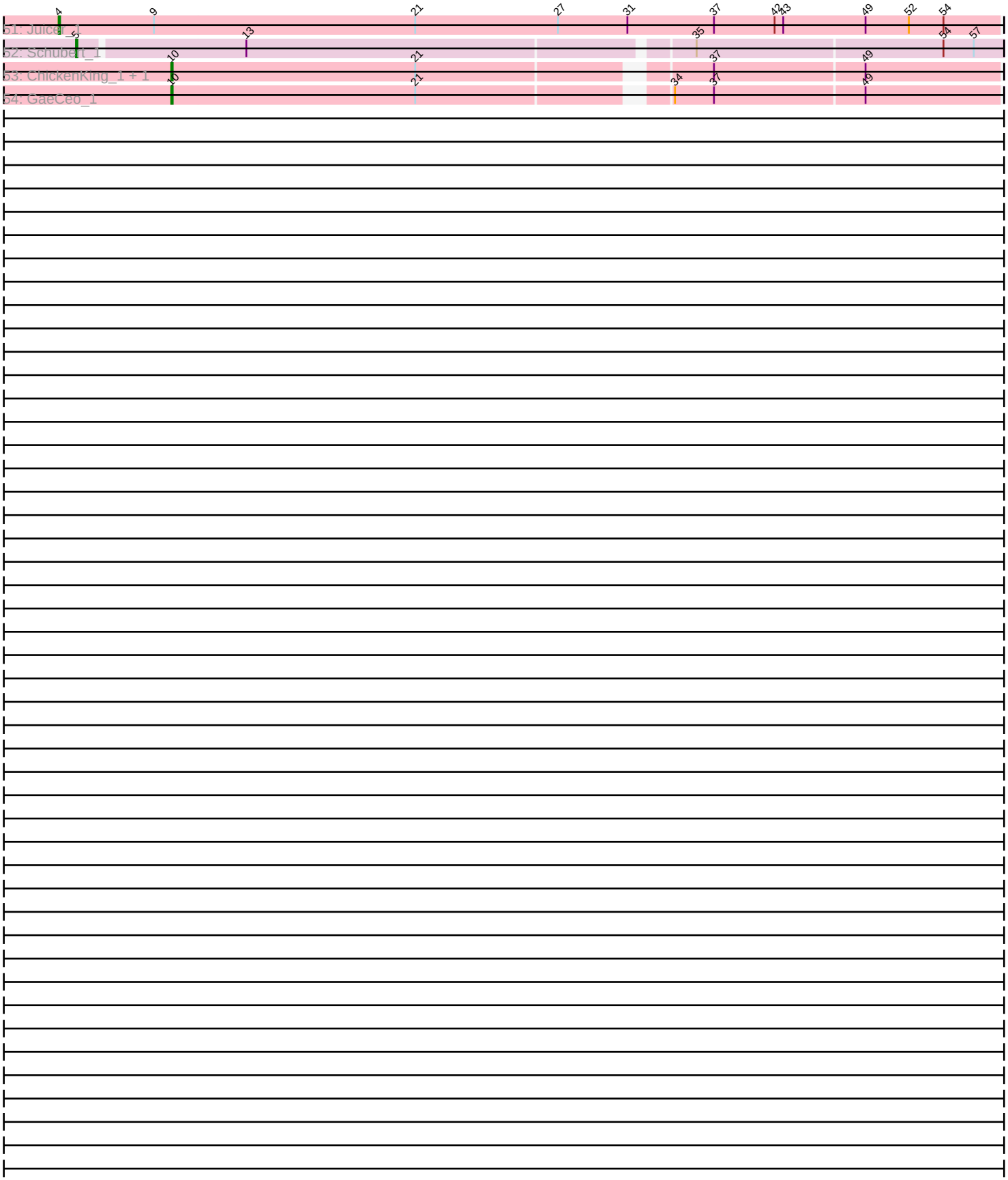
Pham 84998


1: Mercedes_1
2: SJay_1 + 56
3: TinSulphur_1 + 3
4: Greys_1 + 29
5: Etna_1 + 7
6: Byrdn23_65
7: McGalleon_1 + 2
8: MaeLinda_1 + 6
9: Schnapsidee_1 + 1
10: Acosta_1
11: Bonino_1
12: MonChoix_1
13: GardenB_1
14: HankSprout_1
15: Agente005_1
16: Robinson_1
17: Garey24_1
18: Redfield_1
19: Thorongil_1
20: FarmerDoug_1
21: Endor_4
22: Mandalorian_1 + 3
23: Juanyo_1
24: YuuY_1
25: Ixel_1
26: Schimmels22_1
27: HerculesXL_1
28: Tinyman4_1
29: WestPM_1
30: ColaCola_1 + 6
31: Shamu_1
32: Finny_1
33: Pazza_1 + 2
34: Guazzie_1 + 1
35: Kazaia_1
36: Lucky3_1 + 1
37: PrincePhergus_1
38: Bushleton_1 + 3
39: BouleyBill_1
40: Libre_1 + 7
41: Neferneferia_1
42: Hasitha_1
43: Clock_1
44: Nebulous_1
45: Alakazam_1
46: Morgan_1
47: Jennerald_1
48: Kaichan_1 + 1
49: Chegil_1
50: WilliamStrong_1

Pham 84998


51: Juicer_1
52: Schubert_1
53: ChickenKing_1 + 1
54: GaeCeo_1
4
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43
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49

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 84998 Report

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

Pham number 84998 has 183 members, 27 are drafts.

Phages represented in each track:
• Track 1 : Mercedes_1
• Track 2 : SJay_1, Rapheph_1, Duocatuli_1, Renzie_1, Lovelyunicorn_1, Peep_1, Dothraki_1, Delphidian_1, Jerbirus_1, Dave_1, PhredFlintston_1, HanSolo_1, Oats_1, AxiPup_1, Pocket_1, WildNOut_1, Chako_1, Kale_1, Aubergine_1, Ludgate_1, Antoinette_1, Baines_1, JasperRussell_1, Stanktossa_1, Papafritta_1, Christoph_1, StirfryIV_1, Figueroism_1, MillyPhilly_1, Thompsone_1, Teagan_1, Gargoyle_1, Calix_1, Oxtober96_1, Phriends_1, Nagem_1, Tenda_1, Espinosa_1, Gubbabump_1, Vispistious_1, PuppyEggo_1, Erla_1, ManRay_1, BonesMcCoy_1, Velene_1, Zada_1, Sedgewig_1, Rog141_1, JeriBeth_1, KannH_1, Superfresh_1, ShaiHulud_1, Ioannes_1, Etta_1, SoilGremlin_1, Clancy_1, OldNelly_1
• Track 3 : TinSulphur_1, Inventa_1, Bandik_1, Winzigespinne_1
• Track 4 : Greys_1, Benjalauren_1, Raptor_1, Pherferi_1, Phireproof_1, Asta_1, AranulaLuti_1, Blage_1, Shee_1, HungryHenry_1, BigRedClifford_1, ParleG_1, Janus167_1, Kurt1_1, AlexAdler_1, Nattles_1, Gelo_1, Martin_2, Klimt_1, MrWorldwide_1, Gershwin_1, Chamuel_1, StingRay_1, BeautPeep30_1, Riyhil_1, TeddyBear_1, TatarkaPM_1, SonOfLevi_1, NickSell_1, Phiderman_1
• Track 5 : Etna_1, KingJulien_1, Stormbreaker8_1, Balsa_1, Raccoon_1, Peppino_1, Hamlet_1, Leafus_1
• Track 6 : Byron23_65
• Track 7 : McGalleon_1, JasonD_1, Jenos_1
• Track 8 : MaeLinda_1, Convict_1, Ilzat_1, Strathdee_1, Den3_1, Alyxandracam_1, Knox_1
• Track 9 : Schnapsidee_1, BeeBee8_1
• Track 10 : Acosta_1
• Track 11 : Bonino_1
• Track 12 : MonChoix_1
• Track 13 : GardenB_1
• Track 14 : HankSprout_1
• Track 15 : Agente005_1
• Track 16 : Robinson_1
• Track 17 : Garey24_1
• Track 18 : Redfield_1
• Track 19 : Thorongil_1
• Track 20 : FarmerDoug_1
• Track 21 : Endor_1
• Track 22 : Mandalorian_1, Carostasia_1, Nucci_1, Quartz_1
• Track 23 : Juanyo_1

• Track 24 : YuuY_1
• Track 25 : Ixel_1
• Track 26 : Schimmels22_1
• Track 27 : HerculesXL_1
• Track 28 : Tinyman4_1
• Track 29 : WestPM_1
• Track 30 : ColaCorta_1, Sansa_62, ChikPic_1, Zenitsu_1, Eleri_1, Saratos_1, Andromedas_1
• Track 31 : Shamu_1
• Track 32 : Finny_1
• Track 33 : Pajaza_1, Pikmin_1, Casey_1
• Track 34 : Guetzie_1, SirVictor_1
• Track 35 : Kauala_1
• Track 36 : Lucky3_1, Golden_1
• Track 37 : PrincePhergus_1
• Track 38 : Bustleton_1, Pherbot_1, Sinatra_1, Koji_1
• Track 39 : BouleyBill_1
• Track 40 : Librie_1, Zayuliv_1, GreenIvy_1, Fulton_1, CaptainRex_1, QuadZero_1, Zepp_1, LilTerminator_1
• Track 41 : Neferthena_1
• Track 42 : Hasitha_1
• Track 43 : Clock_1
• Track 44 : Nebulous_1
• Track 45 : Alakazam_1
• Track 46 : Morrigan_1
• Track 47 : Jemerald_1
• Track 48 : KatChan_1, Luna18_1
• Track 49 : Chepli_1
• Track 50 : WilliamStrong_1
• Track 51 : Juicer_1
• Track 52 : Schubert_1
• Track 53 : ChickenKing_1, Cheeto1_1
• Track 54 : GaeCeo_1

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

The start number called the most often in the published annotations is 12, it was called in 112 of the 156 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acosta_1, Agente005_1, AlexAdler_1, Alyxandracam_1, Andromedas_1, Antoinette_1, AranulaLuti_1, Asta_1, Aubergine_1, AxiPup_1, Baines_1, Balsa_1, Bandik_1, BeautPeep30_1, BeeBee8_1, Benjalauren_1, BigRedClifford_1, Blage_1, BonesMcCoy_1, Calix_1, Chako_1, Chamuel_1, ChikPic_1, Christoph_1, Clancy_1, ColaCorta_1, Convict_1, Dave_1, Delphidian_1, Den3_1, Dothraki_1, Duocatuli_1, Eleri_1, Endor_1, Erla_1, Espinosa_1, Etna_1, Etta_1, FarmerDoug_1, Figueroism_1, GardenB_1, Gargoyle_1, Gelo_1, Gershwin_1, Greys_1, Gubbabump_1, Hamlet_1, HanSolo_1, HerculesXL_1, HungryHenry_1, Ilzat_1, Inventa_1, Ioannes_1, Janus167_1, JasperRussell_1, Jerbirus_1, JeriBeth_1, Kale_1, KannH_1, KingJulien_1, Klimt_1, Knox_1, Kurt1_1, Leafus_1,

Lovelyunicorn_1, Ludgate_1, MaeLinda_1, ManRay_1, Martin_2, Mercedes_1, MillyPhilly_1, MonChoix_1, MrWorldwide_1, Nagem_1, Nattles_1, NickSell_1, Oats_1, OldNelly_1, Oxtober96_1, Papafritta_1, ParleG_1, Peep_1, Peppino_1, Pherferi_1, Phiderman_1, Phireproof_1, PhredFlintston_1, Phriends_1, Pocket_1, PuppyEggo_1, Raccoon_1, Rapheph_1, Raptor_1, Redfield_1, Renzie_1, Riyhil_1, Robinson_1, Rog141_1, SJay_1, Sansa_62, Saratos_1, Schimmels22_1, Schnapsidee_1, Sedgewig_1, ShaiHulud_1, Shamu_1, Shee_1, SoilGremlin_1, SonOfLevi_1, Stanktossa_1, StingRay_1, StirfryIV_1, Stormbreaker8_1, Strathdee_1, Superfresh_1, TatarkaPM_1, Teagan_1, TeddyBear_1, Tenda_1, Thompsone_1, Thorongil_1, TinSulphur_1, Tinyman4_1, Velene_1, Vispistious_1, WestPM_1, WildNOut_1, Winzigespinne_1, Zada_1, Zenitsu_1,

Genes that have the "Most Annotated" start but do not call it:
• Bonino_1, Byron23_65, Finny_1, Garey24_1, HankSprout_1, Ixel_1, JasonD_1, Jenos_1, McGalleon_1,

Genes that do not have the "Most Annotated" start:
• Alakazam_1, BouleyBill_1, Bustleton_1, CaptainRex_1, Carostasia_1, Casey_1, Cheeto1_1, Chepli_1, ChickenKing_1, Clock_1, Fulton_1, GaeCeo_1, Golden_1, GreenIvy_1, Guetzie_1, Hasitha_1, Jemerald_1, Juanyo_1, Juicer_1, KatChan_1, Kauala_1, Koji_1, Librie_1, LilTerminator_1, Lucky3_1, Luna18_1, Mandalorian_1, Morrigan_1, Nebulous_1, Neferthena_1, Nucci_1, Pajaza_1, Pherbot_1, Pikmin_1, PrincePhergus_1, QuadZero_1, Quartz_1, Schubert_1, Sinatra_1, SirVictor_1, WilliamStrong_1, YuuY_1, Zayuliv_1, Zepp_1,

Summary by start number:

Start 2:
• Found in 4 of 183 (2.2%) of genes in pham
• Manual Annotations of this start: 4 of 156
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Chepli_1 (EA6), KatChan_1 (EA6), Luna18_1 (EA6), Morrigan_1 (EA6),

Start 3:
• Found in 14 of 183 (7.7%) of genes in pham
• Manual Annotations of this start: 13 of 156
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BouleyBill_1 (EA4), Bustleton_1 (EA4), Casey_1 (EA3), Golden_1 (EA4), Guetzie_1 (EA4), Kauala_1 (EA4), Koji_1 (EA4), Lucky3_1 (EA4), Pajaza_1 (EA3), Pherbot_1 (EA4), Pikmin_1 (EA3), PrincePhergus_1 (EA4), Sinatra_1 (EA4), SirVictor_1 (EA4),

Start 4:
• Found in 7 of 183 (3.8%) of genes in pham
• Manual Annotations of this start: 2 of 156
• Called 28.6% of time when present
• Phage (with cluster) where this start called: Juicer_1 (EA6), WilliamStrong_1 (EA6),

Start 5:
• Found in 11 of 183 (6.0%) of genes in pham
• Manual Annotations of this start: 8 of 156
• Called 81.8% of time when present

• Phage (with cluster) where this start called: Alakazam_1 (EA5), Carostasia_1 (EA10), Mandalorian_1 (EA10), Nebulous_1 (EA5), Neferthena_1 (EA5), Nucci_1 (EA10), Quartz_1 (EA10), Schubert_1 (EA8), YuuY_1 (EA10),

Start 6:
• Found in 1 of 183 (0.5%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Byron23_65 (EA1),

Start 7:
• Found in 5 of 183 (2.7%) of genes in pham
• Manual Annotations of this start: 1 of 156
• Called 20.0% of time when present
• Phage (with cluster) where this start called: Ixel_1 (EA11),

Start 9:
• Found in 2 of 183 (1.1%) of genes in pham
• Manual Annotations of this start: 1 of 156
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Jemerald_1 (EA6),

Start 10:
• Found in 7 of 183 (3.8%) of genes in pham
• Manual Annotations of this start: 3 of 156
• Called 57.1% of time when present
• Phage (with cluster) where this start called: Cheeto1_1 (EA9), ChickenKing_1 (EA9), Clock_1 (EA5), GaeCeo_1 (EA9),

Start 11:
• Found in 16 of 183 (8.7%) of genes in pham
• Manual Annotations of this start: 1 of 156
• Called 6.2% of time when present
• Phage (with cluster) where this start called: Juanyo_1 (EA10),

Start 12:
• Found in 139 of 183 (76.0%) of genes in pham
• Manual Annotations of this start: 112 of 156
• Called 93.5% of time when present
• Phage (with cluster) where this start called: Acosta_1 (EA1), Agente005_1 (EA1), AlexAdler_1 (EA1), Alyxandracam_1 (EA1), Andromedas_1 (EA2), Antoinette_1 (EA1), AranulaLuti_1 (EA1), Asta_1 (EA1), Aubergine_1 (EA1), AxiPup_1 (EA1), Baines_1 (EA1), Balsa_1 (EA1), Bandik_1 (EA1), BeautPeep30_1 (EA1), BeeBee8_1 (EA1), Benjalauren_1 (EA1), BigRedClifford_1 (EA1), Blage_1 (EA1), BonesMcCoy_1 (EA1), Calix_1 (EA1), Chako_1 (EA1), Chamuel_1 (EA1), ChikPic_1 (EA2), Christoph_1 (EA1), Clancy_1 (EA1), ColaCorta_1 (EA2), Convict_1 (EA1), Dave_1 (EA1), Delphidian_1 (EA1), Den3_1 (EA1), Dothraki_1 (EA1), Duocatuli_1 (EA1), Eleri_1 (EA2), Endor_1 (EA1), Erla_1 (EA1), Espinosa_1 (EA1), Etna_1 (EA1), Etta_1 (EA1), FarmerDoug_1 (EA1), Figueroism_1 (EA1), GardenB_1 (EA1), Gargoyle_1 (EA1), Gelo_1 (EA1), Gershwin_1 (EA1), Greys_1 (EA1), Gubbabump_1 (EA1), Hamlet_1 (EA1), HanSolo_1 (EA1), HerculesXL_1 (EA11), HungryHenry_1 (EA1), Ilzat_1 (EA1), Inventa_1 (EA1), Ioannes_1 (EA1), Janus167_1 (EA1), JasperRussell_1 (EA1), Jerbirus_1 (EA1), JeriBeth_1 (EA1), Kale_1 (EA1), KannH_1

(EA1), KingJulien_1 (EA1), Klimt_1 (EA1), Knox_1 (EA1), Kurt1_1 (EA1), Leafus_1 (EA1), Lovelyunicorn_1 (EA1), Ludgate_1 (EA1), MaeLinda_1 (EA1), ManRay_1 (EA1), Martin_2 (EA1), Mercedes_1 (EA), MillyPhilly_1 (EA1), MonChoix_1 (EA1), MrWorldwide_1 (EA1), Nagem_1 (EA1), Nattles_1 (EA1), NickSell_1 (EA1), Oats_1 (EA1), OldNelly_1 (EA1), Oxtober96_1 (EA1), Papafritta_1 (EA1), ParleG_1 (EA1), Peep_1 (EA1), Peppino_1 (EA1), Pherferi_1 (EA1), Phiderman_1 (EA1), Phireproof_1 (EA1), PhredFlintston_1 (EA1), Phriends_1 (EA1), Pocket_1 (EA1), PuppyEggo_1 (EA1), Raccoon_1 (EA1), Rapheph_1 (EA1), Raptor_1 (EA1), Redfield_1 (EA1), Renzie_1 (EA1), Riyhil_1 (EA1), Robinson_1 (EA1), Rog141_1 (EA1), SJay_1 (EA1), Sansa_62 (EA2), Saratos_1 (EA2), Schimmels22_1 (EA11), Schnapsidee_1 (EA1), Sedgewig_1 (EA1), ShaiHulud_1 (EA1), Shamu_1 (EA2), Shee_1 (EA1), SoilGremlin_1 (EA1), SonOfLevi_1 (EA1), Stanktossa_1 (EA1), StingRay_1 (EA1), StirfryIV_1 (EA1), Stormbreaker8_1 (EA1), Strathdee_1 (EA1), Superfresh_1 (EA1), TatarkaPM_1 (EA1), Teagan_1 (EA1), TeddyBear_1 (EA1), Tenda_1 (EA1), Thompsone_1 (EA1), Thorongil_1 (EA1), TinSulphur_1 (EA1), Tinyman4_1 (EA11), Velene_1 (EA1), Vispistious_1 (EA1), WestPM_1 (EA11), WildNOut_1 (EA1), Winzigespinne_1 (EA1), Zada_1 (EA1), Zenitsu_1 (EA2),

Start 13:
• Found in 145 of 183 (79.2%) of genes in pham
• Manual Annotations of this start: 11 of 156
• Called 11.0% of time when present
• Phage (with cluster) where this start called: Bonino_1 (EA1), CaptainRex_1 (EA5), Finny_1 (EA2), Fulton_1 (EA5), Garey24_1 (EA1), GreenIvy_1 (EA5), HankSprout_1 (EA1), Hasitha_1 (EA5), JasonD_1 (EA1), Jenos_1 (EA1), Librie_1 (EA5), LilTerminator_1 (EA5), McGalleon_1 (EA1), QuadZero_1 (EA5), Zayuliv_1 (EA5), Zepp_1 (EA5),

Summary by clusters:

There are 11 clusters represented in this pham: EA11, EA10, EA, EA9, EA8, EA1, EA3, EA2, EA5, EA4, EA6,

Info for manual annotations of cluster EA:
•Start number 12 was manually annotated 1 time for cluster EA.

Info for manual annotations of cluster EA1:
•Start number 12 was manually annotated 100 times for cluster EA1.
•Start number 13 was manually annotated 4 times for cluster EA1.

Info for manual annotations of cluster EA10:
•Start number 5 was manually annotated 4 times for cluster EA10.
•Start number 11 was manually annotated 1 time for cluster EA10.

Info for manual annotations of cluster EA11:
•Start number 7 was manually annotated 1 time for cluster EA11.
•Start number 12 was manually annotated 3 times for cluster EA11.

Info for manual annotations of cluster EA2:
•Start number 12 was manually annotated 8 times for cluster EA2.
•Start number 13 was manually annotated 1 time for cluster EA2.

Info for manual annotations of cluster EA3:

•Start number 3 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:
•Start number 3 was manually annotated 10 times for cluster EA4.

Info for manual annotations of cluster EA5:
•Start number 5 was manually annotated 3 times for cluster EA5.
•Start number 13 was manually annotated 6 times for cluster EA5.

Info for manual annotations of cluster EA6:
•Start number 2 was manually annotated 4 times for cluster EA6.
•Start number 4 was manually annotated 2 times for cluster EA6.
•Start number 9 was manually annotated 1 time for cluster EA6.

Info for manual annotations of cluster EA8:
•Start number 5 was manually annotated 1 time for cluster EA8.

Info for manual annotations of cluster EA9:
•Start number 10 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Acosta_1 Start: 1, Stop: 522, Start Num: 12
Candidate Starts for Acosta_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (38, 352), (54, 484), (57, 505),

Gene: Agente005_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Agente005_1:
(Start: 12 @1 has 112 MA's), (35, 316), (38, 352), (42, 370),

Gene: Alakazam_1 Start: 1, Stop: 639, Start Num: 5
Candidate Starts for Alakazam_1:
(Start: 5 @1 has 8 MA's), (Start: 7 @10 has 1 MA's), (Start: 10 @67 has 3 MA's), (21, 235), (24, 280), (31, 382), (33, 412), (51, 571), (56, 613), (57, 619),

Gene: AlexAdler_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for AlexAdler_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Alyxandracam_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Alyxandracam_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: Andromedas_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for Andromedas_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Antoinette_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for Antoinette_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: AranulaLuti_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for AranulaLuti_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Asta_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Asta_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Aubergine_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Aubergine_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: AxiPup_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for AxiPup_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Baines_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Baines_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Balsa_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Balsa_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Bandik_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Bandik_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (38, 352),

Gene: BeautPeep30_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for BeautPeep30_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: BeeBee8_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for BeeBee8_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370), (45, 388),

Gene: Benjalauren_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Benjalauren_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: BigRedClifford_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for BigRedClifford_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Blage_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Blage_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: BonesMcCoy_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for BonesMcCoy_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Bonino_1 Start: 7, Stop: 525, Start Num: 13
Candidate Starts for Bonino_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: BouleyBill_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for BouleyBill_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (40, 454), (41, 460), (45, 481), (47, 508), (57, 598),

Gene: Bustleton_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Bustleton_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (40, 454), (41, 460), (47, 508), (57, 598),

Gene: Byron23_65 Start: 41711, Stop: 525, Start Num: 6
Candidate Starts for Byron23_65:
(1, 41690), (6, 41711), (8, 41723), (Start: 12 @41822 has 112 MA's), (Start: 13 @41828 has 11 MA's), (18, 41903), (20, 41909), (29, 42062), (30, 42065), (31, 42089), (38, 42173),

Gene: Calix_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Calix_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: CaptainRex_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for CaptainRex_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: Carostasia_1 Start: 1, Stop: 624, Start Num: 5
Candidate Starts for Carostasia_1:
(Start: 5 @1 has 8 MA's), (Start: 11 @103 has 1 MA's), (Start: 13 @118 has 11 MA's), (28, 346), (35, 415), (49, 529),

Gene: Casey_1 Start: 1, Stop: 627, Start Num: 3
Candidate Starts for Casey_1:
(Start: 3 @1 has 13 MA's), (35, 421), (40, 466), (57, 610),

Gene: Chako_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for Chako_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Chamuel_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Chamuel_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Cheeto1_1 Start: 1, Stop: 546, Start Num: 10
Candidate Starts for Cheeto1_1:
(Start: 10 @1 has 3 MA's), (21, 169), (37, 352), (49, 454),

Gene: Chepli_1 Start: 1, Stop: 651, Start Num: 2
Candidate Starts for Chepli_1:
(Start: 2 @1 has 4 MA's), (Start: 4 @7 has 2 MA's), (16, 184), (19, 208), (25, 301), (26, 328), (27, 346), (31, 394), (36, 448), (37, 454), (38, 478), (47, 541), (57, 631),

Gene: ChickenKing_1 Start: 1, Stop: 546, Start Num: 10
Candidate Starts for ChickenKing_1:
(Start: 10 @1 has 3 MA's), (21, 169), (37, 352), (49, 454),

Gene: ChikPic_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for ChikPic_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Christoph_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Christoph_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Clancy_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Clancy_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Clock_1 Start: 67, Stop: 639, Start Num: 10
Candidate Starts for Clock_1:
(Start: 5 @1 has 8 MA's), (Start: 7 @10 has 1 MA's), (Start: 10 @67 has 3 MA's), (31, 382), (37, 442), (56, 613),

Gene: ColaCorta_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for ColaCorta_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Convict_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Convict_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: Dave_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for Dave_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Delphidian_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Delphidian_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Den3_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Den3_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: Dothraki_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Dothraki_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Duocatuli_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Duocatuli_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Eleri_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for Eleri_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Endor_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Endor_1:
(Start: 12 @1 has 112 MA's), (38, 352), (45, 388),

Gene: Erla_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Erla_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Espinosa_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Espinosa_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Etna_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Etna_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Etta_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Etta_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: FarmerDoug_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for FarmerDoug_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (20, 88), (30, 244), (38, 352),

Gene: Figueroism_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Figueroism_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Finny_1 Start: 7, Stop: 510, Start Num: 13
Candidate Starts for Finny_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (49, 415), (55, 478),

Gene: Fulton_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for Fulton_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: GaeCeo_1 Start: 1, Stop: 546, Start Num: 10
Candidate Starts for GaeCeo_1:
(Start: 10 @1 has 3 MA's), (21, 169), (34, 325), (37, 352), (49, 454),

Gene: GardenB_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for GardenB_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352),

Gene: Garey24_1 Start: 7, Stop: 525, Start Num: 13
Candidate Starts for Garey24_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (38, 352),

Gene: Gargoyle_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Gargoyle_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Gelo_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Gelo_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Gershwin_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Gershwin_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Golden_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Golden_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (32, 391), (37, 421), (40, 454), (57, 598),

Gene: GreenIvy_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for GreenIvy_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: Greys_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Greys_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Gubbabump_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Gubbabump_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Guetzie_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Guetzie_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (24, 283), (25, 292), (32, 391), (37, 421), (40, 454), (57, 598),

Gene: Hamlet_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Hamlet_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: HanSolo_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for HanSolo_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: HankSprout_1 Start: 7, Stop: 525, Start Num: 13
Candidate Starts for HankSprout_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Hasitha_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for Hasitha_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (51, 454), (56, 496), (57, 502),

Gene: HerculesXL_1 Start: 1, Stop: 528, Start Num: 12
Candidate Starts for HerculesXL_1:
(Start: 12 @1 has 112 MA's), (42, 373), (49, 433), (50, 451),

Gene: HungryHenry_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for HungryHenry_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Ilzat_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Ilzat_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: Inventa_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Inventa_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (38, 352),

Gene: Ioannes_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Ioannes_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Ixel_1 Start: 1, Stop: 630, Start Num: 7
Candidate Starts for Ixel_1:
(Start: 7 @1 has 1 MA's), (Start: 12 @103 has 112 MA's), (37, 433), (39, 463), (46, 514), (49, 535), (58, 613),

Gene: Janus167_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Janus167_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: JasonD_1 Start: 7, Stop: 522, Start Num: 13
Candidate Starts for JasonD_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (23, 160), (38, 352), (54, 484), (57, 505),

Gene: JasperRussell_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for JasperRussell_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Jemerald_1 Start: 67, Stop: 651, Start Num: 9
Candidate Starts for Jemerald_1:
(Start: 4 @1 has 2 MA's), (Start: 9 @67 has 1 MA's), (21, 247), (27, 346), (31, 394), (37, 454), (42, 496), (43, 502), (49, 559), (52, 589), (54, 613),

Gene: Jenos_1 Start: 7, Stop: 522, Start Num: 13
Candidate Starts for Jenos_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (23, 160), (38, 352), (54, 484), (57, 505),

Gene: Jerbirus_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Jerbirus_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: JeriBeth_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for JeriBeth_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Juanyo_1 Start: 103, Stop: 624, Start Num: 11
Candidate Starts for Juanyo_1:
(Start: 5 @1 has 8 MA's), (Start: 11 @103 has 1 MA's), (Start: 13 @118 has 11 MA's), (35, 415), (37, 427), (49, 529),

Gene: Juicer_1 Start: 1, Stop: 651, Start Num: 4
Candidate Starts for Juicer_1:
(Start: 4 @1 has 2 MA's), (Start: 9 @67 has 1 MA's), (21, 247), (27, 346), (31, 394), (37, 454), (42, 496), (43, 502), (49, 559), (52, 589), (54, 613),

Gene: Kale_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Kale_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: KannH_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for KannH_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: KatChan_1 Start: 1, Stop: 651, Start Num: 2
Candidate Starts for KatChan_1:
(Start: 2 @1 has 4 MA's), (Start: 4 @7 has 2 MA's), (19, 208), (25, 301), (27, 346), (31, 394), (36, 448), (37, 454), (38, 478), (47, 541), (57, 631),

Gene: Kauala_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Kauala_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (37, 421), (40, 454), (41, 460), (47, 508), (57, 598),

Gene: KingJulien_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for KingJulien_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Klimt_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Klimt_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Knox_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Knox_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: Koji_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Koji_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (40, 454), (41, 460), (47, 508), (57, 598),

Gene: Kurt1_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Kurt1_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Leafus_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Leafus_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Librie_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for Librie_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: LilTerminator_1 Start: 1, Stop: 519, Start Num: 13

Candidate Starts for LilTerminator_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: Lovelyunicorn_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Lovelyunicorn_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Lucky3_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Lucky3_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (32, 391), (37, 421), (40, 454), (57, 598),

Gene: Ludgate_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Ludgate_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Luna18_1 Start: 1, Stop: 651, Start Num: 2
Candidate Starts for Luna18_1:
(Start: 2 @1 has 4 MA's), (Start: 4 @7 has 2 MA's), (19, 208), (25, 301), (27, 346), (31, 394), (36, 448), (37, 454), (38, 478), (47, 541), (57, 631),

Gene: MaeLinda_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for MaeLinda_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: ManRay_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for ManRay_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Mandalorian_1 Start: 1, Stop: 624, Start Num: 5
Candidate Starts for Mandalorian_1:
(Start: 5 @1 has 8 MA's), (Start: 11 @103 has 1 MA's), (Start: 13 @118 has 11 MA's), (28, 346), (35, 415), (49, 529),

Gene: Martin_2 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Martin_2:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: McGalleon_1 Start: 7, Stop: 522, Start Num: 13
Candidate Starts for McGalleon_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (23, 160), (38, 352), (54, 484), (57, 505),

Gene: Mercedes_1 Start: 1, Stop: 528, Start Num: 12
Candidate Starts for Mercedes_1:
(Start: 12 @1 has 112 MA's), (15, 58), (21, 124), (24, 169), (31, 271), (51, 460), (56, 502), (57, 508),

Gene: MillyPhilly_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for MillyPhilly_1:

(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: MonChoix_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for MonChoix_1:
(Start: 12 @1 has 112 MA's), (17, 79), (38, 352), (45, 388),

Gene: Morrigan_1 Start: 1, Stop: 651, Start Num: 2
Candidate Starts for Morrigan_1:
(Start: 2 @1 has 4 MA's), (Start: 4 @7 has 2 MA's), (19, 208), (23, 283), (25, 301), (26, 328), (27, 346), (31, 394), (38, 478), (47, 541), (57, 631),

Gene: MrWorldwide_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for MrWorldwide_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Nagem_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Nagem_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Nattles_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Nattles_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Nebulous_1 Start: 1, Stop: 639, Start Num: 5
Candidate Starts for Nebulous_1:
(Start: 5 @1 has 8 MA's), (Start: 7 @10 has 1 MA's), (Start: 10 @67 has 3 MA's), (31, 382), (37, 442), (56, 613),

Gene: Neferthena_1 Start: 1, Stop: 639, Start Num: 5
Candidate Starts for Neferthena_1:
(Start: 5 @1 has 8 MA's), (Start: 7 @10 has 1 MA's), (Start: 10 @67 has 3 MA's), (21, 235), (24, 280), (31, 382), (37, 442), (56, 613),

Gene: NickSell_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for NickSell_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Nucci_1 Start: 1, Stop: 624, Start Num: 5
Candidate Starts for Nucci_1:
(Start: 5 @1 has 8 MA's), (Start: 11 @103 has 1 MA's), (Start: 13 @118 has 11 MA's), (28, 346), (35, 415), (49, 529),

Gene: Oats_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Oats_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: OldNelly_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for OldNelly_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Oxtober96_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Oxtober96_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Pajaza_1 Start: 1, Stop: 627, Start Num: 3
Candidate Starts for Pajaza_1:
(Start: 3 @1 has 13 MA's), (35, 421), (40, 466), (57, 610),

Gene: Papafritta_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Papafritta_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: ParleG_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for ParleG_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Peep_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Peep_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Peppino_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Peppino_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Pherbot_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Pherbot_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (40, 454), (41, 460), (47, 508), (57, 598),

Gene: Pherferi_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Pherferi_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Phiderman_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Phiderman_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Phireproof_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Phireproof_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: PhredFlintston_1 Start: 1, Stop: 525, Start Num: 12

Candidate Starts for PhredFlintston_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Phriends_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Phriends_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Pikmin_1 Start: 1, Stop: 627, Start Num: 3
Candidate Starts for Pikmin_1:
(Start: 3 @1 has 13 MA's), (35, 421), (40, 466), (57, 610),

Gene: Pocket_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Pocket_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: PrincePhergus_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for PrincePhergus_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (40, 454), (41, 460), (44, 472), (47, 508), (57, 598),

Gene: PuppyEggo_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for PuppyEggo_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: QuadZero_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for QuadZero_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: Quartz_1 Start: 1, Stop: 624, Start Num: 5
Candidate Starts for Quartz_1:
(Start: 5 @1 has 8 MA's), (Start: 11 @103 has 1 MA's), (Start: 13 @118 has 11 MA's), (28, 346), (35, 415), (49, 529),

Gene: Raccoon_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Raccoon_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Rapheph_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Rapheph_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Raptor_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Raptor_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Redfield_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Redfield_1:

(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (37, 328), (38, 352), (42, 370), (45, 388),

Gene: Renzie_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Renzie_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Riyhil_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Riyhil_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Robinson_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Robinson_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352), (48, 424),

Gene: Rog141_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Rog141_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: SJay_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for SJay_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Sansa_62 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for Sansa_62:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Saratos_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for Saratos_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Schimmels22_1 Start: 1, Stop: 528, Start Num: 12
Candidate Starts for Schimmels22_1:
(Start: 12 @1 has 112 MA's), (42, 373), (49, 433),

Gene: Schnapsidee_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Schnapsidee_1:
(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370), (45, 388),

Gene: Schubert_1 Start: 1, Stop: 618, Start Num: 5
Candidate Starts for Schubert_1:
(Start: 5 @1 has 8 MA's), (Start: 13 @112 has 11 MA's), (35, 409), (54, 577), (57, 598),

Gene: Sedgewig_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Sedgewig_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: ShaiHulud_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for ShaiHulud_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Shamu_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for Shamu_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (49, 415), (55, 478),

Gene: Shee_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Shee_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Sinatra_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for Sinatra_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (40, 454), (41, 460), (47, 508), (57, 598),

Gene: SirVictor_1 Start: 1, Stop: 615, Start Num: 3
Candidate Starts for SirVictor_1:
(Start: 3 @1 has 13 MA's), (Start: 11 @106 has 1 MA's), (Start: 13 @121 has 11 MA's), (24, 283), (25, 292), (32, 391), (37, 421), (40, 454), (57, 598),

Gene: SoilGremlin_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for SoilGremlin_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: SonOfLevi_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for SonOfLevi_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Stanktossa_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Stanktossa_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: StingRay_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for StingRay_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: StirfryIV_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for StirfryIV_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Stormbreaker8_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Stormbreaker8_1:

(Start: 12 @1 has 112 MA's), (22, 127), (35, 316), (38, 352), (42, 370),

Gene: Strathdee_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Strathdee_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (35, 316), (38, 352),

Gene: Superfresh_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Superfresh_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: TatarkaPM_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for TatarkaPM_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Teagan_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Teagan_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: TeddyBear_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for TeddyBear_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (35, 316), (38, 352),

Gene: Tenda_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Tenda_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Thompsone_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Thompsone_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Thorongil_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Thorongil_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (37, 328), (38, 352),

Gene: TinSulphur_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for TinSulphur_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (38, 352),

Gene: Tinyman4_1 Start: 1, Stop: 528, Start Num: 12
Candidate Starts for Tinyman4_1:
(Start: 12 @1 has 112 MA's), (37, 331), (42, 373), (49, 433), (51, 460),

Gene: Velene_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Velene_1:

(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Vispistious_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Vispistious_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: WestPM_1 Start: 1, Stop: 528, Start Num: 12
Candidate Starts for WestPM_1:
(Start: 12 @1 has 112 MA's), (36, 325), (37, 331), (42, 373), (49, 433),

Gene: WildNOut_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for WildNOut_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: WilliamStrong_1 Start: 1, Stop: 645, Start Num: 4
Candidate Starts for WilliamStrong_1:
(Start: 4 @1 has 2 MA's), (14, 166), (19, 202), (23, 277), (31, 388), (36, 442), (37, 448), (38, 472), (53, 598), (57, 625),

Gene: Winzigespinne_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Winzigespinne_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (31, 268), (38, 352),

Gene: YuuY_1 Start: 1, Stop: 621, Start Num: 5
Candidate Starts for YuuY_1:
(Start: 5 @1 has 8 MA's), (Start: 13 @115 has 11 MA's), (28, 343), (37, 424), (49, 526),

Gene: Zada_1 Start: 1, Stop: 525, Start Num: 12
Candidate Starts for Zada_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (18, 82), (20, 88), (29, 241), (30, 244), (31, 268), (38, 352),

Gene: Zayuliv_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for Zayuliv_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),

Gene: Zenitsu_1 Start: 1, Stop: 510, Start Num: 12
Candidate Starts for Zenitsu_1:
(Start: 12 @1 has 112 MA's), (Start: 13 @7 has 11 MA's), (21, 124), (27, 217), (35, 301), (43, 361), (49, 415), (55, 478),

Gene: Zepp_1 Start: 1, Stop: 519, Start Num: 13
Candidate Starts for Zepp_1:
(Start: 13 @1 has 11 MA's), (24, 163), (31, 265), (37, 325), (56, 496), (57, 502),