Pham 332562


1: Abscondus_174
2: Culver_182
3: Geeche_183
4: OneUp_162
5: Morgana_153
6: Redfield_59 + 5
7: AxiPup_60 + 48
8: GoneGirl_61
9: GoingMerry_60
10: AranulaLuti_59 + 25
11: Byron23_61
12: JasonD_61
13: BeeBee8_60
14: Soror1_58 + 4
15: Benjalauren_60 + 2
16: Dave_60 + 5
17: Jenos_61 + 1
18: SolidSnake_61 + 1
19: Acosta_61
20: Chamuel_59 + 10
21: Raccoon_59
22: Duocatuli_59 + 2
23: Figueroism_60
24: Renzie_60
25: GardenB_60
26: FarmerDoug_59
27: RosieMae_59
28: SoilGremlin_60 + 4
29: Agente005_59
30: Ilzat_59
31: Jerbirus_61 + 1
32: Endor_61
33: PhillyPhantom_59
34: McGalleon_60
35: HavenFinLeoSun_61
36: MonChoix_58
37: Aleyra_59
38: Casey_53 + 2
39: PauloDiaboli_40 + 3
40: Erasmago_381 + 1
41: Cece_44 + 1
42: Pumpernickel_352 + 1

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 332562 Report

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

Pham number 332562 has 158 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Abscondus_174
• Track 2 : Culver_182
• Track 3 : Geeche_183
• Track 4 : OneUp_162
• Track 5 : Morgana_153
• Track 6 : Redfield_59, KingJulien_58, Balsa_58, Stormbreaker8_58, Schnapsidee_59, Peppino_59
• Track 7 : AxiPup_60, Convict_60, Pherferi_60, Gargoyle_60, Oxtober96_61, Erla_59, WildNOut_60, Stanktossa_59, Blage_60, ParleG_60, Rog141_59, Greys_60, Exploradora_59, PhredFlintston_60, BigRedClifford_60, Dothraki_60, Symere_59, Martin_61, BonesMcCoy_60, ShaiHulud_60, Bandik_60, Espinosa_59, Baines_59, MrWorldwide_60, Thorongil_60, SJay_60, BeautPeep30_60, Phiderman_60, Sedgewig_59, Inventa_60, Phireproof_60, Lovelyunicorn_60, Knox_60, Gelo_59, Oats_59, NickSell_60, Shee_60, TinSulphur_61, Riyhil_60, HungryHenry_59, MillyPhilly_60, Kouch_60, Teagan_60, Den3_60, Kurt1_60, TatarkaPM_60, Nagem_60, Vispistious_60, PuppyEggo_60
• Track 8 : GoneGirl_61
• Track 9 : GoingMerry_60
• Track 10 : AranulaLuti_59, Aubergine_59, Nattles_59, Asta_59, Gershwin_59, Winzigespinne_59, TeddyBear_59, StirfryIV_59, JeriBeth_59, Strathdee_60, Ioannes_60, HanSolo_59, Clancy_59, Robinson_60, Janus167_59, Ludgate_60, Rapheph_60, HankSprout_60, Christoph_59, Etta_59, Garey24_60, ManRay_59, Calix_59, CoraRita_59, Tenda_59, Kale_59
• Track 11 : Byron23_61
• Track 12 : JasonD_61
• Track 13 : BeeBee8_60
• Track 14 : Soror1_58, Leafus_59, Hamlet_59, Anilorac_58, Etna_59
• Track 15 : Benjalauren_60, Papafritta_59, StingRay_59
• Track 16 : Dave_60, Superfresh_60, MaeLinda_60, Zada_61, Antoinette_60, Peep_60
• Track 17 : Jenos_61, CarisSwetlik_59
• Track 18 : SolidSnake_61, Merida02_61
• Track 19 : Acosta_61
• Track 20 : Chamuel_59, Bonino_59, Raptor_60, Klimt_60, Thompsone_60, SonOfLevi_60, KannH_59, Velene_60, Pocket_59, Alyxandracam_60, Gubbabump_59
• Track 21 : Raccoon_59

• Track 22 : Duocatuli_59, JasperRussell_59, Chako_59
• Track 23 : Figueroism_60
• Track 24 : Renzie_60
• Track 25 : GardenB_60
• Track 26 : FarmerDoug_59
• Track 27 : RosieMae_59
• Track 28 : SoilGremlin_60, Phriends_59, Delphidian_59, OldNelly_60, AlexAdler_60
• Track 29 : Agente005_59
• Track 30 : Ilzat_59
• Track 31 : Jerbirus_61, KellyGreen_61
• Track 32 : Endor_61
• Track 33 : PhillyPhantom_59
• Track 34 : McGalleon_60
• Track 35 : HavenFinLeoSun_61
• Track 36 : MonChoix_58
• Track 37 : Aleyra_59
• Track 38 : Casey_53, Pajaza_53, Pikmin_53
• Track 39 : PauloDiaboli_40, PauloDiaboli_395, Dodo_41, Dodo_387
• Track 40 : Erasmago_381, Erasmago_43
• Track 41 : Cece_44, Cece_346
• Track 42 : Pumpernickel_352, Pumpernickel_51

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

The start number called the most often in the published annotations is 27, it was called in 131 of the 147 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Acosta_61, Agente005_59, AlexAdler_60, Alyxandracam_60, Anilorac_58, Antoinette_60, AranulaLuti_59, Asta_59, Aubergine_59, AxiPup_60, Baines_59, Balsa_58, Bandik_60, BeautPeep30_60, BeeBee8_60, Benjalauren_60, BigRedClifford_60, Blage_60, BonesMcCoy_60, Bonino_59, Byron23_61, Calix_59, CarisSwetlik_59, Chako_59, Chamuel_59, Christoph_59, Clancy_59, Convict_60, CoraRita_59, Dave_60, Delphidian_59, Den3_60, Dothraki_60, Duocatuli_59, Endor_61, Erla_59, Espinosa_59, Etna_59, Etta_59, Exploradora_59, FarmerDoug_59, GardenB_60, Garey24_60, Gargoyle_60, Gelo_59, Gershwin_59, GoingMerry_60, Greys_60, Gubbabump_59, Hamlet_59, HanSolo_59, HankSprout_60, HungryHenry_59, Ilzat_59, Inventa_60, Ioannes_60, Janus167_59, JasonD_61, JasperRussell_59, Jenos_61, JeriBeth_59, Kale_59, KannH_59, KingJulien_58, Klimt_60, Knox_60, Kouch_60, Kurt1_60, Leafus_59, Lovelyunicorn_60, Ludgate_60, MaeLinda_60, ManRay_59, Martin_61, McGalleon_60, MillyPhilly_60, MonChoix_58, MrWorldwide_60, Nagem_60, Nattles_59, NickSell_60, Oats_59, OldNelly_60, Oxtober96_61, Papafritta_59, ParleG_60, Peep_60, Peppino_59, Pherferi_60, Phiderman_60, Phireproof_60, PhredFlintston_60, Phriends_59, Pocket_59, PuppyEggo_60, Raccoon_59, Rapheph_60, Raptor_60, Redfield_59, Renzie_60, Riyhil_60, Robinson_60, Rog141_59, RosieMae_59, SJay_60, Schnapsidee_59, Sedgewig_59, ShaiHulud_60, Shee_60, SoilGremlin_60, SonOfLevi_60, Soror1_58, Stanktossa_59, StingRay_59, StirfryIV_59, Stormbreaker8_58, Strathdee_60, Superfresh_60, Symere_59, TatarkaPM_60, Teagan_60, TeddyBear_59, Tenda_59, Thompsone_60,

Thorongil_60, TinSulphur_61, Velene_60, Vispistious_60, WildNOut_60, Winzigespinne_59, Zada_61,

Genes that have the "Most Annotated" start but do not call it:
• Aleyra_59, Figueroism_60, GoneGirl_61, HavenFinLeoSun_61, Jerbirus_61, KellyGreen_61, Merida02_61, PhillyPhantom_59, SolidSnake_61,

Genes that do not have the "Most Annotated" start:
• Abscondus_174, Casey_53, Cece_346, Cece_44, Culver_182, Dodo_387, Dodo_41, Erasmago_381, Erasmago_43, Geeche_183, Morgana_153, OneUp_162, Pajaza_53, PauloDiaboli_395, PauloDiaboli_40, Pikmin_53, Pumpernickel_352, Pumpernickel_51,

Summary by start number:

Start 27:
• Found in 140 of 158 (88.6%) of genes in pham
• Manual Annotations of this start: 131 of 147
• Called 93.6% of time when present
• Phage (with cluster) where this start called: Acosta_61 (EA1), Agente005_59 (EA1), AlexAdler_60 (EA1), Alyxandracam_60 (EA1), Anilorac_58 (EA1), Antoinette_60 (EA1), AranulaLuti_59 (EA1), Asta_59 (EA1), Aubergine_59 (EA1), AxiPup_60 (EA1), Baines_59 (EA1), Balsa_58 (EA1), Bandik_60 (EA1), BeautPeep30_60 (EA1), BeeBee8_60 (EA1), Benjalauren_60 (EA1), BigRedClifford_60 (EA1), Blage_60 (EA1), BonesMcCoy_60 (EA1), Bonino_59 (EA1), Byron23_61 (EA1), Calix_59 (EA1), CarisSwetlik_59 (EA1), Chako_59 (EA1), Chamuel_59 (EA1), Christoph_59 (EA1), Clancy_59 (EA1), Convict_60 (EA1), CoraRita_59 (EA1), Dave_60 (EA1), Delphidian_59 (EA1), Den3_60 (EA1), Dothraki_60 (EA1), Duocatuli_59 (EA1), Endor_61 (EA1), Erla_59 (EA1), Espinosa_59 (EA1), Etna_59 (EA1), Etta_59 (EA1), Exploradora_59 (EA1), FarmerDoug_59 (EA1), GardenB_60 (EA1), Garey24_60 (EA1), Gargoyle_60 (EA1), Gelo_59 (EA1), Gershwin_59 (EA1), GoingMerry_60 (EA1), Greys_60 (EA1), Gubbabump_59 (EA1), Hamlet_59 (EA1), HanSolo_59 (EA1), HankSprout_60 (EA1), HungryHenry_59 (EA1), Ilzat_59 (EA1), Inventa_60 (EA1), Ioannes_60 (EA1), Janus167_59 (EA1), JasonD_61 (EA1), JasperRussell_59 (EA1), Jenos_61 (EA1), JeriBeth_59 (EA1), Kale_59 (EA1), KannH_59 (EA1), KingJulien_58 (EA1), Klimt_60 (EA1), Knox_60 (EA1), Kouch_60 (EA1), Kurt1_60 (EA1), Leafus_59 (EA1), Lovelyunicorn_60 (EA1), Ludgate_60 (EA1), MaeLinda_60 (EA1), ManRay_59 (EA1), Martin_61 (EA1), McGalleon_60 (EA1), MillyPhilly_60 (EA1), MonChoix_58 (EA1), MrWorldwide_60 (EA1), Nagem_60 (EA1), Nattles_59 (EA1), NickSell_60 (EA1), Oats_59 (EA1), OldNelly_60 (EA1), Oxtober96_61 (EA1), Papafritta_59 (EA1), ParleG_60 (EA1), Peep_60 (EA1), Peppino_59 (EA1), Pherferi_60 (EA1), Phiderman_60 (EA1), Phireproof_60 (EA1), PhredFlintston_60 (EA1), Phriends_59 (EA1), Pocket_59 (EA1), PuppyEggo_60 (EA1), Raccoon_59 (EA1), Rapheph_60 (EA1), Raptor_60 (EA1), Redfield_59 (EA1), Renzie_60 (EA1), Riyhil_60 (EA1), Robinson_60 (EA1), Rog141_59 (EA1), RosieMae_59 (EA1), SJay_60 (EA1), Schnapsidee_59 (EA1), Sedgewig_59 (EA1), ShaiHulud_60 (EA1), Shee_60 (EA1), SoilGremlin_60 (EA1), SonOfLevi_60 (EA1), Soror1_58 (EA1), Stanktossa_59 (EA1), StingRay_59 (EA1), StirfryIV_59 (EA1), Stormbreaker8_58 (EA1), Strathdee_60 (EA1), Superfresh_60 (EA1), Symere_59 (EA1), TatarkaPM_60 (EA1), Teagan_60 (EA1), TeddyBear_59 (EA1), Tenda_59 (EA1), Thompsone_60 (EA1), Thorongil_60 (EA1), TinSulphur_61 (EA1), Velene_60 (EA1), Vispistious_60 (EA1), WildNOut_60 (EA1), Winzigespinne_59 (EA1), Zada_61 (EA1),

Start 29:
• Found in 4 of 158 (2.5%) of genes in pham
• Manual Annotations of this start: 3 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Abscondus_174 (CQ1), Culver_182 (CQ1), Geeche_183 (CQ1), OneUp_162 (CQ2),

Start 30:
• Found in 4 of 158 (2.5%) of genes in pham
• Manual Annotations of this start: 2 of 147
• Called 50.0% of time when present
• Phage (with cluster) where this start called: Pumpernickel_352 (GD4), Pumpernickel_51 (GD4),

Start 31:
• Found in 1 of 158 (0.6%) of genes in pham
• Manual Annotations of this start: 1 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Morgana_153 (DZ),

Start 33:
• Found in 140 of 158 (88.6%) of genes in pham
• Manual Annotations of this start: 1 of 147
• Called 6.4% of time when present
• Phage (with cluster) where this start called: Aleyra_59 (EA1), Figueroism_60 (EA1), GoneGirl_61 (EA1), HavenFinLeoSun_61 (EA1), Jerbirus_61 (EA1), KellyGreen_61 (EA1), Merida02_61 (EA1), PhillyPhantom_59 (EA1), SolidSnake_61 (EA1),

Start 34:
• Found in 8 of 158 (5.1%) of genes in pham
• Manual Annotations of this start: 6 of 147
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cece_346 (GD3), Cece_44 (GD3), Dodo_387 (GD1), Dodo_41 (GD1), Erasmago_381 (GD2), Erasmago_43 (GD2), PauloDiaboli_395 (GD1), PauloDiaboli_40 (GD1),

Start 38:
• Found in 4 of 158 (2.5%) of genes in pham
• Manual Annotations of this start: 3 of 147
• Called 75.0% of time when present
• Phage (with cluster) where this start called: Casey_53 (EA3), Pajaza_53 (EA3), Pikmin_53 (EA3),

Summary by clusters:

There are 9 clusters represented in this pham: GD1, GD2, GD3, GD4, DZ, EA1, CQ2, EA3, CQ1,

Info for manual annotations of cluster CQ1:
•Start number 29 was manually annotated 2 times for cluster CQ1.

Info for manual annotations of cluster CQ2:
•Start number 29 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DZ:
•Start number 31 was manually annotated 1 time for cluster DZ.

Info for manual annotations of cluster EA1:
•Start number 27 was manually annotated 131 times for cluster EA1.
•Start number 33 was manually annotated 1 time for cluster EA1.

Info for manual annotations of cluster EA3:
•Start number 38 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster GD1:
•Start number 34 was manually annotated 4 times for cluster GD1.

Info for manual annotations of cluster GD3:
•Start number 34 was manually annotated 2 times for cluster GD3.

Info for manual annotations of cluster GD4:
•Start number 30 was manually annotated 2 times for cluster GD4.

Gene Information:

Gene: Abscondus_174 Start: 88837, Stop: 88481, Start Num: 29
Candidate Starts for Abscondus_174:
(8, 89281), (10, 89230), (11, 89218), (12, 89143), (14, 89116), (15, 89092), (16, 89080), (17, 89074), (18, 89062), (19, 89026), (20, 88981), (Start: 29 @88837 has 3 MA's), (35, 88798), (48, 88669), (50, 88657), (51, 88654), (52, 88642), (68, 88558), (73, 88489),

Gene: Acosta_61 Start: 40099, Stop: 39716, Start Num: 27
Candidate Starts for Acosta_61:
(1, 40633), (2, 40618), (4, 40609), (7, 40546), (9, 40498), (23, 40171), (Start: 27 @40099 has 131 MA's), (Start: 33 @40051 has 1 MA's), (45, 39937), (49, 39907), (52, 39883), (55, 39871), (57, 39856), (63, 39820), (71, 39748),

Gene: Agente005_59 Start: 39879, Stop: 39493, Start Num: 27
Candidate Starts for Agente005_59:
(Start: 27 @39879 has 131 MA's), (Start: 33 @39831 has 1 MA's), (52, 39660), (55, 39648), (57, 39633), (62, 39600), (63, 39597), (71, 39525),

Gene: AlexAdler_60 Start: 40059, Stop: 39673, Start Num: 27
Candidate Starts for AlexAdler_60:
(Start: 27 @40059 has 131 MA's), (Start: 33 @40011 has 1 MA's), (45, 39894), (52, 39840), (55, 39828), (57, 39813), (63, 39777), (71, 39705),

Gene: Aleyra_59 Start: 39836, Stop: 39498, Start Num: 33
Candidate Starts for Aleyra_59:
(Start: 27 @39884 has 131 MA's), (Start: 33 @39836 has 1 MA's), (52, 39665), (55, 39653), (57, 39638), (62, 39605), (63, 39602), (71, 39530),

Gene: Alyxandracam_60 Start: 39996, Stop: 39610, Start Num: 27

Candidate Starts for Alyxandracam_60:
(Start: 27 @39996 has 131 MA's), (Start: 33 @39948 has 1 MA's), (49, 39801), (52, 39777), (55, 39765), (63, 39714), (71, 39642),

Gene: Anilorac_58 Start: 39786, Stop: 39400, Start Num: 27
Candidate Starts for Anilorac_58:
(Start: 27 @39786 has 131 MA's), (Start: 33 @39738 has 1 MA's), (52, 39567), (55, 39555), (63, 39504), (71, 39432),

Gene: Antoinette_60 Start: 40084, Stop: 39698, Start Num: 27
Candidate Starts for Antoinette_60:
(Start: 27 @40084 has 131 MA's), (Start: 33 @40036 has 1 MA's), (46, 39916), (52, 39865), (55, 39853), (57, 39838), (63, 39802), (71, 39730),

Gene: AranulaLuti_59 Start: 39776, Stop: 39390, Start Num: 27
Candidate Starts for AranulaLuti_59:
(Start: 27 @39776 has 131 MA's), (Start: 33 @39728 has 1 MA's), (49, 39581), (52, 39557), (55, 39545), (63, 39494), (71, 39422),

Gene: Asta_59 Start: 39781, Stop: 39395, Start Num: 27
Candidate Starts for Asta_59:
(Start: 27 @39781 has 131 MA's), (Start: 33 @39733 has 1 MA's), (49, 39586), (52, 39562), (55, 39550), (63, 39499), (71, 39427),

Gene: Aubergine_59 Start: 39781, Stop: 39395, Start Num: 27
Candidate Starts for Aubergine_59:
(Start: 27 @39781 has 131 MA's), (Start: 33 @39733 has 1 MA's), (49, 39586), (52, 39562), (55, 39550), (63, 39499), (71, 39427),

Gene: AxiPup_60 Start: 39995, Stop: 39609, Start Num: 27
Candidate Starts for AxiPup_60:
(Start: 27 @39995 has 131 MA's), (Start: 33 @39947 has 1 MA's), (49, 39800), (52, 39776), (55, 39764), (63, 39713), (71, 39641),

Gene: Baines_59 Start: 39780, Stop: 39394, Start Num: 27
Candidate Starts for Baines_59:
(Start: 27 @39780 has 131 MA's), (Start: 33 @39732 has 1 MA's), (49, 39585), (52, 39561), (55, 39549), (63, 39498), (71, 39426),

Gene: Balsa_58 Start: 39910, Stop: 39524, Start Num: 27
Candidate Starts for Balsa_58:
(Start: 27 @39910 has 131 MA's), (Start: 33 @39862 has 1 MA's), (46, 39742), (52, 39691), (55, 39679), (63, 39628), (71, 39556),

Gene: Bandik_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Bandik_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: BeautPeep30_60 Start: 40034, Stop: 39648, Start Num: 27
Candidate Starts for BeautPeep30_60:
(Start: 27 @40034 has 131 MA's), (Start: 33 @39986 has 1 MA's), (49, 39839), (52, 39815), (55, 39803), (63, 39752), (71, 39680),

Gene: BeeBee8_60 Start: 40084, Stop: 39698, Start Num: 27
Candidate Starts for BeeBee8_60:
(Start: 27 @40084 has 131 MA's), (Start: 33 @40036 has 1 MA's), (47, 39898), (52, 39865), (63, 39802), (71, 39730),

Gene: Benjalauren_60 Start: 39787, Stop: 39401, Start Num: 27
Candidate Starts for Benjalauren_60:
(Start: 27 @39787 has 131 MA's), (Start: 33 @39739 has 1 MA's), (45, 39622), (49, 39592), (52, 39568), (55, 39556), (63, 39505), (71, 39433),

Gene: BigRedClifford_60 Start: 40022, Stop: 39636, Start Num: 27
Candidate Starts for BigRedClifford_60:
(Start: 27 @40022 has 131 MA's), (Start: 33 @39974 has 1 MA's), (49, 39827), (52, 39803), (55, 39791), (63, 39740), (71, 39668),

Gene: Blage_60 Start: 40022, Stop: 39636, Start Num: 27
Candidate Starts for Blage_60:
(Start: 27 @40022 has 131 MA's), (Start: 33 @39974 has 1 MA's), (49, 39827), (52, 39803), (55, 39791), (63, 39740), (71, 39668),

Gene: BonesMcCoy_60 Start: 40023, Stop: 39637, Start Num: 27
Candidate Starts for BonesMcCoy_60:
(Start: 27 @40023 has 131 MA's), (Start: 33 @39975 has 1 MA's), (49, 39828), (52, 39804), (55, 39792), (63, 39741), (71, 39669),

Gene: Bonino_59 Start: 39760, Stop: 39374, Start Num: 27
Candidate Starts for Bonino_59:
(Start: 27 @39760 has 131 MA's), (Start: 33 @39712 has 1 MA's), (49, 39565), (52, 39541), (55, 39529), (63, 39478), (71, 39406),

Gene: Byron23_61 Start: 40031, Stop: 39645, Start Num: 27
Candidate Starts for Byron23_61:
(Start: 27 @40031 has 131 MA's), (Start: 33 @39983 has 1 MA's), (49, 39836), (52, 39812), (55, 39800), (63, 39749), (71, 39677),

Gene: Calix_59 Start: 39767, Stop: 39381, Start Num: 27
Candidate Starts for Calix_59:
(Start: 27 @39767 has 131 MA's), (Start: 33 @39719 has 1 MA's), (49, 39572), (52, 39548), (55, 39536), (63, 39485), (71, 39413),

Gene: CarisSwetlik_59 Start: 40366, Stop: 39983, Start Num: 27
Candidate Starts for CarisSwetlik_59:
(23, 40438), (Start: 27 @40366 has 131 MA's), (Start: 33 @40318 has 1 MA's), (45, 40204), (52, 40150), (55, 40138), (57, 40123), (63, 40087), (71, 40015),

Gene: Casey_53 Start: 36229, Stop: 35939, Start Num: 38
Candidate Starts for Casey_53:
(Start: 38 @36229 has 3 MA's), (62, 36046),

Gene: Cece_44 Start: 16476, Stop: 16823, Start Num: 34
Candidate Starts for Cece_44:

(24, 16371), (28, 16434), (Start: 34 @16476 has 6 MA's), (39, 16524), (43, 16557), (46, 16590), (48, 16614), (62, 16701), (66, 16713),

Gene: Cece_346 Start: 184910, Stop: 185257, Start Num: 34
Candidate Starts for Cece_346:
(24, 184805), (28, 184868), (Start: 34 @184910 has 6 MA's), (39, 184958), (43, 184991), (46, 185024), (48, 185048), (62, 185135), (66, 185147),

Gene: Chako_59 Start: 39776, Stop: 39390, Start Num: 27
Candidate Starts for Chako_59:
(Start: 27 @39776 has 131 MA's), (Start: 33 @39728 has 1 MA's), (49, 39581), (52, 39557), (55, 39545), (63, 39494), (71, 39422),

Gene: Chamuel_59 Start: 39793, Stop: 39407, Start Num: 27
Candidate Starts for Chamuel_59:
(Start: 27 @39793 has 131 MA's), (Start: 33 @39745 has 1 MA's), (49, 39598), (52, 39574), (55, 39562), (63, 39511), (71, 39439),

Gene: Christoph_59 Start: 39780, Stop: 39394, Start Num: 27
Candidate Starts for Christoph_59:
(Start: 27 @39780 has 131 MA's), (Start: 33 @39732 has 1 MA's), (49, 39585), (52, 39561), (55, 39549), (63, 39498), (71, 39426),

Gene: Clancy_59 Start: 39780, Stop: 39394, Start Num: 27
Candidate Starts for Clancy_59:
(Start: 27 @39780 has 131 MA's), (Start: 33 @39732 has 1 MA's), (49, 39585), (52, 39561), (55, 39549), (63, 39498), (71, 39426),

Gene: Convict_60 Start: 40023, Stop: 39637, Start Num: 27
Candidate Starts for Convict_60:
(Start: 27 @40023 has 131 MA's), (Start: 33 @39975 has 1 MA's), (49, 39828), (52, 39804), (55, 39792), (63, 39741), (71, 39669),

Gene: CoraRita_59 Start: 39749, Stop: 39363, Start Num: 27
Candidate Starts for CoraRita_59:
(Start: 27 @39749 has 131 MA's), (Start: 33 @39701 has 1 MA's), (49, 39554), (52, 39530), (55, 39518), (63, 39467), (71, 39395),

Gene: Culver_182 Start: 88820, Stop: 88464, Start Num: 29
Candidate Starts for Culver_182:
(Start: 29 @88820 has 3 MA's), (35, 88781), (40, 88736), (44, 88682), (51, 88637), (52, 88625), (68, 88541), (73, 88472),

Gene: Dave_60 Start: 40084, Stop: 39698, Start Num: 27
Candidate Starts for Dave_60:
(Start: 27 @40084 has 131 MA's), (Start: 33 @40036 has 1 MA's), (46, 39916), (52, 39865), (55, 39853), (57, 39838), (63, 39802), (71, 39730),

Gene: Delphidian_59 Start: 39821, Stop: 39435, Start Num: 27
Candidate Starts for Delphidian_59:
(Start: 27 @39821 has 131 MA's), (Start: 33 @39773 has 1 MA's), (45, 39656), (52, 39602), (55, 39590), (57, 39575), (63, 39539), (71, 39467),

Gene: Den3_60 Start: 40027, Stop: 39641, Start Num: 27
Candidate Starts for Den3_60:
(Start: 27 @40027 has 131 MA's), (Start: 33 @39979 has 1 MA's), (49, 39832), (52, 39808), (55, 39796), (63, 39745), (71, 39673),

Gene: Dodo_41 Start: 13705, Stop: 14037, Start Num: 34
Candidate Starts for Dodo_41:
(22, 13573), (26, 13654), (Start: 34 @13705 has 6 MA's), (37, 13747), (47, 13840), (66, 13945), (72, 14020),

Gene: Dodo_387 Start: 191905, Stop: 192237, Start Num: 34
Candidate Starts for Dodo_387:
(22, 191773), (26, 191854), (Start: 34 @191905 has 6 MA's), (37, 191947), (47, 192040), (66, 192145), (72, 192220),

Gene: Dothraki_60 Start: 40031, Stop: 39645, Start Num: 27
Candidate Starts for Dothraki_60:
(Start: 27 @40031 has 131 MA's), (Start: 33 @39983 has 1 MA's), (49, 39836), (52, 39812), (55, 39800), (63, 39749), (71, 39677),

Gene: Duocatuli_59 Start: 39776, Stop: 39390, Start Num: 27
Candidate Starts for Duocatuli_59:
(Start: 27 @39776 has 131 MA's), (Start: 33 @39728 has 1 MA's), (49, 39581), (52, 39557), (55, 39545), (63, 39494), (71, 39422),

Gene: Endor_61 Start: 40347, Stop: 39961, Start Num: 27
Candidate Starts for Endor_61:
(21, 40467), (Start: 27 @40347 has 131 MA's), (Start: 33 @40299 has 1 MA's), (46, 40179), (52, 40128), (55, 40116), (57, 40101), (63, 40065), (71, 39993),

Gene: Erasmago_381 Start: 189919, Stop: 190239, Start Num: 34
Candidate Starts for Erasmago_381:
(25, 189859), (Start: 30 @189886 has 2 MA's), (Start: 34 @189919 has 6 MA's), (40, 189964), (41, 189979), (42, 189988), (52, 190075), (58, 190114), (66, 190147),

Gene: Erasmago_43 Start: 15410, Stop: 15730, Start Num: 34
Candidate Starts for Erasmago_43:
(25, 15350), (Start: 30 @15377 has 2 MA's), (Start: 34 @15410 has 6 MA's), (40, 15455), (41, 15470), (42, 15479), (52, 15566), (58, 15605), (66, 15638),

Gene: Erla_59 Start: 39764, Stop: 39378, Start Num: 27
Candidate Starts for Erla_59:
(Start: 27 @39764 has 131 MA's), (Start: 33 @39716 has 1 MA's), (49, 39569), (52, 39545), (55, 39533), (63, 39482), (71, 39410),

Gene: Espinosa_59 Start: 39779, Stop: 39393, Start Num: 27
Candidate Starts for Espinosa_59:
(Start: 27 @39779 has 131 MA's), (Start: 33 @39731 has 1 MA's), (49, 39584), (52, 39560), (55, 39548), (63, 39497), (71, 39425),

Gene: Etna_59 Start: 39957, Stop: 39571, Start Num: 27
Candidate Starts for Etna_59:

(Start: 27 @39957 has 131 MA's), (Start: 33 @39909 has 1 MA's), (52, 39738), (55, 39726), (63, 39675), (71, 39603),

Gene: Etta_59 Start: 39768, Stop: 39382, Start Num: 27
Candidate Starts for Etta_59:
(Start: 27 @39768 has 131 MA's), (Start: 33 @39720 has 1 MA's), (49, 39573), (52, 39549), (55, 39537), (63, 39486), (71, 39414),

Gene: Exploradora_59 Start: 39729, Stop: 39343, Start Num: 27
Candidate Starts for Exploradora_59:
(Start: 27 @39729 has 131 MA's), (Start: 33 @39681 has 1 MA's), (49, 39534), (52, 39510), (55, 39498), (63, 39447), (71, 39375),

Gene: FarmerDoug_59 Start: 39780, Stop: 39394, Start Num: 27
Candidate Starts for FarmerDoug_59:
(Start: 27 @39780 has 131 MA's), (Start: 33 @39732 has 1 MA's), (46, 39612), (52, 39561), (55, 39549), (57, 39534), (63, 39498), (71, 39426),

Gene: Figueroism_60 Start: 40025, Stop: 39687, Start Num: 33
Candidate Starts for Figueroism_60:
(Start: 27 @40073 has 131 MA's), (Start: 33 @40025 has 1 MA's), (46, 39905), (52, 39854), (55, 39842), (57, 39827), (63, 39791), (71, 39719),

Gene: GardenB_60 Start: 40152, Stop: 39766, Start Num: 27
Candidate Starts for GardenB_60:
(Start: 27 @40152 has 131 MA's), (Start: 33 @40104 has 1 MA's), (46, 39984), (52, 39933), (55, 39921), (62, 39873), (63, 39870), (71, 39798),

Gene: Garey24_60 Start: 39747, Stop: 39361, Start Num: 27
Candidate Starts for Garey24_60:
(Start: 27 @39747 has 131 MA's), (Start: 33 @39699 has 1 MA's), (49, 39552), (52, 39528), (55, 39516), (63, 39465), (71, 39393),

Gene: Gargoyle_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Gargoyle_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Geeche_183 Start: 90483, Stop: 90124, Start Num: 29
Candidate Starts for Geeche_183:
(Start: 29 @90483 has 3 MA's), (35, 90444), (40, 90399), (51, 90300), (59, 90240), (60, 90237), (61, 90234), (68, 90201), (73, 90132),

Gene: Gelo_59 Start: 39774, Stop: 39388, Start Num: 27
Candidate Starts for Gelo_59:
(Start: 27 @39774 has 131 MA's), (Start: 33 @39726 has 1 MA's), (49, 39579), (52, 39555), (55, 39543), (63, 39492), (71, 39420),

Gene: Gershwin_59 Start: 39781, Stop: 39395, Start Num: 27
Candidate Starts for Gershwin_59:
(Start: 27 @39781 has 131 MA's), (Start: 33 @39733 has 1 MA's), (49, 39586), (52, 39562), (55, 39550), (63, 39499), (71, 39427),

Gene: GoingMerry_60 Start: 40005, Stop: 39619, Start Num: 27
Candidate Starts for GoingMerry_60:
(Start: 27 @40005 has 131 MA's), (Start: 33 @39957 has 1 MA's), (52, 39786), (55, 39774), (63, 39723), (71, 39651),

Gene: GoneGirl_61 Start: 40091, Stop: 39753, Start Num: 33
Candidate Starts for GoneGirl_61:
(Start: 27 @40139 has 131 MA's), (Start: 33 @40091 has 1 MA's), (46, 39971), (52, 39920), (55, 39908), (62, 39860), (63, 39857), (71, 39785),

Gene: Greys_60 Start: 40023, Stop: 39637, Start Num: 27
Candidate Starts for Greys_60:
(Start: 27 @40023 has 131 MA's), (Start: 33 @39975 has 1 MA's), (49, 39828), (52, 39804), (55, 39792), (63, 39741), (71, 39669),

Gene: Gubbabump_59 Start: 39718, Stop: 39332, Start Num: 27
Candidate Starts for Gubbabump_59:
(Start: 27 @39718 has 131 MA's), (Start: 33 @39670 has 1 MA's), (49, 39523), (52, 39499), (55, 39487), (63, 39436), (71, 39364),

Gene: Hamlet_59 Start: 40003, Stop: 39617, Start Num: 27
Candidate Starts for Hamlet_59:
(Start: 27 @40003 has 131 MA's), (Start: 33 @39955 has 1 MA's), (52, 39784), (55, 39772), (63, 39721), (71, 39649),

Gene: HanSolo_59 Start: 39728, Stop: 39342, Start Num: 27
Candidate Starts for HanSolo_59:
(Start: 27 @39728 has 131 MA's), (Start: 33 @39680 has 1 MA's), (49, 39533), (52, 39509), (55, 39497), (63, 39446), (71, 39374),

Gene: HankSprout_60 Start: 39647, Stop: 39261, Start Num: 27
Candidate Starts for HankSprout_60:
(Start: 27 @39647 has 131 MA's), (Start: 33 @39599 has 1 MA's), (49, 39452), (52, 39428), (55, 39416), (63, 39365), (71, 39293),

Gene: HavenFinLeoSun_61 Start: 39997, Stop: 39662, Start Num: 33
Candidate Starts for HavenFinLeoSun_61:
(1, 40579), (2, 40564), (4, 40555), (7, 40492), (9, 40444), (23, 40117), (Start: 27 @40045 has 131 MA's), (Start: 33 @39997 has 1 MA's), (45, 39883), (49, 39853), (52, 39829), (55, 39817), (57, 39802), (63, 39766), (71, 39694),

Gene: HungryHenry_59 Start: 39741, Stop: 39355, Start Num: 27
Candidate Starts for HungryHenry_59:
(Start: 27 @39741 has 131 MA's), (Start: 33 @39693 has 1 MA's), (49, 39546), (52, 39522), (55, 39510), (63, 39459), (71, 39387),

Gene: Ilzat_59 Start: 39751, Stop: 39365, Start Num: 27
Candidate Starts for Ilzat_59:
(Start: 27 @39751 has 131 MA's), (Start: 33 @39703 has 1 MA's), (45, 39586), (49, 39556), (52, 39532), (55, 39520), (63, 39469), (71, 39397),

Gene: Inventa_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Inventa_60:

(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Ioannes_60 Start: 40105, Stop: 39719, Start Num: 27
Candidate Starts for Ioannes_60:
(Start: 27 @40105 has 131 MA's), (Start: 33 @40057 has 1 MA's), (49, 39910), (52, 39886), (55, 39874), (63, 39823), (71, 39751),

Gene: Janus167_59 Start: 39756, Stop: 39370, Start Num: 27
Candidate Starts for Janus167_59:
(Start: 27 @39756 has 131 MA's), (Start: 33 @39708 has 1 MA's), (49, 39561), (52, 39537), (55, 39525), (63, 39474), (71, 39402),

Gene: JasonD_61 Start: 40316, Stop: 39930, Start Num: 27
Candidate Starts for JasonD_61:
(1, 40850), (3, 40832), (4, 40826), (5, 40811), (7, 40763), (9, 40715), (23, 40388), (Start: 27 @40316 has 131 MA's), (Start: 33 @40268 has 1 MA's), (40, 40208), (45, 40151), (52, 40097), (53, 40094), (55, 40085), (63, 40034), (71, 39962),

Gene: JasperRussell_59 Start: 39776, Stop: 39390, Start Num: 27
Candidate Starts for JasperRussell_59:
(Start: 27 @39776 has 131 MA's), (Start: 33 @39728 has 1 MA's), (49, 39581), (52, 39557), (55, 39545), (63, 39494), (71, 39422),

Gene: Jenos_61 Start: 40611, Stop: 40228, Start Num: 27
Candidate Starts for Jenos_61:
(23, 40683), (Start: 27 @40611 has 131 MA's), (Start: 33 @40563 has 1 MA's), (45, 40449), (52, 40395), (55, 40383), (57, 40368), (63, 40332), (71, 40260),

Gene: Jerbirus_61 Start: 39723, Stop: 39385, Start Num: 33
Candidate Starts for Jerbirus_61:
(Start: 27 @39771 has 131 MA's), (Start: 33 @39723 has 1 MA's), (49, 39576), (52, 39552), (55, 39540), (63, 39489), (71, 39417),

Gene: JeriBeth_59 Start: 39659, Stop: 39273, Start Num: 27
Candidate Starts for JeriBeth_59:
(Start: 27 @39659 has 131 MA's), (Start: 33 @39611 has 1 MA's), (49, 39464), (52, 39440), (55, 39428), (63, 39377), (71, 39305),

Gene: Kale_59 Start: 39783, Stop: 39397, Start Num: 27
Candidate Starts for Kale_59:
(Start: 27 @39783 has 131 MA's), (Start: 33 @39735 has 1 MA's), (49, 39588), (52, 39564), (55, 39552), (63, 39501), (71, 39429),

Gene: KannH_59 Start: 39776, Stop: 39390, Start Num: 27
Candidate Starts for KannH_59:
(Start: 27 @39776 has 131 MA's), (Start: 33 @39728 has 1 MA's), (49, 39581), (52, 39557), (55, 39545), (63, 39494), (71, 39422),

Gene: KellyGreen_61 Start: 39717, Stop: 39379, Start Num: 33
Candidate Starts for KellyGreen_61:
(Start: 27 @39765 has 131 MA's), (Start: 33 @39717 has 1 MA's), (49, 39570), (52, 39546), (55, 39534), (63, 39483), (71, 39411),

Gene: KingJulien_58 Start: 39798, Stop: 39412, Start Num: 27
Candidate Starts for KingJulien_58:
(Start: 27 @39798 has 131 MA's), (Start: 33 @39750 has 1 MA's), (46, 39630), (52, 39579), (55, 39567), (63, 39516), (71, 39444),

Gene: Klimt_60 Start: 39799, Stop: 39413, Start Num: 27
Candidate Starts for Klimt_60:
(Start: 27 @39799 has 131 MA's), (Start: 33 @39751 has 1 MA's), (49, 39604), (52, 39580), (55, 39568), (63, 39517), (71, 39445),

Gene: Knox_60 Start: 40023, Stop: 39637, Start Num: 27
Candidate Starts for Knox_60:
(Start: 27 @40023 has 131 MA's), (Start: 33 @39975 has 1 MA's), (49, 39828), (52, 39804), (55, 39792), (63, 39741), (71, 39669),

Gene: Kouch_60 Start: 39729, Stop: 39343, Start Num: 27
Candidate Starts for Kouch_60:
(Start: 27 @39729 has 131 MA's), (Start: 33 @39681 has 1 MA's), (49, 39534), (52, 39510), (55, 39498), (63, 39447), (71, 39375),

Gene: Kurt1_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Kurt1_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Leafus_59 Start: 40060, Stop: 39674, Start Num: 27
Candidate Starts for Leafus_59:
(Start: 27 @40060 has 131 MA's), (Start: 33 @40012 has 1 MA's), (52, 39841), (55, 39829), (63, 39778), (71, 39706),

Gene: Lovelyunicorn_60 Start: 40023, Stop: 39637, Start Num: 27
Candidate Starts for Lovelyunicorn_60:
(Start: 27 @40023 has 131 MA's), (Start: 33 @39975 has 1 MA's), (49, 39828), (52, 39804), (55, 39792), (63, 39741), (71, 39669),

Gene: Ludgate_60 Start: 40024, Stop: 39638, Start Num: 27
Candidate Starts for Ludgate_60:
(Start: 27 @40024 has 131 MA's), (Start: 33 @39976 has 1 MA's), (49, 39829), (52, 39805), (55, 39793), (63, 39742), (71, 39670),

Gene: MaeLinda_60 Start: 40035, Stop: 39649, Start Num: 27
Candidate Starts for MaeLinda_60:
(Start: 27 @40035 has 131 MA's), (Start: 33 @39987 has 1 MA's), (46, 39867), (52, 39816), (55, 39804), (57, 39789), (63, 39753), (71, 39681),

Gene: ManRay_59 Start: 39781, Stop: 39395, Start Num: 27
Candidate Starts for ManRay_59:
(Start: 27 @39781 has 131 MA's), (Start: 33 @39733 has 1 MA's), (49, 39586), (52, 39562), (55, 39550), (63, 39499), (71, 39427),

Gene: Martin_61 Start: 40037, Stop: 39651, Start Num: 27
Candidate Starts for Martin_61:

(Start: 27 @40037 has 131 MA's), (Start: 33 @39989 has 1 MA's), (49, 39842), (52, 39818), (55, 39806), (63, 39755), (71, 39683),

Gene: McGalleon_60 Start: 40752, Stop: 40366, Start Num: 27
Candidate Starts for McGalleon_60:
(23, 40824), (Start: 27 @40752 has 131 MA's), (Start: 33 @40704 has 1 MA's), (52, 40533), (55, 40521), (63, 40470), (71, 40398),

Gene: Merida02_61 Start: 39780, Stop: 39442, Start Num: 33
Candidate Starts for Merida02_61:
(Start: 27 @39828 has 131 MA's), (Start: 33 @39780 has 1 MA's), (45, 39663), (52, 39609), (55, 39597), (57, 39582), (63, 39546), (71, 39474),

Gene: MillyPhilly_60 Start: 40025, Stop: 39639, Start Num: 27
Candidate Starts for MillyPhilly_60:
(Start: 27 @40025 has 131 MA's), (Start: 33 @39977 has 1 MA's), (49, 39830), (52, 39806), (55, 39794), (63, 39743), (71, 39671),

Gene: MonChoix_58 Start: 39706, Stop: 39320, Start Num: 27
Candidate Starts for MonChoix_58:
(Start: 27 @39706 has 131 MA's), (Start: 33 @39658 has 1 MA's), (46, 39538), (52, 39487), (55, 39475), (57, 39460), (62, 39427), (63, 39424), (71, 39352),

Gene: Morgana_153 Start: 78272, Stop: 77919, Start Num: 31
Candidate Starts for Morgana_153:
(Start: 31 @78272 has 1 MA's), (36, 78233), (Start: 38 @78215 has 3 MA's), (54, 78083), (64, 78026), (67, 78002),

Gene: MrWorldwide_60 Start: 40035, Stop: 39649, Start Num: 27
Candidate Starts for MrWorldwide_60:
(Start: 27 @40035 has 131 MA's), (Start: 33 @39987 has 1 MA's), (49, 39840), (52, 39816), (55, 39804), (63, 39753), (71, 39681),

Gene: Nagem_60 Start: 40071, Stop: 39685, Start Num: 27
Candidate Starts for Nagem_60:
(Start: 27 @40071 has 131 MA's), (Start: 33 @40023 has 1 MA's), (49, 39876), (52, 39852), (55, 39840), (63, 39789), (71, 39717),

Gene: Nattles_59 Start: 39768, Stop: 39382, Start Num: 27
Candidate Starts for Nattles_59:
(Start: 27 @39768 has 131 MA's), (Start: 33 @39720 has 1 MA's), (49, 39573), (52, 39549), (55, 39537), (63, 39486), (71, 39414),

Gene: NickSell_60 Start: 40038, Stop: 39652, Start Num: 27
Candidate Starts for NickSell_60:
(Start: 27 @40038 has 131 MA's), (Start: 33 @39990 has 1 MA's), (49, 39843), (52, 39819), (55, 39807), (63, 39756), (71, 39684),

Gene: Oats_59 Start: 39781, Stop: 39395, Start Num: 27
Candidate Starts for Oats_59:
(Start: 27 @39781 has 131 MA's), (Start: 33 @39733 has 1 MA's), (49, 39586), (52, 39562), (55, 39550), (63, 39499), (71, 39427),

Gene: OldNelly_60 Start: 39825, Stop: 39439, Start Num: 27
Candidate Starts for OldNelly_60:
(Start: 27 @39825 has 131 MA's), (Start: 33 @39777 has 1 MA's), (45, 39660), (52, 39606), (55, 39594), (57, 39579), (63, 39543), (71, 39471),

Gene: OneUp_162 Start: 88590, Stop: 88228, Start Num: 29
Candidate Starts for OneUp_162:
(Start: 29 @88590 has 3 MA's), (32, 88560), (48, 88419), (51, 88404), (52, 88392), (68, 88308),

Gene: Oxtober96_61 Start: 40023, Stop: 39637, Start Num: 27
Candidate Starts for Oxtober96_61:
(Start: 27 @40023 has 131 MA's), (Start: 33 @39975 has 1 MA's), (49, 39828), (52, 39804), (55, 39792), (63, 39741), (71, 39669),

Gene: Pajaza_53 Start: 36229, Stop: 35939, Start Num: 38
Candidate Starts for Pajaza_53:
(Start: 38 @36229 has 3 MA's), (62, 36046),

Gene: Papafritta_59 Start: 39786, Stop: 39400, Start Num: 27
Candidate Starts for Papafritta_59:
(Start: 27 @39786 has 131 MA's), (Start: 33 @39738 has 1 MA's), (45, 39621), (49, 39591), (52, 39567), (55, 39555), (63, 39504), (71, 39432),

Gene: ParleG_60 Start: 40035, Stop: 39649, Start Num: 27
Candidate Starts for ParleG_60:
(Start: 27 @40035 has 131 MA's), (Start: 33 @39987 has 1 MA's), (49, 39840), (52, 39816), (55, 39804), (63, 39753), (71, 39681),

Gene: PauloDiaboli_40 Start: 13698, Stop: 14030, Start Num: 34
Candidate Starts for PauloDiaboli_40:
(22, 13566), (26, 13647), (Start: 34 @13698 has 6 MA's), (37, 13740), (47, 13833), (66, 13938), (72, 14013),

Gene: PauloDiaboli_395 Start: 190327, Stop: 190659, Start Num: 34
Candidate Starts for PauloDiaboli_395:
(22, 190195), (26, 190276), (Start: 34 @190327 has 6 MA's), (37, 190369), (47, 190462), (66, 190567), (72, 190642),

Gene: Peep_60 Start: 40081, Stop: 39695, Start Num: 27
Candidate Starts for Peep_60:
(Start: 27 @40081 has 131 MA's), (Start: 33 @40033 has 1 MA's), (46, 39913), (52, 39862), (55, 39850), (57, 39835), (63, 39799), (71, 39727),

Gene: Peppino_59 Start: 39980, Stop: 39594, Start Num: 27
Candidate Starts for Peppino_59:
(Start: 27 @39980 has 131 MA's), (Start: 33 @39932 has 1 MA's), (46, 39812), (52, 39761), (55, 39749), (63, 39698), (71, 39626),

Gene: Pherferi_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Pherferi_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Phiderman_60 Start: 40025, Stop: 39639, Start Num: 27
Candidate Starts for Phiderman_60:
(Start: 27 @40025 has 131 MA's), (Start: 33 @39977 has 1 MA's), (49, 39830), (52, 39806), (55, 39794), (63, 39743), (71, 39671),

Gene: PhillyPhantom_59 Start: 39843, Stop: 39505, Start Num: 33
Candidate Starts for PhillyPhantom_59:
(Start: 27 @39891 has 131 MA's), (Start: 33 @39843 has 1 MA's), (47, 39705), (52, 39672), (55, 39660), (63, 39609), (71, 39537),

Gene: Phireproof_60 Start: 40034, Stop: 39648, Start Num: 27
Candidate Starts for Phireproof_60:
(Start: 27 @40034 has 131 MA's), (Start: 33 @39986 has 1 MA's), (49, 39839), (52, 39815), (55, 39803), (63, 39752), (71, 39680),

Gene: PhredFlintston_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for PhredFlintston_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Phriends_59 Start: 39829, Stop: 39443, Start Num: 27
Candidate Starts for Phriends_59:
(Start: 27 @39829 has 131 MA's), (Start: 33 @39781 has 1 MA's), (45, 39664), (52, 39610), (55, 39598), (57, 39583), (63, 39547), (71, 39475),

Gene: Pikmin_53 Start: 36229, Stop: 35939, Start Num: 38
Candidate Starts for Pikmin_53:
(Start: 38 @36229 has 3 MA's), (62, 36046),

Gene: Pocket_59 Start: 39808, Stop: 39422, Start Num: 27
Candidate Starts for Pocket_59:
(Start: 27 @39808 has 131 MA's), (Start: 33 @39760 has 1 MA's), (49, 39613), (52, 39589), (55, 39577), (63, 39526), (71, 39454),

Gene: Pumpernickel_352 Start: 184745, Stop: 185116, Start Num: 30
Candidate Starts for Pumpernickel_352:
(6, 184244), (13, 184433), (Start: 30 @184745 has 2 MA's), (37, 184826), (41, 184856), (52, 184952), (55, 184964), (65, 185021), (69, 185048), (70, 185060),

Gene: Pumpernickel_51 Start: 18613, Stop: 18984, Start Num: 30
Candidate Starts for Pumpernickel_51:
(6, 18112), (13, 18301), (Start: 30 @18613 has 2 MA's), (37, 18694), (41, 18724), (52, 18820), (55, 18832), (65, 18889), (69, 18916), (70, 18928),

Gene: PuppyEggo_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for PuppyEggo_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Raccoon_59 Start: 39951, Stop: 39565, Start Num: 27
Candidate Starts for Raccoon_59:
(Start: 27 @39951 has 131 MA's), (Start: 33 @39903 has 1 MA's), (47, 39765), (52, 39732), (55, 39720), (63, 39669), (71, 39597),

Gene: Rapheph_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Rapheph_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: Raptor_60 Start: 40026, Stop: 39640, Start Num: 27
Candidate Starts for Raptor_60:
(Start: 27 @40026 has 131 MA's), (Start: 33 @39978 has 1 MA's), (49, 39831), (52, 39807), (55, 39795), (63, 39744), (71, 39672),

Gene: Redfield_59 Start: 39990, Stop: 39604, Start Num: 27
Candidate Starts for Redfield_59:
(Start: 27 @39990 has 131 MA's), (Start: 33 @39942 has 1 MA's), (46, 39822), (52, 39771), (55, 39759), (63, 39708), (71, 39636),

Gene: Renzie_60 Start: 40084, Stop: 39698, Start Num: 27
Candidate Starts for Renzie_60:
(Start: 27 @40084 has 131 MA's), (Start: 33 @40036 has 1 MA's), (46, 39916), (52, 39865), (55, 39853), (57, 39838), (63, 39802), (71, 39730),

Gene: Riyhil_60 Start: 40038, Stop: 39652, Start Num: 27
Candidate Starts for Riyhil_60:
(Start: 27 @40038 has 131 MA's), (Start: 33 @39990 has 1 MA's), (49, 39843), (52, 39819), (55, 39807), (63, 39756), (71, 39684),

Gene: Robinson_60 Start: 40100, Stop: 39714, Start Num: 27
Candidate Starts for Robinson_60:
(Start: 27 @40100 has 131 MA's), (Start: 33 @40052 has 1 MA's), (49, 39905), (52, 39881), (55, 39869), (63, 39818), (71, 39746),

Gene: Rog141_59 Start: 39771, Stop: 39385, Start Num: 27
Candidate Starts for Rog141_59:
(Start: 27 @39771 has 131 MA's), (Start: 33 @39723 has 1 MA's), (49, 39576), (52, 39552), (55, 39540), (63, 39489), (71, 39417),

Gene: RosieMae_59 Start: 39832, Stop: 39446, Start Num: 27
Candidate Starts for RosieMae_59:
(Start: 27 @39832 has 131 MA's), (Start: 33 @39784 has 1 MA's), (49, 39637), (52, 39613), (55, 39601), (56, 39592), (63, 39550), (71, 39478),

Gene: SJay_60 Start: 40072, Stop: 39686, Start Num: 27
Candidate Starts for SJay_60:
(Start: 27 @40072 has 131 MA's), (Start: 33 @40024 has 1 MA's), (49, 39877), (52, 39853), (55, 39841), (63, 39790), (71, 39718),

Gene: Schnapsidee_59 Start: 39932, Stop: 39546, Start Num: 27
Candidate Starts for Schnapsidee_59:
(Start: 27 @39932 has 131 MA's), (Start: 33 @39884 has 1 MA's), (46, 39764), (52, 39713), (55, 39701), (63, 39650), (71, 39578),

Gene: Sedgewig_59 Start: 39732, Stop: 39346, Start Num: 27
Candidate Starts for Sedgewig_59:

(Start: 27 @39732 has 131 MA's), (Start: 33 @39684 has 1 MA's), (49, 39537), (52, 39513), (55, 39501), (63, 39450), (71, 39378),

Gene: ShaiHulud_60 Start: 40037, Stop: 39651, Start Num: 27
Candidate Starts for ShaiHulud_60:
(Start: 27 @40037 has 131 MA's), (Start: 33 @39989 has 1 MA's), (49, 39842), (52, 39818), (55, 39806), (63, 39755), (71, 39683),

Gene: Shee_60 Start: 40025, Stop: 39639, Start Num: 27
Candidate Starts for Shee_60:
(Start: 27 @40025 has 131 MA's), (Start: 33 @39977 has 1 MA's), (49, 39830), (52, 39806), (55, 39794), (63, 39743), (71, 39671),

Gene: SoilGremlin_60 Start: 39822, Stop: 39436, Start Num: 27
Candidate Starts for SoilGremlin_60:
(Start: 27 @39822 has 131 MA's), (Start: 33 @39774 has 1 MA's), (45, 39657), (52, 39603), (55, 39591), (57, 39576), (63, 39540), (71, 39468),

Gene: SolidSnake_61 Start: 39773, Stop: 39435, Start Num: 33
Candidate Starts for SolidSnake_61:
(Start: 27 @39821 has 131 MA's), (Start: 33 @39773 has 1 MA's), (45, 39656), (52, 39602), (55, 39590), (57, 39575), (63, 39539), (71, 39467),

Gene: SonOfLevi_60 Start: 39799, Stop: 39413, Start Num: 27
Candidate Starts for SonOfLevi_60:
(Start: 27 @39799 has 131 MA's), (Start: 33 @39751 has 1 MA's), (49, 39604), (52, 39580), (55, 39568), (63, 39517), (71, 39445),

Gene: Soror1_58 Start: 39813, Stop: 39427, Start Num: 27
Candidate Starts for Soror1_58:
(Start: 27 @39813 has 131 MA's), (Start: 33 @39765 has 1 MA's), (52, 39594), (55, 39582), (63, 39531), (71, 39459),

Gene: Stanktossa_59 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Stanktossa_59:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: StingRay_59 Start: 39822, Stop: 39436, Start Num: 27
Candidate Starts for StingRay_59:
(Start: 27 @39822 has 131 MA's), (Start: 33 @39774 has 1 MA's), (45, 39657), (49, 39627), (52, 39603), (55, 39591), (63, 39540), (71, 39468),

Gene: StirfryIV_59 Start: 39744, Stop: 39358, Start Num: 27
Candidate Starts for StirfryIV_59:
(Start: 27 @39744 has 131 MA's), (Start: 33 @39696 has 1 MA's), (49, 39549), (52, 39525), (55, 39513), (63, 39462), (71, 39390),

Gene: Stormbreaker8_58 Start: 39799, Stop: 39413, Start Num: 27
Candidate Starts for Stormbreaker8_58:
(Start: 27 @39799 has 131 MA's), (Start: 33 @39751 has 1 MA's), (46, 39631), (52, 39580), (55, 39568), (63, 39517), (71, 39445),

Gene: Strathdee_60 Start: 40027, Stop: 39641, Start Num: 27
Candidate Starts for Strathdee_60:
(Start: 27 @40027 has 131 MA's), (Start: 33 @39979 has 1 MA's), (49, 39832), (52, 39808), (55, 39796), (63, 39745), (71, 39673),

Gene: Superfresh_60 Start: 40084, Stop: 39698, Start Num: 27
Candidate Starts for Superfresh_60:
(Start: 27 @40084 has 131 MA's), (Start: 33 @40036 has 1 MA's), (46, 39916), (52, 39865), (55, 39853), (57, 39838), (63, 39802), (71, 39730),

Gene: Symere_59 Start: 39742, Stop: 39356, Start Num: 27
Candidate Starts for Symere_59:
(Start: 27 @39742 has 131 MA's), (Start: 33 @39694 has 1 MA's), (49, 39547), (52, 39523), (55, 39511), (63, 39460), (71, 39388),

Gene: TatarkaPM_60 Start: 40038, Stop: 39652, Start Num: 27
Candidate Starts for TatarkaPM_60:
(Start: 27 @40038 has 131 MA's), (Start: 33 @39990 has 1 MA's), (49, 39843), (52, 39819), (55, 39807), (63, 39756), (71, 39684),

Gene: Teagan_60 Start: 40018, Stop: 39632, Start Num: 27
Candidate Starts for Teagan_60:
(Start: 27 @40018 has 131 MA's), (Start: 33 @39970 has 1 MA's), (49, 39823), (52, 39799), (55, 39787), (63, 39736), (71, 39664),

Gene: TeddyBear_59 Start: 39781, Stop: 39395, Start Num: 27
Candidate Starts for TeddyBear_59:
(Start: 27 @39781 has 131 MA's), (Start: 33 @39733 has 1 MA's), (49, 39586), (52, 39562), (55, 39550), (63, 39499), (71, 39427),

Gene: Tenda_59 Start: 39779, Stop: 39393, Start Num: 27
Candidate Starts for Tenda_59:
(Start: 27 @39779 has 131 MA's), (Start: 33 @39731 has 1 MA's), (49, 39584), (52, 39560), (55, 39548), (63, 39497), (71, 39425),

Gene: Thompsone_60 Start: 40025, Stop: 39639, Start Num: 27
Candidate Starts for Thompsone_60:
(Start: 27 @40025 has 131 MA's), (Start: 33 @39977 has 1 MA's), (49, 39830), (52, 39806), (55, 39794), (63, 39743), (71, 39671),

Gene: Thorongil_60 Start: 39542, Stop: 39156, Start Num: 27
Candidate Starts for Thorongil_60:
(Start: 27 @39542 has 131 MA's), (Start: 33 @39494 has 1 MA's), (49, 39347), (52, 39323), (55, 39311), (63, 39260), (71, 39188),

Gene: TinSulphur_61 Start: 40034, Stop: 39648, Start Num: 27
Candidate Starts for TinSulphur_61:
(Start: 27 @40034 has 131 MA's), (Start: 33 @39986 has 1 MA's), (49, 39839), (52, 39815), (55, 39803), (63, 39752), (71, 39680),

Gene: Velene_60 Start: 40024, Stop: 39638, Start Num: 27
Candidate Starts for Velene_60:

(Start: 27 @40024 has 131 MA's), (Start: 33 @39976 has 1 MA's), (49, 39829), (52, 39805), (55, 39793), (63, 39742), (71, 39670),

Gene: Vispistious_60 Start: 40028, Stop: 39642, Start Num: 27
Candidate Starts for Vispistious_60:
(Start: 27 @40028 has 131 MA's), (Start: 33 @39980 has 1 MA's), (49, 39833), (52, 39809), (55, 39797), (63, 39746), (71, 39674),

Gene: WildNOut_60 Start: 40021, Stop: 39635, Start Num: 27
Candidate Starts for WildNOut_60:
(Start: 27 @40021 has 131 MA's), (Start: 33 @39973 has 1 MA's), (49, 39826), (52, 39802), (55, 39790), (63, 39739), (71, 39667),

Gene: Winzigespinne_59 Start: 39767, Stop: 39381, Start Num: 27
Candidate Starts for Winzigespinne_59:
(Start: 27 @39767 has 131 MA's), (Start: 33 @39719 has 1 MA's), (49, 39572), (52, 39548), (55, 39536), (63, 39485), (71, 39413),

Gene: Zada_61 Start: 40040, Stop: 39654, Start Num: 27
Candidate Starts for Zada_61:
(Start: 27 @40040 has 131 MA's), (Start: 33 @39992 has 1 MA's), (46, 39872), (52, 39821), (55, 39809), (57, 39794), (63, 39758), (71, 39686),