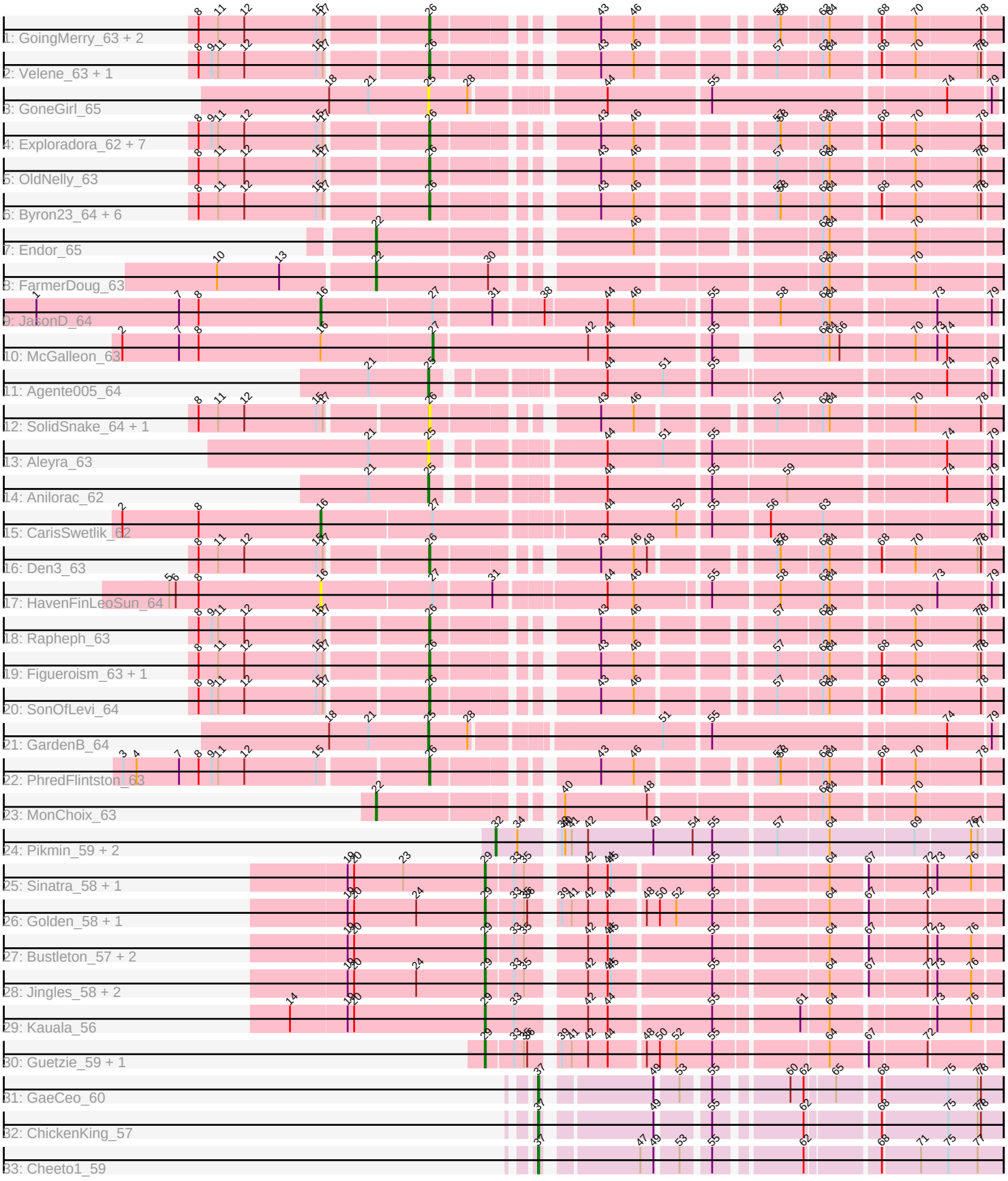
Pham 347644


1: GoingMerry_63 + 2
2: Velene_63 + 1
3: GoneGirl_65
4: Exploradora_62 + 7
5: OldNelly_63
6: Byron23_64 + 6
7: Endor_65
8: FarmerDoug_63
9: JasonD_64
10: McGalleon_63
11: Agente005_64
12: SolidSnake_64 + 1
13: Aleyra_63
14: Anilorac_62
15: CarisSwetlik_62
16: Den3_63
17: HavenFinLeoSun_64
18: Rapheph_63
19: Figueroism_63 + 1
20: SonOfLevi_64
21: GardenB_64
22: PhredFlintston_63
23: MonChoix_63
24: Pikmin_59 + 2
25: Sinatra_58 + 1
26: Golden_58 + 1
27: Bustleton_57 + 2
28: Jingles_58 + 2
29: Kauala_56
30: Guetzie_59 + 1
31: GaeCeo_60
32: ChickenKing_57
33: Cheeto1_59

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 347644 Report

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

Pham number 347644 has 60 members, 8 are drafts.

Phages represented in each track:
- Track 1 : GoingMerry_63, Oxtober96_64, Lovelyunicorn_63
- Track 2 : Velene_63, Blage_63
- Track 3 : GoneGirl_65
- Track 4 : Exploradora_62, Kurt1_63, MrWorldwide_63, NickSell_63, Kouch_63, JeriBeth_62, Jerbirus_64, Phiderman_63
- Track 5 : OldNelly_63
- Track 6 : Byron23_64, KellyGreen_64, Janus167_62, Sedgewig_62, HankSprout_63, StirfryIV_62, Symere_62
- Track 7 : Endor_65
- Track 8 : FarmerDoug_63
- Track 9 : JasonD_64
- Track 10 : McGalleon_63
- Track 11 : Agente005_64
- Track 12 : SolidSnake_64, Merida02_64
- Track 13 : Aleyra_63
- Track 14 : Anilorac_62
- Track 15 : CarisSwetlik_62
- Track 16 : Den3_63
- Track 17 : HavenFinLeoSun_64
- Track 18 : Rapheph_63
- Track 19 : Figueroism_63, Clancy_62
- Track 20 : SonOfLevi_64
- Track 21 : GardenB_64
- Track 22 : PhredFlintston_63
- Track 23 : MonChoix_63
- Track 24 : Pikmin_59, Casey_59, Pajaza_59
- Track 25 : Sinatra_58, RenegadeRaider_59
- Track 26 : Golden_58, Lucky3_58
- Track 27 : Bustleton_57, BouleyBill_56, Pherbot_57
- Track 28 : Jingles_58, PrincePhergus_57, Koji_56
- Track 29 : Kauala_56
- Track 30 : Guetzie_59, SirVictor_59
- Track 31 : GaeCeo_60
- Track 32 : ChickenKing_57
- Track 33 : Cheeto1_59

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

The start number called the most often in the published annotations is 26, it was called in 25 of the 52 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Blage_63, Byron23_64, Clancy_62, Den3_63, Exploradora_62, Figueroism_63, GoingMerry_63, HankSprout_63, Janus167_62, Jerbirus_64, JeriBeth_62, KellyGreen_64, Kouch_63, Kurt1_63, Lovelyunicorn_63, Merida02_64, MrWorldwide_63, NickSell_63, OldNelly_63, Oxtober96_64, Phiderman_63, PhredFlintston_63, Rapheph_63, Sedgewig_62, SolidSnake_64, SonOfLevi_64, StirfryIV_62, Symere_62, Velene_63,

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

Genes that do not have the "Most Annotated" start:
• Agente005_64, Aleyra_63, Anilorac_62, BouleyBill_56, Bustleton_57, CarisSwetlik_62, Casey_59, Cheeto1_59, ChickenKing_57, Endor_65, FarmerDoug_63, GaeCeo_60, GardenB_64, Golden_58, GoneGirl_65, Guetzie_59, HavenFinLeoSun_64, JasonD_64, Jingles_58, Kauala_56, Koji_56, Lucky3_58, McGalleon_63, MonChoix_63, Pajaza_59, Pherbot_57, Pikmin_59, PrincePhergus_57, RenegadeRaider_59, Sinatra_58, SirVictor_59,

Summary by start number:

Start 16:
• Found in 4 of 60 (6.7%) of genes in pham
• Manual Annotations of this start: 2 of 52
• Called 75.0% of time when present
• Phage (with cluster) where this start called: CarisSwetlik_62 (EA1), HavenFinLeoSun_64 (EA1), JasonD_64 (EA1),

Start 22:
• Found in 3 of 60 (5.0%) of genes in pham
• Manual Annotations of this start: 3 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Endor_65 (EA1), FarmerDoug_63 (EA1), MonChoix_63 (EA1),

Start 25:
• Found in 5 of 60 (8.3%) of genes in pham
• Manual Annotations of this start: 3 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agente005_64 (EA1), Aleyra_63 (EA1), Anilorac_62 (EA1), GardenB_64 (EA1), GoneGirl_65 (EA1),

Start 26:
• Found in 29 of 60 (48.3%) of genes in pham
• Manual Annotations of this start: 25 of 52
• Called 100.0% of time when present

• Phage (with cluster) where this start called: Blage_63 (EA1), Byron23_64 (EA1), Clancy_62 (EA1), Den3_63 (EA1), Exploradora_62 (EA1), Figueroism_63 (EA1), GoingMerry_63 (EA1), HankSprout_63 (EA1), Janus167_62 (EA1), Jerbirus_64 (EA1), JeriBeth_62 (EA1), KellyGreen_64 (EA1), Kouch_63 (EA1), Kurt1_63 (EA1), Lovelyunicorn_63 (EA1), Merida02_64 (EA1), MrWorldwide_63 (EA1), NickSell_63 (EA1), OldNelly_63 (EA1), Oxtober96_64 (EA1), Phiderman_63 (EA1), PhredFlintston_63 (EA1), Rapheph_63 (EA1), Sedgewig_62 (EA1), SolidSnake_64 (EA1), SonOfLevi_64 (EA1), StirfryIV_62 (EA1), Symere_62 (EA1), Velene_63 (EA1),

Start 27:
• Found in 4 of 60 (6.7%) of genes in pham
• Manual Annotations of this start: 1 of 52
• Called 25.0% of time when present
• Phage (with cluster) where this start called: McGalleon_63 (EA1),

Start 29:
• Found in 13 of 60 (21.7%) of genes in pham
• Manual Annotations of this start: 12 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: BouleyBill_56 (EA4), Bustleton_57 (EA4), Golden_58 (EA4), Guetzie_59 (EA4), Jingles_58 (EA4), Kauala_56 (EA4), Koji_56 (EA4), Lucky3_58 (EA4), Pherbot_57 (EA4), PrincePhergus_57 (EA4), RenegadeRaider_59 (EA4), Sinatra_58 (EA4), SirVictor_59 (EA4),

Start 32:
• Found in 3 of 60 (5.0%) of genes in pham
• Manual Annotations of this start: 3 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Casey_59 (EA3), Pajaza_59 (EA3), Pikmin_59 (EA3),

Start 37:
• Found in 3 of 60 (5.0%) of genes in pham
• Manual Annotations of this start: 3 of 52
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Cheeto1_59 (EA9), ChickenKing_57 (EA9), GaeCeo_60 (EA9),

Summary by clusters:

There are 4 clusters represented in this pham: EA9, EA1, EA3, EA4,

Info for manual annotations of cluster EA1:
•Start number 16 was manually annotated 2 times for cluster EA1.
•Start number 22 was manually annotated 3 times for cluster EA1.
•Start number 25 was manually annotated 3 times for cluster EA1.
•Start number 26 was manually annotated 25 times for cluster EA1.
•Start number 27 was manually annotated 1 time for cluster EA1.

Info for manual annotations of cluster EA3:
•Start number 32 was manually annotated 3 times for cluster EA3.

Info for manual annotations of cluster EA4:

•Start number 29 was manually annotated 12 times for cluster EA4.

Info for manual annotations of cluster EA9:
•Start number 37 was manually annotated 3 times for cluster EA9.

Gene Information:

Gene: Agente005_64 Start: 41218, Stop: 41679, Start Num: 25
Candidate Starts for Agente005_64:
(21, 41164), (Start: 25 @41218 has 3 MA's), (44, 41350), (51, 41401), (55, 41440), (74, 41638), (79, 41674),

Gene: Aleyra_63 Start: 41222, Stop: 41683, Start Num: 25
Candidate Starts for Aleyra_63:
(21, 41168), (Start: 25 @41222 has 3 MA's), (44, 41354), (51, 41405), (55, 41444), (74, 41642), (79, 41678),

Gene: Anilorac_62 Start: 41125, Stop: 41589, Start Num: 25
Candidate Starts for Anilorac_62:
(21, 41071), (Start: 25 @41125 has 3 MA's), (44, 41257), (55, 41347), (59, 41413), (74, 41548), (79, 41584),

Gene: Blage_63 Start: 41170, Stop: 41613, Start Num: 26
Candidate Starts for Blage_63:
(8, 40972), (9, 40984), (11, 40990), (12, 41014), (15, 41080), (17, 41086), (Start: 26 @41170 has 25 MA's), (43, 41293), (46, 41323), (57, 41428), (63, 41467), (64, 41473), (68, 41515), (70, 41542), (77, 41596), (78, 41599),

Gene: BouleyBill_56 Start: 38730, Stop: 39152, Start Num: 29
Candidate Starts for BouleyBill_56:
(19, 38604), (20, 38610), (Start: 29 @38730 has 12 MA's), (33, 38754), (35, 38763), (42, 38808), (44, 38826), (45, 38829), (55, 38916), (64, 39012), (67, 39042), (72, 39093), (73, 39099), (76, 39129),

Gene: Bustleton_57 Start: 38699, Stop: 39121, Start Num: 29
Candidate Starts for Bustleton_57:
(19, 38573), (20, 38579), (Start: 29 @38699 has 12 MA's), (33, 38723), (35, 38732), (42, 38777), (44, 38795), (45, 38798), (55, 38885), (64, 38981), (67, 39011), (72, 39062), (73, 39068), (76, 39098),

Gene: Byron23_64 Start: 41180, Stop: 41623, Start Num: 26
Candidate Starts for Byron23_64:
(8, 40982), (11, 41000), (12, 41024), (15, 41090), (17, 41096), (Start: 26 @41180 has 25 MA's), (43, 41303), (46, 41333), (57, 41438), (58, 41441), (63, 41477), (64, 41483), (68, 41525), (70, 41552), (77, 41606), (78, 41609),

Gene: CarisSwetlik_62 Start: 41433, Stop: 42002, Start Num: 16
Candidate Starts for CarisSwetlik_62:
(2, 41253), (8, 41322), (Start: 16 @41433 has 2 MA's), (Start: 27 @41529 has 1 MA's), (44, 41673), (52, 41736), (55, 41763), (56, 41811), (63, 41859), (79, 41997),

Gene: Casey_59 Start: 38795, Stop: 39223, Start Num: 32
Candidate Starts for Casey_59:

(Start: 32 @38795 has 3 MA's), (34, 38813), (39, 38840), (40, 38843), (41, 38849), (42, 38864), (49, 38924), (54, 38960), (55, 38978), (57, 39032), (64, 39077), (69, 39152), (76, 39200), (77, 39206),

Gene: Cheeto1_59 Start: 39365, Stop: 39727, Start Num: 37
Candidate Starts for Cheeto1_59:
(Start: 37 @39365 has 3 MA's), (47, 39440), (49, 39452), (53, 39470), (55, 39491), (62, 39560), (68, 39620), (71, 39653), (75, 39677), (77, 39704),

Gene: ChickenKing_57 Start: 39423, Stop: 39785, Start Num: 37
Candidate Starts for ChickenKing_57:
(Start: 37 @39423 has 3 MA's), (49, 39510), (55, 39549), (62, 39618), (68, 39678), (75, 39735), (77, 39762), (78, 39765),

Gene: Clancy_62 Start: 40928, Stop: 41371, Start Num: 26
Candidate Starts for Clancy_62:
(8, 40730), (11, 40748), (12, 40772), (15, 40838), (17, 40844), (Start: 26 @40928 has 25 MA's), (43, 41051), (46, 41081), (57, 41186), (63, 41225), (64, 41231), (68, 41273), (70, 41300), (77, 41354), (78, 41357),

Gene: Den3_63 Start: 41173, Stop: 41616, Start Num: 26
Candidate Starts for Den3_63:
(8, 40975), (11, 40993), (12, 41017), (15, 41083), (17, 41089), (Start: 26 @41173 has 25 MA's), (43, 41296), (46, 41326), (48, 41338), (57, 41431), (58, 41434), (63, 41470), (64, 41476), (68, 41518), (70, 41545), (77, 41599), (78, 41602),

Gene: Endor_65 Start: 41639, Stop: 42139, Start Num: 22
Candidate Starts for Endor_65:
(Start: 22 @41639 has 3 MA's), (46, 41843), (63, 41990), (64, 41996), (70, 42068),

Gene: Exploradora_62 Start: 40876, Stop: 41319, Start Num: 26
Candidate Starts for Exploradora_62:
(8, 40678), (9, 40690), (11, 40696), (12, 40720), (15, 40786), (17, 40792), (Start: 26 @40876 has 25 MA's), (43, 40999), (46, 41029), (57, 41134), (58, 41137), (63, 41173), (64, 41179), (68, 41221), (70, 41248), (78, 41305),

Gene: FarmerDoug_63 Start: 41088, Stop: 41597, Start Num: 22
Candidate Starts for FarmerDoug_63:
(10, 40950), (13, 41007), (Start: 22 @41088 has 3 MA's), (30, 41187), (63, 41448), (64, 41454), (70, 41526),

Gene: Figueroism_63 Start: 41220, Stop: 41663, Start Num: 26
Candidate Starts for Figueroism_63:
(8, 41022), (11, 41040), (12, 41064), (15, 41130), (17, 41136), (Start: 26 @41220 has 25 MA's), (43, 41343), (46, 41373), (57, 41478), (63, 41517), (64, 41523), (68, 41565), (70, 41592), (77, 41646), (78, 41649),

Gene: GaeCeo_60 Start: 39667, Stop: 40029, Start Num: 37
Candidate Starts for GaeCeo_60:
(Start: 37 @39667 has 3 MA's), (49, 39754), (53, 39772), (55, 39793), (60, 39850), (62, 39862), (65, 39886), (68, 39922), (75, 39979), (77, 40006), (78, 40009),

Gene: GardenB_64 Start: 41481, Stop: 41960, Start Num: 25
Candidate Starts for GardenB_64:

(18, 41391), (21, 41427), (Start: 25 @41481 has 3 MA's), (28, 41517), (51, 41676), (55, 41715), (74, 41919), (79, 41955),

Gene: GoingMerry_63 Start: 41152, Stop: 41595, Start Num: 26
Candidate Starts for GoingMerry_63:
(8, 40954), (11, 40972), (12, 40996), (15, 41062), (17, 41068), (Start: 26 @41152 has 25 MA's), (43, 41275), (46, 41305), (57, 41410), (58, 41413), (63, 41449), (64, 41455), (68, 41497), (70, 41524), (78, 41581),

Gene: Golden_58 Start: 39155, Stop: 39577, Start Num: 29
Candidate Starts for Golden_58:
(19, 39029), (20, 39035), (24, 39092), (Start: 29 @39155 has 12 MA's), (33, 39179), (35, 39188), (36, 39191), (39, 39209), (41, 39218), (42, 39233), (44, 39251), (48, 39281), (50, 39293), (52, 39308), (55, 39341), (64, 39437), (67, 39467), (72, 39518),

Gene: GoneGirl_65 Start: 41468, Stop: 41947, Start Num: 25
Candidate Starts for GoneGirl_65:
(18, 41378), (21, 41414), (Start: 25 @41468 has 3 MA's), (28, 41504), (44, 41612), (55, 41702), (74, 41906), (79, 41942),

Gene: Guetzie_59 Start: 39273, Stop: 39695, Start Num: 29
Candidate Starts for Guetzie_59:
(Start: 29 @39273 has 12 MA's), (33, 39297), (35, 39306), (36, 39309), (39, 39327), (41, 39336), (42, 39351), (44, 39369), (48, 39399), (50, 39411), (52, 39426), (55, 39459), (64, 39555), (67, 39585), (72, 39636),

Gene: HankSprout_63 Start: 40794, Stop: 41237, Start Num: 26
Candidate Starts for HankSprout_63:
(8, 40596), (11, 40614), (12, 40638), (15, 40704), (17, 40710), (Start: 26 @40794 has 25 MA's), (43, 40917), (46, 40947), (57, 41052), (58, 41055), (63, 41091), (64, 41097), (68, 41139), (70, 41166), (77, 41220), (78, 41223),

Gene: HavenFinLeoSun_64 Start: 41126, Stop: 41692, Start Num: 16
Candidate Starts for HavenFinLeoSun_64:
(5, 40988), (6, 40994), (8, 41015), (Start: 16 @41126 has 2 MA's), (Start: 27 @41222 has 1 MA's), (31, 41273), (44, 41366), (46, 41390), (55, 41453), (58, 41510), (63, 41549), (64, 41555), (73, 41642), (79, 41687),

Gene: Janus167_62 Start: 40903, Stop: 41346, Start Num: 26
Candidate Starts for Janus167_62:
(8, 40705), (11, 40723), (12, 40747), (15, 40813), (17, 40819), (Start: 26 @40903 has 25 MA's), (43, 41026), (46, 41056), (57, 41161), (58, 41164), (63, 41200), (64, 41206), (68, 41248), (70, 41275), (77, 41329), (78, 41332),

Gene: JasonD_64 Start: 41391, Stop: 41957, Start Num: 16
Candidate Starts for JasonD_64:
(1, 41133), (7, 41262), (8, 41280), (Start: 16 @41391 has 2 MA's), (Start: 27 @41487 has 1 MA's), (31, 41538), (38, 41577), (44, 41631), (46, 41655), (55, 41718), (58, 41775), (63, 41814), (64, 41820), (73, 41907), (79, 41952),

Gene: Jerbirus_64 Start: 40919, Stop: 41362, Start Num: 26
Candidate Starts for Jerbirus_64:

(8, 40721), (9, 40733), (11, 40739), (12, 40763), (15, 40829), (17, 40835), (Start: 26 @40919 has 25 MA's), (43, 41042), (46, 41072), (57, 41177), (58, 41180), (63, 41216), (64, 41222), (68, 41264), (70, 41291), (78, 41348),

Gene: JeriBeth_62 Start: 40807, Stop: 41250, Start Num: 26
Candidate Starts for JeriBeth_62:
(8, 40609), (9, 40621), (11, 40627), (12, 40651), (15, 40717), (17, 40723), (Start: 26 @40807 has 25 MA's), (43, 40930), (46, 40960), (57, 41065), (58, 41068), (63, 41104), (64, 41110), (68, 41152), (70, 41179), (78, 41236),

Gene: Jingles_58 Start: 38796, Stop: 39218, Start Num: 29
Candidate Starts for Jingles_58:
(19, 38670), (20, 38676), (24, 38733), (Start: 29 @38796 has 12 MA's), (33, 38820), (35, 38829), (42, 38874), (44, 38892), (45, 38895), (55, 38982), (64, 39078), (67, 39108), (72, 39159), (73, 39165), (76, 39195),

Gene: Kauala_56 Start: 38890, Stop: 39315, Start Num: 29
Candidate Starts for Kauala_56:
(14, 38713), (19, 38764), (20, 38770), (Start: 29 @38890 has 12 MA's), (33, 38917), (42, 38971), (44, 38989), (55, 39079), (61, 39151), (64, 39175), (73, 39262), (76, 39292),

Gene: KellyGreen_64 Start: 40913, Stop: 41356, Start Num: 26
Candidate Starts for KellyGreen_64:
(8, 40715), (11, 40733), (12, 40757), (15, 40823), (17, 40829), (Start: 26 @40913 has 25 MA's), (43, 41036), (46, 41066), (57, 41171), (58, 41174), (63, 41210), (64, 41216), (68, 41258), (70, 41285), (77, 41339), (78, 41342),

Gene: Koji_56 Start: 38918, Stop: 39340, Start Num: 29
Candidate Starts for Koji_56:
(19, 38792), (20, 38798), (24, 38855), (Start: 29 @38918 has 12 MA's), (33, 38942), (35, 38951), (42, 38996), (44, 39014), (45, 39017), (55, 39104), (64, 39200), (67, 39230), (72, 39281), (73, 39287), (76, 39317),

Gene: Kouch_63 Start: 40876, Stop: 41319, Start Num: 26
Candidate Starts for Kouch_63:
(8, 40678), (9, 40690), (11, 40696), (12, 40720), (15, 40786), (17, 40792), (Start: 26 @40876 has 25 MA's), (43, 40999), (46, 41029), (57, 41134), (58, 41137), (63, 41173), (64, 41179), (68, 41221), (70, 41248), (78, 41305),

Gene: Kurt1_63 Start: 41176, Stop: 41619, Start Num: 26
Candidate Starts for Kurt1_63:
(8, 40978), (9, 40990), (11, 40996), (12, 41020), (15, 41086), (17, 41092), (Start: 26 @41176 has 25 MA's), (43, 41299), (46, 41329), (57, 41434), (58, 41437), (63, 41473), (64, 41479), (68, 41521), (70, 41548), (78, 41605),

Gene: Lovelyunicorn_63 Start: 41171, Stop: 41614, Start Num: 26
Candidate Starts for Lovelyunicorn_63:
(8, 40973), (11, 40991), (12, 41015), (15, 41081), (17, 41087), (Start: 26 @41171 has 25 MA's), (43, 41294), (46, 41324), (57, 41429), (58, 41432), (63, 41468), (64, 41474), (68, 41516), (70, 41543), (78, 41600),

Gene: Lucky3_58 Start: 39155, Stop: 39577, Start Num: 29
Candidate Starts for Lucky3_58:

(19, 39029), (20, 39035), (24, 39092), (Start: 29 @39155 has 12 MA's), (33, 39179), (35, 39188), (36, 39191), (39, 39209), (41, 39218), (42, 39233), (44, 39251), (48, 39281), (50, 39293), (52, 39308), (55, 39341), (64, 39437), (67, 39467), (72, 39518),

Gene: McGalleon_63 Start: 41920, Stop: 42396, Start Num: 27
Candidate Starts for McGalleon_63:
(2, 41641), (7, 41692), (8, 41710), (Start: 16 @41821 has 2 MA's), (Start: 27 @41920 has 1 MA's), (42, 42058), (44, 42076), (55, 42166), (63, 42253), (64, 42259), (66, 42268), (70, 42328), (73, 42346), (74, 42355),

Gene: Merida02_64 Start: 40975, Stop: 41418, Start Num: 26
Candidate Starts for Merida02_64:
(8, 40777), (11, 40795), (12, 40819), (15, 40885), (17, 40891), (Start: 26 @40975 has 25 MA's), (43, 41098), (46, 41128), (57, 41233), (63, 41272), (64, 41278), (70, 41347), (78, 41404),

Gene: MonChoix_63 Start: 41006, Stop: 41509, Start Num: 22
Candidate Starts for MonChoix_63:
(Start: 22 @41006 has 3 MA's), (40, 41144), (48, 41219), (63, 41363), (64, 41369), (70, 41438),

Gene: MrWorldwide_63 Start: 41183, Stop: 41626, Start Num: 26
Candidate Starts for MrWorldwide_63:
(8, 40985), (9, 40997), (11, 41003), (12, 41027), (15, 41093), (17, 41099), (Start: 26 @41183 has 25 MA's), (43, 41306), (46, 41336), (57, 41441), (58, 41444), (63, 41480), (64, 41486), (68, 41528), (70, 41555), (78, 41612),

Gene: NickSell_63 Start: 41186, Stop: 41629, Start Num: 26
Candidate Starts for NickSell_63:
(8, 40988), (9, 41000), (11, 41006), (12, 41030), (15, 41096), (17, 41102), (Start: 26 @41186 has 25 MA's), (43, 41309), (46, 41339), (57, 41444), (58, 41447), (63, 41483), (64, 41489), (68, 41531), (70, 41558), (78, 41615),

Gene: OldNelly_63 Start: 40973, Stop: 41416, Start Num: 26
Candidate Starts for OldNelly_63:
(8, 40775), (11, 40793), (12, 40817), (15, 40883), (17, 40889), (Start: 26 @40973 has 25 MA's), (43, 41096), (46, 41126), (57, 41231), (63, 41270), (64, 41276), (70, 41345), (77, 41399), (78, 41402),

Gene: Oxtober96_64 Start: 41171, Stop: 41614, Start Num: 26
Candidate Starts for Oxtober96_64:
(8, 40973), (11, 40991), (12, 41015), (15, 41081), (17, 41087), (Start: 26 @41171 has 25 MA's), (43, 41294), (46, 41324), (57, 41429), (58, 41432), (63, 41468), (64, 41474), (68, 41516), (70, 41543), (78, 41600),

Gene: Pajaza_59 Start: 38795, Stop: 39223, Start Num: 32
Candidate Starts for Pajaza_59:
(Start: 32 @38795 has 3 MA's), (34, 38813), (39, 38840), (40, 38843), (41, 38849), (42, 38864), (49, 38924), (54, 38960), (55, 38978), (57, 39032), (64, 39077), (69, 39152), (76, 39200), (77, 39206),

Gene: Pherbot_57 Start: 38686, Stop: 39108, Start Num: 29
Candidate Starts for Pherbot_57:
(19, 38560), (20, 38566), (Start: 29 @38686 has 12 MA's), (33, 38710), (35, 38719), (42, 38764), (44, 38782), (45, 38785), (55, 38872), (64, 38968), (67, 38998), (72, 39049), (73, 39055), (76, 39085),

Gene: Phiderman_63 Start: 41172, Stop: 41615, Start Num: 26

Candidate Starts for Phiderman_63:
(8, 40974), (9, 40986), (11, 40992), (12, 41016), (15, 41082), (17, 41088), (Start: 26 @41172 has 25 MA's), (43, 41295), (46, 41325), (57, 41430), (58, 41433), (63, 41469), (64, 41475), (68, 41517), (70, 41544), (78, 41601),

Gene: PhredFlintston_63 Start: 41176, Stop: 41619, Start Num: 26
Candidate Starts for PhredFlintston_63:
(3, 40909), (4, 40921), (7, 40960), (8, 40978), (9, 40990), (11, 40996), (12, 41020), (15, 41086), (Start: 26 @41176 has 25 MA's), (43, 41299), (46, 41329), (57, 41434), (58, 41437), (63, 41473), (64, 41479), (68, 41521), (70, 41548), (78, 41605),

Gene: Pikmin_59 Start: 38795, Stop: 39223, Start Num: 32
Candidate Starts for Pikmin_59:
(Start: 32 @38795 has 3 MA's), (34, 38813), (39, 38840), (40, 38843), (41, 38849), (42, 38864), (49, 38924), (54, 38960), (55, 38978), (57, 39032), (64, 39077), (69, 39152), (76, 39200), (77, 39206),

Gene: PrincePhergus_57 Start: 38703, Stop: 39128, Start Num: 29
Candidate Starts for PrincePhergus_57:
(19, 38577), (20, 38583), (24, 38640), (Start: 29 @38703 has 12 MA's), (33, 38730), (35, 38739), (42, 38784), (44, 38802), (45, 38805), (55, 38892), (64, 38988), (67, 39018), (72, 39069), (73, 39075), (76, 39105),

Gene: Rapheph_63 Start: 41176, Stop: 41619, Start Num: 26
Candidate Starts for Rapheph_63:
(8, 40978), (9, 40990), (11, 40996), (12, 41020), (15, 41086), (17, 41092), (Start: 26 @41176 has 25 MA's), (43, 41299), (46, 41329), (57, 41434), (63, 41473), (64, 41479), (70, 41548), (77, 41602), (78, 41605),

Gene: RenegadeRaider_59 Start: 38624, Stop: 39049, Start Num: 29
Candidate Starts for RenegadeRaider_59:
(19, 38498), (20, 38504), (23, 38549), (Start: 29 @38624 has 12 MA's), (33, 38651), (35, 38660), (42, 38705), (44, 38723), (45, 38726), (55, 38813), (64, 38909), (67, 38939), (72, 38990), (73, 38996), (76, 39026),

Gene: Sedgewig_62 Start: 40878, Stop: 41321, Start Num: 26
Candidate Starts for Sedgewig_62:
(8, 40680), (11, 40698), (12, 40722), (15, 40788), (17, 40794), (Start: 26 @40878 has 25 MA's), (43, 41001), (46, 41031), (57, 41136), (58, 41139), (63, 41175), (64, 41181), (68, 41223), (70, 41250), (77, 41304), (78, 41307),

Gene: Sinatra_58 Start: 38698, Stop: 39120, Start Num: 29
Candidate Starts for Sinatra_58:
(19, 38572), (20, 38578), (23, 38623), (Start: 29 @38698 has 12 MA's), (33, 38722), (35, 38731), (42, 38776), (44, 38794), (45, 38797), (55, 38884), (64, 38980), (67, 39010), (72, 39061), (73, 39067), (76, 39097),

Gene: SirVictor_59 Start: 39273, Stop: 39695, Start Num: 29
Candidate Starts for SirVictor_59:
(Start: 29 @39273 has 12 MA's), (33, 39297), (35, 39306), (36, 39309), (39, 39327), (41, 39336), (42, 39351), (44, 39369), (48, 39399), (50, 39411), (52, 39426), (55, 39459), (64, 39555), (67, 39585), (72, 39636),

Gene: SolidSnake_64 Start: 40969, Stop: 41412, Start Num: 26

Candidate Starts for SolidSnake_64:
(8, 40771), (11, 40789), (12, 40813), (15, 40879), (17, 40885), (Start: 26 @40969 has 25 MA's), (43, 41092), (46, 41122), (57, 41227), (63, 41266), (64, 41272), (70, 41341), (78, 41398),

Gene: SonOfLevi_64 Start: 40946, Stop: 41389, Start Num: 26
Candidate Starts for SonOfLevi_64:
(8, 40748), (9, 40760), (11, 40766), (12, 40790), (15, 40856), (17, 40862), (Start: 26 @40946 has 25 MA's), (43, 41069), (46, 41099), (57, 41204), (63, 41243), (64, 41249), (68, 41291), (70, 41318), (78, 41375),

Gene: StirfryIV_62 Start: 40892, Stop: 41335, Start Num: 26
Candidate Starts for StirfryIV_62:
(8, 40694), (11, 40712), (12, 40736), (15, 40802), (17, 40808), (Start: 26 @40892 has 25 MA's), (43, 41015), (46, 41045), (57, 41150), (58, 41153), (63, 41189), (64, 41195), (68, 41237), (70, 41264), (77, 41318), (78, 41321),

Gene: Symere_62 Start: 40888, Stop: 41331, Start Num: 26
Candidate Starts for Symere_62:
(8, 40690), (11, 40708), (12, 40732), (15, 40798), (17, 40804), (Start: 26 @40888 has 25 MA's), (43, 41011), (46, 41041), (57, 41146), (58, 41149), (63, 41185), (64, 41191), (68, 41233), (70, 41260), (77, 41314), (78, 41317),

Gene: Velene_63 Start: 41171, Stop: 41614, Start Num: 26
Candidate Starts for Velene_63:
(8, 40973), (9, 40985), (11, 40991), (12, 41015), (15, 41081), (17, 41087), (Start: 26 @41171 has 25 MA's), (43, 41294), (46, 41324), (57, 41429), (63, 41468), (64, 41474), (68, 41516), (70, 41543), (77, 41597), (78, 41600),