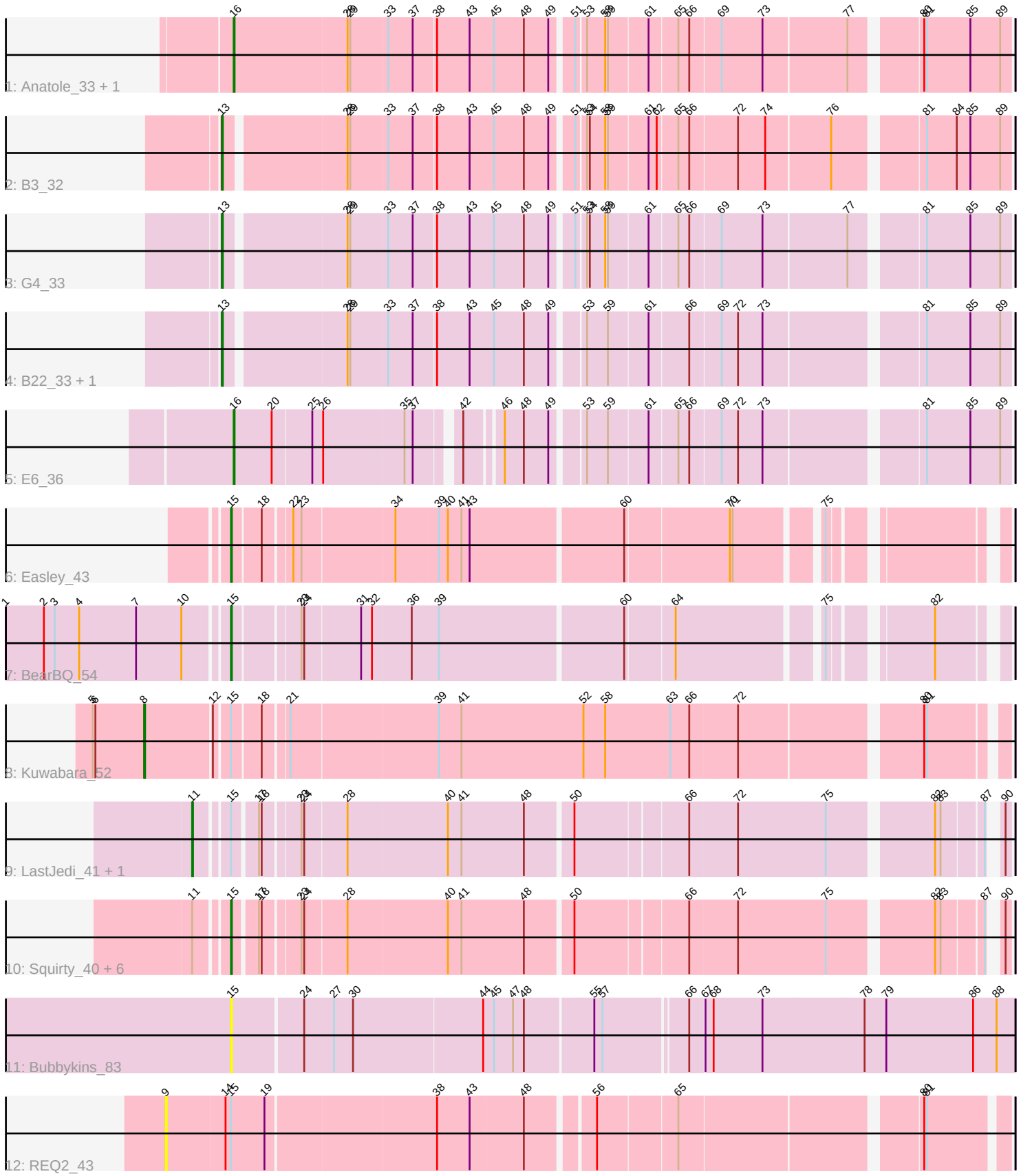
Pham 291542


1: Anatole_33 + 1
2: B3_32
3: G4_33
4: B22_33 + 1
5: E6_36
6: Easley_43
7: BearBQ_54
8: Kuwabara_52
9: LastJedi_41 + 1
10: Squirty_40 + 6
11: Bubbykins_83
12: REQ2_43

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 291542 Report

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

Pham number 291542 has 21 members, 4 are drafts.

Phages represented in each track:
• Track 1 : Anatole_33, E1_33
• Track 2 : B3_32
• Track 3 : G4_33
• Track 4 : B22_33, Doucette_35
• Track 5 : E6_36
• Track 6 : Easley_43
• Track 7 : BearBQ_54
• Track 8 : Kuwabara_52
• Track 9 : LastJedi_41, LordVader_44
• Track 10 : Squirty_40, Donkeykong_46, Zizzle_51, Jennelsea_44, Clifton_42, Brocalys_43, Pippy_45
• Track 11 : Bubbykins_83
• Track 12 : REQ2_43

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

The start number called the most often in the published annotations is 15, it was called in 8 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• BearBQ_54, Brocalys_43, Bubbykins_83, Clifton_42, Donkeykong_46, Easley_43, Jennelsea_44, Pippy_45, Squirty_40, Zizzle_51,

Genes that have the "Most Annotated" start but do not call it:
• Kuwabara_52, LastJedi_41, LordVader_44, REQ2_43,

Genes that do not have the "Most Annotated" start:
• Anatole_33, B22_33, B3_32, Doucette_35, E1_33, E6_36, G4_33,

Summary by start number:

Start 8:
• Found in 1 of 21 (4.8%) of genes in pham
• Manual Annotations of this start: 1 of 17

• Called 100.0% of time when present
• Phage (with cluster) where this start called: Kuwabara_52 (DN4),

Start 9:
• Found in 1 of 21 (4.8%) of genes in pham
• No Manual Annotations of this start.
• Called 100.0% of time when present
• Phage (with cluster) where this start called: REQ2_43 (singleton),

Start 11:
• Found in 9 of 21 (42.9%) of genes in pham
• Manual Annotations of this start: 1 of 17
• Called 22.2% of time when present
• Phage (with cluster) where this start called: LastJedi_41 (F1), LordVader_44 (F),

Start 13:
• Found in 4 of 21 (19.0%) of genes in pham
• Manual Annotations of this start: 4 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: B22_33 (BW), B3_32 (BV), Doucette_35 (BW), G4_33 (BW),

Start 15:
• Found in 14 of 21 (66.7%) of genes in pham
• Manual Annotations of this start: 8 of 17
• Called 71.4% of time when present
• Phage (with cluster) where this start called: BearBQ_54 (DN), Brocalys_43 (F1), Bubbykins_83 (UNK), Clifton_42 (F1), Donkeykong_46 (F1), Easley_43 (CZ4), Jennelsea_44 (F1), Pippy_45 (F1), Squirty_40 (F3), Zizzle_51 (F1),

Start 16:
• Found in 3 of 21 (14.3%) of genes in pham
• Manual Annotations of this start: 3 of 17
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Anatole_33 (BV), E1_33 (BV), E6_36 (BW),

Summary by clusters:

There are 10 clusters represented in this pham: DN, F1, singleton, F3, F, CZ4, DN4, BV, BW, UNK,

Info for manual annotations of cluster BV:
•Start number 13 was manually annotated 1 time for cluster BV.
•Start number 16 was manually annotated 2 times for cluster BV.

Info for manual annotations of cluster BW:
•Start number 13 was manually annotated 3 times for cluster BW.
•Start number 16 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CZ4:
•Start number 15 was manually annotated 1 time for cluster CZ4.

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

Info for manual annotations of cluster DN4:
•Start number 8 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster F1:
•Start number 11 was manually annotated 1 time for cluster F1.
•Start number 15 was manually annotated 5 times for cluster F1.

Info for manual annotations of cluster F3:
•Start number 15 was manually annotated 1 time for cluster F3.

Gene Information:

Gene: Anatole_33 Start: 24569, Stop: 25372, Start Num: 16
Candidate Starts for Anatole_33:
(Start: 16 @24569 has 3 MA's), (28, 24692), (29, 24695), (33, 24734), (37, 24761), (38, 24785), (43, 24821), (45, 24848), (48, 24881), (49, 24908), (51, 24929), (53, 24938), (58, 24956), (59, 24959), (61, 25001), (65, 25031), (66, 25043), (69, 25076), (73, 25121), (77, 25211), (80, 25277), (81, 25280), (85, 25328), (89, 25361),

Gene: B22_33 Start: 23699, Stop: 24502, Start Num: 13
Candidate Starts for B22_33:
(Start: 13 @23699 has 4 MA's), (28, 23822), (29, 23825), (33, 23864), (37, 23891), (38, 23915), (43, 23951), (45, 23978), (48, 24011), (49, 24038), (53, 24068), (59, 24089), (61, 24131), (66, 24173), (69, 24206), (72, 24224), (73, 24251), (81, 24410), (85, 24458), (89, 24491),

Gene: B3_32 Start: 23829, Stop: 24632, Start Num: 13
Candidate Starts for B3_32:
(Start: 13 @23829 has 4 MA's), (28, 23952), (29, 23955), (33, 23994), (37, 24021), (38, 24045), (43, 24081), (45, 24108), (48, 24141), (49, 24168), (51, 24189), (53, 24198), (54, 24201), (58, 24216), (59, 24219), (61, 24261), (62, 24270), (65, 24291), (66, 24303), (72, 24354), (74, 24384), (76, 24453), (81, 24540), (84, 24573), (85, 24588), (89, 24621),

Gene: BearBQ_54 Start: 38297, Stop: 39052, Start Num: 15
Candidate Starts for BearBQ_54:
(1, 38063), (2, 38105), (3, 38117), (4, 38144), (7, 38207), (10, 38255), (Start: 15 @38297 has 8 MA's), (23, 38363), (24, 38366), (31, 38426), (32, 38438), (36, 38480), (39, 38507), (60, 38702), (64, 38753), (75, 38897), (82, 38990),

Gene: Brocalys_43 Start: 31207, Stop: 31986, Start Num: 15
Candidate Starts for Brocalys_43:
(Start: 11 @31177 has 1 MA's), (Start: 15 @31207 has 8 MA's), (17, 31231), (18, 31234), (23, 31270), (24, 31273), (28, 31318), (40, 31426), (41, 31441), (48, 31510), (50, 31558), (66, 31675), (72, 31726), (75, 31822), (82, 31927), (83, 31933), (87, 31975), (90, 31981),

Gene: Bubbykins_83 Start: 52362, Stop: 53198, Start Num: 15
Candidate Starts for Bubbykins_83:

(Start: 15 @52362 has 8 MA's), (24, 52437), (27, 52470), (30, 52491), (44, 52632), (45, 52644), (47, 52665), (48, 52677), (55, 52749), (57, 52758), (66, 52845), (67, 52860), (68, 52869), (73, 52923), (78, 53034), (79, 53058), (86, 53154), (88, 53178),

Gene: Clifton_42 Start: 31558, Stop: 32337, Start Num: 15
Candidate Starts for Clifton_42:
(Start: 11 @31528 has 1 MA's), (Start: 15 @31558 has 8 MA's), (17, 31582), (18, 31585), (23, 31621), (24, 31624), (28, 31669), (40, 31777), (41, 31792), (48, 31861), (50, 31909), (66, 32026), (72, 32077), (75, 32173), (82, 32278), (83, 32284), (87, 32326), (90, 32332),

Gene: Donkeykong_46 Start: 35576, Stop: 36355, Start Num: 15
Candidate Starts for Donkeykong_46:
(Start: 11 @35546 has 1 MA's), (Start: 15 @35576 has 8 MA's), (17, 35600), (18, 35603), (23, 35639), (24, 35642), (28, 35687), (40, 35795), (41, 35810), (48, 35879), (50, 35927), (66, 36044), (72, 36095), (75, 36191), (82, 36296), (83, 36302), (87, 36344), (90, 36350),

Gene: Doucette_35 Start: 25113, Stop: 25916, Start Num: 13
Candidate Starts for Doucette_35:
(Start: 13 @25113 has 4 MA's), (28, 25236), (29, 25239), (33, 25278), (37, 25305), (38, 25329), (43, 25365), (45, 25392), (48, 25425), (49, 25452), (53, 25482), (59, 25503), (61, 25545), (66, 25587), (69, 25620), (72, 25638), (73, 25665), (81, 25824), (85, 25872), (89, 25905),

Gene: E1_33 Start: 24569, Stop: 25372, Start Num: 16
Candidate Starts for E1_33:
(Start: 16 @24569 has 3 MA's), (28, 24692), (29, 24695), (33, 24734), (37, 24761), (38, 24785), (43, 24821), (45, 24848), (48, 24881), (49, 24908), (51, 24929), (53, 24938), (58, 24956), (59, 24959), (61, 25001), (65, 25031), (66, 25043), (69, 25076), (73, 25121), (77, 25211), (80, 25277), (81, 25280), (85, 25328), (89, 25361),

Gene: E6_36 Start: 26500, Stop: 27273, Start Num: 16
Candidate Starts for E6_36:
(Start: 16 @26500 has 3 MA's), (20, 26542), (25, 26584), (26, 26593), (35, 26680), (37, 26689), (42, 26728), (46, 26761), (48, 26782), (49, 26809), (53, 26839), (59, 26860), (61, 26902), (65, 26932), (66, 26944), (69, 26977), (72, 26995), (73, 27022), (81, 27181), (85, 27229), (89, 27262),

Gene: Easley_43 Start: 32655, Stop: 33410, Start Num: 15
Candidate Starts for Easley_43:
(Start: 15 @32655 has 8 MA's), (18, 32685), (22, 32712), (23, 32721), (34, 32820), (39, 32865), (40, 32874), (41, 32889), (43, 32898), (60, 33060), (70, 33171), (71, 33174), (75, 33255),

Gene: G4_33 Start: 24732, Stop: 25535, Start Num: 13
Candidate Starts for G4_33:
(Start: 13 @24732 has 4 MA's), (28, 24855), (29, 24858), (33, 24897), (37, 24924), (38, 24948), (43, 24984), (45, 25011), (48, 25044), (49, 25071), (51, 25092), (53, 25101), (54, 25104), (58, 25119), (59, 25122), (61, 25164), (65, 25194), (66, 25206), (69, 25239), (73, 25284), (77, 25374), (81, 25443), (85, 25491), (89, 25524),

Gene: Jennelsea_44 Start: 32861, Stop: 33640, Start Num: 15
Candidate Starts for Jennelsea_44:
(Start: 11 @32831 has 1 MA's), (Start: 15 @32861 has 8 MA's), (17, 32885), (18, 32888), (23, 32924), (24, 32927), (28, 32972), (40, 33080), (41, 33095), (48, 33164), (50, 33212), (66, 33329), (72, 33380), (75, 33476), (82, 33581), (83, 33587), (87, 33629), (90, 33635),

Gene: Kuwabara_52 Start: 36557, Stop: 37444, Start Num: 8
Candidate Starts for Kuwabara_52:
(5, 36500), (6, 36503), (Start: 8 @36557 has 1 MA's), (12, 36629), (Start: 15 @36644 has 8 MA's), (18, 36671), (21, 36695), (39, 36854), (41, 36878), (52, 37013), (58, 37037), (63, 37109), (66, 37130), (72, 37181), (80, 37367), (81, 37370),

Gene: LastJedi_41 Start: 31571, Stop: 32380, Start Num: 11
Candidate Starts for LastJedi_41:
(Start: 11 @31571 has 1 MA's), (Start: 15 @31601 has 8 MA's), (17, 31625), (18, 31628), (23, 31664), (24, 31667), (28, 31712), (40, 31820), (41, 31835), (48, 31904), (50, 31952), (66, 32069), (72, 32120), (75, 32216), (82, 32321), (83, 32327), (87, 32369), (90, 32375),

Gene: LordVader_44 Start: 30174, Stop: 30983, Start Num: 11
Candidate Starts for LordVader_44:
(Start: 11 @30174 has 1 MA's), (Start: 15 @30204 has 8 MA's), (17, 30228), (18, 30231), (23, 30267), (24, 30270), (28, 30315), (40, 30423), (41, 30438), (48, 30507), (50, 30555), (66, 30672), (72, 30723), (75, 30819), (82, 30924), (83, 30930), (87, 30972), (90, 30978),

Gene: Pippy_45 Start: 33164, Stop: 33943, Start Num: 15
Candidate Starts for Pippy_45:
(Start: 11 @33134 has 1 MA's), (Start: 15 @33164 has 8 MA's), (17, 33188), (18, 33191), (23, 33227), (24, 33230), (28, 33275), (40, 33383), (41, 33398), (48, 33467), (50, 33515), (66, 33632), (72, 33683), (75, 33779), (82, 33884), (83, 33890), (87, 33932), (90, 33938),

Gene: REQ2_43 Start: 33255, Stop: 34112, Start Num: 9
Candidate Starts for REQ2_43:
(9, 33255), (14, 33318), (Start: 15 @33324 has 8 MA's), (19, 33360), (38, 33540), (43, 33576), (48, 33633), (56, 33699), (65, 33783), (80, 34029), (81, 34032),

Gene: Squirty_40 Start: 32337, Stop: 33116, Start Num: 15
Candidate Starts for Squirty_40:
(Start: 11 @32307 has 1 MA's), (Start: 15 @32337 has 8 MA's), (17, 32361), (18, 32364), (23, 32400), (24, 32403), (28, 32448), (40, 32556), (41, 32571), (48, 32640), (50, 32688), (66, 32805), (72, 32856), (75, 32952), (82, 33057), (83, 33063), (87, 33105), (90, 33111),

Gene: Zizzle_51 Start: 36006, Stop: 36785, Start Num: 15
Candidate Starts for Zizzle_51:
(Start: 11 @35976 has 1 MA's), (Start: 15 @36006 has 8 MA's), (17, 36030), (18, 36033), (23, 36069), (24, 36072), (28, 36117), (40, 36225), (41, 36240), (48, 36309), (50, 36357), (66, 36474), (72, 36525), (75, 36621), (82, 36726), (83, 36732), (87, 36774), (90, 36780),