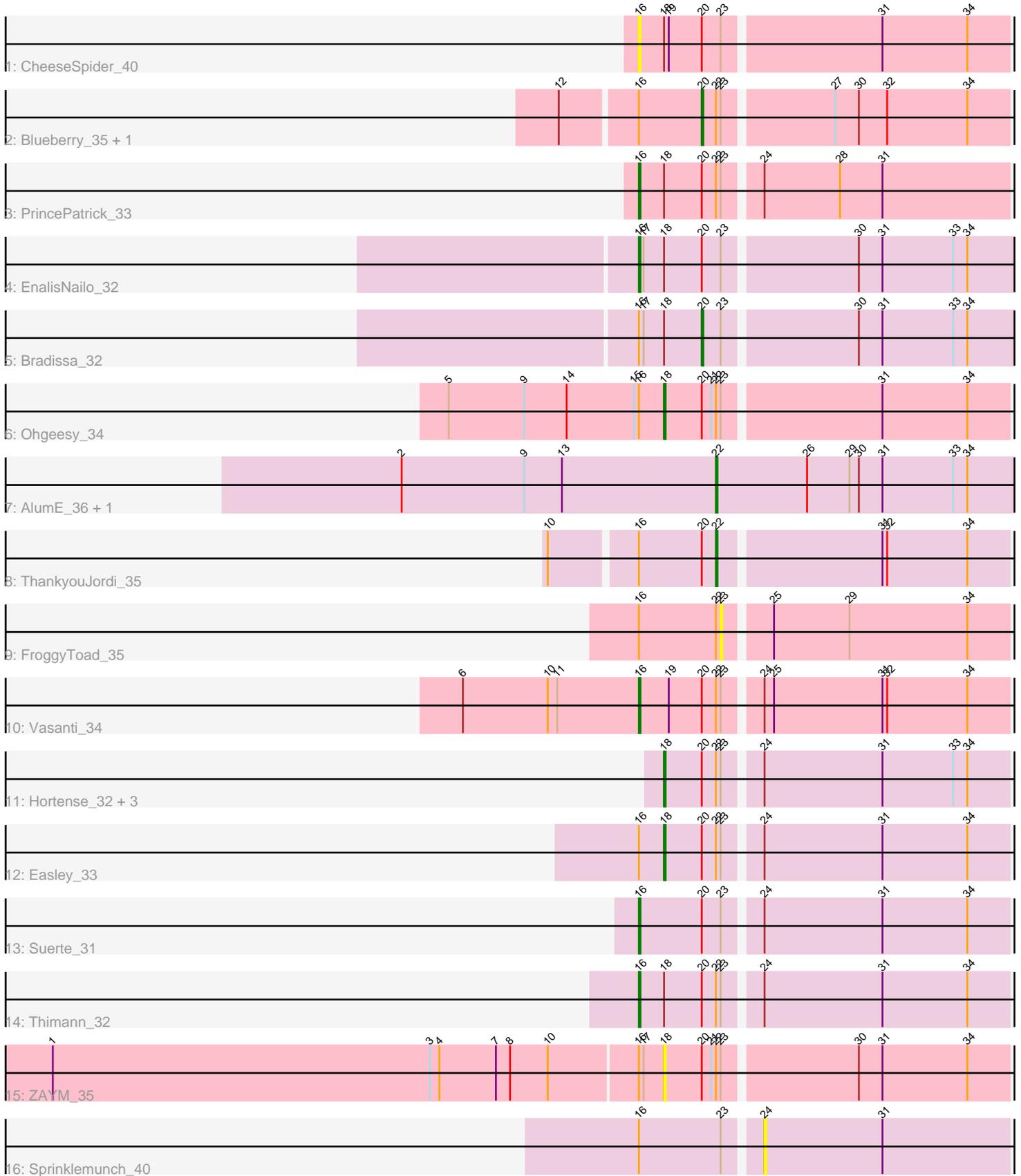# Pham 284193

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 284193 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284193 has 21 members, 4 are drafts.

Phages represented in each track:
• Track 1 : CheeseSpider_40
• Track 2 : Blueberry_35, Gambino_36
• Track 3 : PrincePatrick_33
• Track 4 : EnalisNailo_32
• Track 5 : Bradissa_32
• Track 6 : Ohgeesy_34
• Track 7 : AlumE_36, BoyNamedSue_36
• Track 8 : ThankyouJordi_35
• Track 9 : FroggyToad_35
• Track 10 : Vasanti_34
• Track 11 : Hortense_32, Twinkle_32, Shlim410_32, Howe_32
• Track 12 : Easley_33
• Track 13 : Suerte_31
• Track 14 : Thimann_32
• Track 15 : ZAYM_35
• Track 16 : Sprinklemunch_40

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

The start number called the most often in the published annotations is 18, it was called in 6 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Easley_33, Hortense_32, Howe_32, Ohgeesy_34, Shlim410_32, Twinkle_32, ZAYM_35,

Genes that have the "Most Annotated" start but do not call it:
• Bradissa_32, CheeseSpider_40, EnalisNailo_32, PrincePatrick_33, Thimann_32,

Genes that do not have the "Most Annotated" start:
• AlumE_36, Blueberry_35, BoyNamedSue_36, FroggyToad_35, Gambino_36, Sprinklemunch_40, Suerte_31, ThankyouJordi_35, Vasanti_34,

Summary by start number:

Start 16:
• Found in 15 of 21 (71.4%) of genes in pham
• Manual Annotations of this start: 5 of 17
• Called 40.0% of time when present
• Phage (with cluster) where this start called: CheeseSpider_40 (CV), EnalisNailo_32 (CY1), PrincePatrick_33 (CV), Suerte_31 (CZ4), Thimann_32 (CZ4), Vasanti_34 (CZ2),

Start 18:
• Found in 12 of 21 (57.1%) of genes in pham
• Manual Annotations of this start: 6 of 17
• Called 58.3% of time when present
• Phage (with cluster) where this start called: Easley_33 (CZ4), Hortense_32 (CZ4), Howe_32 (CZ4), Ohgeesy_34 (CZ), Shlim410_32 (CZ4), Twinkle_32 (CZ4), ZAYM_35 (DB),

Start 20:
• Found in 17 of 21 (81.0%) of genes in pham
• Manual Annotations of this start: 3 of 17
• Called 17.6% of time when present
• Phage (with cluster) where this start called: Blueberry_35 (CV), Bradissa_32 (CY1), Gambino_36 (CV),

Start 22:
• Found in 16 of 21 (76.2%) of genes in pham
• Manual Annotations of this start: 3 of 17
• Called 18.8% of time when present
• Phage (with cluster) where this start called: AlumE_36 (CZ1), BoyNamedSue_36 (CZ1), ThankyouJordi_35 (CZ1),

Start 23:
• Found in 18 of 21 (85.7%) of genes in pham
• No Manual Annotations of this start.
• Called 5.6% of time when present
• Phage (with cluster) where this start called: FroggyToad_35 (CZ2),

Start 24:
• Found in 10 of 21 (47.6%) of genes in pham
• No Manual Annotations of this start.
• Called 10.0% of time when present
• Phage (with cluster) where this start called: Sprinklemunch_40 (DW),

Summary by clusters:

There are 8 clusters represented in this pham: CY1, CZ2, CZ1, DB, CZ4, CZ, DW, CV,

Info for manual annotations of cluster CV:
•Start number 16 was manually annotated 1 time for cluster CV.
•Start number 20 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster CY1:

•Start number 16 was manually annotated 1 time for cluster CY1.
•Start number 20 was manually annotated 1 time for cluster CY1.

Info for manual annotations of cluster CZ:
•Start number 18 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:
•Start number 22 was manually annotated 3 times for cluster CZ1.

Info for manual annotations of cluster CZ2:
•Start number 16 was manually annotated 1 time for cluster CZ2.

Info for manual annotations of cluster CZ4:
•Start number 16 was manually annotated 2 times for cluster CZ4.
•Start number 18 was manually annotated 5 times for cluster CZ4.

Gene Information:

Gene: AlumE_36 Start: 30317, Stop: 30123, Start Num: 22
Candidate Starts for AlumE_36:
(2, 30515), (9, 30437), (13, 30413), (Start: 22 @30317 has 3 MA's), (26, 30260), (29, 30233), (30, 30227), (31, 30212), (33, 30167), (34, 30158),

Gene: Blueberry_35 Start: 28987, Stop: 28799, Start Num: 20
Candidate Starts for Blueberry_35:
(12, 29071), (Start: 16 @29026 has 5 MA's), (Start: 20 @28987 has 3 MA's), (Start: 22 @28978 has 3 MA's), (23, 28975), (27, 28909), (30, 28894), (32, 28876), (34, 28825),

Gene: BoyNamedSue_36 Start: 30317, Stop: 30123, Start Num: 22
Candidate Starts for BoyNamedSue_36:
(2, 30515), (9, 30437), (13, 30413), (Start: 22 @30317 has 3 MA's), (26, 30260), (29, 30233), (30, 30227), (31, 30212), (33, 30167), (34, 30158),

Gene: Bradissa_32 Start: 28422, Stop: 28231, Start Num: 20
Candidate Starts for Bradissa_32:
(Start: 16 @28461 has 5 MA's), (17, 28458), (Start: 18 @28446 has 6 MA's), (Start: 20 @28422 has 3 MA's), (23, 28410), (30, 28329), (31, 28314), (33, 28269), (34, 28260),

Gene: CheeseSpider_40 Start: 28731, Stop: 28504, Start Num: 16
Candidate Starts for CheeseSpider_40:
(Start: 16 @28731 has 5 MA's), (Start: 18 @28716 has 6 MA's), (19, 28713), (Start: 20 @28692 has 3 MA's), (23, 28680), (31, 28584), (34, 28530),

Gene: Easley_33 Start: 26425, Stop: 26213, Start Num: 18
Candidate Starts for Easley_33:
(Start: 16 @26440 has 5 MA's), (Start: 18 @26425 has 6 MA's), (Start: 20 @26401 has 3 MA's), (Start: 22 @26392 has 3 MA's), (23, 26389), (24, 26368), (31, 26293), (34, 26239),

Gene: EnalisNailo_32 Start: 27995, Stop: 27765, Start Num: 16

Candidate Starts for EnalisNailo_32:
(Start: 16 @27995 has 5 MA's), (17, 27992), (Start: 18 @27980 has 6 MA's), (Start: 20 @27956 has 3 MA's), (23, 27944), (30, 27863), (31, 27848), (33, 27803), (34, 27794),

Gene: FroggyToad_35 Start: 27684, Stop: 27508, Start Num: 23
Candidate Starts for FroggyToad_35:
(Start: 16 @27735 has 5 MA's), (Start: 22 @27687 has 3 MA's), (23, 27684), (25, 27657), (29, 27609), (34, 27534),

Gene: Gambino_36 Start: 28987, Stop: 28799, Start Num: 20
Candidate Starts for Gambino_36:
(12, 29071), (Start: 16 @29026 has 5 MA's), (Start: 20 @28987 has 3 MA's), (Start: 22 @28978 has 3 MA's), (23, 28975), (27, 28909), (30, 28894), (32, 28876), (34, 28825),

Gene: Hortense_32 Start: 28665, Stop: 28453, Start Num: 18
Candidate Starts for Hortense_32:
(Start: 18 @28665 has 6 MA's), (Start: 20 @28641 has 3 MA's), (Start: 22 @28632 has 3 MA's), (23, 28629), (24, 28608), (31, 28533), (33, 28488), (34, 28479),

Gene: Howe_32 Start: 28665, Stop: 28453, Start Num: 18
Candidate Starts for Howe_32:
(Start: 18 @28665 has 6 MA's), (Start: 20 @28641 has 3 MA's), (Start: 22 @28632 has 3 MA's), (23, 28629), (24, 28608), (31, 28533), (33, 28488), (34, 28479),

Gene: Ohgeesy_34 Start: 29848, Stop: 29636, Start Num: 18
Candidate Starts for Ohgeesy_34:
(5, 29983), (9, 29935), (14, 29908), (15, 29866), (Start: 16 @29863 has 5 MA's), (Start: 18 @29848 has 6 MA's), (Start: 20 @29824 has 3 MA's), (21, 29818), (Start: 22 @29815 has 3 MA's), (23, 29812), (31, 29716), (34, 29662),

Gene: PrincePatrick_33 Start: 27253, Stop: 27026, Start Num: 16
Candidate Starts for PrincePatrick_33:
(Start: 16 @27253 has 5 MA's), (Start: 18 @27238 has 6 MA's), (Start: 20 @27214 has 3 MA's), (Start: 22 @27205 has 3 MA's), (23, 27202), (24, 27181), (28, 27133), (31, 27106),

Gene: Shlim410_32 Start: 28665, Stop: 28453, Start Num: 18
Candidate Starts for Shlim410_32:
(Start: 18 @28665 has 6 MA's), (Start: 20 @28641 has 3 MA's), (Start: 22 @28632 has 3 MA's), (23, 28629), (24, 28608), (31, 28533), (33, 28488), (34, 28479),

Gene: Sprinklemunch_40 Start: 30648, Stop: 30493, Start Num: 24
Candidate Starts for Sprinklemunch_40:
(Start: 16 @30720 has 5 MA's), (23, 30669), (24, 30648), (31, 30573),

Gene: Suerte_31 Start: 27445, Stop: 27218, Start Num: 16
Candidate Starts for Suerte_31:
(Start: 16 @27445 has 5 MA's), (Start: 20 @27406 has 3 MA's), (23, 27394), (24, 27373), (31, 27298), (34, 27244),

Gene: ThankyouJordi_35 Start: 30189, Stop: 30010, Start Num: 22
Candidate Starts for ThankyouJordi_35:
(10, 30288), (Start: 16 @30237 has 5 MA's), (Start: 20 @30198 has 3 MA's), (Start: 22 @30189 has 3 MA's), (31, 30090), (32, 30087), (34, 30036),

Gene: Thimann_32 Start: 26356, Stop: 26129, Start Num: 16
Candidate Starts for Thimann_32:
(Start: 16 @26356 has 5 MA's), (Start: 18 @26341 has 6 MA's), (Start: 20 @26317 has 3 MA's), (Start: 22 @26308 has 3 MA's), (23, 26305), (24, 26284), (31, 26209), (34, 26155),

Gene: Twinkle_32 Start: 29724, Stop: 29512, Start Num: 18
Candidate Starts for Twinkle_32:
(Start: 18 @29724 has 6 MA's), (Start: 20 @29700 has 3 MA's), (Start: 22 @29691 has 3 MA's), (23, 29688), (24, 29667), (31, 29592), (33, 29547), (34, 29538),

Gene: Vasanti_34 Start: 26861, Stop: 26634, Start Num: 16
Candidate Starts for Vasanti_34:
(6, 26972), (10, 26918), (11, 26912), (Start: 16 @26861 has 5 MA's), (19, 26843), (Start: 20 @26822 has 3 MA's), (Start: 22 @26813 has 3 MA's), (23, 26810), (24, 26789), (25, 26783), (31, 26714), (32, 26711), (34, 26660),

Gene: ZAYM_35 Start: 28842, Stop: 28630, Start Num: 18
Candidate Starts for ZAYM_35:
(1, 29226), (3, 28986), (4, 28980), (7, 28944), (8, 28935), (10, 28911), (Start: 16 @28857 has 5 MA's), (17, 28854), (Start: 18 @28842 has 6 MA's), (Start: 20 @28818 has 3 MA's), (21, 28812), (Start: 22 @28809 has 3 MA's), (23, 28806), (30, 28725), (31, 28710), (34, 28656),