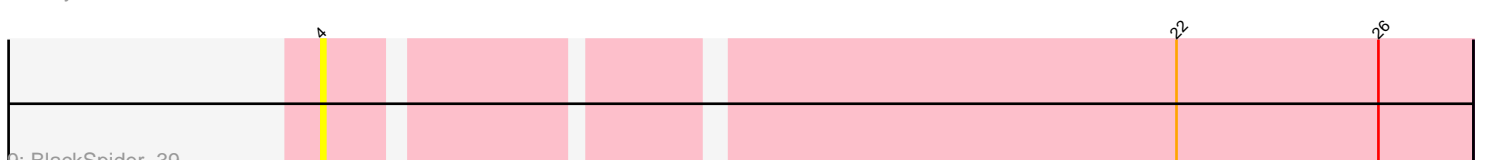
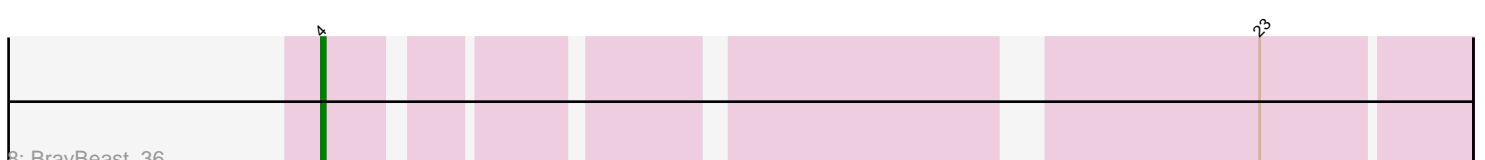
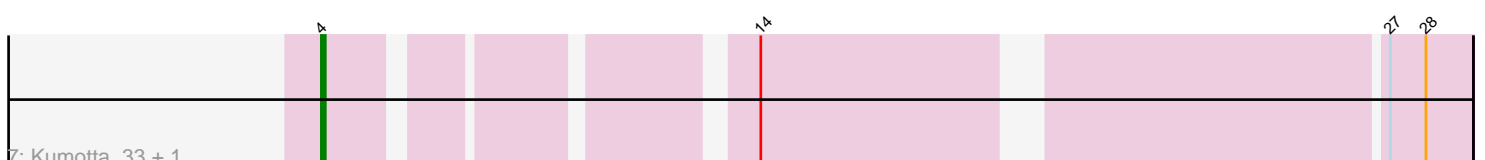
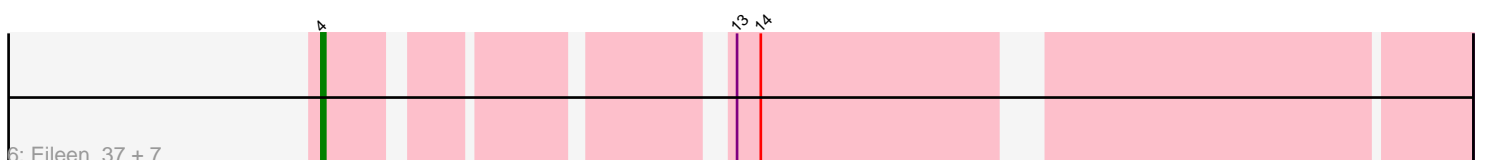
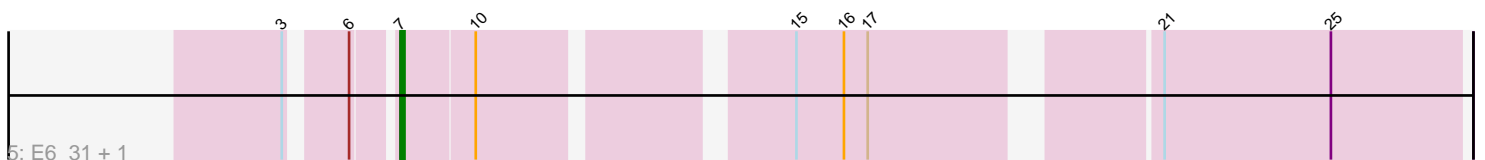
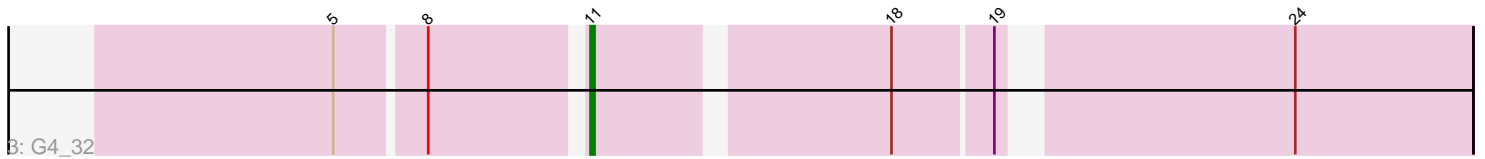
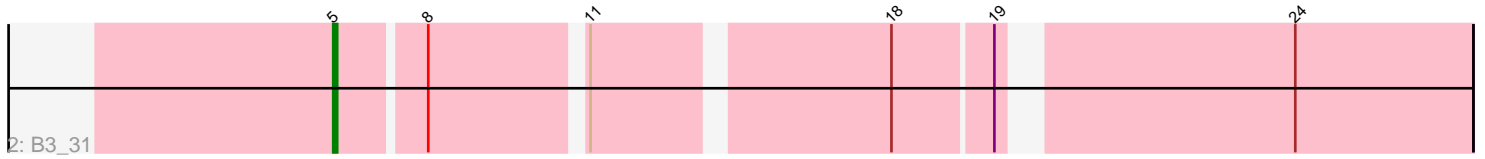


Pham 171768



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 171768 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171768 has 21 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Anatole\_31
- Track 2 : B3\_31
- Track 3 : G4\_32
- Track 4 : B22\_32, Doucette\_34
- Track 5 : E6\_31, E1\_31
- Track 6 : Eileen\_37, Judy\_42, GlobiWarming\_41, RootBeer\_34, Bridgette\_41, ChuckDuck\_42, Peas\_38, Constance\_41
- Track 7 : Kumotta\_33, MargaretKali\_33
- Track 8 : BrayBeast\_36
- Track 9 : BlackSpider\_39
- Track 10 : 32HC\_49, Rem711\_48

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

The start number called the most often in the published annotations is 4, it was called in 9 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BlackSpider\_39, BrayBeast\_36, Bridgette\_41, ChuckDuck\_42, Constance\_41, Eileen\_37, GlobiWarming\_41, Judy\_42, Kumotta\_33, MargaretKali\_33, Peas\_38, RootBeer\_34,

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

- 32HC\_49, Rem711\_48,

Genes that do not have the "Most Annotated" start:

- Anatole\_31, B22\_32, B3\_31, Doucette\_34, E1\_31, E6\_31, G4\_32,

### **Summary by start number:**

Start 3:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 33.3% of time when present

- Phage (with cluster) where this start called: Anatole\_31 (BV),

#### Start 4:

- Found in 14 of 21 ( 66.7% ) of genes in pham
- Manual Annotations of this start: 9 of 17
- Called 85.7% of time when present
- Phage (with cluster) where this start called: BlackSpider\_39 (FN), BrayBeast\_36 (FB), Bridgette\_41 (FA), ChuckDuck\_42 (FA), Constance\_41 (FA), Eileen\_37 (FA), GlobiWarming\_41 (FA), Judy\_42 (FA), Kumotta\_33 (FB), MargaretKali\_33 (FB), Peas\_38 (FA), RootBeer\_34 (FA),

#### Start 5:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 25.0% of time when present
- Phage (with cluster) where this start called: B3\_31 (BV),

#### Start 7:

- Found in 3 of 21 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 66.7% of time when present
- Phage (with cluster) where this start called: E1\_31 (BV), E6\_31 (BW),

#### Start 8:

- Found in 6 of 21 ( 28.6% ) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 66.7% of time when present
- Phage (with cluster) where this start called: 32HC\_49 (Z), B22\_32 (BW), Doucette\_34 (BW), Rem711\_48 (Z),

#### Start 11:

- Found in 4 of 21 ( 19.0% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 25.0% of time when present
- Phage (with cluster) where this start called: G4\_32 (BW),

### **Summary by clusters:**

There are 6 clusters represented in this pham: FB, FA, BV, BW, Z, FN,

#### Info for manual annotations of cluster BV:

- Start number 3 was manually annotated 1 time for cluster BV.
- Start number 5 was manually annotated 1 time for cluster BV.
- Start number 7 was manually annotated 1 time for cluster BV.

#### Info for manual annotations of cluster BW:

- Start number 7 was manually annotated 1 time for cluster BW.
- Start number 8 was manually annotated 2 times for cluster BW.
- Start number 11 was manually annotated 1 time for cluster BW.

#### Info for manual annotations of cluster FA:

- Start number 4 was manually annotated 6 times for cluster FA.

Info for manual annotations of cluster FB:

- Start number 4 was manually annotated 3 times for cluster FB.

Info for manual annotations of cluster Z:

- Start number 8 was manually annotated 1 time for cluster Z.

### **Gene Information:**

Gene: 32HC\_49 Start: 34204, Stop: 34452, Start Num: 8

Candidate Starts for 32HC\_49:

(Start: 4 @34177 has 9 MA's), (Start: 8 @34204 has 3 MA's), (9, 34213), (12, 34267), (13, 34282), (14, 34288), (20, 34363),

Gene: Anatole\_31 Start: 23401, Stop: 23664, Start Num: 3

Candidate Starts for Anatole\_31:

(Start: 3 @23401 has 1 MA's), (6, 23413), (Start: 7 @23422 has 2 MA's), (10, 23440), (15, 23509), (16, 23521), (17, 23527), (21, 23590), (25, 23632),

Gene: B22\_32 Start: 23397, Stop: 23636, Start Num: 8

Candidate Starts for B22\_32:

(1, 23325), (2, 23346), (Start: 5 @23376 has 1 MA's), (Start: 8 @23397 has 3 MA's), (Start: 11 @23433 has 1 MA's), (18, 23502), (19, 23526), (24, 23592),

Gene: B3\_31 Start: 23506, Stop: 23766, Start Num: 5

Candidate Starts for B3\_31:

(Start: 5 @23506 has 1 MA's), (Start: 8 @23527 has 3 MA's), (Start: 11 @23563 has 1 MA's), (18, 23632), (19, 23656), (24, 23722),

Gene: BlackSpider\_39 Start: 28835, Stop: 29107, Start Num: 4

Candidate Starts for BlackSpider\_39:

(Start: 4 @28835 has 9 MA's), (22, 29033), (26, 29084),

Gene: BrayBeast\_36 Start: 26166, Stop: 26420, Start Num: 4

Candidate Starts for BrayBeast\_36:

(Start: 4 @26166 has 9 MA's), (23, 26370),

Gene: Bridgette\_41 Start: 28919, Stop: 29173, Start Num: 4

Candidate Starts for Bridgette\_41:

(Start: 4 @28919 has 9 MA's), (13, 29003), (14, 29009),

Gene: ChuckDuck\_42 Start: 28742, Stop: 28996, Start Num: 4

Candidate Starts for ChuckDuck\_42:

(Start: 4 @28742 has 9 MA's), (13, 28826), (14, 28832),

Gene: Constance\_41 Start: 29071, Stop: 29325, Start Num: 4

Candidate Starts for Constance\_41:

(Start: 4 @29071 has 9 MA's), (13, 29155), (14, 29161),

Gene: Doucette\_34 Start: 24811, Stop: 25050, Start Num: 8

Candidate Starts for Doucette\_34:

(1, 24739), (2, 24760), (Start: 5 @24790 has 1 MA's), (Start: 8 @24811 has 3 MA's), (Start: 11 @24847 has 1 MA's), (18, 24916), (19, 24940), (24, 25006),

Gene: E1\_31 Start: 23422, Stop: 23664, Start Num: 7

Candidate Starts for E1\_31:

(Start: 3 @23401 has 1 MA's), (6, 23413), (Start: 7 @23422 has 2 MA's), (10, 23440), (15, 23509), (16, 23521), (17, 23527), (21, 23590), (25, 23632),

Gene: E6\_31 Start: 23144, Stop: 23386, Start Num: 7

Candidate Starts for E6\_31:

(Start: 3 @23123 has 1 MA's), (6, 23135), (Start: 7 @23144 has 2 MA's), (10, 23162), (15, 23231), (16, 23243), (17, 23249), (21, 23312), (25, 23354),

Gene: Eileen\_37 Start: 27149, Stop: 27403, Start Num: 4

Candidate Starts for Eileen\_37:

(Start: 4 @27149 has 9 MA's), (13, 27233), (14, 27239),

Gene: G4\_32 Start: 24466, Stop: 24669, Start Num: 11

Candidate Starts for G4\_32:

(Start: 5 @24409 has 1 MA's), (Start: 8 @24430 has 3 MA's), (Start: 11 @24466 has 1 MA's), (18, 24535), (19, 24559), (24, 24625),

Gene: GlobiWarming\_41 Start: 28325, Stop: 28579, Start Num: 4

Candidate Starts for GlobiWarming\_41:

(Start: 4 @28325 has 9 MA's), (13, 28409), (14, 28415),

Gene: Judy\_42 Start: 29237, Stop: 29491, Start Num: 4

Candidate Starts for Judy\_42:

(Start: 4 @29237 has 9 MA's), (13, 29321), (14, 29327),

Gene: Kumotta\_33 Start: 26166, Stop: 26420, Start Num: 4

Candidate Starts for Kumotta\_33:

(Start: 4 @26166 has 9 MA's), (14, 26256), (27, 26400), (28, 26409),

Gene: MargaretKali\_33 Start: 25801, Stop: 26055, Start Num: 4

Candidate Starts for MargaretKali\_33:

(Start: 4 @25801 has 9 MA's), (14, 25891), (27, 26035), (28, 26044),

Gene: Peas\_38 Start: 29296, Stop: 29550, Start Num: 4

Candidate Starts for Peas\_38:

(Start: 4 @29296 has 9 MA's), (13, 29380), (14, 29386),

Gene: Rem711\_48 Start: 34188, Stop: 34436, Start Num: 8

Candidate Starts for Rem711\_48:

(Start: 4 @34161 has 9 MA's), (Start: 8 @34188 has 3 MA's), (9, 34197), (12, 34251), (13, 34266), (14, 34272), (20, 34347),

Gene: RootBeer\_34 Start: 25199, Stop: 25453, Start Num: 4

Candidate Starts for RootBeer\_34:

(Start: 4 @25199 has 9 MA's), (13, 25283), (14, 25289),