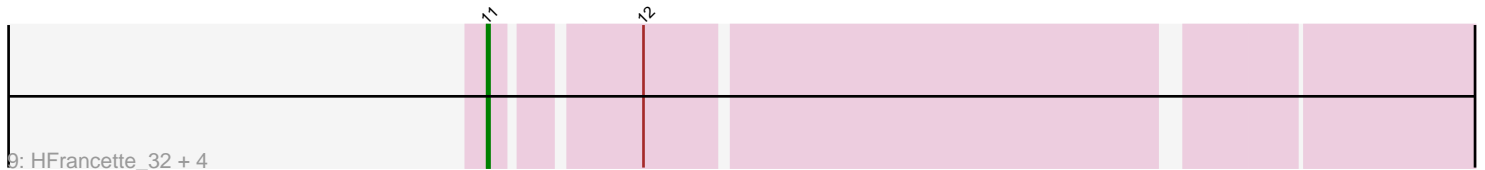
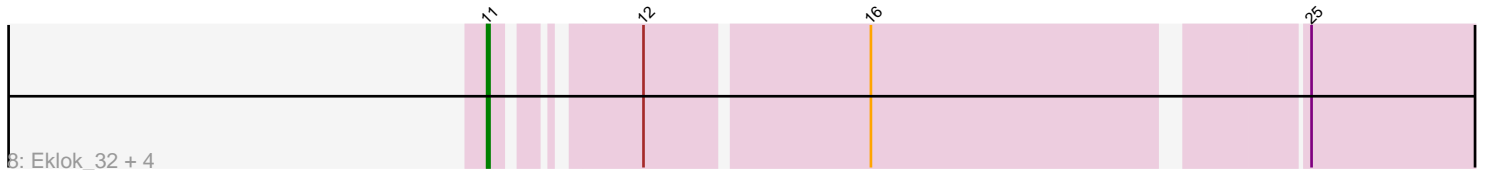


Pham 309301



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 309301 Report

This analysis was run 06/27/26 on database version 652.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 309301 has 20 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Tubberson\_31, SoJo\_31
- Track 2 : Picard\_32, Mojorita\_32
- Track 3 : SV1\_29
- Track 4 : Darolandstone\_31
- Track 5 : Raleigh\_31
- Track 6 : Bioscum\_33, Ididsumtinwong\_33
- Track 7 : PapayaSalad\_32
- Track 8 : Eklok\_32, AxeJC\_31, Eastland\_31, FrumpyGal\_32, Piccadilly\_31
- Track 9 : HFrancette\_32, ArizonaGT\_32, Cumberbatch\_32, Vondra\_30, Schlegelian\_33

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

The start number called the most often in the published annotations is 11, it was called in 14 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ArizonaGT\_32, AxeJC\_31, Bioscum\_33, Cumberbatch\_32, Darolandstone\_31, Eastland\_31, Eklok\_32, FrumpyGal\_32, HFrancette\_32, Ididsumtinwong\_33, Piccadilly\_31, Raleigh\_31, Schlegelian\_33, Vondra\_30,

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

- PapayaSalad\_32,

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

- Mojorita\_32, Picard\_32, SV1\_29, SoJo\_31, Tubberson\_31,

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

Start 10:

- Found in 5 of 20 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 5 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mojorita\_32 (BC1), Picard\_32 (BC1), SV1\_29 (BC1), SoJo\_31 (BC1), Tubberson\_31 (BC1),

Start 11:

- Found in 15 of 20 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 14 of 20
- Called 93.3% of time when present
- Phage (with cluster) where this start called: ArizonaGT\_32 (BP), AxeJC\_31 (BP), Bioscum\_33 (BC3), Cumberbatch\_32 (BP), Darolandstone\_31 (BC2), Eastland\_31 (BP), Eklok\_32 (BP), FrumpyGal\_32 (BP), HFrancette\_32 (BP), Ididsumtinwong\_33 (BC3), Piccadilly\_31 (BP), Raleigh\_31 (BC2), Schlegelian\_33 (BP), Vondra\_30 (BP),

Start 13:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 33.3% of time when present
- Phage (with cluster) where this start called: PapayaSalad\_32 (BC3),

### **Summary by clusters:**

There are 4 clusters represented in this pham: BP, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

- Start number 10 was manually annotated 5 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 11 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 11 was manually annotated 2 times for cluster BC3.
- Start number 13 was manually annotated 1 time for cluster BC3.

Info for manual annotations of cluster BP:

- Start number 11 was manually annotated 10 times for cluster BP.

### **Gene Information:**

Gene: ArizonaGT\_32 Start: 23729, Stop: 23331, Start Num: 11

Candidate Starts for ArizonaGT\_32:

(Start: 11 @23729 has 14 MA's), (12, 23669),

Gene: AxeJC\_31 Start: 23724, Stop: 23344, Start Num: 11

Candidate Starts for AxeJC\_31:

(Start: 11 @23724 has 14 MA's), (12, 23676), (16, 23586), (25, 23415),

Gene: Bioscum\_33 Start: 23831, Stop: 23391, Start Num: 11

Candidate Starts for Bioscum\_33:

(Start: 11 @23831 has 14 MA's), (Start: 13 @23768 has 1 MA's), (28, 23450),

Gene: Cumberbatch\_32 Start: 23729, Stop: 23331, Start Num: 11

Candidate Starts for Cumberbatch\_32:  
(Start: 11 @23729 has 14 MA's), (12, 23669),

Gene: Darolandstone\_31 Start: 25446, Stop: 25000, Start Num: 11

Candidate Starts for Darolandstone\_31:  
(1, 25641), (8, 25521), (Start: 11 @25446 has 14 MA's), (18, 25257), (24, 25131), (27, 25068), (28, 25062),

Gene: Eastland\_31 Start: 23709, Stop: 23329, Start Num: 11

Candidate Starts for Eastland\_31:  
(Start: 11 @23709 has 14 MA's), (12, 23661), (16, 23571), (25, 23400),

Gene: Eklok\_32 Start: 23724, Stop: 23344, Start Num: 11

Candidate Starts for Eklok\_32:  
(Start: 11 @23724 has 14 MA's), (12, 23676), (16, 23586), (25, 23415),

Gene: FrumpyGal\_32 Start: 23709, Stop: 23329, Start Num: 11

Candidate Starts for FrumpyGal\_32:  
(Start: 11 @23709 has 14 MA's), (12, 23661), (16, 23571), (25, 23400),

Gene: HFrancette\_32 Start: 24366, Stop: 23974, Start Num: 11

Candidate Starts for HFrancette\_32:  
(Start: 11 @24366 has 14 MA's), (12, 24312),

Gene: Ididsumtinwong\_33 Start: 23831, Stop: 23391, Start Num: 11

Candidate Starts for Ididsumtinwong\_33:  
(Start: 11 @23831 has 14 MA's), (Start: 13 @23768 has 1 MA's), (28, 23450),

Gene: Mojorita\_32 Start: 24247, Stop: 23783, Start Num: 10

Candidate Starts for Mojorita\_32:  
(Start: 10 @24247 has 5 MA's), (15, 24070), (21, 23983), (22, 23980), (28, 23839),

Gene: PapayaSalad\_32 Start: 24077, Stop: 23700, Start Num: 13

Candidate Starts for PapayaSalad\_32:  
(Start: 11 @24140 has 14 MA's), (Start: 13 @24077 has 1 MA's), (28, 23759),

Gene: Picard\_32 Start: 24445, Stop: 23981, Start Num: 10

Candidate Starts for Picard\_32:  
(Start: 10 @24445 has 5 MA's), (15, 24268), (21, 24181), (22, 24178), (28, 24037),

Gene: Piccadilly\_31 Start: 23708, Stop: 23328, Start Num: 11

Candidate Starts for Piccadilly\_31:  
(Start: 11 @23708 has 14 MA's), (12, 23660), (16, 23570), (25, 23399),

Gene: Raleigh\_31 Start: 25958, Stop: 25512, Start Num: 11

Candidate Starts for Raleigh\_31:  
(2, 26141), (3, 26135), (4, 26126), (5, 26120), (8, 26033), (Start: 11 @25958 has 14 MA's), (18, 25769), (23, 25682), (24, 25643), (27, 25580), (28, 25574),

Gene: SV1\_29 Start: 23178, Stop: 22711, Start Num: 10

Candidate Starts for SV1\_29:

(6, 23301), (7, 23265), (9, 23220), (Start: 10 @23178 has 5 MA's), (15, 23001), (21, 22914), (26, 22782), (28, 22770),

Gene: Schlegelian\_33 Start: 24097, Stop: 23699, Start Num: 11

Candidate Starts for Schlegelian\_33:

(Start: 11 @24097 has 14 MA's), (12, 24037),

Gene: SoJo\_31 Start: 25601, Stop: 25134, Start Num: 10

Candidate Starts for SoJo\_31:

(Start: 10 @25601 has 5 MA's), (14, 25427), (17, 25403), (19, 25355), (20, 25340), (27, 25199), (28, 25193),

Gene: Tubberson\_31 Start: 25606, Stop: 25139, Start Num: 10

Candidate Starts for Tubberson\_31:

(Start: 10 @25606 has 5 MA's), (14, 25432), (17, 25408), (19, 25360), (20, 25345), (27, 25204), (28, 25198),

Gene: Vondra\_30 Start: 23536, Stop: 23138, Start Num: 11

Candidate Starts for Vondra\_30:

(Start: 11 @23536 has 14 MA's), (12, 23476),