

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 136082 Report

This analysis was run 04/28/24 on database version 559.

Pham number 136082 has 10 members, 8 are drafts.

Phages represented in each track:

Track 1: Patbob 31, Bloom 326, Patbob 321, Bloom 39

Track 2 : Talia1610\_323, Talia1610\_36

Track 3 : Mimi\_39, Mimi\_329

Track 4: Racecar\_36, Racecar\_325

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

The start number called the most often in the published annotations is 2, it was called in 2 of the 2 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Racecar\_325, Racecar\_36,

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

Mimi\_329, Mimi\_39, Talia1610\_323, Talia1610\_36,

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

Bloom\_326, Bloom\_39, Patbob\_31, Patbob\_321,

#### Summary by start number:

### Start 2:

- Found in 6 of 10 (60.0%) of genes in pham
- Manual Annotations of this start: 2 of 2
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Racecar\_325 (FC), Racecar\_36 (FC),

#### Start 3.

- Found in 10 of 10 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Bloom\_326 (FC), Bloom\_39 (FC), Mimi\_329 (FC), Mimi\_39 (FC), Patbob\_31 (FC), Patbob\_321 (FC), Talia1610\_323 (FC), Talia1610\_36 (FC).

### Summary by clusters:

There is one cluster represented in this pham: FC

Info for manual annotations of cluster FC:

•Start number 2 was manually annotated 2 times for cluster FC.

#### Gene Information:

Gene: Bloom 326 Start: 189677, Stop: 189871, Start Num: 3 Candidate Starts for Bloom\_326: (3, 189677), (4, 189758), (5, 189833), (6, 189839), (7, 189854), Gene: Bloom 39 Start: 16202, Stop: 16396, Start Num: 3 Candidate Starts for Bloom 39: (3, 16202), (4, 16283), (5, 16358), (6, 16364), (7, 16379),Gene: Mimi 39 Start: 15379, Stop: 15573, Start Num: 3 Candidate Starts for Mimi 39: (1, 15322), (Start: 2 @15331 has 2 MA's), (3, 15379), (4, 15460), (5, 15535), (6, 15541), Gene: Mimi\_329 Start: 188039, Stop: 188233, Start Num: 3 Candidate Starts for Mimi 329: (1, 187982), (Start: 2 @187991 has 2 MA's), (3, 188039), (4, 188120), (5, 188195), (6, 188201), Gene: Patbob 31 Start: 14936, Stop: 15130, Start Num: 3 Candidate Starts for Patbob 31: (3, 14936), (4, 15017), (5, 15092), (6, 15098), (7, 15113),Gene: Patbob 321 Start: 190395, Stop: 190589, Start Num: 3 Candidate Starts for Patbob 321: (3, 190395), (4, 190476), (5, 190551), (6, 190557), (7, 190572),Gene: Racecar 36 Start: 15923, Stop: 16165, Start Num: 2 Candidate Starts for Racecar 36: (1, 15914), (Start: 2 @15923 has 2 MA's), (3, 15971), (4, 16052), (5, 16127), (6, 16133), Gene: Racecar\_325 Start: 189632, Stop: 189874, Start Num: 2 Candidate Starts for Racecar\_325: (1, 189623), (Start: 2 @189632 has 2 MA's), (3, 189680), (4, 189761), (5, 189836), (6, 189842), Gene: Talia1610 323 Start: 189865, Stop: 190059, Start Num: 3 Candidate Starts for Talia1610 323: (1, 189808), (Start: 2 @189817 has 2 MA's), (3, 189865), (4, 189946), (5, 190021), (6, 190027), (7, 190042), Gene: Talia1610 36 Start: 15393, Stop: 15587, Start Num: 3 Candidate Starts for Talia1610 36:

(1, 15336), (Start: 2 @ 15345 has 2 MA's), (3, 15393), (4, 15474), (5, 15549), (6, 15555), (7, 15570),