

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 136072 Report

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

Pham number 136072 has 10 members, 8 are drafts.

Phages represented in each track:

• Track 1 : Talia1610\_302, Mimi\_17, Mimi\_307, Talia1610\_15

• Track 2 : Racecar\_15, Bloom\_16, Bloom\_303, Racecar\_304

Track 3: Patbob\_14, Patbob\_304

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

The start number called the most often in the published annotations is 1, it was called in 2 of the 2 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Bloom\_16, Bloom\_303, Mimi\_17, Mimi\_307, Racecar\_15, Racecar\_304, Talia1610\_15, Talia1610\_302,

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

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

Patbob\_14, Patbob\_304,

### Summary by start number:

#### Start 1:

- Found in 8 of 10 (80.0%) of genes in pham
- Manual Annotations of this start: 2 of 2
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom\_16 (FC), Bloom\_303 (FC), Mimi\_17 (FC), Mimi\_307 (FC), Racecar\_15 (FC), Racecar\_304 (FC), Talia1610\_15 (FC), Talia1610\_302 (FC),

#### Start 2

- Found in 10 of 10 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Patbob 14 (FC), Patbob 304 (FC).

# Summary by clusters:

There is one cluster represented in this pham: FC

Info for manual annotations of cluster FC:

•Start number 1 was manually annotated 2 times for cluster FC.

#### Gene Information:

Gene: Bloom 16 Start: 7224, Stop: 7766, Start Num: 1

Candidate Starts for Bloom\_16:

(Start: 1 @7224 has 2 MA's), (2, 7290), (4, 7521), (5, 7539), (6, 7557), (7, 7569), (8, 7614), (9, 7686),

Gene: Bloom\_303 Start: 180699, Stop: 181241, Start Num: 1

Candidate Starts for Bloom 303:

(Start: 1 @180699 has 2 MA's), (2, 180765), (4, 180996), (5, 181014), (6, 181032), (7, 181044), (8, 181089), (9, 181161),

Gene: Mimi 17 Start: 7142, Stop: 7684, Start Num: 1

Candidate Starts for Mimi\_17:

(Start: 1 @7142 has 2 MA's), (2, 7208), (4, 7439), (5, 7457), (6, 7475), (7, 7487), (8, 7532), (9, 7604),

Gene: Mimi\_307 Start: 179802, Stop: 180344, Start Num: 1

Candidate Starts for Mimi 307:

(Start: 1 @179802 has 2 MA's), (2, 179868), (4, 180099), (5, 180117), (6, 180135), (7, 180147), (8, 180192), (9, 180264),

Gene: Patbob\_14 Start: 7205, Stop: 7681, Start Num: 2

Candidate Starts for Patbob 14:

(2,7205), (3,7394), (5,7454), (8,7529), (9,7601),

Gene: Patbob 304 Start: 182664, Stop: 183140, Start Num: 2

Candidate Starts for Patbob\_304:

(2, 182664), (3, 182853), (5, 182913), (8, 182988), (9, 183060),

Gene: Racecar 15 Start: 7224, Stop: 7766, Start Num: 1

Candidate Starts for Racecar 15:

(Start: 1 @7224 has 2 MA's), (2, 7290), (4, 7521), (5, 7539), (6, 7557), (7, 7569), (8, 7614), (9, 7686),

Gene: Racecar 304 Start: 180933, Stop: 181475, Start Num: 1

Candidate Starts for Racecar\_304:

(Start: 1 @180933 has 2 MA's), (2, 180999), (4, 181230), (5, 181248), (6, 181266), (7, 181278), (8, 181323), (9, 181395),

Gene: Talia1610 302 Start: 181616, Stop: 182158, Start Num: 1

Candidate Starts for Talia1610 302:

(Start: 1 @181616 has 2 MA's), (2, 181682), (4, 181913), (5, 181931), (6, 181949), (7, 181961), (8, 182006), (9, 182078),

Gene: Talia1610\_15 Start: 7144, Stop: 7686, Start Num: 1

Candidate Starts for Talia1610\_15: (Start: 1 @7144 has 2 MA's), (2, 7210), (4, 7441), (5, 7459), (6, 7477), (7, 7489), (8, 7534), (9, 7606),