

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 10540 Report

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

Pham number 10540 has 5 members, 1 are drafts.

Phages represented in each track:

Track 1 : GantcherGoblin\_85

Track 2 : Uzumaki\_86Track 3 : Argan\_86Track 4 : Zeina 87

Track 5: Leathea 89

### 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 2 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Uzumaki 86, Zeina 87,

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

Argan\_86, GantcherGoblin\_85,

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

Leathea 89.

## Summary by start number:

#### Start 4:

- Found in 4 of 5 (80.0%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Uzumaki\_86 (AU6), Zeina\_87 (AU6),

### Start 5:

- Found in 4 of 5 (80.0%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Argan\_86 (AU6), GantcherGoblin\_85 (AU6), Leathea 89 (AU6).

### Summary by clusters:

There is one cluster represented in this pham: AU6

Info for manual annotations of cluster AU6:

- •Start number 4 was manually annotated 2 times for cluster AU6.
- •Start number 5 was manually annotated 2 times for cluster AU6.

#### Gene Information:

Gene: Argan\_86 Start: 50215, Stop: 50451, Start Num: 5

Candidate Starts for Argan\_86:

(1, 50143), (2, 50182), (3, 50197), (Start: 4 @50212 has 2 MA's), (Start: 5 @50215 has 2 MA's), (6, 50263), (7, 50272), (10, 50308), (11, 50311), (13, 50326), (16, 50353), (20, 50398), (21, 50413),

Gene: GantcherGoblin\_85 Start: 50390, Stop: 50614, Start Num: 5

Candidate Starts for GantcherGoblin 85:

(1, 50318), (2, 50357), (3, 50372), (Start: 4 @50387 has 2 MA's), (Start: 5 @50390 has 2 MA's), (6, 50438), (10, 50483), (13, 50501), (16, 50528), (20, 50573), (21, 50588),

Gene: Leathea\_89 Start: 49827, Stop: 50054, Start Num: 5

Candidate Starts for Leathea\_89:

(Start: 5 @ 49827 has 2 MA's), (7, 49884), (8, 49908), (9, 49914), (14, 49941), (15, 49956), (17, 49974), (21, 50025),

Gene: Uzumaki\_86 Start: 50346, Stop: 50585, Start Num: 4

Candidate Starts for Uzumaki 86:

(1, 50277), (2, 50316), (3, 50331), (Start: 4 @50346 has 2 MA's), (Start: 5 @50349 has 2 MA's), (6, 50397), (7, 50406), (10, 50442), (11, 50445), (13, 50460), (16, 50487), (20, 50532), (21, 50547),

Gene: Zeina 87 Start: 50095, Stop: 50319, Start Num: 4

Candidate Starts for Zeina 87:

(Start: 4 @ 50095 has 2 MA's), (6, 50140), (10, 50185), (12, 50197), (14, 50206), (15, 50221), (18, 50054), (40, 50054), (24, 50000)

50251), (19, 50254), (21, 50290),