

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 213434 Report

This analysis was run 02/22/25 on database version 588.

Pham number 213434 has 4 members, 0 are drafts.

Phages represented in each track:

Track 1 : Cosmo\_163, EniyanLRS\_155

Track 2 : MaryV\_148Track 3 : Azrael100\_154

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

The start number called the most often in the published annotations is 5, it was called in 3 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Cosmo\_163, EniyanLRS\_155, MaryV\_148,

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

Azrael100\_154,

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

•

### Summary by start number:

# Start 5:

- Found in 4 of 4 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 4
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Cosmo\_163 (V), EniyanLRS\_155 (V), MaryV\_148 (V),

# Start 6:

- Found in 3 of 4 (75.0%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Azrael100\_154 (V),

#### Summary by clusters:

There is one cluster represented in this pham: V

Info for manual annotations of cluster V:

- •Start number 5 was manually annotated 3 times for cluster V.
- •Start number 6 was manually annotated 1 time for cluster V.

#### Gene Information:

Gene: Azrael100\_154 Start: 72983, Stop: 72756, Start Num: 6 Candidate Starts for Azrael100 154:

(1, 73109), (2, 73058), (3, 73025), (4, 73019), (Start: 5 @73007 has 3 MA's), (Start: 6 @72983 has 1 MA's), (7, 72980), (8, 72968), (9, 72947), (10, 72890), (11, 72881), (12, 72866), (13, 72863), (14, 72839), (15, 72836), (16, 72818), (17, 72797), (18, 72788), (19, 72767),

Gene: Cosmo\_163 Start: 73171, Stop: 72920, Start Num: 5 Candidate Starts for Cosmo 163:

(1, 73273), (2, 73222), (3, 73189), (4, 73183), (Start: 5 @73171 has 3 MA's), (Start: 6 @73147 has 1 MA's), (7, 73144), (8, 73132), (9, 73111), (10, 73054), (11, 73045), (12, 73030), (13, 73027), (14, 73003), (15, 73000), (16, 72982), (17, 72961), (18, 72952), (19, 72931),

Gene: EniyanLRS\_155 Start: 73498, Stop: 73247, Start Num: 5 Candidate Starts for EniyanLRS\_155:

(1, 73600), (2, 73549), (3, 73516), (4, 73510), (Start: 5 @73498 has 3 MA's), (Start: 6 @73474 has 1 MA's), (7, 73471), (8, 73459), (9, 73438), (10, 73381), (11, 73372), (12, 73357), (13, 73354), (14, 73330), (15, 73327), (16, 73309), (17, 73288), (18, 73279), (19, 73258),

Gene: MaryV\_148 Start: 71348, Stop: 71097, Start Num: 5

Candidate Starts for MaryV\_148:

(1, 71450), (2, 71399), (3, 71366), (4, 71360), (Start: 5 @71348 has 3 MA's), (7, 71321), (8, 71309), (9, 71288), (10, 71231), (11, 71222), (12, 71207), (13, 71204), (14, 71180), (15, 71177), (16, 71159), (18, 71129), (19, 71108),