

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 197216 Report

This analysis was run 12/09/24 on database version 580.

Pham number 197216 has 6 members, 0 are drafts.

Phages represented in each track:

Track 1 : MaryV\_90, Wildcat\_90Track 2 : Cosmo\_89, Azrael100\_88

Track 3 : EniyanLRS\_86Track 4 : Kumao 72

## 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 5 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Azrael100\_88, Cosmo\_89, EniyanLRS\_86, MaryV\_90, Wildcat\_90,

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:

• Kumao 72,

### Summary by start number:

### Start 1:

- Found in 1 of 6 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_72 (singleton),

#### Start 2

- Found in 5 of 6 (83.3%) of genes in pham
- Manual Annotations of this start: 5 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100\_88 (V), Cosmo\_89 (V), EniyanLRS\_86 (V), MaryV\_90 (V), Wildcat\_90 (V),

### **Summary by clusters:**

There are 2 clusters represented in this pham: singleton, V,

Info for manual annotations of cluster V:

•Start number 2 was manually annotated 5 times for cluster V.

#### Gene Information:

Gene: Azrael100\_88 Start: 54300, Stop: 54977, Start Num: 2

Candidate Starts for Azrael100\_88:

(Start: 2 @54300 has 5 MA's), (3, 54387), (4, 54402), (6, 54483), (7, 54495), (8, 54606), (10, 54624), (12, 54642), (13, 54702), (14, 54735), (16, 54789), (17, 54816), (18, 54828), (19, 54939), (21, 54954), (22, 54969),

Gene: Cosmo 89 Start: 54301, Stop: 54978, Start Num: 2

Candidate Starts for Cosmo\_89:

(Start: 2 @54301 has 5 MA's), (3, 54388), (4, 54403), (6, 54484), (7, 54496), (8, 54607), (10, 54625), (12, 54643), (13, 54703), (14, 54736), (16, 54790), (17, 54817), (18, 54829), (19, 54940), (21, 54955), (22, 54970),

Gene: EniyanLRS\_86 Start: 54295, Stop: 54972, Start Num: 2

Candidate Starts for EniyanLRS\_86:

(Start: 2 @54295 has 5 MA's), (3, 54382), (4, 54397), (6, 54478), (7, 54490), (8, 54601), (10, 54619), (12, 54637), (13, 54697), (14, 54730), (16, 54784), (18, 54823), (19, 54934), (21, 54949), (22, 54964),

Gene: Kumao\_72 Start: 49482, Stop: 50174, Start Num: 1

Candidate Starts for Kumao 72:

(Start: 1 @49482 has 1 MA's), (3, 49572), (5, 49665), (9, 49827), (11, 49842), (12, 49857), (15, 49938), (20, 50139),

Gene: MaryV 90 Start: 54365, Stop: 55042, Start Num: 2

Candidate Starts for MaryV 90:

(Start: 2 @54365 has 5 MA's), (3, 54452), (4, 54467), (6, 54548), (7, 54560), (8, 54671), (12, 54707), (13, 54767), (14, 54800), (16, 54854), (17, 54881), (18, 54893), (19, 55004), (21, 55019), (22, 55034),

Gene: Wildcat 90 Start: 54375, Stop: 55052, Start Num: 2

Candidate Starts for Wildcat 90:

(Start: 2 @54375 has 5 MA's), (3, 54462), (4, 54477), (6, 54558), (7, 54570), (8, 54681), (12, 54717), (13, 54777), (14, 54810), (16, 54864), (17, 54891), (18, 54903), (19, 55014), (21, 55029), (22, 55044),