

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 216962 Report

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

Pham number 216962 has 6 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Nirvana 342

• Track 2: Kradal\_298, EhyElimayoE\_301, Quantum\_296, Satis\_298

• Track 3 : CN1A 12

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

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

Genes that call this "Most Annotated" start:

• EhyElimayoE\_301, Kradal\_298, Nirvana\_342, Quantum\_296, Satis\_298,

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:

• CN1A 12,

# Summary by start number:

## Start 3:

- Found in 5 of 6 (83.3%) of genes in pham
- Manual Annotations of this start: 4 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_301 (BM), Kradal\_298 (BM), Nirvana\_342 (BM), Quantum\_296 (BM), Satis\_298 (BM),

#### Start 4:

- Found in 1 of 6 (16.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CN1A\_12 (singleton),

### Summary by clusters:

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

Info for manual annotations of cluster BM:

•Start number 3 was manually annotated 4 times for cluster BM.

### Gene Information:

Gene: CN1A 12 Start: 5964, Stop: 6377, Start Num: 4

Candidate Starts for CN1A 12:

(1, 5682), (2, 5778), (4, 5964), (5, 5988), (9, 6012), (10, 6036), (12, 6102), (14, 6111), (16, 6129), (17, 6159), (18, 6168), (20, 6363), (21, 6366),

Gene: EhyElimayoE 301 Start: 165214, Stop: 164768, Start Num: 3

Candidate Starts for EhyElimayoE 301:

(Start: 3 @165214 has 4 MA's), (5, 165184), (6, 165175), (7, 165172), (8, 165163), (11, 165106), (13, 165067), (14, 165064), (19, 164875),

Gene: Kradal\_298 Start: 165211, Stop: 164765, Start Num: 3

Candidate Starts for Kradal 298:

(Start: 3 @165211 has 4 MA's), (5, 165181), (6, 165172), (7, 165169), (8, 165160), (11, 165103), (13, 165064), (14, 165061), (19, 164872),

Gene: Nirvana\_342 Start: 178592, Stop: 178146, Start Num: 3

Candidate Starts for Nirvana 342:

(Start: 3 @178592 has 4 MA's), (5, 178562), (6, 178553), (7, 178550), (8, 178541), (11, 178484), (12, 178451), (14, 178442), (15, 178436), (22, 178184),

Gene: Quantum\_296 Start: 165205, Stop: 164759, Start Num: 3

Candidate Starts for Quantum 296:

(Start: 3 @165205 has 4 MA's), (5, 165175), (6, 165166), (7, 165163), (8, 165154), (11, 165097), (13, 165058), (14, 165055), (19, 164866),

Gene: Satis\_298 Start: 165548, Stop: 165102, Start Num: 3

Candidate Starts for Satis\_298:

(Start: 3 @165548 has 4 MA's), (5, 165518), (6, 165509), (7, 165506), (8, 165497), (11, 165440), (13, 165401), (14, 165398), (19, 165209),