

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 188667 Report

This analysis was run 11/02/24 on database version 579.

Pham number 188667 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1 : Kradal\_50, EhyElimayoE\_50, Quantum\_49

Track 2 : JustBecause\_44, Kela\_45

Track 3 : Nirvana\_55Track 4 : Satis 50

Track 5 : Frankenweenie\_57

### 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 6 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• EhyElimayoE\_50, Frankenweenie\_57, JustBecause\_44, Kela\_45, Kradal\_50, Nirvana\_55, Quantum\_49,

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

• Satis\_50,

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

## Summary by start number:

#### Start 4:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 6 of 7
- Called 87.5% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_50 (BM),
  Frankenweenie\_57 (BM), JustBecause\_44 (BM), Kela\_45 (BM), Kradal\_50 (BM),
  Nirvana\_55 (BM), Quantum\_49 (BM),

#### Start 5:

- Found in 4 of 8 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 7

- Called 25.0% of time when present
- Phage (with cluster) where this start called: Satis\_50 (BM),

### **Summary by clusters:**

There is one cluster represented in this pham: BM

Info for manual annotations of cluster BM:

- •Start number 4 was manually annotated 6 times for cluster BM.
- •Start number 5 was manually annotated 1 time for cluster BM.

#### Gene Information:

Gene: EhyElimayoE 50 Start: 27577, Stop: 28065, Start Num: 4

Candidate Starts for EhyElimayoE 50:

(Start: 4 @27577 has 6 MA's), (Start: 5 @27586 has 1 MA's), (9, 27667), (10, 27700), (11, 27709), (13, 27907), (14, 27949), (15, 27952),

Gene: Frankenweenie 57 Start: 30164, Stop: 30652, Start Num: 4

Candidate Starts for Frankenweenie\_57:

(1, 30113), (2, 30119), (Start: 4 @30164 has 6 MA's), (6, 30197), (7, 30221), (8, 30245), (11, 30296), (14, 30536), (15, 30539), (16, 30545), (17, 30560), (18, 30611), (19, 30614),

Gene: JustBecause\_44 Start: 24800, Stop: 25288, Start Num: 4

Candidate Starts for JustBecause 44:

(3, 24797), (Start: 4 @24800 has 6 MA's), (6, 24833), (7, 24857), (8, 24881), (9, 24890), (11, 24932), (12, 24974), (14, 25172), (15, 25175),

Gene: Kela\_45 Start: 24665, Stop: 25153, Start Num: 4

Candidate Starts for Kela 45:

(3, 24662), (Start: 4 @24665 has 6 MA's), (6, 24698), (7, 24722), (8, 24746), (9, 24755), (11, 24797), (12, 24839), (14, 25037), (15, 25040),

Gene: Kradal\_50 Start: 27577, Stop: 28065, Start Num: 4

Candidate Starts for Kradal\_50:

(Start: 4 @27577 has 6 MA's), (Start: 5 @27586 has 1 MA's), (9, 27667), (10, 27700), (11, 27709), (13, 27907), (14, 27949), (15, 27952),

Gene: Nirvana 55 Start: 29563, Stop: 30051, Start Num: 4

Candidate Starts for Nirvana 55:

(1, 29512), (Start: 4 @29563 has 6 MA's), (6, 29596), (7, 29620), (11, 29695), (14, 29935), (15, 29938), (16, 29944), (17, 29959),

Gene: Quantum\_49 Start: 27577, Stop: 28065, Start Num: 4

Candidate Starts for Quantum\_49:

(Start: 4 @27577 has 6 MA's), (Start: 5 @27586 has 1 MA's), (9, 27667), (10, 27700), (11, 27709), (13, 27907), (14, 27949), (15, 27952),

Gene: Satis 50 Start: 27582, Stop: 28061, Start Num: 5

Candidate Starts for Satis 50:

 $(Start: 4 @27573 \ has 6 \ MA's), \ (Start: 5 @27582 \ has 1 \ MA's), \ (9, 27663), \ (10, 27696), \ (11, 27705), \ (13, 27903), \ (14, 27945), \ (15, 27948),$