

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 87848 Report

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

Pham number 87848 has 8 members, 0 are drafts.

Phages represented in each track:

• Track 1 : G4 61

Track 2 : Jalammah\_73

Track 3 : Ohgeesy\_70Track 4 : Thimann 68

• Track 5 : Beenie\_61, Clark\_66, Samman98\_68

• Track 6 : Dante\_73

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

The start number called the most often in the published annotations is 8, it was called in 6 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beenie\_61, Clark\_66, Jalammah\_73, Ohgeesy\_70, Samman98\_68, Thimann\_68,

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:

Dante\_73, G4\_61,

# Summary by start number:

#### Start 8:

- Found in 6 of 8 (75.0%) of genes in pham
- Manual Annotations of this start: 6 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie\_61 (CZ4), Clark\_66 (CZ4), Jalammah\_73 (CV), Ohgeesy\_70 (CZ), Samman98\_68 (CZ4), Thimann\_68 (CZ4),

### Start 9:

- Found in 2 of 8 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 50.0% of time when present

Phage (with cluster) where this start called: G4\_61 (BW),

Start 10:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Dante\_73 (F1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: F1, BW, CV, CZ4, CZ,

Info for manual annotations of cluster BW:

•Start number 9 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster CV:

•Start number 8 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ:

•Start number 8 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ4:

•Start number 8 was manually annotated 4 times for cluster CZ4.

Info for manual annotations of cluster F1:

•Start number 10 was manually annotated 1 time for cluster F1.

#### Gene Information:

Gene: Beenie 61 Start: 42455, Stop: 43030, Start Num: 8

Candidate Starts for Beenie 61:

(2, 42347), (Start: 8 @ 42455 has 6 MA's), (Start: 10 @ 42473 has 1 MA's), (16, 42551), (18, 42605), (21, 42707), (22, 42716), (27, 42827), (33, 42914),

Gene: Clark\_66 Start: 42218, Stop: 42793, Start Num: 8

Candidate Starts for Clark\_66:

(2, 42110), (Start: 8 @ 42218 has 6 MA's), (Start: 10 @ 42236 has 1 MA's), (16, 42314), (18, 42368), (21, 42470), (22, 42479), (27, 42590), (33, 42677),

Gene: Dante\_73 Start: 48234, Stop: 48875, Start Num: 10

Candidate Starts for Dante 73:

(3, 48090), (4, 48129), (6, 48153), (7, 48171), (Start: 9 @48216 has 1 MA's), (Start: 10 @48234 has 1 MA's), (15, 48306), (24, 48612), (25, 48618), (28, 48699), (32, 48738), (33, 48753),

Gene: G4\_61 Start: 34444, Stop: 35019, Start Num: 9

Candidate Starts for G4 61:

(1, 34267), (5, 34369), (Start: 9 @34444 has 1 MA's), (Start: 10 @34462 has 1 MA's), (11, 34474), (14, 34528), (17, 34552), (18, 34594), (20, 34654), (23, 34717), (26, 34783), (29, 34831), (30, 34837), (31, 34861), (34, 34930),

Gene: Jalammah\_73 Start: 45277, Stop: 45858, Start Num: 8

Candidate Starts for Jalammah\_73:

(Start: 8 @ 45277 has 6 MA's), (14, 45361), (19, 45484), (21, 45529), (33, 45742), (36, 45841),

Gene: Ohgeesy\_70 Start: 46679, Stop: 47254, Start Num: 8

Candidate Starts for Ohgeesy\_70:

(2, 46571), (Start: 8 @ 46679 has 6 MA's), (12, 46712), (13, 46730), (16, 46775), (20, 46889), (21, 46931), (33, 47138), (35, 47204), (37, 47246),

Gene: Samman98\_68 Start: 42321, Stop: 42896, Start Num: 8

Candidate Starts for Samman98\_68:

(2, 42213), (Start: 8 @42321 has 6 MA's), (Start: 10 @42339 has 1 MA's), (16, 42417), (18, 42471), (21, 42573), (22, 42582), (27, 42693), (33, 42780),

Gene: Thimann\_68 Start: 42578, Stop: 43153, Start Num: 8

Candidate Starts for Thimann\_68:

(2, 42470), (Start: 8 @42578 has 6 MA's), (16, 42674), (18, 42728), (22, 42839), (27, 42950), (33, 43037),