

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 168728 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168728 has 12 members, 3 are drafts.

Phages represented in each track:

- Track 1: AreFloNak 49, Nivinsha 48
- Track 2 : Brunswick\_48
- Track 3 : DevitoJr 47
- Track 4 : ScienceWizSam 48
- Track 5 : MiniBagel 47, CapnMurica 45
- Track 6 : Loretta\_59, Ingrid\_62
- Track 7 : Paella\_201, Elver\_197, Qui\_201

## 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 5 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 AreFloNak\_49, Brunswick\_48, CapnMurica\_45, DevitoJr\_47, MiniBagel\_47, Nivinsha\_48, ScienceWizSam\_48,

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

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

• Elver\_197, Ingrid\_62, Loretta\_59, Paella\_201, Qui\_201,

# Summary by start number:

#### Start 3:

- Found in 7 of 12 (58.3%) of genes in pham
- Manual Annotations of this start: 5 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AreFloNak\_49 (AU1), Brunswick\_48 (AU1), CapnMurica\_45 (AU1), DevitoJr\_47 (AU1), MiniBagel\_47 (AU1), Nivinsha\_48 (AU1), ScienceWizSam\_48 (AU1),

#### Start 4:

- Found in 10 of 12 (83.3%) of genes in pham
- Manual Annotation's of this start: 4 of 9
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Elver\_197 (FK), Ingrid\_62 (AU3), Loretta\_59 (AU3), Paella\_201 (FK), Qui\_201 (FK),

### **Summary by clusters:**

There are 3 clusters represented in this pham: AU1, AU3, FK,

Info for manual annotations of cluster AU1:

•Start number 3 was manually annotated 5 times for cluster AU1.

Info for manual annotations of cluster AU3:

•Start number 4 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster FK:

•Start number 4 was manually annotated 2 times for cluster FK.

### Gene Information:

Gene: AreFloNak\_49 Start: 34627, Stop: 34830, Start Num: 3

Candidate Starts for AreFloNak\_49:

(Start: 3 @34627 has 5 MA's), (Start: 4 @34639 has 4 MA's), (8, 34723), (9, 34765),

Gene: Brunswick\_48 Start: 34511, Stop: 34714, Start Num: 3

Candidate Starts for Brunswick\_48:

(Start: 3 @34511 has 5 MA's), (Start: 4 @34523 has 4 MA's), (8, 34607), (9, 34649),

Gene: CapnMurica\_45 Start: 35410, Stop: 35613, Start Num: 3

Candidate Starts for CapnMurica\_45: (Start: 3 @35410 has 5 MA's), (9, 35548),

Gene: DevitoJr\_47 Start: 34848, Stop: 35051, Start Num: 3

Candidate Starts for DevitoJr\_47:

(1, 34815), (Start: 3 @34848 has 5 MA's), (Start: 4 @34860 has 4 MA's), (7, 34902), (8, 34944), (9, 34986),

Gene: Elver 197 Start: 94814, Stop: 94990, Start Num: 4

Candidate Starts for Elver 197:

(2, 94796), (Start: 4 @ 94814 has 4 MA's), (6, 94853),

Gene: Ingrid\_62 Start: 42753, Stop: 42935, Start Num: 4

Candidate Starts for Ingrid\_62:

(Start: 4 @ 42753 has 4 MA's), (5, 42780), (6, 42789), (8, 42837),

Gene: Loretta 59 Start: 42753, Stop: 42935, Start Num: 4

Candidate Starts for Loretta 59:

(Start: 4 @ 42753 has 4 MA's), (5, 42780), (6, 42789), (8, 42837),

Gene: MiniBagel\_47 Start: 35392, Stop: 35595, Start Num: 3

Candidate Starts for MiniBagel\_47:

(Start: 3 @35392 has 5 MA's), (9, 35530),

Gene: Nivinsha\_48 Start: 34627, Stop: 34830, Start Num: 3

Candidate Starts for Nivinsha\_48:

(Start: 3 @34627 has 5 MA's), (Start: 4 @34639 has 4 MA's), (8, 34723), (9, 34765),

Gene: Paella\_201 Start: 95690, Stop: 95866, Start Num: 4

Candidate Starts for Paella\_201:

(2, 95672), (Start: 4 @ 95690 has 4 MA's), (6, 95729),

Gene: Qui\_201 Start: 95687, Stop: 95863, Start Num: 4

Candidate Starts for Qui\_201:

(2, 95669), (Start: 4 @ 95687 has 4 MA's), (6, 95726),

Gene: ScienceWizSam\_48 Start: 34735, Stop: 34938, Start Num: 3

Candidate Starts for ScienceWizSam\_48:

(Start: 3 @34735 has 5 MA's), (Start: 4 @34747 has 4 MA's), (7, 34789), (8, 34831), (9, 34873),