

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 224994 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224994 has 15 members, 3 are drafts.

Phages represented in each track:

- Track 1 : ScoobyDoobyDoo 136
- Track 2 : Phabba\_145Track 3 : Orchid\_78, Kampe\_79, PatrickStar\_79
- Track 4: Towmatter 48, Daredevil 48
- Track 5 : Wrackline 10
- Track 6: Azrael100\_136, MaryV\_129, EniyanLRS\_175, Cosmo\_143, Wildcat\_143
- Track 7 : Kumao 98
- Track 8 : Phroglets\_47

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

The start number called the most often in the published annotations is 15, it was called in 5 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Azrael100\_136, Cosmo\_143, EniyanLRS\_175, MaryV\_129, Wildcat\_143,

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

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

 Daredevil\_48, Kampe\_79, Kumao\_98, Orchid\_78, PatrickStar\_79, Phabba\_145, Phroglets\_47, ScoobyDoobyDoo\_136, Towmatter\_48, Wrackline\_10,

## Summary by start number:

#### Start 5:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kumao\_98 (singleton),

#### Start 10:

Found in 3 of 15 (20.0%) of genes in pham

- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Daredevil\_48 (DL), Towmatter\_48 (DL), Wrackline\_10 (GF),

#### Start 11:

- Found in 1 of 15 (6.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phroglets\_47 (singleton),

#### Start 13:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phabba\_145 (C2), ScoobyDoobyDoo\_136 (C2),

### Start 14:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kampe\_79 (CX), Orchid\_78 (CX), PatrickStar\_79 (CX),

## Start 15:

- Found in 5 of 15 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azrael100\_136 (V), Cosmo\_143 (V), EniyanLRS\_175 (V), MaryV\_129 (V), Wildcat\_143 (V),

### Summary by clusters:

There are 6 clusters represented in this pham: singleton, DL, GF, CX, V, C2,

Info for manual annotations of cluster C2:

•Start number 13 was manually annotated 2 times for cluster C2.

Info for manual annotations of cluster CX:

•Start number 14 was manually annotated 3 times for cluster CX.

Info for manual annotations of cluster DL:

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

Info for manual annotations of cluster V:

•Start number 15 was manually annotated 5 times for cluster V.

## Gene Information:

Gene: Azrael100\_136 Start: 67289, Stop: 67110, Start Num: 15

Candidate Starts for Azrael100\_136:

(Start: 15 @67289 has 5 MA's), (20, 67220), (22, 67178),

Gene: Cosmo\_143 Start: 67452, Stop: 67273, Start Num: 15

Candidate Starts for Cosmo\_143:

(Start: 15 @67452 has 5 MA's), (20, 67383), (22, 67341),

Gene: Daredevil\_48 Start: 40251, Stop: 40478, Start Num: 10

Candidate Starts for Daredevil 48:

(8, 40239), (Start: 10 @40251 has 1 MA's), (19, 40329), (20, 40338),

Gene: EniyanLRS\_175 Start: 67797, Stop: 67618, Start Num: 15

Candidate Starts for EniyanLRS\_175:

(Start: 15 @67797 has 5 MA's), (20, 67728), (22, 67686),

Gene: Kampe\_79 Start: 59645, Stop: 59466, Start Num: 14

Candidate Starts for Kampe\_79:

(7, 59675), (Start: 14 @59645 has 3 MA's),

Gene: Kumao\_98 Start: 61160, Stop: 60951, Start Num: 5

Candidate Starts for Kumao\_98:

(Start: 5 @61160 has 1 MA's), (12, 61115), (16, 61097), (17, 61085), (18, 61082),

Gene: MaryV\_129 Start: 65640, Stop: 65461, Start Num: 15

Candidate Starts for MaryV\_129:

(Start: 15 @65640 has 5 MA's), (20, 65571), (22, 65529),

Gene: Orchid\_78 Start: 59646, Stop: 59467, Start Num: 14

Candidate Starts for Orchid\_78:

(7, 59676), (Start: 14 @59646 has 3 MA's),

Gene: PatrickStar\_79 Start: 59645, Stop: 59466, Start Num: 14

Candidate Starts for PatrickStar 79:

(7, 59675), (Start: 14 @59645 has 3 MA's),

Gene: Phabba\_145 Start: 88454, Stop: 88248, Start Num: 13

Candidate Starts for Phabba\_145:

(Start: 13 @88454 has 2 MA's), (19, 88382), (23, 88337),

Gene: Phroglets\_47 Start: 39923, Stop: 39744, Start Num: 11

Candidate Starts for Phroglets\_47:

(4, 39977), (9, 39935), (11, 39923), (22, 39815),

Gene: ScoobyDoobyDoo 136 Start: 88103, Stop: 87900, Start Num: 13

Candidate Starts for ScoobyDoobyDoo\_136:

(Start: 13 @88103 has 2 MA's), (21, 88010),

Gene: Towmatter\_48 Start: 40088, Stop: 40315, Start Num: 10

Candidate Starts for Towmatter 48:

(8, 40076), (Start: 10 @40088 has 1 MA's), (19, 40166), (20, 40175),

Gene: Wildcat\_143 Start: 67533, Stop: 67354, Start Num: 15

Candidate Starts for Wildcat\_143:

(Start: 15 @67533 has 5 MA's), (20, 67464), (22, 67422),

Gene: Wrackline\_10 Start: 2288, Stop: 2479, Start Num: 10

Candidate Starts for Wrackline\_10:

(1, 2126), (2, 2171), (3, 2213), (6, 2267), (9, 2279), (Start: 10 @2288 has 1 MA's), (22, 2402), (24,

2447), (25, 2474),