

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 164134 Report

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

Pham number 164134 has 9 members, 1 are drafts.

Phages represented in each track:

• Track 1: Phlei 41

Track 2 : ElTiger69\_46

Track 3: Benedict\_47, Jabiru\_45, UnionJack\_45

Track 4 : GenevaB15\_98, Aziz\_96

Track 5 : Rey\_98Track 6 : Finch\_139

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

The start number called the most often in the published annotations is 12, it was called in 4 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Benedict\_47, ElTiger69\_46, Jabiru\_45, UnionJack\_45,

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:

Aziz\_96, Finch\_139, GenevaB15\_98, Phlei\_41, Rey\_98,

## Summary by start number:

### Start 12:

- Found in 4 of 9 (44.4%) of genes in pham
- Manual Annotations of this start: 4 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benedict\_47 (A5), EITiger69\_46 (A5), Jabiru\_45 (A5), UnionJack\_45 (A5),

## Start 13:

- Found in 1 of 9 (11.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

Phage (with cluster) where this start called: Phlei\_41 (A13),

### Start 14:

- Found in 3 of 9 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 3 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aziz\_96 (M2), GenevaB15\_98 (M2), Rey\_98 (M2),

### Start 15:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Finch 139 (singleton),

## **Summary by clusters:**

There are 4 clusters represented in this pham: singleton, A5, A13, M2,

Info for manual annotations of cluster A5:

•Start number 12 was manually annotated 4 times for cluster A5.

Info for manual annotations of cluster M2:

•Start number 14 was manually annotated 3 times for cluster M2.

### Gene Information:

Gene: Aziz\_96 Start: 54973, Stop: 55158, Start Num: 14

Candidate Starts for Aziz 96:

(Start: 14 @54973 has 3 MA's), (18, 55060), (19, 55072), (21, 55081), (22, 55084), (28, 55144), (30, 55147).

Gene: Benedict\_47 Start: 34549, Stop: 34346, Start Num: 12

Candidate Starts for Benedict\_47:

(Start: 12 @34549 has 4 MA's), (20, 34435), (23, 34417), (24, 34393),

Gene: ElTiger69 46 Start: 34531, Stop: 34328, Start Num: 12

Candidate Starts for ElTiger69 46:

(Start: 12 @34531 has 4 MA's), (20, 34417), (23, 34399),

Gene: Finch\_139 Start: 94070, Stop: 94243, Start Num: 15

Candidate Starts for Finch 139:

(1, 93464), (2, 93533), (3, 93578), (5, 93734), (8, 93890), (10, 93947), (Start: 15 @94070 has 1 MA's), (19, 94160), (26, 94232), (27, 94235),

Gene: GenevaB15 98 Start: 54973, Stop: 55158, Start Num: 14

Candidate Starts for GenevaB15 98:

(Start: 14 @54973 has 3 MA's), (18, 55060), (19, 55072), (21, 55081), (22, 55084), (28, 55144), (30, 55147),

Gene: Jabiru\_45 Start: 34404, Stop: 34201, Start Num: 12

Candidate Starts for Jabiru\_45:

(Start: 12 @34404 has 4 MA's), (20, 34290), (23, 34272), (24, 34248),

Gene: Phlei\_41 Start: 35394, Stop: 35197, Start Num: 13

Candidate Starts for Phlei\_41:

(11, 35409), (13, 35394), (16, 35373), (18, 35307), (25, 35235), (26, 35223), (27, 35220), (29, 35214),

Gene: Rey\_98 Start: 54891, Stop: 55076, Start Num: 14

Candidate Starts for Rey\_98:

(4, 54522), (6, 54618), (7, 54630), (9, 54759), (Start: 14 @54891 has 3 MA's), (17, 54912), (18,

54978), (19, 54990), (21, 54999), (28, 55062),

Gene: UnionJack\_45 Start: 34104, Stop: 33901, Start Num: 12

Candidate Starts for UnionJack\_45:

(Start: 12 @34104 has 4 MA's), (20, 33990), (23, 33972), (24, 33948),