

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 152309 Report

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

Pham number 152309 has 13 members, 7 are drafts.

Phages represented in each track:

- Track 1: AreFloNak\_76, Nivinsha\_73
- Track 2 : Tokki\_81
- Track 3: Truckee\_72, Makai\_74
- Track 4 : GantcherGoblin 73
- Track 5 : Zeina 78
- Track 6 : BarbieDoll 79
- Track 7 : Leathea 76
- Track 8 : Sporto\_72
- Track 9 : Jazzy4900\_72
- Track 10 : Arzan 74
- Track 11 : Sunny4976\_71

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

Genes that call this "Most Annotated" start:

AreFloNak\_76, Makai\_74, Nivinsha\_73, Tokki\_81, Truckee\_72,

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

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

• Arzan\_74, BarbieDoll\_79, GantcherGoblin\_73, Jazzy4900\_72, Leathea\_76, Sporto\_72, Sunny4976\_71, Zeina\_78,

### Summary by start number:

#### Start 7:

- Found in 2 of 13 (15.4%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 100.0% of time when present

• Phage (with cluster) where this start called: GantcherGoblin\_73 (AU6), Zeina\_78 (AU6),

# Start 8:

- Found in 1 of 13 (7.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Leathea\_76 (AU6),

## Start 15:

- Found in 5 of 13 (38.5%) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AreFloNak\_76 (AU1), Makai\_74 (AU5), Nivinsha\_73 (AU1), Tokki\_81 (AU2), Truckee\_72 (AU5),

#### Start 16:

- Found in 3 of 13 (23.1%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Arzan\_74 (FI), Sunny4976\_71 (FI),

#### Start 17:

- Found in 1 of 13 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sporto\_72 (AW),

#### Start 19:

- Found in 3 of 13 (23.1%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Jazzy4900 72 (FI),

### Start 20:

- Found in 1 of 13 (7.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BarbieDoll\_79 (AU6),

# **Summary by clusters:**

There are 6 clusters represented in this pham: AU1, AU2, AU5, AW, AU6, FI,

Info for manual annotations of cluster AU2:

•Start number 15 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU5:

•Start number 15 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster AU6:

•Start number 7 was manually annotated 2 times for cluster AU6.

Info for manual annotations of cluster AW:

•Start number 17 was manually annotated 1 time for cluster AW.

#### Gene Information:

Gene: AreFloNak\_76 Start: 47429, Stop: 47785, Start Num: 15

Candidate Starts for AreFloNak\_76:

(Start: 15 @ 47429 has 3 MA's), (26, 47564), (31, 47612), (32, 47624), (36, 47663), (40, 47726),

Gene: Arzan\_74 Start: 46947, Stop: 47339, Start Num: 16

Candidate Starts for Arzan 74:

(1, 46821), (4, 46842), (16, 46947), (19, 46956), (44, 47292),

Gene: BarbieDoll 79 Start: 46967, Stop: 47353, Start Num: 20

Candidate Starts for BarbieDoll\_79:

(3, 46850), (6, 46883), (10, 46907), (12, 46931), (14, 46937), (18, 46961), (20, 46967), (29, 47123), (34, 47180), (35, 47186), (41, 47288), (44, 47306), (45, 47309),

Gene: GantcherGoblin\_73 Start: 45315, Stop: 45701, Start Num: 7

Candidate Starts for GantcherGoblin\_73:

(Start: 7 @ 45315 has 2 MA's), (13, 45360), (39, 45594), (44, 45660),

Gene: Jazzy4900\_72 Start: 47820, Stop: 48170, Start Num: 19

Candidate Starts for Jazzy4900\_72:

(1, 47685), (2, 47691), (4, 47706), (5, 47733), (6, 47736), (9, 47748), (16, 47811), (19, 47820), (25, 47913), (33, 48000), (42, 48111), (44, 48123),

Gene: Leathea 76 Start: 45220, Stop: 45642, Start Num: 8

Candidate Starts for Leathea 76:

(8, 45220), (11, 45250), (23, 45361), (24, 45373), (40, 45574), (44, 45595), (46, 45601),

Gene: Makai\_74 Start: 47957, Stop: 48316, Start Num: 15

Candidate Starts for Makai\_74:

(Start: 15 @ 47957 has 3 MA's), (22, 47996), (26, 48092), (30, 48137), (32, 48152), (43, 48272),

Gene: Nivinsha 73 Start: 47429, Stop: 47785, Start Num: 15

Candidate Starts for Nivinsha 73:

(Start: 15 @47429 has 3 MA's), (26, 47564), (31, 47612), (32, 47624), (36, 47663), (40, 47726),

Gene: Sporto\_72 Start: 46794, Stop: 47192, Start Num: 17

Candidate Starts for Sporto\_72:

(Start: 17 @46794 has 1 MA's), (21, 46815), (28, 46956), (29, 46962), (35, 47031), (38, 47079), (47, 47184),

Gene: Sunny4976 71 Start: 47811, Stop: 48170, Start Num: 16

Candidate Starts for Sunny4976 71:

(1, 47685), (2, 47691), (4, 47706), (5, 47733), (6, 47736), (9, 47748), (16, 47811), (19, 47820), (25, 47913), (33, 48000), (42, 48111), (44, 48123),

Gene: Tokki\_81 Start: 48071, Stop: 48379, Start Num: 15

Candidate Starts for Tokki\_81:

(Start: 15 @48071 has 3 MA's), (27, 48170), (30, 48200), (32, 48215), (36, 48254),

Gene: Truckee\_72 Start: 47742, Stop: 48101, Start Num: 15

Candidate Starts for Truckee\_72:

(Start: 15 @47742 has 3 MA's), (22, 47781), (26, 47877), (30, 47922), (32, 47937), (43, 48057),

Gene: Zeina\_78 Start: 46274, Stop: 46717, Start Num: 7

Candidate Starts for Zeina\_78:

(Start: 7 @ 46274 has 2 MA's), (37, 46592), (39, 46604), (40, 46646), (46, 46676),