

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 149122 Report

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

Pham number 149122 has 14 members, 7 are drafts.

Phages represented in each track:

- Track 1: Talia1610\_91, Bloom\_92, Racecar\_89, Mimi\_94, Patbob\_89
- Track 2 : DunneganBoMo\_82
- Track 3 : Atuin\_86
- Track 4 : SJReid 94
- Track 5 : PauloDiaboli\_95, A3Wally\_95
- Track 6 : Zooman\_80
- Track 7 : Big4\_84
- Track 8 : Cece 78
- Track 9 : Pumpernickel\_92

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

The start number called the most often in the published annotations is 6, it was called in 2 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Big4\_84, Zooman\_80,

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

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

• A3Wally\_95, Atuin\_86, Bloom\_92, Cece\_78, DunneganBoMo\_82, Mimi\_94, Patbob\_89, PauloDiaboli\_95, Pumpernickel\_92, Racecar\_89, SJReid\_94, Talia1610\_91,

# Summary by start number:

### Start 2:

- Found in 1 of 14 (7.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SJReid\_94 (FC),

#### Start 3:

- Found in 7 of 14 (50.0%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin\_86 (FC), Bloom\_92 (FC), DunneganBoMo\_82 (FC), Mimi\_94 (FC), Patbob\_89 (FC), Racecar\_89 (FC), Talia1610\_91 (FC),

### Start 4:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cece\_78 (GD3),

### Start 5:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pumpernickel\_92 (GD4),

#### Start 6:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Big4\_84 (GD2), Zooman\_80 (GD2),

#### Start 7:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: A3Wally\_95 (GD1), PauloDiaboli\_95 (GD1),

## **Summary by clusters:**

There are 5 clusters represented in this pham: GD3, GD1, GD2, FC, GD4,

Info for manual annotations of cluster FC:

•Start number 3 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster GD1:

•Start number 7 was manually annotated 2 times for cluster GD1.

Info for manual annotations of cluster GD2:

•Start number 6 was manually annotated 2 times for cluster GD2.

Info for manual annotations of cluster GD3:

•Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:

•Start number 5 was manually annotated 1 time for cluster GD4.

## Gene Information:

Gene: A3Wally 95 Start: 51157, Stop: 51489, Start Num: 7

Candidate Starts for A3Wally\_95:

(1, 51109), (Start: 7 @51157 has 2 MA's), (8, 51271), (9, 51280), (11, 51322), (15, 51382), (16, 51412),

Gene: Atuin\_86 Start: 52443, Stop: 52784, Start Num: 3

Candidate Starts for Atuin\_86:

(Start: 3 @52443 has 1 MA's), (13, 52650), (18, 52746),

Gene: Big4\_84 Start: 50177, Stop: 50509, Start Num: 6

Candidate Starts for Big4\_84:

(Start: 6 @50177 has 2 MA's), (8, 50291),

Gene: Bloom\_92 Start: 53844, Stop: 54185, Start Num: 3

Candidate Starts for Bloom\_92:

(Start: 3 @53844 has 1 MA's), (13, 54051),

Gene: Cece\_78 Start: 46135, Stop: 46464, Start Num: 4

Candidate Starts for Cece\_78:

(Start: 4 @ 46135 has 1 MA's), (8, 46246), (12, 46321), (17, 46408),

Gene: DunneganBoMo\_82 Start: 49289, Stop: 49633, Start Num: 3

Candidate Starts for DunneganBoMo 82:

(Start: 3 @49289 has 1 MA's), (13, 49499), (18, 49595),

Gene: Mimi\_94 Start: 53191, Stop: 53532, Start Num: 3

Candidate Starts for Mimi\_94:

(Start: 3 @53191 has 1 MA's), (13, 53398),

Gene: Patbob 89 Start: 54063, Stop: 54404, Start Num: 3

Candidate Starts for Patbob\_89:

(Start: 3 @54063 has 1 MA's), (13, 54270),

Gene: PauloDiaboli 95 Start: 50514, Stop: 50846, Start Num: 7

Candidate Starts for PauloDiaboli\_95:

(1, 50466), (Start: 7 @50514 has 2 MA's), (8, 50628), (9, 50637), (11, 50679), (15, 50739), (16, 50769),

Gene: Pumpernickel\_92 Start: 51885, Stop: 52220, Start Num: 5

Candidate Starts for Pumpernickel\_92:

(Start: 5 @ 51885 has 1 MA's), (8, 52002), (11, 52053), (14, 52098),

Gene: Racecar 89 Start: 53844, Stop: 54185, Start Num: 3

Candidate Starts for Racecar\_89:

(Start: 3 @53844 has 1 MA's), (13, 54051),

Gene: SJReid\_94 Start: 55142, Stop: 55498, Start Num: 2

Candidate Starts for SJReid\_94:

(2, 55142), (8, 55283), (10, 55328), (18, 55454),

Gene: Talia1610\_91 Start: 53209, Stop: 53550, Start Num: 3

Candidate Starts for Talia1610\_91:

(Start: 3 @53209 has 1 MA's), (13, 53416),

Gene: Zooman\_80 Start: 48831, Stop: 49163, Start Num: 6

Candidate Starts for Zooman\_80:

(Start: 6 @48831 has 2 MA's), (8, 48945), (9, 48954),