

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 158305 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158305 has 12 members, 4 are drafts.

Phages represented in each track:

Track 1 : Warren\_65

• Track 2 : Blett 65

Track 3 : MenE\_69

• Track 4 : Bush\_68

• Track 5 : Antuna 67

Track 6 : Phonegingi\_67

Track 7 : Pickles13 65

Track 8 : Dropshot\_65, Appa\_65Track 9 : DelaGarza 2, Lesiram 2

• Track 10 : Teng\_2

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

The start number called the most often in the published annotations is 11, it was called in 3 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Blett\_65, Phonegingi\_67, Warren\_65,

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

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

• Antuna\_67, Appa\_65, Bush\_68, DelaGarza\_2, Dropshot\_65, Lesiram\_2, MenE\_69, Pickles13\_65, Teng\_2,

## Summary by start number:

#### Start 9:

- Found in 1 of 12 (8.3%) 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: Pickles13\_65 (GA),

### Start 10:

- Found in 3 of 12 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Appa\_65 (GA), Dropshot\_65 (GA), MenE\_69 (GA),

## Start 11:

- Found in 3 of 12 (25.0%) 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: Blett\_65 (GA), Phonegingi\_67 (GA),
  Warren\_65 (GA),

### Start 14:

- Found in 1 of 12 (8.3%) 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: Antuna\_67 (GA),

#### Start 15:

- Found in 7 of 12 (58.3%) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Bush\_68 (GA),

#### Start 17:

- Found in 3 of 12 (25.0%) 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: DelaGarza\_2 (GF), Lesiram\_2 (GF), Teng\_2 (GF),

## **Summary by clusters:**

There are 2 clusters represented in this pham: GF, GA,

Info for manual annotations of cluster GA:

- •Start number 9 was manually annotated 1 time for cluster GA.
- •Start number 10 was manually annotated 2 times for cluster GA.
- •Start number 11 was manually annotated 3 times for cluster GA.
- •Start number 14 was manually annotated 1 time for cluster GA.

Info for manual annotations of cluster GF:

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

#### Gene Information:

Gene: Antuna\_67 Start: 38444, Stop: 38728, Start Num: 14 Candidate Starts for Antuna 67:

(4, 38369), (6, 38378), (7, 38387), (8, 38393), (12, 38420), (Start: 14 @38444 has 1 MA's), (15, 38456), (19, 38501), (24, 38540), (25, 38549), (27, 38567), (28, 38573), (29, 38606), (30, 38615), (32, 38687), (34, 38717),

Gene: Appa\_65 Start: 38092, Stop: 38397, Start Num: 10

Candidate Starts for Appa 65:

(1, 37717), (2, 37747), (3, 37960), (Start: 10 @38092 has 2 MA's), (15, 38125), (16, 38131), (19, 38170), (24, 38215), (25, 38224), (27, 38242), (28, 38248), (32, 38362), (33, 38383),

Gene: Blett\_65 Start: 38245, Stop: 38562, Start Num: 11

Candidate Starts for Blett 65:

(5, 38203), (Start: 11 @38245 has 3 MA's), (15, 38278), (19, 38323), (21, 38353), (24, 38368), (25, 38377), (27, 38395), (28, 38401), (32, 38524), (34, 38554),

Gene: Bush\_68 Start: 38316, Stop: 38591, Start Num: 15

Candidate Starts for Bush\_68:

(13, 38304), (15, 38316), (19, 38361), (24, 38406), (25, 38415), (27, 38433), (28, 38439), (32, 38553), (33, 38574),

Gene: DelaGarza\_2 Start: 468, Stop: 755, Start Num: 17

Candidate Starts for DelaGarza\_2:

(Start: 17 @468 has 1 MA's), (20, 504), (23, 534), (26, 552), (32, 720),

Gene: Dropshot\_65 Start: 37930, Stop: 38238, Start Num: 10

Candidate Starts for Dropshot 65:

(1, 37555), (2, 37585), (3, 37798), (Start: 10 @37930 has 2 MA's), (15, 37963), (16, 37969), (19, 38008), (24, 38053), (25, 38062), (27, 38080), (28, 38086), (32, 38200), (33, 38221),

Gene: Lesiram\_2 Start: 468, Stop: 731, Start Num: 17

Candidate Starts for Lesiram\_2:

(Start: 17 @468 has 1 MA's), (20, 504), (23, 534), (26, 552), (32, 696),

Gene: MenE\_69 Start: 37970, Stop: 38275, Start Num: 10

Candidate Starts for MenE 69:

(Start: 10 @37970 has 2 MA's), (16, 38009), (19, 38048), (24, 38087), (25, 38096), (27, 38114), (28, 38120), (29, 38153), (30, 38162), (32, 38234), (34, 38264),

Gene: Phonegingi\_67 Start: 38811, Stop: 39134, Start Num: 11

Candidate Starts for Phonegingi\_67:

(5, 38769), (Start: 11 @38811 has 3 MA's), (15, 38844), (16, 38850), (24, 38937), (25, 38946), (27, 38964), (28, 38970), (32, 39093), (34, 39123),

Gene: Pickles13\_65 Start: 38714, Stop: 39004, Start Num: 9

Candidate Starts for Pickles13 65:

(Start: 9 @38714 has 1 MA's), (15, 38750), (16, 38756), (21, 38825), (24, 38840), (25, 38849), (27, 38867), (28, 38873), (31, 38987),

Gene: Teng\_2 Start: 468, Stop: 755, Start Num: 17

Candidate Starts for Teng\_2:

(Start: 17 @468 has 1 MA's), (18, 477), (20, 504), (22, 528), (23, 534), (26, 552), (32, 720),

Gene: Warren 65 Start: 38108, Stop: 38425, Start Num: 11

Candidate Starts for Warren\_65:

 $(5,\,38066),\,(Start:\,11\,\,@\,38108\,\,has\,\,3\,\,MA's),\,(19,\,38186),\,(21,\,38216),\,(24,\,38231),\,(25,\,38240),\,(27,\,38258),\,(28,\,38264),\,(32,\,38387),\,(34,\,38417),$