

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 164057 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164057 has 12 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Puppers\_61
- Track 2 : Widow\_61
- Track 3 : Sour 66
- Track 4 : NHagos\_65
- Track 5 : Blett 5
- Track 6 : Antuna\_4
- Track 7 : Dropshot 4
- Track 8 : Appa 4
- Track 9 : MenE 5
- Track 10 : Phonegingi\_4
- Track 11 : Warren\_5
- Track 12 : Bush\_5

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

The start number called the most often in the published annotations is 13, it was called in 3 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Antuna\_4, Blett\_5, Bush\_5, MenE\_5, Warren\_5,

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

Appa\_4, Dropshot\_4,

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

NHagos\_65, Phonegingi\_4, Puppers\_61, Sour\_66, Widow\_61,

# Summary by start number:

### Start 8:

- Found in 3 of 12 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Dropshot\_4 (GA),

#### Start 10:

- Found in 4 of 12 (33.3%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Appa\_4 (GA), Phonegingi\_4 (GA),

### Start 11:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NHagos\_65 (DR),

#### Start 12:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sour\_66 (DR),

## Start 13:

- Found in 7 of 12 (58.3%) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 71.4% of time when present
- Phage (with cluster) where this start called: Antuna\_4 (GA), Blett\_5 (GA), Bush\_5 (GA), MenE\_5 (GA), Warren\_5 (GA),

#### Start 14:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppers 61 (CD), Widow 61 (CD),

#### Summary by clusters:

There are 3 clusters represented in this pham: DR, GA, CD,

Info for manual annotations of cluster CD:

•Start number 14 was manually annotated 2 times for cluster CD.

Info for manual annotations of cluster DR:

- •Start number 11 was manually annotated 1 time for cluster DR.
- •Start number 12 was manually annotated 1 time for cluster DR.

# Info for manual annotations of cluster GA:

- •Start number 8 was manually annotated 1 time for cluster GA.
- •Start number 10 was manually annotated 2 times for cluster GA.
- •Start number 13 was manually annotated 3 times for cluster GA.

#### Gene Information:

Gene: Antuna\_4 Start: 880, Stop: 993, Start Num: 13

Candidate Starts for Antuna 4:

(Start: 8 @859 has 1 MA's), (Start: 10 @865 has 2 MA's), (Start: 13 @880 has 3 MA's), (21, 982),

Gene: Appa\_4 Start: 883, Stop: 1011, Start Num: 10

Candidate Starts for Appa\_4:

(Start: 8 @877 has 1 MA's), (Start: 10 @883 has 2 MA's), (Start: 13 @898 has 3 MA's), (21, 1000),

Gene: Blett 5 Start: 1053, Stop: 1166, Start Num: 13

Candidate Starts for Blett\_5:

(1, 759), (2, 771), (6, 990), (9, 1035), (Start: 13 @1053 has 3 MA's), (21, 1155),

Gene: Bush 5 Start: 1059, Stop: 1172, Start Num: 13

Candidate Starts for Bush\_5:

(1, 765), (6, 996), (9, 1041), (Start: 13 @1059 has 3 MA's), (21, 1161),

Gene: Dropshot\_4 Start: 877, Stop: 1011, Start Num: 8

Candidate Starts for Dropshot 4:

(Start: 8 @877 has 1 MA's), (Start: 10 @883 has 2 MA's), (Start: 13 @898 has 3 MA's), (21, 1000),

Gene: MenE\_5 Start: 1059, Stop: 1172, Start Num: 13

Candidate Starts for MenE 5:

(6, 996), (9, 1041), (Start: 13 @ 1059 has 3 MA's), (21, 1161),

Gene: NHagos\_65 Start: 52079, Stop: 52204, Start Num: 11

Candidate Starts for NHagos\_65:

(7, 52037), (Start: 11 @52079 has 1 MA's), (15, 52097),

Gene: Phonegingi 4 Start: 872, Stop: 1000, Start Num: 10

Candidate Starts for Phonegingi\_4:

(Start: 10 @872 has 2 MA's), (20, 917), (21, 989),

Gene: Puppers\_61 Start: 41680, Stop: 41793, Start Num: 14

Candidate Starts for Puppers\_61:

(3, 41518), (4, 41533), (5, 41575), (Start: 14 @41680 has 2 MA's), (18, 41692), (19, 41695), (22, 41788),

Gene: Sour\_66 Start: 54996, Stop: 55142, Start Num: 12

Candidate Starts for Sour\_66:

(Start: 12 @54996 has 1 MA's), (17, 55020), (23, 55128), (24, 55131),

Gene: Warren\_5 Start: 1062, Stop: 1190, Start Num: 13

Candidate Starts for Warren\_5:

(1, 768), (6, 999), (9, 1044), (Start: 13 @ 1062 has 3 MA's), (16, 1077), (21, 1179),

Gene: Widow\_61 Start: 42226, Stop: 42339, Start Num: 14

Candidate Starts for Widow\_61:

(3, 42064), (4, 42079), (5, 42121), (Start: 14 @42226 has 2 MA's), (19, 42241), (22, 42334),