

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 216630 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216630 has 17 members, 4 are drafts.

Phages represented in each track:

- Track 1: Ouroboros 44
- Track 2 : Aquarius  $\overline{47}$
- Track 3 : P1.1\_44
- Track 4 : Supernova 44
- Track 5 : Solid 44
- Track 6 : P107A\_44
- Track 7: P106I 45, P106M 44, P106L 44, P106A 44, P106C 45
- Track 8 : PHL113M01\_43
- Track 9 : PHL037M02\_44
- Track 10 : P108C\_43
- Track 11 : P14.4\_46
- Track 12 : PA6\_47
- Track 13 : PHL067M10\_44

## 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 9 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Ouroboros\_44, P106A\_44, P106C\_45, P106I\_45, P106L\_44, P106M\_44, P107A\_44, P14.4\_46, PA6\_47, PHL113M01\_43, Solid\_44,

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

• P108C\_43,

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

Aquarius\_47, P1.1\_44, PHL037M02\_44, PHL067M10\_44, Supernova\_44,

### **Summary by start number:**

### Start 5:

- Found in 8 of 17 (47.1%) of genes in pham
- Manual Annotations of this start: 1 of 13

- Called 12.5% of time when present
- Phage (with cluster) where this start called: P108C\_43 (BU),

### Start 6:

- Found in 12 of 17 (70.6%) of genes in pham
- Manual Annotations of this start: 9 of 13
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Ouroboros\_44 (BU), P106A\_44 (BU), P106C\_45 (BU), P106I\_45 (BU), P106L\_44 (BU), P106M\_44 (BU), P107A\_44 (BU), P14.4\_46 (BU), PA6\_47 (BU), PHL113M01\_43 (BU), Solid\_44 (BU),

#### Start 7:

- Found in 5 of 17 (29.4%) of genes in pham
- Manual Annotations of this start: 3 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aquarius\_47 (BU), P1.1\_44 (BU), PHL037M02\_44 (BU), PHL067M10\_44 (BU), Supernova\_44 (BU),

# Summary by clusters:

There is one cluster represented in this pham: BU

Info for manual annotations of cluster BU:

- •Start number 5 was manually annotated 1 time for cluster BU.
- •Start number 6 was manually annotated 9 times for cluster BU.
- •Start number 7 was manually annotated 3 times for cluster BU.

#### Gene Information:

Gene: Aquarius\_47 Start: 29564, Stop: 29728, Start Num: 7

Candidate Starts for Aquarius\_47:

(2, 29477), (Start: 7 @ 29564 has 3 MA's),

Gene: Ouroboros\_44 Start: 28944, Stop: 29105, Start Num: 6

Candidate Starts for Ouroboros\_44:

(Start: 5 @28923 has 1 MA's), (Start: 6 @28944 has 9 MA's), (8, 28962), (12, 29016),

Gene: P1.1 44 Start: 28801, Stop: 28947, Start Num: 7

Candidate Starts for P1.1 44:

(1, 28681), (4, 28753), (Start: 7 @28801 has 3 MA's),

Gene: P106A\_44 Start: 28992, Stop: 29153, Start Num: 6

Candidate Starts for P106A\_44:

(2, 28917), (Start: 6 @28992 has 9 MA's), (8, 29010), (11, 29019),

Gene: P106C\_45 Start: 29079, Stop: 29240, Start Num: 6

Candidate Starts for P106C 45:

(2, 29004), (Start: 6 @ 29079 has 9 MA's), (8, 29097), (11, 29106),

Gene: P106I\_45 Start: 28908, Stop: 29069, Start Num: 6

Candidate Starts for P106I\_45:

(2, 28833), (Start: 6 @28908 has 9 MA's), (8, 28926), (11, 28935),

Gene: P106L\_44 Start: 29079, Stop: 29240, Start Num: 6

Candidate Starts for P106L\_44:

(2, 29004), (Start: 6 @ 29079 has 9 MA's), (8, 29097), (11, 29106),

Gene: P106M\_44 Start: 29079, Stop: 29240, Start Num: 6

Candidate Starts for P106M 44:

(2, 29004), (Start: 6 @ 29079 has 9 MA's), (8, 29097), (11, 29106),

Gene: P107A 44 Start: 28903, Stop: 29082, Start Num: 6

Candidate Starts for P107A 44:

(Start: 5 @ 28882 has 1 MA's), (Start: 6 @ 28903 has 9 MA's), (8, 28921), (13, 29044),

Gene: P108C\_43 Start: 28911, Stop: 29093, Start Num: 5

Candidate Starts for P108C\_43:

(Start: 5 @ 28911 has 1 MA's), (Start: 6 @ 28932 has 9 MA's), (8, 28950),

Gene: P14.4 46 Start: 29167, Stop: 29328, Start Num: 6

Candidate Starts for P14.4\_46:

(Start: 5 @ 29146 has 1 MA's), (Start: 6 @ 29167 has 9 MA's),

Gene: PA6 47 Start: 29190, Stop: 29369, Start Num: 6

Candidate Starts for PA6\_47:

(Start: 5 @ 29169 has 1 MA's), (Start: 6 @ 29190 has 9 MA's), (9, 29214),

Gene: PHL037M02\_44 Start: 28907, Stop: 29077, Start Num: 7

Candidate Starts for PHL037M02 44:

(Start: 7 @28907 has 3 MA's),

Gene: PHL067M10\_44 Start: 28840, Stop: 28986, Start Num: 7

Candidate Starts for PHL067M10 44:

(2, 28753), (Start: 7 @28840 has 3 MA's), (10, 28852),

Gene: PHL113M01\_43 Start: 28649, Stop: 28810, Start Num: 6

Candidate Starts for PHL113M01\_43:

(3, 28580), (Start: 5 @28628 has 1 MA's), (Start: 6 @28649 has 9 MA's), (8, 28667),

Gene: Solid\_44 Start: 28878, Stop: 29039, Start Num: 6

Candidate Starts for Solid\_44:

(Start: 5 @28857 has 1 MA's), (Start: 6 @28878 has 9 MA's), (12, 28950),

Gene: Supernova\_44 Start: 28670, Stop: 28816, Start Num: 7

Candidate Starts for Supernova 44:

(2, 28583), (Start: 5 @ 28634 has 1 MA's), (Start: 7 @ 28670 has 3 MA's),