

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 216589 Report

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

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 216589 has 19 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Euratis 44
- Track 2 : TG1\_38
- Track 3 : Vash 42
- Track 4 : Shawty 42
- Track 5 : Lilbooboo 43
- Track 6 : Heather 45
- Track 7 : Diane 77
- Track 8 : Celery\_70
- Track 9 : Vanséggelen\_72
- Track 10 : Provolone\_68, Kaine\_67, Alsaber\_67
- Track 11 : ElGato 68
- Track 12: Saftant 65
- Track 13 : Pavo\_68, Dexers\_65, Conan\_68
- Track 14 : Rowa 47
- Track 15 : Ponzi\_10

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

The start number called the most often in the published annotations is 8, it was called in 11 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Alsaber\_67, Celery\_70, Conan\_68, Dexers\_65, ElGato\_68, Kaine\_67, Pavo\_68, Ponzi\_10, Provolone\_68, Saftant\_65, Shawty\_42, TG1\_38, Vanseggelen\_72,

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

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

Diane\_77, Euratis\_44, Heather\_45, Lilbooboo\_43, Rowa\_47, Vash\_42,

# Summary by start number:

#### Start 5:

- Found in 2 of 19 (10.5%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Heather\_45 (BB2), Rowa\_47 (BL),

#### Start 6:

- Found in 3 of 19 (15.8%) of genes in pham
- Manual Annotations of this start: 3 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Euratis\_44 (BB1), Lilbooboo\_43 (BB1), Vash\_42 (BB1),

#### Start 8:

- Found in 13 of 19 (68.4%) of genes in pham
- Manual Annotation's of this start: 11 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alsaber\_67 (BD3), Celery\_70 (BD3), Conan\_68 (BD3), Dexers\_65 (BD3), ElGato\_68 (BD3), Kaine\_67 (BD3), Pavo\_68 (BD3), Ponzi\_10 (singleton), Provolone\_68 (BD3), Saftant\_65 (BD3), Shawty\_42 (BB1), TG1\_38 (BB1), Vanseggelen\_72 (BD3),

### Start 12:

- Found in 2 of 19 ( 10.5% ) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Diane\_77 (BD2),

#### Summary by clusters:

There are 6 clusters represented in this pham: singleton, BL, BD3, BD2, BB2, BB1,

Info for manual annotations of cluster BB1:

- •Start number 6 was manually annotated 3 times for cluster BB1.
- •Start number 8 was manually annotated 2 times for cluster BB1.

Info for manual annotations of cluster BB2:

•Start number 5 was manually annotated 1 time for cluster BB2.

Info for manual annotations of cluster BD2:

•Start number 12 was manually annotated 1 time for cluster BD2.

Info for manual annotations of cluster BD3:

•Start number 8 was manually annotated 8 times for cluster BD3.

Info for manual annotations of cluster BL:

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

### Gene Information:

Gene: Alsaber 67 Start: 43932, Stop: 43747, Start Num: 8

Candidate Starts for Alsaber\_67:

(1, 44124), (Start: 8 @ 43932 has 11 MA's), (18, 43896), (33, 43776),

Gene: Celery\_70 Start: 43835, Stop: 43656, Start Num: 8

Candidate Starts for Celery\_70:

(Start: 8 @ 43835 has 11 MA's), (14, 43811), (17, 43802), (26, 43724), (33, 43685),

Gene: Conan\_68 Start: 44184, Stop: 43999, Start Num: 8

Candidate Starts for Conan\_68:

(Start: 8 @44184 has 11 MA's), (18, 44148), (33, 44028),

Gene: Dexers\_65 Start: 44158, Stop: 43973, Start Num: 8

Candidate Starts for Dexers 65:

(Start: 8 @44158 has 11 MA's), (18, 44122), (33, 44002),

Gene: Diane\_77 Start: 48864, Stop: 48694, Start Num: 12

Candidate Starts for Diane 77:

(7, 48882), (Start: 12 @48864 has 1 MA's), (24, 48783), (32, 48729), (33, 48723),

Gene: ElGato 68 Start: 44061, Stop: 43876, Start Num: 8

Candidate Starts for ElGato\_68:

(1, 44253), (2, 44145), (Start: 8 @44061 has 11 MA's), (18, 44025), (33, 43905),

Gene: Euratis\_44 Start: 32135, Stop: 32332, Start Num: 6

Candidate Starts for Euratis\_44:

(4, 32093), (Start: 6 @32135 has 3 MA's), (13, 32156), (16, 32168), (18, 32174), (22, 32216),

Gene: Heather\_45 Start: 33301, Stop: 33516, Start Num: 5

Candidate Starts for Heather 45:

(Start: 5 @ 33301 has 2 MA's), (18, 33346), (19, 33355), (31, 33460), (33, 33469),

Gene: Kaine\_67 Start: 43956, Stop: 43771, Start Num: 8

Candidate Starts for Kaine\_67:

(1, 44148), (Start: 8 @ 43956 has 11 MA's), (18, 43920), (33, 43800),

Gene: Lilbooboo\_43 Start: 32803, Stop: 33003, Start Num: 6

Candidate Starts for Lilbooboo\_43:

(4, 32761), (Start: 6 @32803 has 3 MA's), (13, 32824), (16, 32836), (18, 32842), (26, 32911), (33, 32962),

Gene: Pavo\_68 Start: 44132, Stop: 43947, Start Num: 8

Candidate Starts for Pavo 68:

(Start: 8 @ 44132 has 11 MA's), (18, 44096), (33, 43976),

Gene: Ponzi\_10 Start: 7385, Stop: 7191, Start Num: 8

Candidate Starts for Ponzi\_10:

(Start: 8 @7385 has 11 MA's), (11, 7373), (18, 7349), (20, 7337), (21, 7322), (27, 7271), (33, 7223),

Gene: Provolone\_68 Start: 44273, Stop: 44088, Start Num: 8

Candidate Starts for Provolone 68:

(1, 44465), (Start: 8 @ 44273 has 11 MA's), (18, 44237), (33, 44117),

Gene: Rowa\_47 Start: 34523, Stop: 34726, Start Num: 5

Candidate Starts for Rowa\_47:

(Start: 5 @ 34523 has 2 MA's), (9, 34538), (18, 34568), (28, 34667), (30, 34676),

Gene: Saftant\_65 Start: 44014, Stop: 43835, Start Num: 8

Candidate Starts for Saftant 65:

(2, 44098), (Start: 8 @44014 has 11 MA's), (10, 44005), (Start: 12 @43999 has 1 MA's), (28, 43879),

(33, 43864),

Gene: Shawty\_42 Start: 32427, Stop: 32624, Start Num: 8

Candidate Starts for Shawty\_42:

(Start: 8 @ 32427 has 11 MA's), (15, 32454), (24, 32526), (29, 32568), (33, 32586),

Gene: TG1\_38 Start: 31372, Stop: 31563, Start Num: 8

Candidate Starts for TG1\_38:

(Start: 8 @31372 has 11 MA's), (23, 31465), (25, 31477), (27, 31486), (28, 31510), (33, 31531),

Gene: Vanseggelen\_72 Start: 43995, Stop: 43816, Start Num: 8

Candidate Starts for Vanseggelen\_72:

(3, 44058), (Start: 8 @43995 has 11 MA's), (33, 43845),

Gene: Vash\_42 Start: 32602, Stop: 32802, Start Num: 6

Candidate Starts for Vash\_42:

(Start: 6 @ 32602 has 3 MA's), (13, 32623), (16, 32635), (18, 32641), (26, 32710), (33, 32761),