

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 225054 Report

This analysis was run 03/28/25 on database version 593.

Pham number 225054 has 12 members, 3 are drafts.

Phages represented in each track:

Track 1 : Utopia\_16

• Track 2 : Yavru\_15

Track 3 : CabbageMan\_17

Track 4 : Cheese Danish\_19, Corgi\_19

Track 5 : Whytu\_15

• Track 6 : Noely\_17

Track 7 : Piku\_15

Track 8 : Idaho\_17

• Track 9 : KNG13\_19

• Track 10 : Berka\_22

Track 11 : Phayonce\_34

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

The start number called the most often in the published annotations is 12, it was called in 5 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

CabbageMan\_17, CheeseDanish\_19, Corgi\_19, Piku\_15, Whytu\_15, Yavru\_15,

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

KNG13\_19, Utopia\_16,

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

Berka\_22, Idaho\_17, Noely\_17, Phayonce\_34,

## Summary by start number:

### Start 4:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phayonce 34 (P5),

#### Start 9:

- Found in 4 of 12 (33.3%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Utopia\_16 (FE),

#### Start 12:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 5 of 9
- Called 75.0% of time when present
- Phage (with cluster) where this start called: CabbageMan\_17 (FE), CheeseDanish\_19 (FE), Corgi\_19 (FE), Piku\_15 (FE), Whytu\_15 (FE), Yavru\_15 (FE),

## Start 13:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Berka\_22 (FE),

#### Start 14:

- Found in 6 of 12 (50.0%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Idaho\_17 (FE), Noely\_17 (FE),

#### Start 16:

- Found in 8 of 12 (66.7%) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: KNG13\_19 (FE),

### Summary by clusters:

There are 2 clusters represented in this pham: FE, P5,

Info for manual annotations of cluster FE:

- •Start number 12 was manually annotated 5 times for cluster FE.
- •Start number 13 was manually annotated 1 time for cluster FE.
- •Start number 14 was manually annotated 2 times for cluster FE.

Info for manual annotations of cluster P5:

Start number 4 was manually annotated 1 time for cluster P5.

## Gene Information:

Gene: Berka 22 Start: 13026, Stop: 13250, Start Num: 13

Candidate Starts for Berka 22:

(1, 12918), (5, 12957), (Start: 13 @13026 has 1 MA's), (15, 13044), (16, 13068), (17, 13113), (20, 13206), (22, 13233), (23, 13239),

Gene: CabbageMan\_17 Start: 13096, Stop: 13374, Start Num: 12

Candidate Starts for CabbageMan\_17:

(6, 13033), (Start: 12 @13096 has 5 MA's), (Start: 14 @13102 has 2 MA's), (16, 13141), (20, 13279), (21, 13297), (25, 13339),

Gene: CheeseDanish\_19 Start: 13255, Stop: 13533, Start Num: 12

Candidate Starts for CheeseDanish\_19:

(7, 13198), (Start: 12 @13255 has 5 MA's), (Start: 14 @13261 has 2 MA's), (16, 13300), (20, 13438), (25, 13498),

Gene: Corgi\_19 Start: 13255, Stop: 13533, Start Num: 12

Candidate Starts for Corgi 19:

(7, 13198), (Start: 12 @13255 has 5 MA's), (Start: 14 @13261 has 2 MA's), (16, 13300), (20, 13438), (25, 13498),

Gene: Idaho\_17 Start: 13517, Stop: 13774, Start Num: 14

Candidate Starts for Idaho 17:

(Start: 14 @13517 has 2 MA's), (16, 13556), (17, 13601), (18, 13652), (20, 13694),

Gene: KNG13\_19 Start: 13297, Stop: 13530, Start Num: 16

Candidate Starts for KNG13 19:

(7, 13195), (Start: 12 @13252 has 5 MA's), (Start: 14 @13258 has 2 MA's), (16, 13297), (20, 13435), (25, 13495),

Gene: Noely\_17 Start: 12627, Stop: 12899, Start Num: 14

Candidate Starts for Noely\_17:

(10, 12588), (Start: 14 @12627 has 2 MA's), (16, 12666), (20, 12804), (21, 12822),

Gene: Phayonce\_34 Start: 29517, Stop: 29735, Start Num: 4

Candidate Starts for Phayonce\_34:

(2, 29487), (Start: 4 @ 29517 has 1 MA's), (16, 29625),

Gene: Piku 15 Start: 12477, Stop: 12746, Start Num: 12

Candidate Starts for Piku 15:

(1, 12372), (3, 12387), (8, 12429), (9, 12438), (Start: 12 @12477 has 5 MA's), (24, 12717),

Gene: Utopia\_16 Start: 12409, Stop: 12717, Start Num: 9

Candidate Starts for Utopia\_16:

(1, 12343), (3, 12358), (9, 12409), (11, 12430), (Start: 12 @12448 has 5 MA's), (24, 12688),

Gene: Whytu\_15 Start: 12543, Stop: 12812, Start Num: 12

Candidate Starts for Whytu\_15:

(1, 12438), (3, 12453), (9, 12504), (Start: 12 @12543 has 5 MA's), (19, 12693), (24, 12783),

Gene: Yavru\_15 Start: 12438, Stop: 12707, Start Num: 12

Candidate Starts for Yavru 15:

(1, 12333), (3, 12348), (9, 12399), (11, 12420), (Start: 12 @12438 has 5 MA's), (17, 12528), (24, 12678),