

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 216866 Report

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

Pham number 216866 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1: Chevrolet 49, ArcusAngelus 46

Track 2: Brushbloom\_48, Mutaforma13\_44, PhesterPhotato\_43

Track 3 : Lizziana\_49Track 4 : Avani\_49Track 5 : DirkDirk\_31

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

The start number called the most often in the published annotations is 5, it was called in 2 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Brushbloom\_48, Mutaforma13\_44, PhesterPhotato\_43,

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

Avani\_49, Lizziana\_49,

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

ArcusAngelus 46, Chevrolet 49, DirkDirk 31,

## Summary by start number:

#### Start 4:

- Found in 2 of 8 ( 25.0% ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Avani\_49 (F2), Lizziana\_49 (F1),

#### Start 5:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Brushbloom\_48 (F1), Mutaforma13\_44 (F1), PhesterPhotato\_43 (F1),

#### Start 8:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DirkDirk\_31 (L1),

### Start 10:

- Found in 4 of 8 (50.0%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 50.0% of time when present
- Phage (with cluster) where this start called: ArcusAngelus\_46 (F1), Chevrolet\_49 (F1),

### Summary by clusters:

There are 3 clusters represented in this pham: F1, F2, L1,

Info for manual annotations of cluster F1:

- •Start number 4 was manually annotated 1 time for cluster F1.
- •Start number 5 was manually annotated 2 times for cluster F1.
- •Start number 10 was manually annotated 2 times for cluster F1.

Info for manual annotations of cluster F2:

•Start number 4 was manually annotated 1 time for cluster F2.

Info for manual annotations of cluster L1:

Start number 8 was manually annotated 1 time for cluster L1.

#### Gene Information:

Gene: ArcusAngelus\_46 Start: 33985, Stop: 33863, Start Num: 10 Candidate Starts for ArcusAngelus\_46: (9, 34003), (Start: 10 @33985 has 2 MA's), (11, 33961), (13, 33958), (14, 33952), (15, 33949), (16, 33919), (17, 33916), (18, 33895), (19, 33874), (20, 33868),

Gene: Avani\_49 Start: 31816, Stop: 31664, Start Num: 4

Candidate Starts for Avani 49:

(Start: 4 @31816 has 2 MA's), (Start: 5 @31813 has 2 MA's), (6, 31810), (7, 31807), (Start: 10 @31786 has 2 MA's), (11, 31762), (13, 31759), (14, 31753), (15, 31750), (16, 31720), (17, 31717), (18, 31696), (19, 31675), (20, 31669),

Gene: Brushbloom\_48 Start: 32635, Stop: 32483, Start Num: 5

Candidate Starts for Brushbloom\_48:

(Start: 5 @32635 has 2 MA's), (7, 32629), (14, 32575), (15, 32572), (16, 32542), (17, 32539), (18, 32518),

Gene: Chevrolet 49 Start: 33986, Stop: 33864, Start Num: 10

Candidate Starts for Chevrolet 49:

(9, 34004), (Start: 10 @33986 has 2 MA's), (11, 33962), (13, 33959), (14, 33953), (15, 33950), (16, 33920), (17, 33917), (18, 33896), (19, 33875), (20, 33869),

Gene: DirkDirk\_31 Start: 28183, Stop: 28028, Start Num: 8

Candidate Starts for DirkDirk\_31:

(1, 28234), (2, 28222), (3, 28219), (Start: 8 @28183 has 1 MA's), (12, 28126), (16, 28084),

Gene: Lizziana\_49 Start: 34010, Stop: 33846, Start Num: 4

Candidate Starts for Lizziana\_49:

(Start: 4 @34010 has 2 MA's), (Start: 5 @34007 has 2 MA's), (6, 34004), (7, 34001), (Start: 10 @33980 has 2 MA's), (11, 33956), (13, 33953), (14, 33947), (15, 33944), (16, 33914), (17, 33911), (18, 33890),

Gene: Mutaforma13\_44 Start: 32959, Stop: 32807, Start Num: 5

Candidate Starts for Mutaforma13 44:

(Start: 5 @32959 has 2 MA's), (7, 32953), (14, 32899), (15, 32896), (16, 32866), (17, 32863), (18, 32842),

Gene: PhesterPhotato\_43 Start: 32683, Stop: 32531, Start Num: 5

Candidate Starts for PhesterPhotato 43:

(Start: 5 @ 32683 has 2 MA's), (7, 32677), (14, 32623), (15, 32620), (16, 32590), (17, 32587), (18,

32566),