

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 107205 Report

This analysis was run 04/28/24 on database version 559.

Pham number 107205 has 6 members, 1 are drafts.

Phages represented in each track:

Track 1 : Seagreen\_40

Track 2 : ArcusAngelus\_43

Track 3 : Chevrolet\_46

Track 4 : Mutaforma13\_41

Track 5 : Plumbus\_42

Track 6 : Avani\_46

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

The start number called the most often in the published annotations is 3, it was called in 3 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

ArcusAngelus\_43, Avani\_46, Mutaforma13\_41,

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

Chevrolet\_46, Plumbus\_42, Seagreen\_40,

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

## Summary by start number:

#### Start 2:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Plumbus\_42 (F1),

#### Start 3:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 50.0% of time when present

• Phage (with cluster) where this start called: ArcusAngelus\_43 (F1), Avani\_46 (F2), Mutaforma13\_41 (F1),

### Start 4:

- Found in 6 of 6 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Chevrolet\_46 (F1), Seagreen\_40 (F1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: F1, F2,

Info for manual annotations of cluster F1:

- •Start number 2 was manually annotated 1 time for cluster F1.
- •Start number 3 was manually annotated 2 times for cluster F1.
- •Start number 4 was manually annotated 1 time for cluster F1.

Info for manual annotations of cluster F2:

•Start number 3 was manually annotated 1 time for cluster F2.

#### Gene Information:

Gene: ArcusAngelus\_43 Start: 33078, Stop: 32920, Start Num: 3

Candidate Starts for ArcusAngelus\_43:

(Start: 2 @ 33093 has 1 MA's), (Start: 3 @ 33078 has 3 MA's), (Start: 4 @ 33072 has 1 MA's), (5, 33051), (6, 33027), (8, 32931),

Gene: Avani\_46 Start: 30879, Stop: 30688, Start Num: 3

Candidate Starts for Avani 46:

(Start: 2 @30894 has 1 MA's), (Start: 3 @30879 has 3 MA's), (Start: 4 @30873 has 1 MA's), (5, 30852), (6, 30828), (7, 30765), (8, 30699),

Gene: Chevrolet\_46 Start: 33073, Stop: 32921, Start Num: 4

Candidate Starts for Chevrolet\_46:

(Start: 2 @33094 has 1 MA's), (Start: 3 @33079 has 3 MA's), (Start: 4 @33073 has 1 MA's), (5, 33052), (6, 33028), (8, 32932),

Gene: Mutaforma13 41 Start: 32229, Stop: 32038, Start Num: 3

Candidate Starts for Mutaforma13 41:

(1, 32457), (Start: 2 @32244 has 1 MA's), (Start: 3 @32229 has 3 MA's), (Start: 4 @32223 has 1 MA's), (5, 32202), (6, 32178), (7, 32115), (8, 32049),

Gene: Plumbus\_42 Start: 31348, Stop: 31142, Start Num: 2

Candidate Starts for Plumbus 42:

(Start: 2 @31348 has 1 MA's), (Start: 3 @31333 has 3 MA's), (Start: 4 @31327 has 1 MA's), (5, 31306), (6, 31282), (7, 31219), (8, 31153),

Gene: Seagreen\_40 Start: 31258, Stop: 31073, Start Num: 4

Candidate Starts for Seagreen 40:

(Start: 2 @31279 has 1 MA's), (Start: 3 @31264 has 3 MA's), (Start: 4 @31258 has 1 MA's), (5, 31237), (6, 31213), (7, 31150), (8, 31084),