

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 88544 Report

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

Pham number 88544 has 6 members, 1 are drafts.

Phages represented in each track:

Track 1 : ModicumRichard\_37

Track 2 : Aleemily\_36Track 3 : ObLaDi\_37Track 4 : Morgana 37

Track 5 : Cafasso\_37Track 6 : VanLee 34

## 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 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Aleemily\_36, ObLaDi\_37,

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

Cafasso 37, ModicumRichard 37,

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

Morgana\_37, VanLee\_34,

## Summary by start number:

### Start 1:

- Found in 4 of 6 (66.7%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: ModicumRichard\_37 (DZ),

#### Start 5

- Found in 4 of 6 (66.7%) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Aleemily 36 (DZ), ObLaDi 37 (DZ),

#### Start 7:

- Found in 1 of 6 (16.7%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: VanLee\_34 (singleton),

### Start 8:

- Found in 4 of 6 (66.7%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Cafasso\_37 (DZ),

### Start 10:

- 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: Morgana\_37 (DZ),

## **Summary by clusters:**

There are 2 clusters represented in this pham: singleton, DZ,

Info for manual annotations of cluster DZ:

- •Start number 5 was manually annotated 2 times for cluster DZ.
- •Start number 8 was manually annotated 1 time for cluster DZ.
- Start number 10 was manually annotated 1 time for cluster DZ.

### Gene Information:

Gene: Aleemily 36 Start: 31232, Stop: 30702, Start Num: 5

Candidate Starts for Aleemily 36:

(1, 31307), (2, 31277), (3, 31265), (Start: 5 @31232 has 2 MA's), (Start: 8 @31214 has 1 MA's), (9, 31202), (Start: 10 @31160 has 1 MA's), (11, 31088), (12, 31073), (14, 31037), (15, 30995), (19, 30872), (20, 30836), (23, 30773),

Gene: Cafasso\_37 Start: 31788, Stop: 31276, Start Num: 8

Candidate Starts for Cafasso 37:

(1, 31881), (2, 31851), (3, 31839), (Start: 5 @31806 has 2 MA's), (Start: 8 @31788 has 1 MA's), (9, 31776), (Start: 10 @31734 has 1 MA's), (11, 31662), (12, 31647), (14, 31611), (15, 31569), (19, 31446), (20, 31410), (23, 31347),

Gene: ModicumRichard\_37 Start: 31880, Stop: 31275, Start Num: 1

Candidate Starts for ModicumRichard\_37:

(1, 31880), (2, 31850), (3, 31838), (Start: 5 @31805 has 2 MA's), (Start: 8 @31787 has 1 MA's), (9, 31775), (Start: 10 @31733 has 1 MA's), (11, 31661), (12, 31646), (14, 31610), (15, 31568), (19, 31445), (20, 31409), (23, 31346),

Gene: Morgana\_37 Start: 31686, Stop: 31228, Start Num: 10

Candidate Starts for Morgana 37:

(4, 31779), (9, 31728), (Start: 10 @31686 has 1 MA's), (12, 31599), (14, 31563), (15, 31521), (16, 31509), (19, 31398), (20, 31362), (21, 31356), (23, 31299),

Gene: ObLaDi\_37 Start: 31789, Stop: 31259, Start Num: 5

Candidate Starts for ObLaDi\_37:

(1, 31864), (2, 31834), (3, 31822), (Start: 5 @31789 has 2 MA's), (Start: 8 @31771 has 1 MA's), (9, 31759), (Start: 10 @31717 has 1 MA's), (12, 31630), (14, 31594), (15, 31552), (19, 31429), (20, 31393), (21, 31387), (23, 31330),

Gene: VanLee\_34 Start: 28889, Stop: 28455, Start Num: 7

Candidate Starts for VanLee\_34:

(6, 28892), (Start: 7 @28889 has 1 MA's), (9, 28874), (Start: 10 @28835 has 1 MA's), (13, 28724), (17, 28604), (18, 28547), (22, 28508),