	0,	5	×6 (	ò 1	
		·	·		
1: ModicumRichard_110					
		> \ \		5	
2: Aleemily_108					
		5		δ <b>1</b>	8
3: Cafasso_110					
	•	5	<b>5</b>	ò 1	8
4: ObLaDi_109					
			*	o 1	8
5: Morgana_117					

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 11358 Report

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

Pham number 11358 has 5 members, 1 are drafts.

Phages represented in each track:

Track 1: ModicumRichard 110

Track 2 : Aleemily\_108

Track 3 : Cafasso\_110Track 4 : ObLaDi 109

Track 5 : Morgana\_117

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

The start number called the most often in the published annotations is 4, it was called in 3 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Aleemily\_108, ModicumRichard\_110, Morgana\_117, ObLaDi\_109,

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

• Cafasso\_110,

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

•

## Summary by start number:

#### Start 4:

- Found in 5 of 5 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 4
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Aleemily\_108 (DZ),
  ModicumRichard\_110 (DZ), Morgana\_117 (DZ), ObLaDi\_109 (DZ),

#### Start 5

- Found in 4 of 5 (80.0%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Cafasso 110 (DZ).

## Summary by clusters:

There is one cluster represented in this pham: DZ

Info for manual annotations of cluster DZ:

- •Start number 4 was manually annotated 3 times for cluster DZ.
- •Start number 5 was manually annotated 1 time for cluster DZ.

### Gene Information:

Gene: Aleemily\_108 Start: 60896, Stop: 61258, Start Num: 4

Candidate Starts for Aleemily\_108:

(3, 60728), (Start: 4 @ 60896 has 3 MA's), (6, 61034), (7, 61097), (8, 61139),

Gene: Cafasso\_110 Start: 61450, Stop: 61809, Start Num: 5

Candidate Starts for Cafasso\_110:

(3, 61279), (Start: 4 @61447 has 3 MA's), (Start: 5 @61450 has 1 MA's), (6, 61585), (7, 61648), (8, 61690),

Gene: ModicumRichard\_110 Start: 61729, Stop: 62094, Start Num: 4

Candidate Starts for ModicumRichard 110:

(1, 61288), (2, 61483), (3, 61561), (Start: 4 @61729 has 3 MA's), (Start: 5 @61732 has 1 MA's), (6, 61870), (7, 61933),

Gene: Morgana\_117 Start: 63820, Stop: 64182, Start Num: 4

Candidate Starts for Morgana\_117:

(Start: 4 @63820 has 3 MA's), (Start: 5 @63823 has 1 MA's), (6, 63958), (7, 64021), (8, 64063),

Gene: ObLaDi 109 Start: 61131, Stop: 61493, Start Num: 4

Candidate Starts for ObLaDi 109:

(3, 60963), (Start: 4 @61131 has 3 MA's), (Start: 5 @61134 has 1 MA's), (6, 61269), (7, 61332), (8, 61374),