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I: Lilbeanie_39							
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2: Mareelih_108 + 3							
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3: GMA2_37							
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4: Sixama_108	_						
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5: Aleemily_28 + 3							
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6: Morg	ana_29				

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 5718 Report

This analysis was run 07/09/24 on database version 566.

Pham number 5718 has 12 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Lilbeanie\_39
- Track 2 : Mareelih\_108, BlueNGold\_109, Forza\_110, Boopy\_110
- Track 3 : GMA2\_37
- Track 4 : Sixama\_108
- Track 5 : Aleemily\_28, ObLaDi\_29, Cafasso\_29, ModicumRichard\_29
- Track 6 : Morgana\_29

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

The start number called the most often in the published annotations is 2, it was called in 10 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aleemily\_28, BlueNGold\_109, Boopy\_110, Cafasso\_29, Forza\_110, GMA2\_37, Lilbeanie\_39, Mareelih\_108, ModicumRichard\_29, Morgana\_29, ObLaDi\_29, Sixama\_108,

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

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

## Summary by start number:

Start 2:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 10 of 10
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Aleemily\_28 (DZ), BlueNGold\_109 (DS), Boopy\_110 (DS), Cafasso\_29 (DZ), Forza\_110 (DS), GMA2\_37 (DS), Lilbeanie\_39 (DE5), Mareelih\_108 (DS), ModicumRichard\_29 (DZ), Morgana\_29 (DZ), ObLaDi\_29 (DZ), Sixama\_108 (DS),

#### Summary by clusters:

There are 3 clusters represented in this pham: DZ, DS, DE5,

Info for manual annotations of cluster DE5: •Start number 2 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DS: •Start number 2 was manually annotated 5 times for cluster DS.

Info for manual annotations of cluster DZ: •Start number 2 was manually annotated 4 times for cluster DZ.

#### Gene Information:

Gene: Aleemily\_28 Start: 25493, Stop: 25876, Start Num: 2 Candidate Starts for Aleemily\_28: (Start: 2 @25493 has 10 MA's), (4, 25562), (5, 25658), (8, 25727), (13, 25778), (15, 25808),

Gene: BlueNGold\_109 Start: 68160, Stop: 68528, Start Num: 2 Candidate Starts for BlueNGold\_109: (Start: 2 @68160 has 10 MA's), (6, 68361), (13, 68433),

Gene: Boopy\_110 Start: 68172, Stop: 68540, Start Num: 2 Candidate Starts for Boopy\_110: (Start: 2 @68172 has 10 MA's), (6, 68373), (13, 68445),

Gene: Cafasso\_29 Start: 26067, Stop: 26450, Start Num: 2 Candidate Starts for Cafasso\_29: (Start: 2 @26067 has 10 MA's), (4, 26136), (5, 26232), (8, 26301), (13, 26352), (15, 26382),

Gene: Forza\_110 Start: 68088, Stop: 68456, Start Num: 2 Candidate Starts for Forza\_110: (Start: 2 @68088 has 10 MA's), (6, 68289), (13, 68361),

Gene: GMA2\_37 Start: 40766, Stop: 41137, Start Num: 2 Candidate Starts for GMA2\_37: (Start: 2 @40766 has 10 MA's), (7, 40976), (11, 41021),

Gene: Lilbeanie\_39 Start: 32534, Stop: 32905, Start Num: 2 Candidate Starts for Lilbeanie\_39: (Start: 2 @32534 has 10 MA's), (3, 32573),

Gene: Mareelih\_108 Start: 67590, Stop: 67958, Start Num: 2 Candidate Starts for Mareelih\_108: (Start: 2 @67590 has 10 MA's), (6, 67791), (13, 67863),

Gene: ModicumRichard\_29 Start: 26066, Stop: 26449, Start Num: 2 Candidate Starts for ModicumRichard\_29: (Start: 2 @26066 has 10 MA's), (4, 26135), (5, 26231), (8, 26300), (13, 26351), (15, 26381), Gene: Morgana\_29 Start: 25822, Stop: 26205, Start Num: 2 Candidate Starts for Morgana\_29: (1, 25618), (Start: 2 @25822 has 10 MA's), (5, 25987), (8, 26056), (13, 26107), (14, 26131), (15, 26137),

Gene: ObLaDi\_29 Start: 26045, Stop: 26428, Start Num: 2 Candidate Starts for ObLaDi\_29: (Start: 2 @26045 has 10 MA's), (4, 26114), (5, 26210), (8, 26279), (13, 26330), (15, 26360),

Gene: Sixama\_108 Start: 67612, Stop: 67983, Start Num: 2 Candidate Starts for Sixama\_108: (Start: 2 @67612 has 10 MA's), (6, 67813), (9, 67843), (10, 67855), (12, 67873),