

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 164184 Report

This analysis was run 05/04/24 on database version 560.

Pham number 164184 has 7 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Dusty\_136

• Track 2 : Aphelion\_139, Culver\_139

• Track 3 : WilliamBoone\_137

• Track 4 : Engineer\_141

Track 5 : Yvonnetastic\_105

• Track 6 : Cardigan\_109

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

The start number called the most often in the published annotations is 8, it was called in 4 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aphelion\_139, Culver\_139, Dusty\_136, Engineer\_141, WilliamBoone\_137,

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

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

Cardigan\_109, Yvonnetastic\_105,

## Summary by start number:

#### Start 5:

- Found in 2 of 7 (28.6%) 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: Cardigan\_109 (DD), Yvonnetastic\_105 (DD),

### Start 8:

- Found in 5 of 7 (71.4%) of genes in pham
- Manual Annotations of this start: 4 of 5
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Aphelion\_139 (CQ1), Culver\_139 (CQ1), Dusty\_136 (CQ), Engineer\_141 (CQ1), WilliamBoone\_137 (CQ1),

## **Summary by clusters:**

There are 3 clusters represented in this pham: CQ1, CQ, DD,

Info for manual annotations of cluster CQ1:

•Start number 8 was manually annotated 4 times for cluster CQ1.

Info for manual annotations of cluster DD:

•Start number 5 was manually annotated 1 time for cluster DD.

### Gene Information:

Gene: Aphelion\_139 Start: 77220, Stop: 77483, Start Num: 8

Candidate Starts for Aphelion\_139:

(1, 77091), (2, 77097), (6, 77202), (7, 77208), (Start: 8 @77220 has 4 MA's), (9, 77232), (11, 77268), (14, 77364), (18, 77478),

Gene: Cardigan\_109 Start: 63163, Stop: 63447, Start Num: 5

Candidate Starts for Cardigan\_109:

(Start: 5 @63163 has 1 MA's), (10, 63211), (12, 63238), (15, 63355),

Gene: Culver\_139 Start: 75674, Stop: 75937, Start Num: 8

Candidate Starts for Culver\_139:

(1, 75545), (2, 75551), (6, 75656), (7, 75662), (Start: 8 @75674 has 4 MA's), (9, 75686), (11, 75722), (14, 75818), (18, 75932),

Gene: Dusty 136 Start: 75910, Stop: 76173, Start Num: 8

Candidate Starts for Dusty 136:

(6, 75892), (Start: 8 @ 75910 has 4 MA's), (11, 75958), (14, 76054), (18, 76168),

Gene: Engineer\_141 Start: 77134, Stop: 77397, Start Num: 8

Candidate Starts for Engineer\_141:

(6, 77116), (Start: 8 @ 77134 has 4 MA's), (11, 77182), (14, 77278), (18, 77392),

Gene: WilliamBoone 137 Start: 74000, Stop: 74260, Start Num: 8

Candidate Starts for WilliamBoone 137:

(3, 73919), (4, 73964), (Start: 8 @74000 has 4 MA's), (11, 74048), (13, 74093), (14, 74141), (16, 74189), (17, 74225), (18, 74255),

Gene: Yvonnetastic 105 Start: 60859, Stop: 61143, Start Num: 5

Candidate Starts for Yvonnetastic\_105:

(Start: 5 @ 60859 has 1 MA's), (10, 60907), (15, 61051),