

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 4840 Report

This analysis was run 04/05/24 on database version 557.

Pham number 4840 has 13 members, 0 are drafts.

Phages represented in each track:

Track 1 : Aphelion\_171

• Track 2 : Smoothie\_174, Toniann\_173, Norvs\_170, PhinkBoden\_170, Lozinak\_173, ClubL\_173, Cucurbita\_172

• Track 3 : WilliamBoone 178

Track 4 : Engineer\_175

• Track 5 : Bachita\_175

Track 6 : Culver\_176Track 7 : OneUp\_159

# 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 13 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aphelion\_171, Bachita\_175, ClubL\_173, Cucurbita\_172, Culver\_176, Engineer\_175, Lozinak\_173, Norvs\_170, OneUp\_159, PhinkBoden\_170, Smoothie\_174, Toniann\_173, WilliamBoone\_178,

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 3

- Found in 13 of 13 (100.0%) of genes in pham
- Manual Annotation's of this start: 13 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aphelion\_171 (CQ1), Bachita\_175 (CQ1), ClubL\_173 (CQ1), Cucurbita\_172 (CQ1), Culver\_176 (CQ1), Engineer\_175 (CQ1), Lozinak\_173 (CQ1), Norvs\_170 (CQ), OneUp\_159 (CQ2), PhinkBoden\_170

(CQ1), Smoothie\_174 (CQ1), Toniann\_173 (CQ1), WilliamBoone\_178 (CQ1),

## **Summary by clusters:**

There are 3 clusters represented in this pham: CQ2, CQ1, CQ,

Info for manual annotations of cluster CQ:

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

Info for manual annotations of cluster CQ1:

•Start number 3 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

•Start number 3 was manually annotated 1 time for cluster CQ2.

### Gene Information:

Gene: Aphelion\_171 Start: 87732, Stop: 87532, Start Num: 3

Candidate Starts for Aphelion 171:

(Start: 3 @87732 has 13 MA's), (4, 87720), (5, 87654), (6, 87651), (7, 87636),

Gene: Bachita\_175 Start: 87808, Stop: 87608, Start Num: 3

Candidate Starts for Bachita\_175:

(1, 88051), (2, 87946), (Start: 3 @87808 has 13 MA's), (5, 87730), (6, 87727), (7, 87712), (9, 87679),

Gene: ClubL\_173 Start: 87053, Stop: 86853, Start Num: 3

Candidate Starts for ClubL\_173:

(Start: 3 @87053 has 13 MA's), (5, 86975), (7, 86957), (9, 86924),

Gene: Cucurbita 172 Start: 88114, Stop: 87914, Start Num: 3

Candidate Starts for Cucurbita 172:

(Start: 3 @88114 has 13 MA's), (5, 88036), (7, 88018), (9, 87985),

Gene: Culver\_176 Start: 86784, Stop: 86587, Start Num: 3

Candidate Starts for Culver\_176:

(Start: 3 @86784 has 13 MA's), (4, 86772), (5, 86706), (6, 86703), (7, 86688),

Gene: Engineer 175 Start: 87762, Stop: 87562, Start Num: 3

Candidate Starts for Engineer 175:

(Start: 3 @87762 has 13 MA's), (7, 87666),

Gene: Lozinak\_173 Start: 87657, Stop: 87457, Start Num: 3

Candidate Starts for Lozinak\_173:

(Start: 3 @87657 has 13 MA's), (5, 87579), (7, 87561), (9, 87528),

Gene: Norvs\_170 Start: 86833, Stop: 86633, Start Num: 3

Candidate Starts for Norvs 170:

(Start: 3 @86833 has 13 MA's), (5, 86755), (7, 86737), (9, 86704),

Gene: OneUp 159 Start: 87059, Stop: 86853, Start Num: 3

Candidate Starts for OneUp\_159:

(Start: 3 @87059 has 13 MA's), (4, 87044), (7, 86960), (8, 86936), (10, 86918), (11, 86876), (12, 86870),

Gene: PhinkBoden\_170 Start: 87231, Stop: 87031, Start Num: 3

Candidate Starts for PhinkBoden\_170:

(Start: 3 @87231 has 13 MA's), (5, 87153), (7, 87135), (9, 87102),

Gene: Smoothie\_174 Start: 87529, Stop: 87329, Start Num: 3

Candidate Starts for Smoothie\_174:

(Start: 3 @87529 has 13 MA's), (5, 87451), (7, 87433), (9, 87400),

Gene: Toniann\_173 Start: 86974, Stop: 86774, Start Num: 3

Candidate Starts for Toniann\_173:

(Start: 3 @ 86974 has 13 MA's), (5, 86896), (7, 86878), (9, 86845),

Gene: WilliamBoone\_178 Start: 86471, Stop: 86271, Start Num: 3

Candidate Starts for WilliamBoone\_178:

(Start: 3 @86471 has 13 MA's), (4, 86459), (5, 86393), (6, 86390), (7, 86375),