



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 5111 Report

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

Pham number 5111 has 14 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Lozinak\_82, Cucurbita\_83, Abscondus\_81, PhinkBoden\_81, Toniann\_82, Aphelion\_81
- Track 2 : ClubL\_81, Smoothie\_83, Bachita\_83, Engineer\_83, Norvs\_82, WilliamBoone\_81, Dusty\_78
- Track 3 : Culver\_83

### ***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 7 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bachita\_83, ClubL\_81, Culver\_83, Dusty\_78, Engineer\_83, Norvs\_82, Smoothie\_83, WilliamBoone\_81,

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

- Abscondus\_81, Aphelion\_81, Cucurbita\_83, Lozinak\_82, PhinkBoden\_81, Toniann\_82,

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

- 

### **Summary by start number:**

Start 2:

- Found in 14 of 14 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 42.9% of time when present
- Phage (with cluster) where this start called: Abscondus\_81 (CQ), Aphelion\_81 (CQ1), Cucurbita\_83 (CQ1), Lozinak\_82 (CQ1), PhinkBoden\_81 (CQ1), Toniann\_82 (CQ1),

Start 3:

- Found in 14 of 14 ( 100.0% ) of genes in pham

- Manual Annotations of this start: 7 of 12
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Bachita\_83 (CQ1), ClubL\_81 (CQ1), Culver\_83 (CQ1), Dusty\_78 (CQ), Engineer\_83 (CQ1), Norvs\_82 (CQ), Smoothie\_83 (CQ1), WilliamBoone\_81 (CQ1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: 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 2 was manually annotated 5 times for cluster CQ1.
- Start number 3 was manually annotated 6 times for cluster CQ1.

### **Gene Information:**

Gene: Abscondus\_81 Start: 50101, Stop: 50412, Start Num: 2

Candidate Starts for Abscondus\_81:

(1, 49981), (Start: 2 @50101 has 5 MA's), (Start: 3 @50110 has 7 MA's), (4, 50185), (5, 50194), (6, 50290), (7, 50317),

Gene: Aphelion\_81 Start: 50723, Stop: 51034, Start Num: 2

Candidate Starts for Aphelion\_81:

(1, 50603), (Start: 2 @50723 has 5 MA's), (Start: 3 @50732 has 7 MA's), (4, 50807), (5, 50816), (6, 50912), (7, 50939),

Gene: Bachita\_83 Start: 51157, Stop: 51459, Start Num: 3

Candidate Starts for Bachita\_83:

(1, 51028), (Start: 2 @51148 has 5 MA's), (Start: 3 @51157 has 7 MA's), (4, 51232), (5, 51241), (6, 51337), (7, 51364),

Gene: ClubL\_81 Start: 49845, Stop: 50147, Start Num: 3

Candidate Starts for ClubL\_81:

(1, 49716), (Start: 2 @49836 has 5 MA's), (Start: 3 @49845 has 7 MA's), (4, 49920), (5, 49929), (6, 50025), (7, 50052),

Gene: Cucurbita\_83 Start: 51655, Stop: 51966, Start Num: 2

Candidate Starts for Cucurbita\_83:

(1, 51535), (Start: 2 @51655 has 5 MA's), (Start: 3 @51664 has 7 MA's), (4, 51739), (5, 51748), (6, 51844), (7, 51871),

Gene: Culver\_83 Start: 49768, Stop: 50070, Start Num: 3

Candidate Starts for Culver\_83:

(Start: 2 @49759 has 5 MA's), (Start: 3 @49768 has 7 MA's), (4, 49843), (5, 49852), (6, 49948), (7, 49975),

Gene: Dusty\_78 Start: 49357, Stop: 49659, Start Num: 3

Candidate Starts for Dusty\_78:

(1, 49228), (Start: 2 @49348 has 5 MA's), (Start: 3 @49357 has 7 MA's), (4, 49432), (5, 49441), (6, 49537), (7, 49564),

Gene: Engineer\_83 Start: 51130, Stop: 51432, Start Num: 3

Candidate Starts for Engineer\_83:

(1, 51001), (Start: 2 @51121 has 5 MA's), (Start: 3 @51130 has 7 MA's), (4, 51205), (5, 51214), (6, 51310), (7, 51337),

Gene: Lozinak\_82 Start: 50959, Stop: 51270, Start Num: 2

Candidate Starts for Lozinak\_82:

(1, 50839), (Start: 2 @50959 has 5 MA's), (Start: 3 @50968 has 7 MA's), (4, 51043), (5, 51052), (6, 51148), (7, 51175),

Gene: Norvs\_82 Start: 50377, Stop: 50679, Start Num: 3

Candidate Starts for Norvs\_82:

(1, 50248), (Start: 2 @50368 has 5 MA's), (Start: 3 @50377 has 7 MA's), (4, 50452), (5, 50461), (6, 50557), (7, 50584),

Gene: PhinkBoden\_81 Start: 50749, Stop: 51060, Start Num: 2

Candidate Starts for PhinkBoden\_81:

(1, 50629), (Start: 2 @50749 has 5 MA's), (Start: 3 @50758 has 7 MA's), (4, 50833), (5, 50842), (6, 50938), (7, 50965),

Gene: Smoothie\_83 Start: 50968, Stop: 51270, Start Num: 3

Candidate Starts for Smoothie\_83:

(1, 50839), (Start: 2 @50959 has 5 MA's), (Start: 3 @50968 has 7 MA's), (4, 51043), (5, 51052), (6, 51148), (7, 51175),

Gene: Toniann\_82 Start: 50311, Stop: 50622, Start Num: 2

Candidate Starts for Toniann\_82:

(1, 50191), (Start: 2 @50311 has 5 MA's), (Start: 3 @50320 has 7 MA's), (4, 50395), (5, 50404), (6, 50500), (7, 50527),

Gene: WilliamBoone\_81 Start: 49068, Stop: 49370, Start Num: 3

Candidate Starts for WilliamBoone\_81:

(1, 48939), (Start: 2 @49059 has 5 MA's), (Start: 3 @49068 has 7 MA's), (4, 49143), (5, 49152), (6, 49248), (7, 49275),