

Pham 4574



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 4574 Report

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

Pham number 4574 has 19 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Miskis\_110, Aphelion\_112, Toniann\_111, Norvs\_113
- Track 2 : Dusty\_108
- Track 3 : Cucurbita\_112
- Track 4 : ClubL\_112, Engineer\_112, Bachita\_113, Smoothie\_112
- Track 5 : Culver\_111, Abscondus\_110
- Track 6 : PhinkBoden\_111
- Track 7 : WilliamBoone\_112
- Track 8 : Lozinak\_111
- Track 9 : JonJames\_180
- Track 10 : Yvonnetastic\_180
- Track 11 : Cardigan\_186
- Track 12 : Pumpernickel\_288

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

The start number called the most often in the published annotations is 6, it was called in 11 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_110, Aphelion\_112, Bachita\_113, ClubL\_112, Cucurbita\_112, Culver\_111, Dusty\_108, Engineer\_112, Miskis\_110, Norvs\_113, PhinkBoden\_111, Smoothie\_112, Toniann\_111, WilliamBoone\_112,

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

- Lozinak\_111,

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

- Cardigan\_186, JonJames\_180, Pumpernickel\_288, Yvonnetastic\_180,

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

Start 5:

- Found in 12 of 19 ( 63.2% ) of genes in pham
- Manual Annotations of this start: 1 of 15

- Called 8.3% of time when present
- Phage (with cluster) where this start called: Lozinak\_111 (CQ1),

Start 6:

- Found in 15 of 19 ( 78.9% ) of genes in pham
- Manual Annotations of this start: 11 of 15
- Called 93.3% of time when present
- Phage (with cluster) where this start called: Abscondus\_110 (CQ), Aphelion\_112 (CQ1), Bachita\_113 (CQ1), ClubL\_112 (CQ1), Cucurbita\_112 (CQ1), Culver\_111 (CQ1), Dusty\_108 (CQ), Engineer\_112 (CQ1), Miskis\_110 (CQ), Norvs\_113 (CQ), PhinkBoden\_111 (CQ1), Smoothie\_112 (CQ1), Toniann\_111 (CQ1), WilliamBoone\_112 (CQ1),

Start 7:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pumpernickel\_288 (GD4),

Start 10:

- Found in 3 of 19 ( 15.8% ) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan\_186 (DD), JonJames\_180 (DD), Yvonnetastic\_180 (DD),

### **Summary by clusters:**

There are 4 clusters represented in this pham: CQ1, GD4, CQ, DD,

Info for manual annotations of cluster CQ:

- Start number 6 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 5 was manually annotated 1 time for cluster CQ1.
- Start number 6 was manually annotated 10 times for cluster CQ1.

Info for manual annotations of cluster DD:

- Start number 10 was manually annotated 2 times for cluster DD.

Info for manual annotations of cluster GD4:

- Start number 7 was manually annotated 1 time for cluster GD4.

### **Gene Information:**

Gene: Abscondus\_110 Start: 64538, Stop: 64915, Start Num: 6

Candidate Starts for Abscondus\_110:

(Start: 5 @64535 has 1 MA's), (Start: 6 @64538 has 11 MA's), (8, 64553), (21, 64754),

Gene: Aphelion\_112 Start: 66091, Stop: 66468, Start Num: 6

Candidate Starts for Aphelion\_112:

(Start: 5 @66088 has 1 MA's), (Start: 6 @66091 has 11 MA's), (8, 66106), (17, 66196), (21, 66307),

Gene: Bachita\_113 Start: 65749, Stop: 66138, Start Num: 6

Candidate Starts for Bachita\_113:

(Start: 5 @65746 has 1 MA's), (Start: 6 @65749 has 11 MA's), (8, 65764), (17, 65854), (21, 65965), (27, 66085),

Gene: Cardigan\_186 Start: 93001, Stop: 92639, Start Num: 10

Candidate Starts for Cardigan\_186:

(1, 93355), (3, 93313), (4, 93031), (8, 93004), (Start: 10 @93001 has 2 MA's), (14, 92950), (18, 92908), (23, 92752), (28, 92683),

Gene: ClubL\_112 Start: 64679, Stop: 65068, Start Num: 6

Candidate Starts for ClubL\_112:

(Start: 5 @64676 has 1 MA's), (Start: 6 @64679 has 11 MA's), (8, 64694), (17, 64784), (21, 64895), (27, 65015),

Gene: Cucurbita\_112 Start: 66256, Stop: 66633, Start Num: 6

Candidate Starts for Cucurbita\_112:

(Start: 5 @66253 has 1 MA's), (Start: 6 @66256 has 11 MA's), (8, 66271), (13, 66316), (20, 66436), (21, 66472),

Gene: Culver\_111 Start: 64010, Stop: 64387, Start Num: 6

Candidate Starts for Culver\_111:

(Start: 5 @64007 has 1 MA's), (Start: 6 @64010 has 11 MA's), (8, 64025), (21, 64226),

Gene: Dusty\_108 Start: 64597, Stop: 64974, Start Num: 6

Candidate Starts for Dusty\_108:

(Start: 6 @64597 has 11 MA's), (8, 64612), (18, 64705), (20, 64777), (21, 64813),

Gene: Engineer\_112 Start: 65722, Stop: 66111, Start Num: 6

Candidate Starts for Engineer\_112:

(Start: 5 @65719 has 1 MA's), (Start: 6 @65722 has 11 MA's), (8, 65737), (17, 65827), (21, 65938), (27, 66058),

Gene: JonJames\_180 Start: 93921, Stop: 93559, Start Num: 10

Candidate Starts for JonJames\_180:

(1, 94275), (2, 94236), (3, 94233), (4, 93951), (8, 93924), (Start: 10 @93921 has 2 MA's), (14, 93870), (18, 93828), (23, 93672), (28, 93603),

Gene: Lozinak\_111 Start: 65557, Stop: 65949, Start Num: 5

Candidate Starts for Lozinak\_111:

(Start: 5 @65557 has 1 MA's), (Start: 6 @65560 has 11 MA's), (8, 65575), (17, 65665), (21, 65776), (27, 65896),

Gene: Miskis\_110 Start: 64523, Stop: 64900, Start Num: 6

Candidate Starts for Miskis\_110:

(Start: 5 @64520 has 1 MA's), (Start: 6 @64523 has 11 MA's), (8, 64538), (17, 64628), (21, 64739),

Gene: Norvs\_113 Start: 65587, Stop: 65964, Start Num: 6

Candidate Starts for Norvs\_113:

(Start: 5 @65584 has 1 MA's), (Start: 6 @65587 has 11 MA's), (8, 65602), (17, 65692), (21, 65803),

Gene: PhinkBoden\_111 Start: 65861, Stop: 66238, Start Num: 6  
Candidate Starts for PhinkBoden\_111:  
(Start: 6 @65861 has 11 MA's), (13, 65921), (20, 66041), (21, 66077),

Gene: Pumpernickel\_288 Start: 160285, Stop: 160650, Start Num: 7  
Candidate Starts for Pumpernickel\_288:  
(Start: 7 @160285 has 1 MA's), (9, 160291), (11, 160300), (12, 160327), (15, 160360), (16, 160363),  
(17, 160381), (19, 160441), (21, 160498), (24, 160546), (26, 160591), (29, 160624), (30, 160630),

Gene: Smoothie\_112 Start: 65560, Stop: 65949, Start Num: 6  
Candidate Starts for Smoothie\_112:  
(Start: 5 @65557 has 1 MA's), (Start: 6 @65560 has 11 MA's), (8, 65575), (17, 65665), (21, 65776),  
(27, 65896),

Gene: Toniann\_111 Start: 64962, Stop: 65339, Start Num: 6  
Candidate Starts for Toniann\_111:  
(Start: 5 @64959 has 1 MA's), (Start: 6 @64962 has 11 MA's), (8, 64977), (17, 65067), (21, 65178),

Gene: WilliamBoone\_112 Start: 63968, Stop: 64345, Start Num: 6  
Candidate Starts for WilliamBoone\_112:  
(Start: 6 @63968 has 11 MA's), (8, 63983), (21, 64184), (22, 64205), (25, 64256),

Gene: Yvonnetastic\_180 Start: 90820, Stop: 90458, Start Num: 10  
Candidate Starts for Yvonnetastic\_180:  
(4, 90850), (8, 90823), (Start: 10 @90820 has 2 MA's), (14, 90769), (18, 90727), (23, 90571), (28,  
90502),