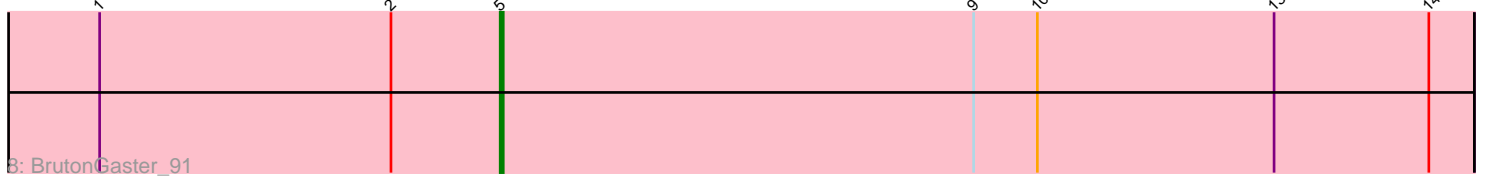
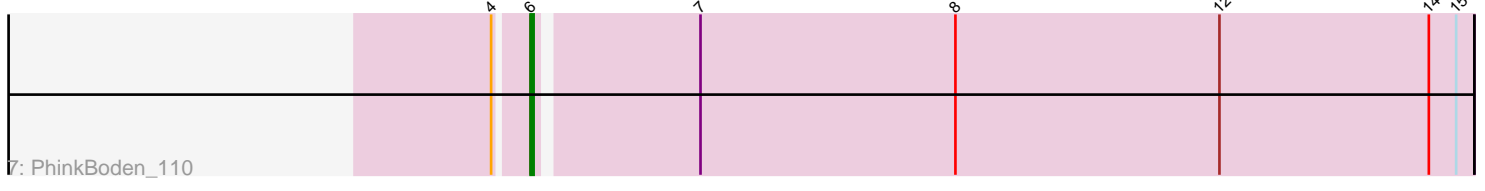
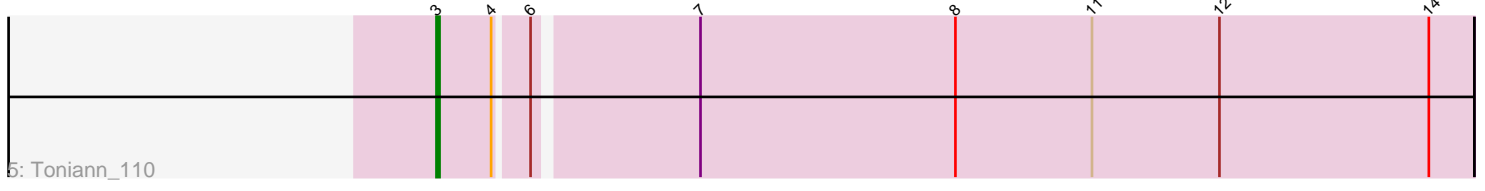
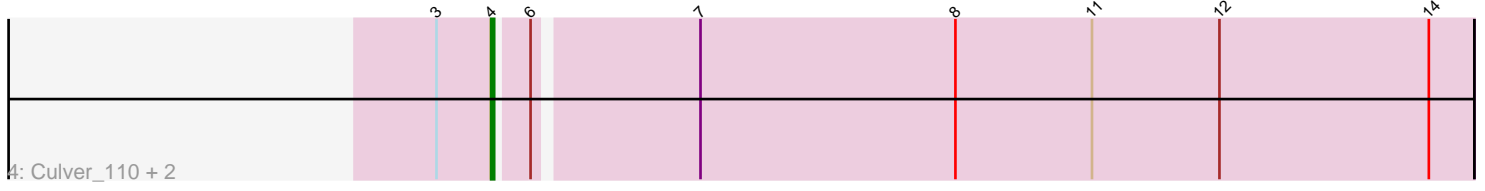
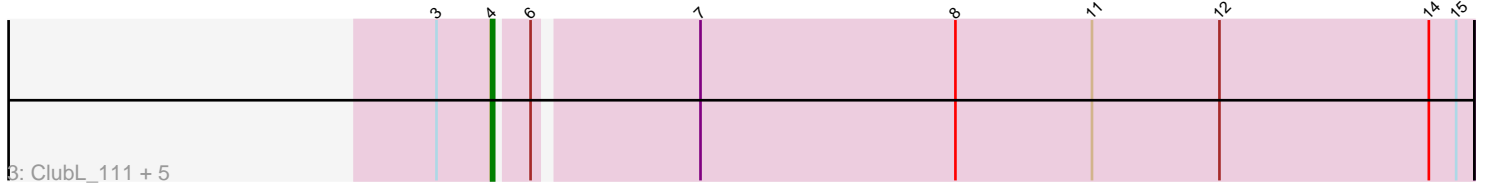
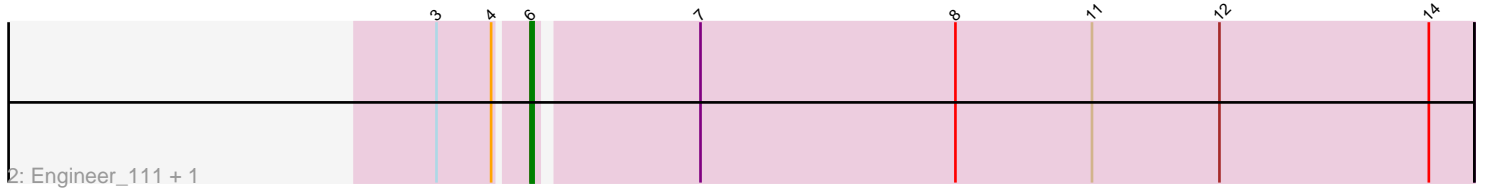
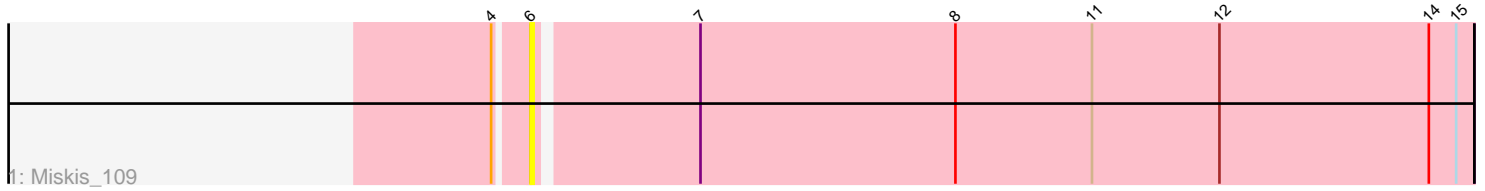


Pham 159460



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 159460 Report

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

Pham number 159460 has 16 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Miskis\_109
- Track 2 : Engineer\_111, Smoothie\_111
- Track 3 : ClubL\_111, Cucurbita\_111, Aphelion\_111, Norvs\_112, Bachita\_112, Dusty\_107
- Track 4 : Culver\_110, Abscondus\_109, Lozinak\_110
- Track 5 : Toniann\_110
- Track 6 : WilliamBoone\_111
- Track 7 : PhinkBoden\_110
- Track 8 : BrutonGaster\_91

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

The start number called the most often in the published annotations is 4, it was called in 7 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_109, Aphelion\_111, Bachita\_112, ClubL\_111, Cucurbita\_111, Culver\_110, Dusty\_107, Lozinak\_110, Norvs\_112,

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

- Engineer\_111, Miskis\_109, PhinkBoden\_110, Smoothie\_111, Toniann\_110, WilliamBoone\_111,

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

- BrutonGaster\_91,

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

Start 3:

- Found in 12 of 16 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Toniann\_110 (CQ1),

#### Start 4:

- Found in 15 of 16 ( 93.8% ) of genes in pham
- Manual Annotations of this start: 7 of 13
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_109 (CQ), Aphelion\_111 (CQ1), Bachita\_112 (CQ1), ClubL\_111 (CQ1), Cucurbita\_111 (CQ1), Culver\_110 (CQ1), Dusty\_107 (CQ), Lozinak\_110 (CQ1), Norvs\_112 (CQ),

#### Start 5:

- Found in 1 of 16 ( 6.2% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster\_91 (CQ2),

#### Start 6:

- Found in 15 of 16 ( 93.8% ) of genes in pham
- Manual Annotations of this start: 4 of 13
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Engineer\_111 (CQ1), Miskis\_109 (CQ), PhinkBoden\_110 (CQ1), Smoothie\_111 (CQ1), WilliamBoone\_111 (CQ1),

### **Summary by clusters:**

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

Info for manual annotations of cluster CQ:

- Start number 4 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 3 was manually annotated 1 time for cluster CQ1.
- Start number 4 was manually annotated 6 times for cluster CQ1.
- Start number 6 was manually annotated 4 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 5 was manually annotated 1 time for cluster CQ2.

### **Gene Information:**

Gene: Abscondus\_109 Start: 64171, Stop: 64485, Start Num: 4

Candidate Starts for Abscondus\_109:

(Start: 3 @64153 has 1 MA's), (Start: 4 @64171 has 7 MA's), (Start: 6 @64180 has 4 MA's), (7, 64231), (8, 64315), (11, 64360), (12, 64402), (14, 64471),

Gene: Aphelion\_111 Start: 65724, Stop: 66038, Start Num: 4

Candidate Starts for Aphelion\_111:

(Start: 3 @65706 has 1 MA's), (Start: 4 @65724 has 7 MA's), (Start: 6 @65733 has 4 MA's), (7, 65784), (8, 65868), (11, 65913), (12, 65955), (14, 66024), (15, 66033),

Gene: Bachita\_112 Start: 65382, Stop: 65696, Start Num: 4

Candidate Starts for Bachita\_112:

(Start: 3 @65364 has 1 MA's), (Start: 4 @65382 has 7 MA's), (Start: 6 @65391 has 4 MA's), (7, 65442), (8, 65526), (11, 65571), (12, 65613), (14, 65682), (15, 65691),

Gene: BrutonGaster\_91 Start: 59582, Stop: 59902, Start Num: 5

Candidate Starts for BrutonGaster\_91:

(1, 59450), (2, 59546), (Start: 5 @59582 has 1 MA's), (9, 59738), (10, 59759), (13, 59837), (14, 59888),

Gene: ClubL\_111 Start: 64312, Stop: 64626, Start Num: 4

Candidate Starts for ClubL\_111:

(Start: 3 @64294 has 1 MA's), (Start: 4 @64312 has 7 MA's), (Start: 6 @64321 has 4 MA's), (7, 64372), (8, 64456), (11, 64501), (12, 64543), (14, 64612), (15, 64621),

Gene: Cucurbita\_111 Start: 65889, Stop: 66203, Start Num: 4

Candidate Starts for Cucurbita\_111:

(Start: 3 @65871 has 1 MA's), (Start: 4 @65889 has 7 MA's), (Start: 6 @65898 has 4 MA's), (7, 65949), (8, 66033), (11, 66078), (12, 66120), (14, 66189), (15, 66198),

Gene: Culver\_110 Start: 63643, Stop: 63957, Start Num: 4

Candidate Starts for Culver\_110:

(Start: 3 @63625 has 1 MA's), (Start: 4 @63643 has 7 MA's), (Start: 6 @63652 has 4 MA's), (7, 63703), (8, 63787), (11, 63832), (12, 63874), (14, 63943),

Gene: Dusty\_107 Start: 64230, Stop: 64544, Start Num: 4

Candidate Starts for Dusty\_107:

(Start: 3 @64212 has 1 MA's), (Start: 4 @64230 has 7 MA's), (Start: 6 @64239 has 4 MA's), (7, 64290), (8, 64374), (11, 64419), (12, 64461), (14, 64530), (15, 64539),

Gene: Engineer\_111 Start: 65364, Stop: 65669, Start Num: 6

Candidate Starts for Engineer\_111:

(Start: 3 @65337 has 1 MA's), (Start: 4 @65355 has 7 MA's), (Start: 6 @65364 has 4 MA's), (7, 65415), (8, 65499), (11, 65544), (12, 65586), (14, 65655),

Gene: Lozinak\_110 Start: 65193, Stop: 65507, Start Num: 4

Candidate Starts for Lozinak\_110:

(Start: 3 @65175 has 1 MA's), (Start: 4 @65193 has 7 MA's), (Start: 6 @65202 has 4 MA's), (7, 65253), (8, 65337), (11, 65382), (12, 65424), (14, 65493),

Gene: Miskis\_109 Start: 64165, Stop: 64470, Start Num: 6

Candidate Starts for Miskis\_109:

(Start: 4 @64156 has 7 MA's), (Start: 6 @64165 has 4 MA's), (7, 64216), (8, 64300), (11, 64345), (12, 64387), (14, 64456), (15, 64465),

Gene: Norvs\_112 Start: 65220, Stop: 65534, Start Num: 4

Candidate Starts for Norvs\_112:

(Start: 3 @65202 has 1 MA's), (Start: 4 @65220 has 7 MA's), (Start: 6 @65229 has 4 MA's), (7, 65280), (8, 65364), (11, 65409), (12, 65451), (14, 65520), (15, 65529),

Gene: PhinkBoden\_110 Start: 65503, Stop: 65808, Start Num: 6

Candidate Starts for PhinkBoden\_110:

(Start: 4 @65494 has 7 MA's), (Start: 6 @65503 has 4 MA's), (7, 65554), (8, 65638), (12, 65725), (14, 65794), (15, 65803),

Gene: Smoothie\_111 Start: 65202, Stop: 65507, Start Num: 6

Candidate Starts for Smoothie\_111:

(Start: 3 @65175 has 1 MA's), (Start: 4 @65193 has 7 MA's), (Start: 6 @65202 has 4 MA's), (7, 65253), (8, 65337), (11, 65382), (12, 65424), (14, 65493),

Gene: Toniann\_110 Start: 64577, Stop: 64909, Start Num: 3

Candidate Starts for Toniann\_110:

(Start: 3 @64577 has 1 MA's), (Start: 4 @64595 has 7 MA's), (Start: 6 @64604 has 4 MA's), (7, 64655), (8, 64739), (11, 64784), (12, 64826), (14, 64895),

Gene: WilliamBoone\_111 Start: 63615, Stop: 63920, Start Num: 6

Candidate Starts for WilliamBoone\_111:

(2, 63573), (Start: 4 @63606 has 7 MA's), (Start: 6 @63615 has 4 MA's), (8, 63750), (12, 63837), (14, 63906),