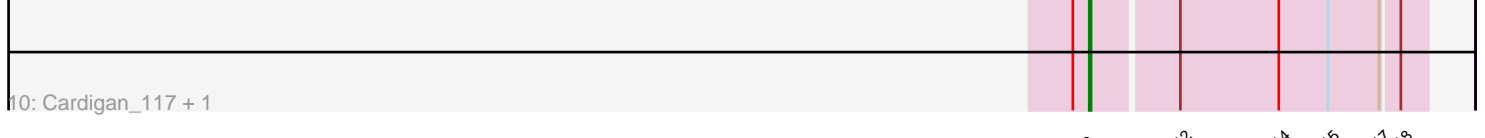
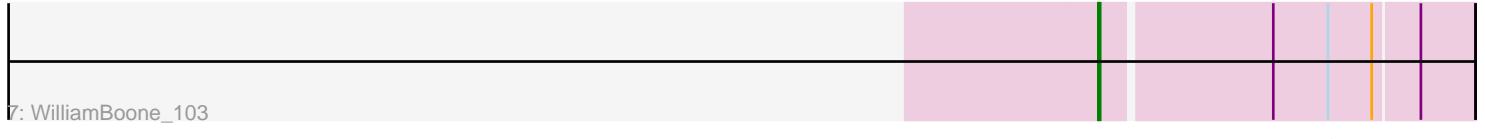
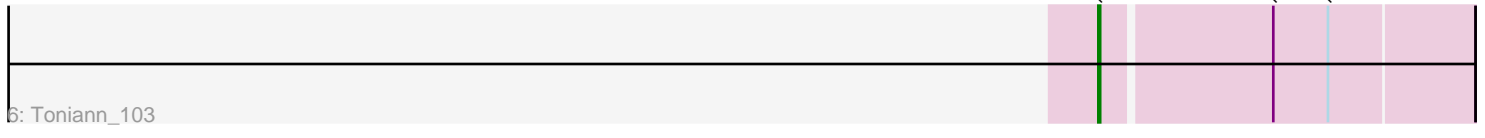
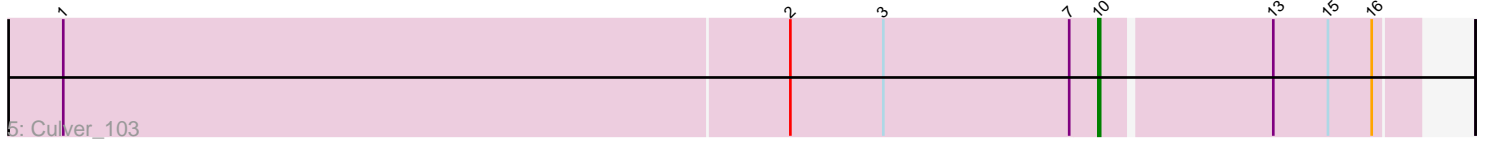
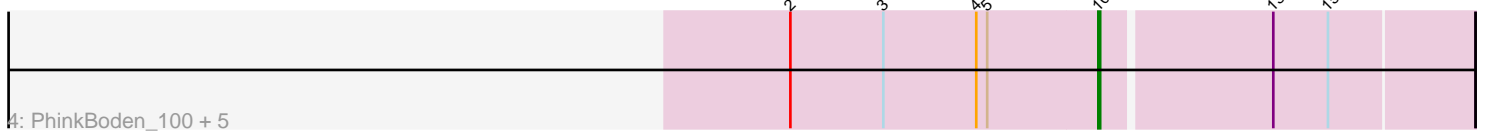
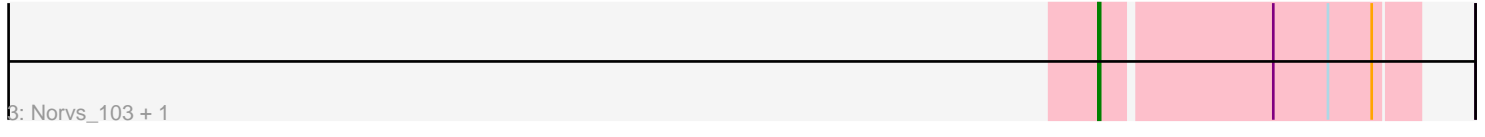
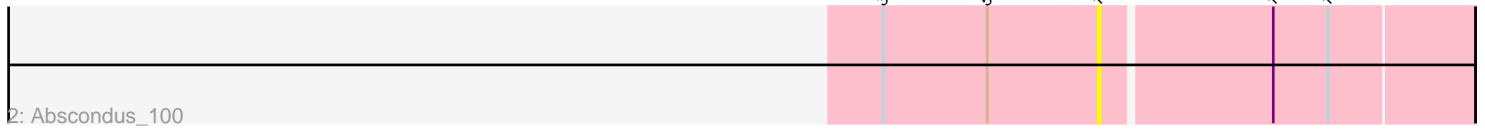
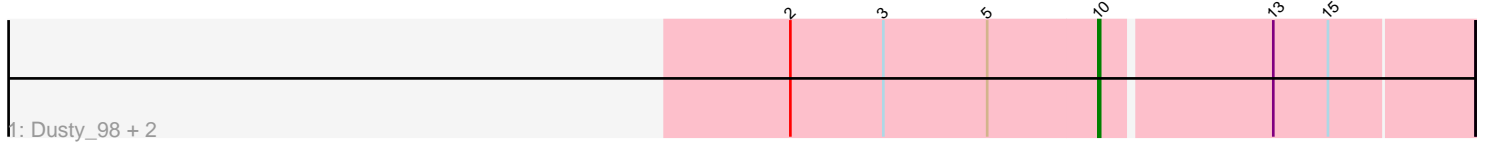


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 162189 Report

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

Pham number 162189 has 20 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Dusty\_98, Aphelion\_102, Miskis\_99
- Track 2 : Abscondus\_100
- Track 3 : Norvs\_103, ClubL\_102
- Track 4 : PhinkBoden\_100, Cucurbita\_102, Smoothie\_102, Lozinak\_101, Bachita\_103, Engineer\_102
- Track 5 : Culver\_103
- Track 6 : Toniann\_103
- Track 7 : WilliamBoone\_103
- Track 8 : OneUp\_88
- Track 9 : BrutonGaster\_82
- Track 10 : Cardigan\_117, JonJames\_116
- Track 11 : Yvonnetastic\_112

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

The start number called the most often in the published annotations is 10, it was called in 13 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_100, Aphelion\_102, Bachita\_103, ClubL\_102, Cucurbita\_102, Culver\_103, Dusty\_98, Engineer\_102, Lozinak\_101, Miskis\_99, Norvs\_103, OneUp\_88, PhinkBoden\_100, Smoothie\_102, Toniann\_103, WilliamBoone\_103,

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

- BrutonGaster\_82,

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

- Cardigan\_117, JonJames\_116, Yvonnetastic\_112,

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

Start 6:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- Manual Annotations of this start: 1 of 16

- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster\_82 (CQ2),

Start 9:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cardigan\_117 (DD), JonJames\_116 (DD), Yvonnetastic\_112 (DD),

Start 10:

- Found in 17 of 20 ( 85.0% ) of genes in pham
- Manual Annotations of this start: 13 of 16
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Abscondus\_100 (CQ), Aphelion\_102 (CQ1), Bachita\_103 (CQ1), ClubL\_102 (CQ1), Cucurbita\_102 (CQ1), Culver\_103 (CQ1), Dusty\_98 (CQ), Engineer\_102 (CQ1), Lozinak\_101 (CQ1), Miskis\_99 (CQ), Norvs\_103 (CQ), OneUp\_88 (CQ2), PhinkBoden\_100 (CQ1), Smoothie\_102 (CQ1), Toniann\_103 (CQ1), WilliamBoone\_103 (CQ1),

### **Summary by clusters:**

There are 4 clusters represented in this pham: CQ2, DD, CQ, CQ1,

Info for manual annotations of cluster CQ:

- Start number 10 was manually annotated 1 time for cluster CQ.

Info for manual annotations of cluster CQ1:

- Start number 10 was manually annotated 11 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 6 was manually annotated 1 time for cluster CQ2.
- Start number 10 was manually annotated 1 time for cluster CQ2.

Info for manual annotations of cluster DD:

- Start number 9 was manually annotated 2 times for cluster DD.

### **Gene Information:**

Gene: Abscondus\_100 Start: 59662, Stop: 59859, Start Num: 10

Candidate Starts for Abscondus\_100:

(3, 59545), (5, 59602), (Start: 10 @59662 has 13 MA's), (13, 59752), (15, 59782),

Gene: Aphelion\_102 Start: 61215, Stop: 61412, Start Num: 10

Candidate Starts for Aphelion\_102:

(2, 61047), (3, 61098), (5, 61155), (Start: 10 @61215 has 13 MA's), (13, 61305), (15, 61335),

Gene: Bachita\_103 Start: 60873, Stop: 61070, Start Num: 10

Candidate Starts for Bachita\_103:

(2, 60705), (3, 60756), (4, 60807), (5, 60813), (Start: 10 @60873 has 13 MA's), (13, 60963), (15, 60993),

Gene: BrutonGaster\_82 Start: 54964, Stop: 55164, Start Num: 6  
Candidate Starts for BrutonGaster\_82:  
(Start: 6 @54964 has 1 MA's), (Start: 10 @54979 has 13 MA's), (11, 55015), (15, 55105),

Gene: Cardigan\_117 Start: 66367, Stop: 66543, Start Num: 9  
Candidate Starts for Cardigan\_117:  
(8, 66358), (Start: 9 @66367 has 2 MA's), (12, 66412), (14, 66466), (15, 66493), (17, 66520), (18, 66529),

Gene: ClubL\_102 Start: 59803, Stop: 59970, Start Num: 10  
Candidate Starts for ClubL\_102:  
(Start: 10 @59803 has 13 MA's), (13, 59893), (15, 59923), (16, 59947),

Gene: Cucurbita\_102 Start: 61380, Stop: 61577, Start Num: 10  
Candidate Starts for Cucurbita\_102:  
(2, 61212), (3, 61263), (4, 61314), (5, 61320), (Start: 10 @61380 has 13 MA's), (13, 61470), (15, 61500),

Gene: Culver\_103 Start: 59702, Stop: 59869, Start Num: 10  
Candidate Starts for Culver\_103:  
(1, 59138), (2, 59534), (3, 59585), (7, 59687), (Start: 10 @59702 has 13 MA's), (13, 59792), (15, 59822), (16, 59846),

Gene: Dusty\_98 Start: 59721, Stop: 59918, Start Num: 10  
Candidate Starts for Dusty\_98:  
(2, 59553), (3, 59604), (5, 59661), (Start: 10 @59721 has 13 MA's), (13, 59811), (15, 59841),

Gene: Engineer\_102 Start: 60846, Stop: 61043, Start Num: 10  
Candidate Starts for Engineer\_102:  
(2, 60678), (3, 60729), (4, 60780), (5, 60786), (Start: 10 @60846 has 13 MA's), (13, 60936), (15, 60966),

Gene: JonJames\_116 Start: 66878, Stop: 67054, Start Num: 9  
Candidate Starts for JonJames\_116:  
(8, 66869), (Start: 9 @66878 has 2 MA's), (12, 66923), (14, 66977), (15, 67004), (17, 67031), (18, 67040),

Gene: Lozinak\_101 Start: 60684, Stop: 60881, Start Num: 10  
Candidate Starts for Lozinak\_101:  
(2, 60516), (3, 60567), (4, 60618), (5, 60624), (Start: 10 @60684 has 13 MA's), (13, 60774), (15, 60804),

Gene: Miskis\_99 Start: 59384, Stop: 59581, Start Num: 10  
Candidate Starts for Miskis\_99:  
(2, 59216), (3, 59267), (5, 59324), (Start: 10 @59384 has 13 MA's), (13, 59474), (15, 59504),

Gene: Norvs\_103 Start: 60711, Stop: 60878, Start Num: 10  
Candidate Starts for Norvs\_103:  
(Start: 10 @60711 has 13 MA's), (13, 60801), (15, 60831), (16, 60855),

Gene: OneUp\_88 Start: 56848, Stop: 57033, Start Num: 10  
Candidate Starts for OneUp\_88:

(Start: 10 @56848 has 13 MA's), (15, 56974),

Gene: PhinkBoden\_100 Start: 60474, Stop: 60671, Start Num: 10

Candidate Starts for PhinkBoden\_100:

(2, 60306), (3, 60357), (4, 60408), (5, 60414), (Start: 10 @60474 has 13 MA's), (13, 60564), (15, 60594),

Gene: Smoothie\_102 Start: 60684, Stop: 60881, Start Num: 10

Candidate Starts for Smoothie\_102:

(2, 60516), (3, 60567), (4, 60618), (5, 60624), (Start: 10 @60684 has 13 MA's), (13, 60774), (15, 60804),

Gene: Toniann\_103 Start: 60654, Stop: 60851, Start Num: 10

Candidate Starts for Toniann\_103:

(Start: 10 @60654 has 13 MA's), (13, 60744), (15, 60774),

Gene: WilliamBoone\_103 Start: 59422, Stop: 59619, Start Num: 10

Candidate Starts for WilliamBoone\_103:

(Start: 10 @59422 has 13 MA's), (13, 59512), (15, 59542), (16, 59566), (19, 59590),

Gene: Yvonnetastic\_112 Start: 63521, Stop: 63697, Start Num: 9

Candidate Starts for Yvonnetastic\_112:

(Start: 9 @63521 has 2 MA's), (12, 63566), (14, 63620), (15, 63647), (17, 63674), (18, 63683),