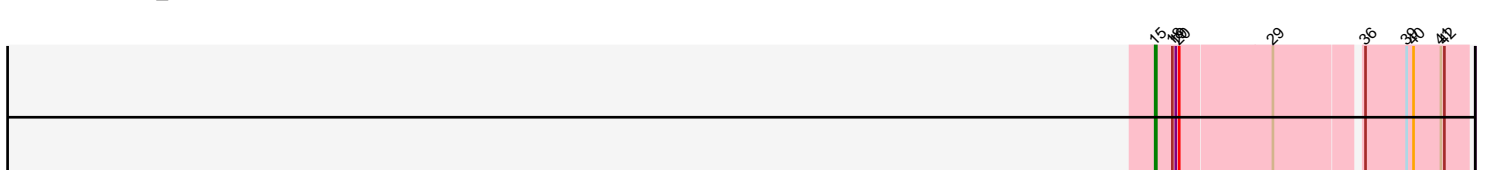
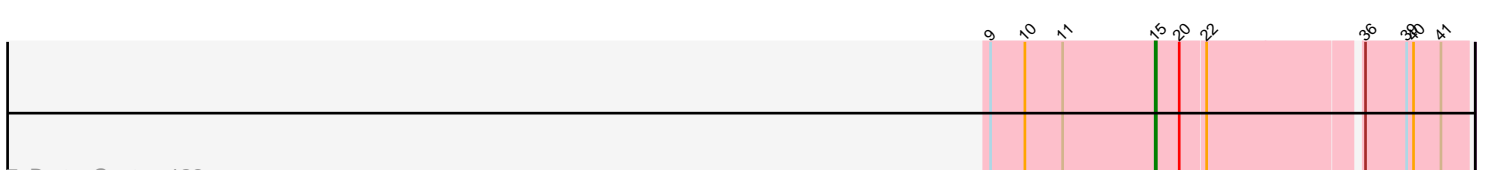
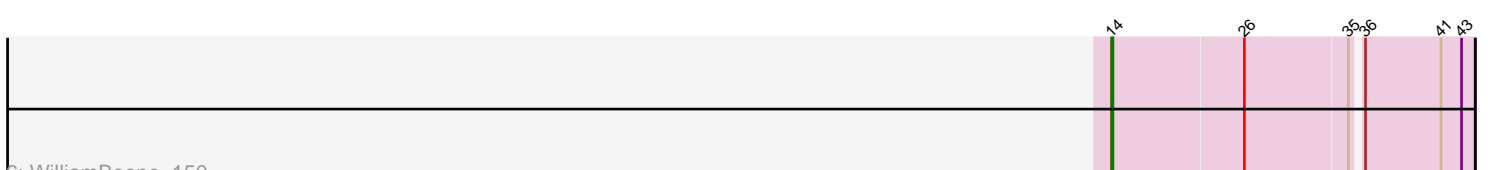
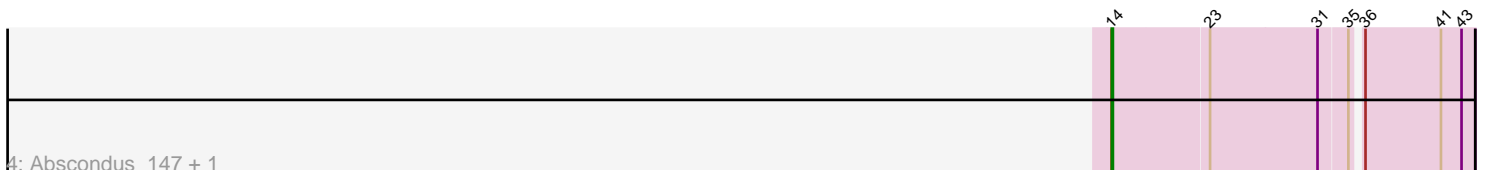
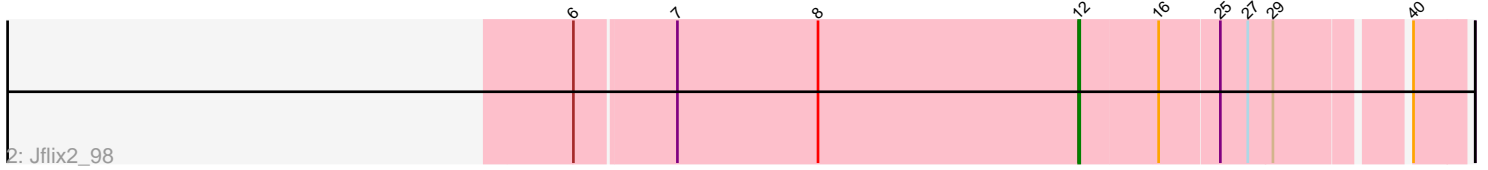
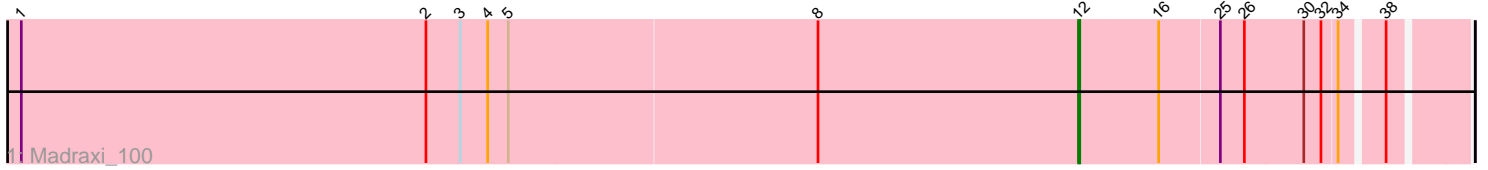


Pham 312037



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 312037 Report

This analysis was run 06/27/26 on database version 652.

Pham number 312037 has 20 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Madraxi\_100
- Track 2 : Jflix2\_98
- Track 3 : Bachita\_152, PhinkBoden\_147, Lozinak\_149, Miskis\_142, Toniann\_149, Aphelion\_148, Engineer\_151, Cucurbita\_148, Norvs\_147, Dusty\_146
- Track 4 : Abscondus\_147, Geeche\_149
- Track 5 : Culver\_149, Smoothie\_150
- Track 6 : WilliamBoone\_150
- Track 7 : BrutonGaster\_128
- Track 8 : OneUp\_134
- Track 9 : Gonephishing\_155

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

The start number called the most often in the published annotations is 14, it was called in 14 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abscondus\_147, Aphelion\_148, Bachita\_152, Cucurbita\_148, Culver\_149, Dusty\_146, Engineer\_151, Geeche\_149, Lozinak\_149, Miskis\_142, Norvs\_147, PhinkBoden\_147, Smoothie\_150, Toniann\_149, WilliamBoone\_150,

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

- 

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

- BrutonGaster\_128, Gonephishing\_155, Jflix2\_98, Madraxi\_100, OneUp\_134,

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

Start 12:

- Found in 3 of 20 ( 15.0% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Jflix2\_98 (CF), Madraxi\_100 (CF),

Start 13:

- Found in 1 of 20 ( 5.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gonephishing\_155 (J),

Start 14:

- Found in 15 of 20 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 14 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_147 (CQ1), Aphelion\_148 (CQ1), Bachita\_152 (CQ1), Cucurbita\_148 (CQ1), Culver\_149 (CQ1), Dusty\_146 (CQ1), Engineer\_151 (CQ1), Geeche\_149 (CQ1), Lozinak\_149 (CQ1), Miskis\_142 (CQ1), Norvs\_147 (CQ1), PhinkBoden\_147 (CQ1), Smoothie\_150 (CQ1), Toniann\_149 (CQ1), WilliamBoone\_150 (CQ1),

Start 15:

- Found in 2 of 20 ( 10.0% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrutonGaster\_128 (CQ2), OneUp\_134 (CQ2),

**Summary by clusters:**

There are 4 clusters represented in this pham: CQ2, CQ1, J, CF,

Info for manual annotations of cluster CF:

- Start number 12 was manually annotated 2 times for cluster CF.

Info for manual annotations of cluster CQ1:

- Start number 14 was manually annotated 14 times for cluster CQ1.

Info for manual annotations of cluster CQ2:

- Start number 15 was manually annotated 2 times for cluster CQ2.

**Gene Information:**

Gene: Abscondus\_147 Start: 80394, Stop: 80693, Start Num: 14

Candidate Starts for Abscondus\_147:

(Start: 14 @80394 has 14 MA's), (23, 80475), (31, 80568), (35, 80592), (36, 80598), (41, 80664), (43, 80682),

Gene: Aphelion\_148 Start: 81287, Stop: 81586, Start Num: 14

Candidate Starts for Aphelion\_148:

(Start: 14 @81287 has 14 MA's), (23, 81368), (33, 81473), (36, 81491), (41, 81557), (43, 81575),

Gene: Bachita\_152 Start: 81434, Stop: 81733, Start Num: 14

Candidate Starts for Bachita\_152:

(Start: 14 @81434 has 14 MA's), (23, 81515), (33, 81620), (36, 81638), (41, 81704), (43, 81722),

Gene: BrutonGaster\_128 Start: 76649, Stop: 76906, Start Num: 15

Candidate Starts for BrutonGaster\_128:

(9, 76505), (10, 76535), (11, 76568), (Start: 15 @76649 has 2 MA's), (20, 76670), (22, 76691), (36, 76817), (39, 76853), (40, 76859), (41, 76883),

Gene: Cucurbita\_148 Start: 81747, Stop: 82046, Start Num: 14

Candidate Starts for Cucurbita\_148:

(Start: 14 @81747 has 14 MA's), (23, 81828), (33, 81933), (36, 81951), (41, 82017), (43, 82035),

Gene: Culver\_149 Start: 80011, Stop: 80310, Start Num: 14

Candidate Starts for Culver\_149:

(Start: 14 @80011 has 14 MA's), (23, 80092), (36, 80215), (41, 80281), (43, 80299),

Gene: Dusty\_146 Start: 80222, Stop: 80521, Start Num: 14

Candidate Starts for Dusty\_146:

(Start: 14 @80222 has 14 MA's), (23, 80303), (33, 80408), (36, 80426), (41, 80492), (43, 80510),

Gene: Engineer\_151 Start: 81270, Stop: 81569, Start Num: 14

Candidate Starts for Engineer\_151:

(Start: 14 @81270 has 14 MA's), (23, 81351), (33, 81456), (36, 81474), (41, 81540), (43, 81558),

Gene: Geeche\_149 Start: 80647, Stop: 80946, Start Num: 14

Candidate Starts for Geeche\_149:

(Start: 14 @80647 has 14 MA's), (23, 80728), (31, 80821), (35, 80845), (36, 80851), (41, 80917), (43, 80935),

Gene: Gonephishing\_155 Start: 84870, Stop: 85190, Start Num: 13

Candidate Starts for Gonephishing\_155:

(Start: 12 @84855 has 2 MA's), (13, 84870), (17, 84933), (21, 84945), (24, 84975), (28, 85020), (32, 85065), (37, 85113),

Gene: Jflix2\_98 Start: 56001, Stop: 56309, Start Num: 12

Candidate Starts for Jflix2\_98:

(6, 55566), (7, 55650), (8, 55773), (Start: 12 @56001 has 2 MA's), (16, 56067), (25, 56118), (27, 56142), (29, 56163), (40, 56265),

Gene: Lozinak\_149 Start: 81275, Stop: 81574, Start Num: 14

Candidate Starts for Lozinak\_149:

(Start: 14 @81275 has 14 MA's), (23, 81356), (33, 81461), (36, 81479), (41, 81545), (43, 81563),

Gene: Madraxi\_100 Start: 58159, Stop: 58470, Start Num: 12

Candidate Starts for Madraxi\_100:

(1, 57238), (2, 57592), (3, 57622), (4, 57646), (5, 57664), (8, 57931), (Start: 12 @58159 has 2 MA's), (16, 58225), (25, 58276), (26, 58297), (30, 58348), (32, 58363), (34, 58375), (38, 58408),

Gene: Miskis\_142 Start: 80036, Stop: 80335, Start Num: 14

Candidate Starts for Miskis\_142:

(Start: 14 @80036 has 14 MA's), (23, 80117), (33, 80222), (36, 80240), (41, 80306), (43, 80324),

Gene: Norvs\_147 Start: 80466, Stop: 80765, Start Num: 14

Candidate Starts for Norvs\_147:

(Start: 14 @80466 has 14 MA's), (23, 80547), (33, 80652), (36, 80670), (41, 80736), (43, 80754),

Gene: OneUp\_134 Start: 80067, Stop: 80324, Start Num: 15

Candidate Starts for OneUp\_134:

(Start: 15 @80067 has 2 MA's), (18, 80082), (19, 80085), (20, 80088), (29, 80166), (36, 80235), (39, 80271), (40, 80277), (41, 80301), (42, 80304),

Gene: PhinkBoden\_147 Start: 80864, Stop: 81163, Start Num: 14

Candidate Starts for PhinkBoden\_147:

(Start: 14 @80864 has 14 MA's), (23, 80945), (33, 81050), (36, 81068), (41, 81134), (43, 81152),

Gene: Smoothie\_150 Start: 80851, Stop: 81150, Start Num: 14

Candidate Starts for Smoothie\_150:

(Start: 14 @80851 has 14 MA's), (23, 80932), (36, 81055), (41, 81121), (43, 81139),

Gene: Toniann\_149 Start: 80607, Stop: 80906, Start Num: 14

Candidate Starts for Toniann\_149:

(Start: 14 @80607 has 14 MA's), (23, 80688), (33, 80793), (36, 80811), (41, 80877), (43, 80895),

Gene: WilliamBoone\_150 Start: 78865, Stop: 79164, Start Num: 14

Candidate Starts for WilliamBoone\_150:

(Start: 14 @78865 has 14 MA's), (26, 78976), (35, 79063), (36, 79069), (41, 79135), (43, 79153),