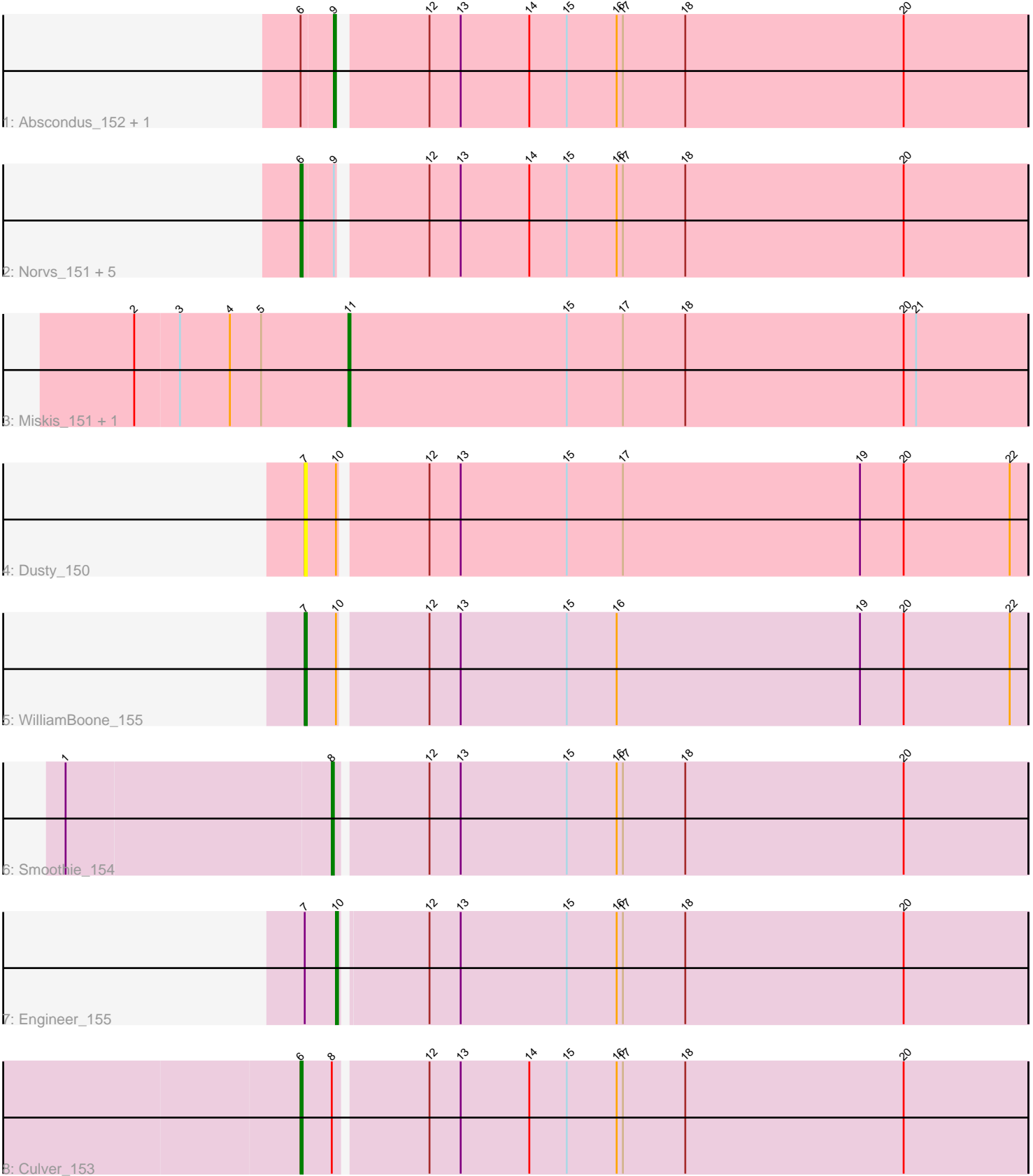


Pham 4961



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 4961 Report

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

Pham number 4961 has 15 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Abscondus\_152, PhinkBoden\_151
- Track 2 : Norvs\_151, ClubL\_154, Bachita\_156, Lozinak\_153, Cucurbita\_152, Toniann\_153
- Track 3 : Miskis\_151, Aphelion\_152
- Track 4 : Dusty\_150
- Track 5 : WilliamBoone\_155
- Track 6 : Smoothie\_154
- Track 7 : Engineer\_155
- Track 8 : Culver\_153

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

Genes that call this "Most Annotated" start:

- Bachita\_156, ClubL\_154, Cucurbita\_152, Culver\_153, Lozinak\_153, Norvs\_151, Toniann\_153,

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

- Abscondus\_152, PhinkBoden\_151,

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

- Aphelion\_152, Dusty\_150, Engineer\_155, Miskis\_151, Smoothie\_154, WilliamBoone\_155,

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

Start 6:

- Found in 9 of 15 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 7 of 12
- Called 77.8% of time when present
- Phage (with cluster) where this start called: Bachita\_156 (CQ1), ClubL\_154 (CQ1), Cucurbita\_152 (CQ1), Culver\_153 (CQ1), Lozinak\_153 (CQ1), Norvs\_151 (CQ),

Toniann\_153 (CQ1),

Start 7:

- Found in 3 of 15 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dusty\_150 (CQ), WilliamBoone\_155 (CQ1),

Start 8:

- Found in 2 of 15 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Smoothie\_154 (CQ1),

Start 9:

- Found in 8 of 15 ( 53.3% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Abscondus\_152 (CQ), PhinkBoden\_151 (CQ1),

Start 10:

- Found in 3 of 15 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Engineer\_155 (CQ1),

Start 11:

- Found in 2 of 15 ( 13.3% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aphelion\_152 (CQ1), Miskis\_151 (CQ),

### **Summary by clusters:**

There are 2 clusters represented in this pham: CQ, CQ1,

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 6 was manually annotated 6 times for cluster CQ1.
- Start number 7 was manually annotated 1 time for cluster CQ1.
- Start number 8 was manually annotated 1 time for cluster CQ1.
- Start number 9 was manually annotated 1 time for cluster CQ1.
- Start number 10 was manually annotated 1 time for cluster CQ1.
- Start number 11 was manually annotated 1 time for cluster CQ1.

### **Gene Information:**

Gene: Abscondus\_152 Start: 82121, Stop: 81795, Start Num: 9

Candidate Starts for Abscondus\_152:

(Start: 6 @82136 has 7 MA's), (Start: 9 @82121 has 1 MA's), (12, 82082), (13, 82067), (14, 82034), (15, 82016), (16, 81992), (17, 81989), (18, 81959), (20, 81854),

Gene: Aphelion\_152 Start: 83014, Stop: 82688, Start Num: 11

Candidate Starts for Aphelion\_152:

(2, 83116), (3, 83095), (4, 83071), (5, 83056), (Start: 11 @83014 has 1 MA's), (15, 82909), (17, 82882), (18, 82852), (20, 82747), (21, 82741),

Gene: Bachita\_156 Start: 83176, Stop: 82835, Start Num: 6

Candidate Starts for Bachita\_156:

(Start: 6 @83176 has 7 MA's), (Start: 9 @83161 has 1 MA's), (12, 83122), (13, 83107), (14, 83074), (15, 83056), (16, 83032), (17, 83029), (18, 82999), (20, 82894),

Gene: ClubL\_154 Start: 82428, Stop: 82087, Start Num: 6

Candidate Starts for ClubL\_154:

(Start: 6 @82428 has 7 MA's), (Start: 9 @82413 has 1 MA's), (12, 82374), (13, 82359), (14, 82326), (15, 82308), (16, 82284), (17, 82281), (18, 82251), (20, 82146),

Gene: Cucurbita\_152 Start: 83489, Stop: 83148, Start Num: 6

Candidate Starts for Cucurbita\_152:

(Start: 6 @83489 has 7 MA's), (Start: 9 @83474 has 1 MA's), (12, 83435), (13, 83420), (14, 83387), (15, 83369), (16, 83345), (17, 83342), (18, 83312), (20, 83207),

Gene: Culver\_153 Start: 81756, Stop: 81412, Start Num: 6

Candidate Starts for Culver\_153:

(Start: 6 @81756 has 7 MA's), (Start: 8 @81741 has 1 MA's), (12, 81699), (13, 81684), (14, 81651), (15, 81633), (16, 81609), (17, 81606), (18, 81576), (20, 81471),

Gene: Dusty\_150 Start: 82165, Stop: 81824, Start Num: 7

Candidate Starts for Dusty\_150:

(Start: 7 @82165 has 1 MA's), (Start: 10 @82150 has 1 MA's), (12, 82111), (13, 82096), (15, 82045), (17, 82018), (19, 81904), (20, 81883), (22, 81832),

Gene: Engineer\_155 Start: 82997, Stop: 82671, Start Num: 10

Candidate Starts for Engineer\_155:

(Start: 7 @83012 has 1 MA's), (Start: 10 @82997 has 1 MA's), (12, 82958), (13, 82943), (15, 82892), (16, 82868), (17, 82865), (18, 82835), (20, 82730),

Gene: Lozinak\_153 Start: 83017, Stop: 82676, Start Num: 6

Candidate Starts for Lozinak\_153:

(Start: 6 @83017 has 7 MA's), (Start: 9 @83002 has 1 MA's), (12, 82963), (13, 82948), (14, 82915), (15, 82897), (16, 82873), (17, 82870), (18, 82840), (20, 82735),

Gene: Miskis\_151 Start: 81763, Stop: 81437, Start Num: 11

Candidate Starts for Miskis\_151:

(2, 81865), (3, 81844), (4, 81820), (5, 81805), (Start: 11 @81763 has 1 MA's), (15, 81658), (17, 81631), (18, 81601), (20, 81496), (21, 81490),

Gene: Norvs\_151 Start: 82208, Stop: 81867, Start Num: 6

Candidate Starts for Norvs\_151:

(Start: 6 @82208 has 7 MA's), (Start: 9 @82193 has 1 MA's), (12, 82154), (13, 82139), (14, 82106), (15, 82088), (16, 82064), (17, 82061), (18, 82031), (20, 81926),

Gene: PhinkBoden\_151 Start: 82591, Stop: 82265, Start Num: 9

Candidate Starts for PhinkBoden\_151:

(Start: 6 @82606 has 7 MA's), (Start: 9 @82591 has 1 MA's), (12, 82552), (13, 82537), (14, 82504), (15, 82486), (16, 82462), (17, 82459), (18, 82429), (20, 82324),

Gene: Smoothie\_154 Start: 82581, Stop: 82252, Start Num: 8

Candidate Starts for Smoothie\_154:

(1, 82707), (Start: 8 @82581 has 1 MA's), (12, 82539), (13, 82524), (15, 82473), (16, 82449), (17, 82446), (18, 82416), (20, 82311),

Gene: Toniann\_153 Start: 82349, Stop: 82008, Start Num: 6

Candidate Starts for Toniann\_153:

(Start: 6 @82349 has 7 MA's), (Start: 9 @82334 has 1 MA's), (12, 82295), (13, 82280), (14, 82247), (15, 82229), (16, 82205), (17, 82202), (18, 82172), (20, 82067),

Gene: WilliamBoone\_155 Start: 80809, Stop: 80468, Start Num: 7

Candidate Starts for WilliamBoone\_155:

(Start: 7 @80809 has 1 MA's), (Start: 10 @80794 has 1 MA's), (12, 80755), (13, 80740), (15, 80689), (16, 80665), (19, 80548), (20, 80527), (22, 80476),