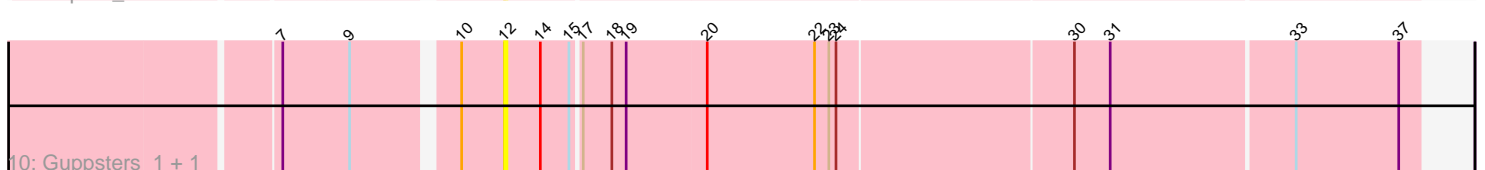
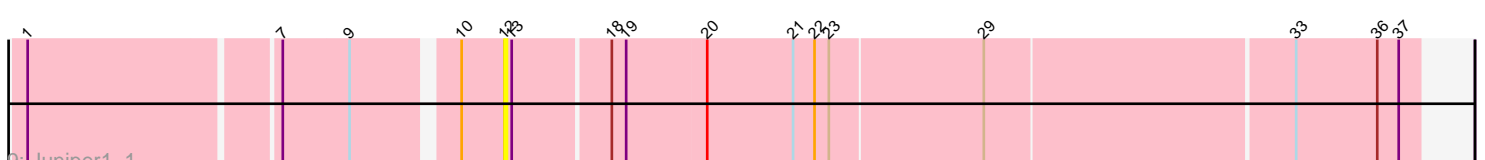
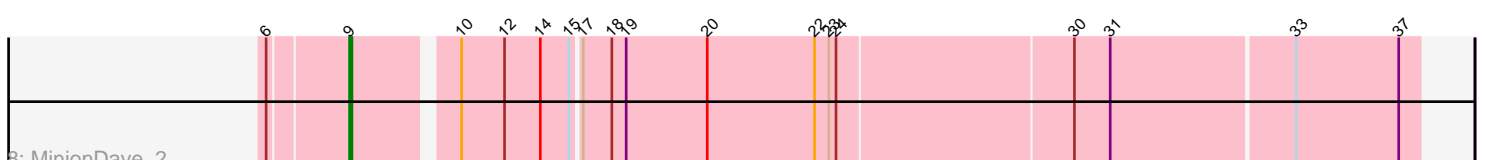
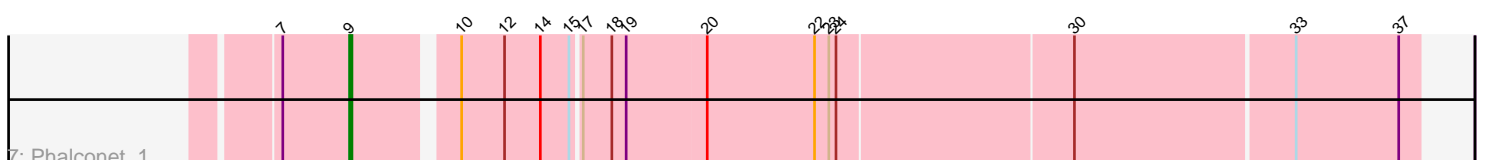
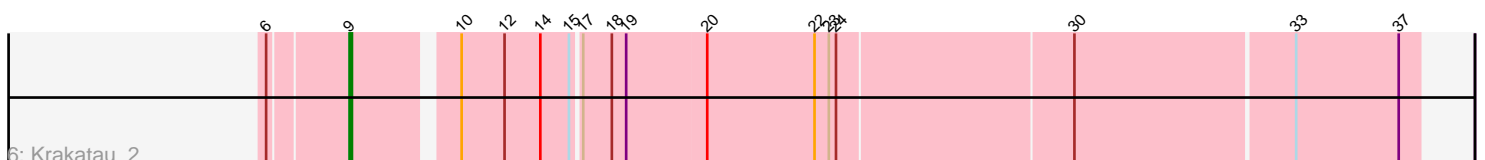
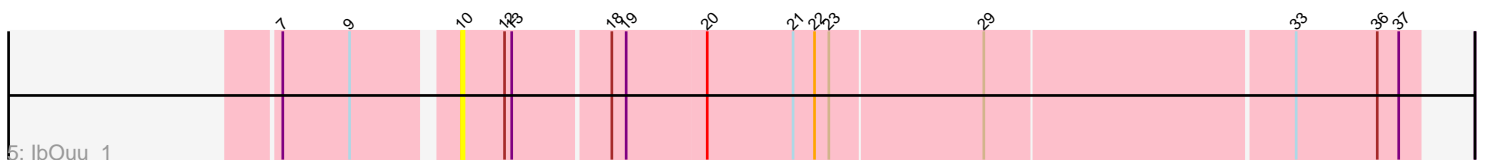
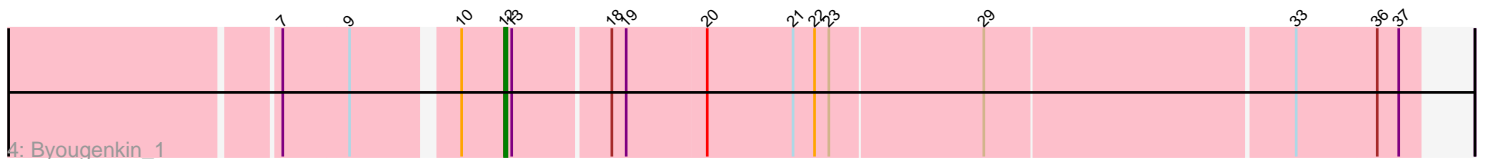
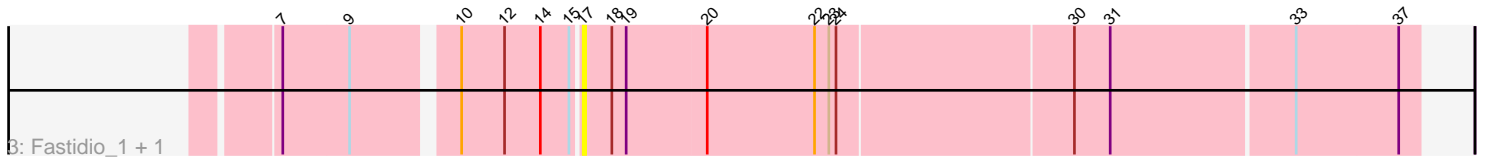
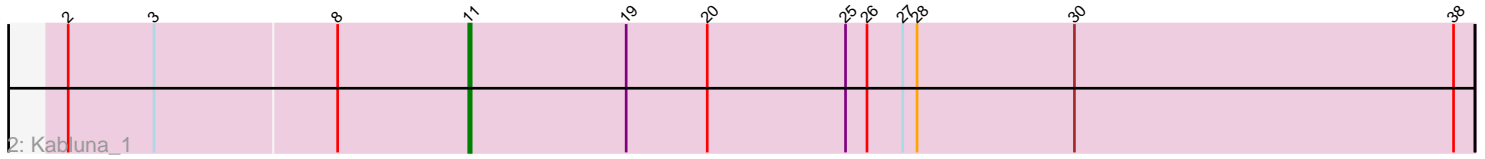
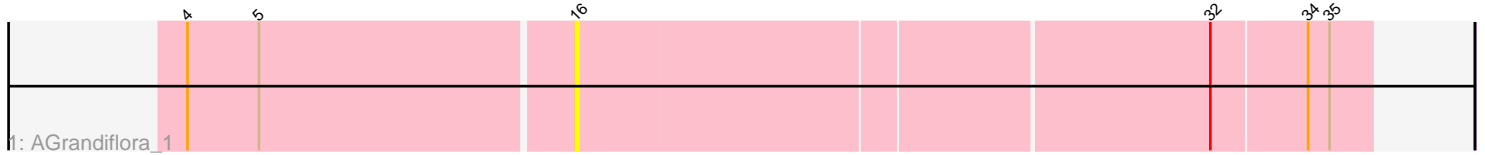


# Pham 164058



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 164058 Report

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

Pham number 164058 has 12 members, 7 are drafts.

Phages represented in each track:

- Track 1 : AGrandiflora\_1
- Track 2 : Kabluna\_1
- Track 3 : Fastidio\_1, PhesterPhotato\_1
- Track 4 : Byougenkin\_1
- Track 5 : IbOuu\_1
- Track 6 : Krakatau\_2
- Track 7 : Phalconet\_1
- Track 8 : MinionDave\_2
- Track 9 : Juniper1\_1
- Track 10 : Guppsters\_1, Ms6\_1

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

The start number called the most often in the published annotations is 9, it was called in 3 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Krakatau\_2, MinionDave\_2, Phalconet\_1,

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

- Byougenkin\_1, Fastidio\_1, Guppsters\_1, IbOuu\_1, Juniper1\_1, Ms6\_1, PhesterPhotato\_1,

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

- AGrandiflora\_1, Kabluna\_1,

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

Start 9:

- Found in 10 of 12 ( 83.3% ) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Krakatau\_2 (F1), MinionDave\_2 (F1), Phalconet\_1 (F1),

Start 10:

- Found in 10 of 12 ( 83.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 10.0% of time when present
- Phage (with cluster) where this start called: IbOuu\_1 (F1),

Start 11:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kabluna\_1 (CR2),

Start 12:

- Found in 10 of 12 ( 83.3% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Byougenkin\_1 (F1), Guppsters\_1 (F1), Juniper1\_1 (F1), Ms6\_1 (F1),

Start 16:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AGrandiflora\_1 (AZ1),

Start 17:

- Found in 7 of 12 ( 58.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 28.6% of time when present
- Phage (with cluster) where this start called: Fastidio\_1 (F1), PhesterPhotato\_1 (F1),

**Summary by clusters:**

There are 3 clusters represented in this pham: CR2, F1, AZ1,

Info for manual annotations of cluster CR2:

- Start number 11 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster F1:

- Start number 9 was manually annotated 3 times for cluster F1.
- Start number 12 was manually annotated 1 time for cluster F1.

**Gene Information:**

Gene: AGrandiflora\_1 Start: 213, Stop: 536, Start Num: 16

Candidate Starts for AGrandiflora\_1:

(4, 54), (5, 84), (16, 213), (32, 471), (34, 510), (35, 519),

Gene: Byougenkin\_1 Start: 193, Stop: 564, Start Num: 12

Candidate Starts for Byougenkin\_1:

(7, 109), (Start: 9 @136 has 3 MA's), (10, 175), (Start: 12 @193 has 1 MA's), (13, 196), (18, 235), (19, 241), (20, 274), (21, 310), (22, 319), (23, 325), (29, 388), (33, 514), (36, 547), (37, 556),

Gene: Fastidio\_1 Start: 223, Stop: 564, Start Num: 17

Candidate Starts for Fastidio\_1:

(7, 109), (Start: 9 @136 has 3 MA's), (10, 175), (Start: 12 @193 has 1 MA's), (14, 208), (15, 220), (17, 223), (18, 235), (19, 241), (20, 274), (22, 319), (23, 325), (24, 328), (30, 424), (31, 439), (33, 514), (37, 556),

Gene: Guppsters\_1 Start: 193, Stop: 564, Start Num: 12

Candidate Starts for Guppsters\_1:

(7, 109), (Start: 9 @136 has 3 MA's), (10, 175), (Start: 12 @193 has 1 MA's), (14, 208), (15, 220), (17, 223), (18, 235), (19, 241), (20, 274), (22, 319), (23, 325), (24, 328), (30, 424), (31, 439), (33, 514), (37, 556),

Gene: lbOuu\_1 Start: 174, Stop: 563, Start Num: 10

Candidate Starts for lbOuu\_1:

(7, 108), (Start: 9 @135 has 3 MA's), (10, 174), (Start: 12 @192 has 1 MA's), (13, 195), (18, 234), (19, 240), (20, 273), (21, 309), (22, 318), (23, 324), (29, 387), (33, 513), (36, 546), (37, 555),

Gene: Juniper1\_1 Start: 192, Stop: 563, Start Num: 12

Candidate Starts for Juniper1\_1:

(1, 9), (7, 108), (Start: 9 @135 has 3 MA's), (10, 174), (Start: 12 @192 has 1 MA's), (13, 195), (18, 234), (19, 240), (20, 273), (21, 309), (22, 318), (23, 324), (29, 387), (33, 513), (36, 546), (37, 555),

Gene: Kabluna\_1 Start: 289, Stop: 708, Start Num: 11

Candidate Starts for Kabluna\_1:

(2, 124), (3, 160), (8, 235), (Start: 11 @289 has 1 MA's), (19, 355), (20, 388), (25, 445), (26, 454), (27, 469), (28, 475), (30, 541), (38, 700),

Gene: Krakatau\_2 Start: 784, Stop: 1212, Start Num: 9

Candidate Starts for Krakatau\_2:

(6, 754), (Start: 9 @784 has 3 MA's), (10, 823), (Start: 12 @841 has 1 MA's), (14, 856), (15, 868), (17, 871), (18, 883), (19, 889), (20, 922), (22, 967), (23, 973), (24, 976), (30, 1072), (33, 1162), (37, 1204),

Gene: MinionDave\_2 Start: 784, Stop: 1212, Start Num: 9

Candidate Starts for MinionDave\_2:

(6, 754), (Start: 9 @784 has 3 MA's), (10, 823), (Start: 12 @841 has 1 MA's), (14, 856), (15, 868), (17, 871), (18, 883), (19, 889), (20, 922), (22, 967), (23, 973), (24, 976), (30, 1072), (31, 1087), (33, 1162), (37, 1204),

Gene: Ms6\_1 Start: 193, Stop: 564, Start Num: 12

Candidate Starts for Ms6\_1:

(7, 109), (Start: 9 @136 has 3 MA's), (10, 175), (Start: 12 @193 has 1 MA's), (14, 208), (15, 220), (17, 223), (18, 235), (19, 241), (20, 274), (22, 319), (23, 325), (24, 328), (30, 424), (31, 439), (33, 514), (37, 556),

Gene: Phalconet\_1 Start: 136, Stop: 564, Start Num: 9

Candidate Starts for Phalconet\_1:

(7, 109), (Start: 9 @136 has 3 MA's), (10, 175), (Start: 12 @193 has 1 MA's), (14, 208), (15, 220), (17, 223), (18, 235), (19, 241), (20, 274), (22, 319), (23, 325), (24, 328), (30, 424), (33, 514), (37, 556),

Gene: PhesterPhotato\_1 Start: 223, Stop: 564, Start Num: 17

Candidate Starts for PhesterPhotato\_1:

(7, 109), (Start: 9 @136 has 3 MA's), (10, 175), (Start: 12 @193 has 1 MA's), (14, 208), (15, 220), (17, 223), (18, 235), (19, 241), (20, 274), (22, 319), (23, 325), (24, 328), (30, 424), (31, 439), (33, 514), (37, 556),