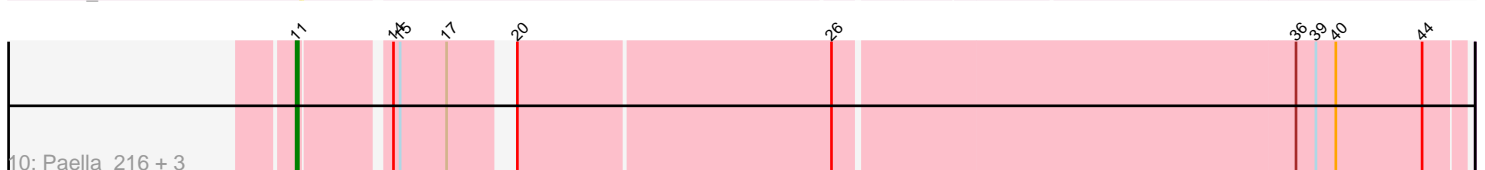
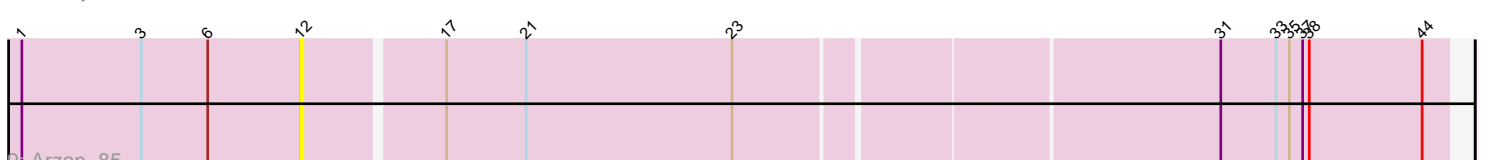
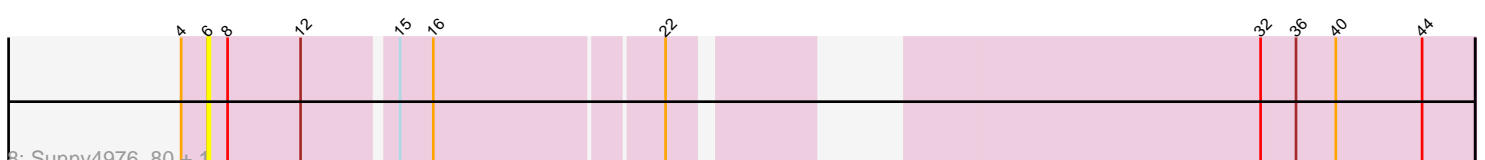
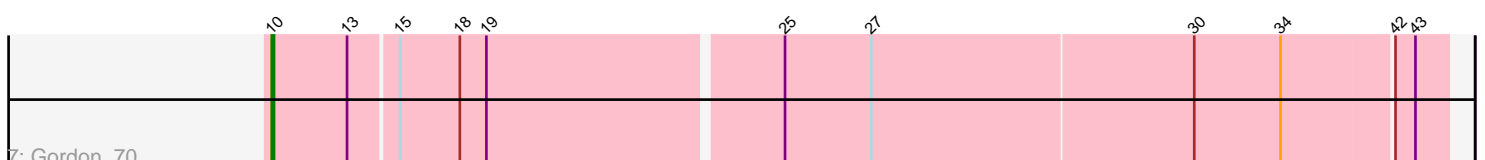
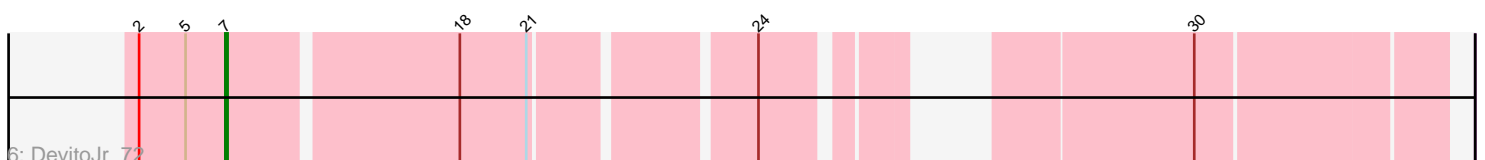
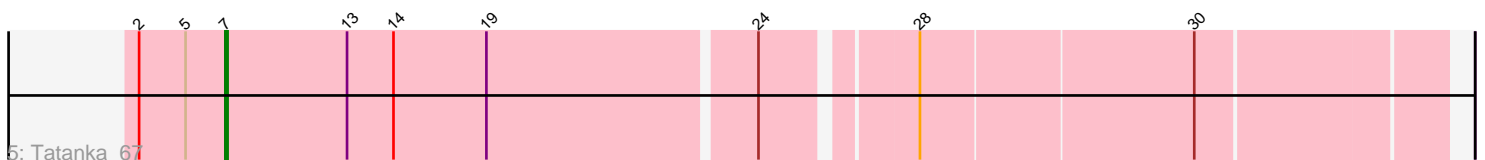
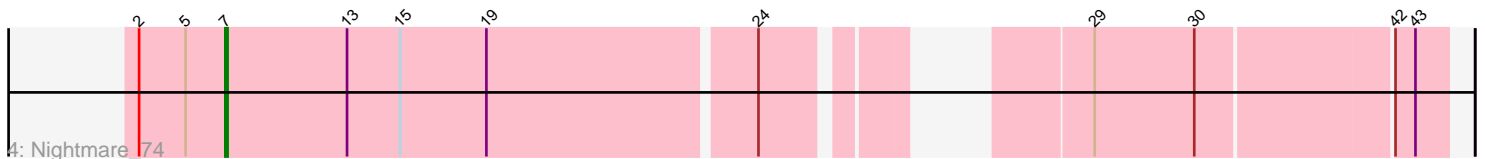
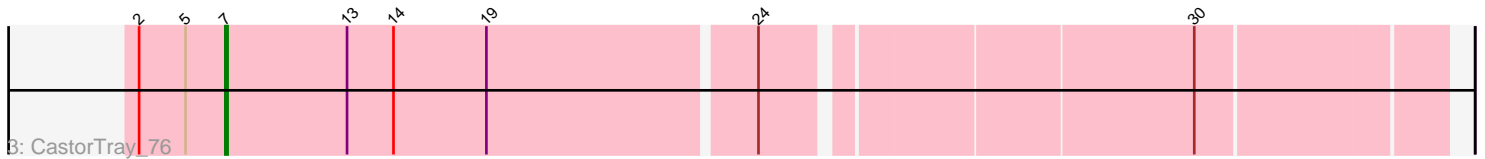
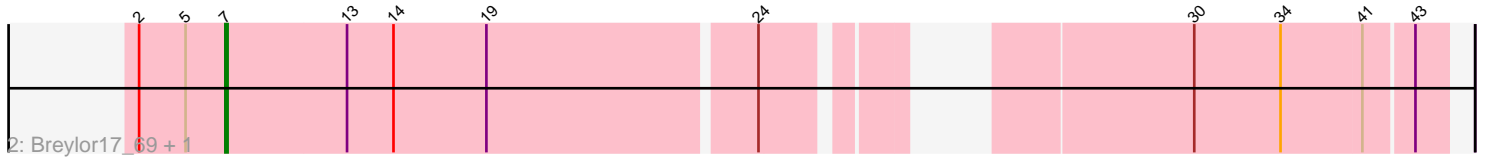
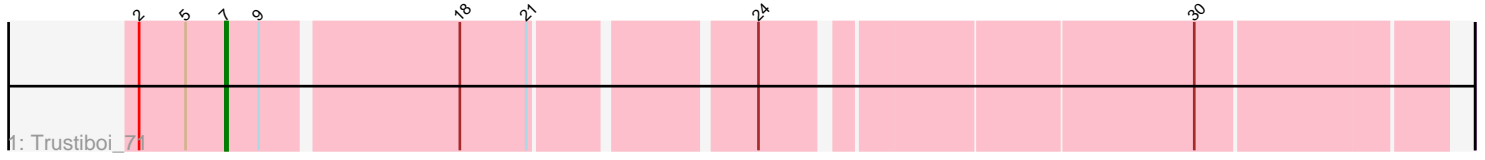


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 216658 Report

This analysis was run 02/22/25 on database version 588.

Pham number 216658 has 15 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Trustiboi\_71
- Track 2 : Breylor17\_69, Synepsis\_68
- Track 3 : CastorTray\_76
- Track 4 : Nightmare\_74
- Track 5 : Tatanka\_67
- Track 6 : DevitoJr\_72
- Track 7 : Gordon\_70
- Track 8 : Sunny4976\_80, Jazzy4900\_81
- Track 9 : Arzan\_85
- Track 10 : Paella\_216, Gandionco\_214, Elver\_212, Qui\_216

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

The start number called the most often in the published annotations is 7, it was called in 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Breylor17\_69, CastorTray\_76, DevitoJr\_72, Nightmare\_74, Synepsis\_68, Tatanka\_67, Trustiboi\_71,

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

- 

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

- Arzan\_85, Elver\_212, Gandionco\_214, Gordon\_70, Jazzy4900\_81, Paella\_216, Qui\_216, Sunny4976\_80,

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

Start 6:

- Found in 3 of 15 ( 20.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Jazzy4900\_81 (FI), Sunny4976\_80 (FI),

Start 7:

- Found in 7 of 15 ( 46.7% ) of genes in pham
- Manual Annotations of this start: 7 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Breylor17\_69 (AU1), CastorTray\_76 (AU1), DevitoJr\_72 (AU1), Nightmare\_74 (AU1), Synepsis\_68 (AU1), Tatanka\_67 (AU1), Trustiboi\_71 (AU1),

Start 10:

- Found in 1 of 15 ( 6.7% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gordon\_70 (AU1),

Start 11:

- Found in 4 of 15 ( 26.7% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Elver\_212 (FK), Gandionco\_214 (FK), Paella\_216 (FK), Qui\_216 (FK),

Start 12:

- Found in 3 of 15 ( 20.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Arzan\_85 (FI),

**Summary by clusters:**

There are 3 clusters represented in this pham: AU1, FI, FK,

Info for manual annotations of cluster AU1:

- Start number 7 was manually annotated 7 times for cluster AU1.
- Start number 10 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster FK:

- Start number 11 was manually annotated 2 times for cluster FK.

**Gene Information:**

Gene: Arzan\_85 Start: 51094, Stop: 51591, Start Num: 12

Candidate Starts for Arzan\_85:

(1, 50968), (3, 51022), (6, 51052), (12, 51094), (17, 51154), (21, 51190), (23, 51283), (31, 51490), (33, 51514), (35, 51520), (37, 51526), (38, 51529), (44, 51580),

Gene: Breylor17\_69 Start: 49530, Stop: 50018, Start Num: 7

Candidate Starts for Breylor17\_69:

(2, 49491), (5, 49512), (Start: 7 @49530 has 7 MA's), (13, 49584), (14, 49605), (19, 49647), (24, 49764), (30, 49908), (34, 49947), (41, 49983), (43, 50004),

Gene: CastorTray\_76 Start: 49722, Stop: 50243, Start Num: 7

Candidate Starts for CastorTray\_76:

(2, 49683), (5, 49704), (Start: 7 @49722 has 7 MA's), (13, 49776), (14, 49797), (19, 49839), (24, 49956), (30, 50136),

Gene: DevitoJr\_72 Start: 49103, Stop: 49573, Start Num: 7

Candidate Starts for DevitoJr\_72:

(2, 49064), (5, 49085), (Start: 7 @49103 has 7 MA's), (18, 49202), (21, 49232), (24, 49322), (30, 49466),

Gene: Elver\_212 Start: 98933, Stop: 99430, Start Num: 11

Candidate Starts for Elver\_212:

(Start: 11 @98933 has 2 MA's), (14, 98969), (15, 98972), (17, 98993), (20, 99014), (26, 99152), (36, 99356), (39, 99365), (40, 99374), (44, 99413),

Gene: Gandionco\_214 Start: 98504, Stop: 99001, Start Num: 11

Candidate Starts for Gandionco\_214:

(Start: 11 @98504 has 2 MA's), (14, 98540), (15, 98543), (17, 98564), (20, 98585), (26, 98723), (36, 98927), (39, 98936), (40, 98945), (44, 98984),

Gene: Gordon\_70 Start: 49594, Stop: 50109, Start Num: 10

Candidate Starts for Gordon\_70:

(Start: 10 @49594 has 1 MA's), (13, 49627), (15, 49648), (18, 49675), (19, 49687), (25, 49816), (27, 49855), (30, 49999), (34, 50038), (42, 50086), (43, 50095),

Gene: Jazzy4900\_81 Start: 51336, Stop: 51845, Start Num: 6

Candidate Starts for Jazzy4900\_81:

(4, 51324), (6, 51336), (8, 51345), (12, 51378), (15, 51417), (16, 51432), (22, 51531), (32, 51750), (36, 51765), (40, 51783), (44, 51822),

Gene: Nightmare\_74 Start: 50029, Stop: 50514, Start Num: 7

Candidate Starts for Nightmare\_74:

(2, 49990), (5, 50011), (Start: 7 @50029 has 7 MA's), (13, 50083), (15, 50107), (19, 50146), (24, 50263), (29, 50362), (30, 50407), (42, 50491), (43, 50500),

Gene: Paella\_216 Start: 99818, Stop: 100315, Start Num: 11

Candidate Starts for Paella\_216:

(Start: 11 @99818 has 2 MA's), (14, 99854), (15, 99857), (17, 99878), (20, 99899), (26, 100037), (36, 100241), (39, 100250), (40, 100259), (44, 100298),

Gene: Qui\_216 Start: 99806, Stop: 100303, Start Num: 11

Candidate Starts for Qui\_216:

(Start: 11 @99806 has 2 MA's), (14, 99842), (15, 99845), (17, 99866), (20, 99887), (26, 100025), (36, 100229), (39, 100238), (40, 100247), (44, 100286),

Gene: Sunny4976\_80 Start: 51336, Stop: 51845, Start Num: 6

Candidate Starts for Sunny4976\_80:

(4, 51324), (6, 51336), (8, 51345), (12, 51378), (15, 51417), (16, 51432), (22, 51531), (32, 51750), (36, 51765), (40, 51783), (44, 51822),

Gene: Synopsis\_68 Start: 49067, Stop: 49555, Start Num: 7

Candidate Starts for Synopsis\_68:

(2, 49028), (5, 49049), (Start: 7 @49067 has 7 MA's), (13, 49121), (14, 49142), (19, 49184), (24, 49301), (30, 49445), (34, 49484), (41, 49520), (43, 49541),

Gene: Tatanka\_67 Start: 49212, Stop: 49733, Start Num: 7

Candidate Starts for Tatanka\_67:

(2, 49173), (5, 49194), (Start: 7 @49212 has 7 MA's), (13, 49266), (14, 49287), (19, 49329), (24, 49446), (28, 49506), (30, 49626),

Gene: Trustiboi\_71 Start: 49330, Stop: 49836, Start Num: 7

Candidate Starts for Trustiboi\_71:

(2, 49291), (5, 49312), (Start: 7 @49330 has 7 MA's), (9, 49345), (18, 49429), (21, 49459), (24, 49549), (30, 49729),