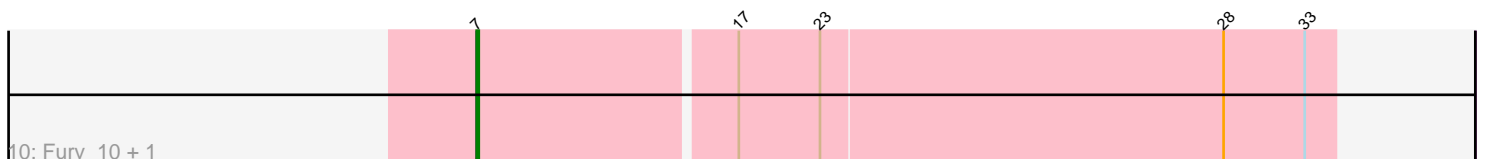
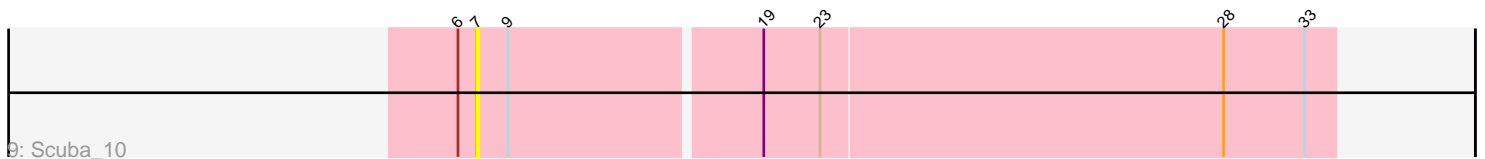
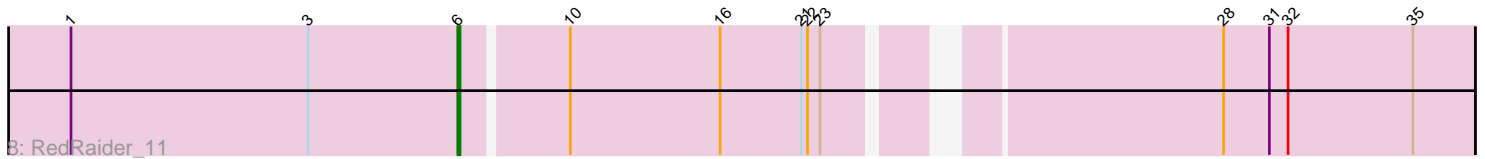
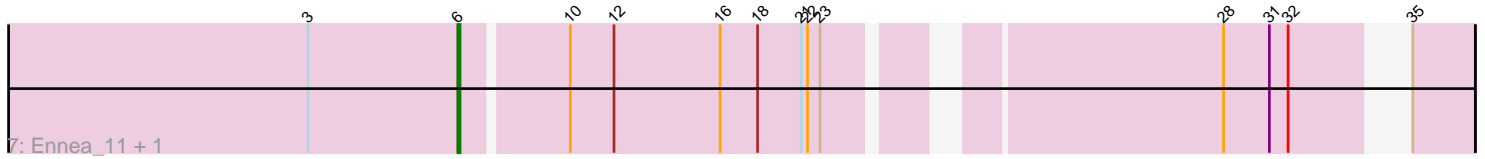
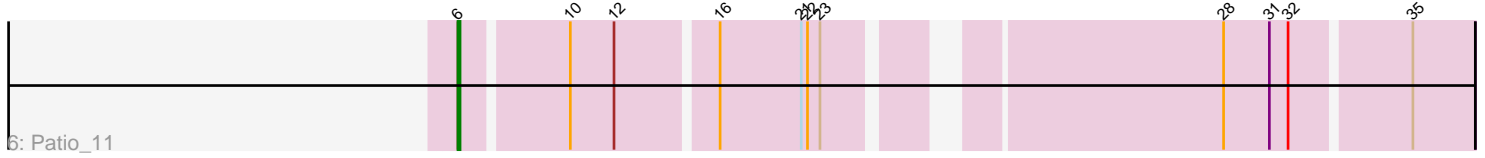
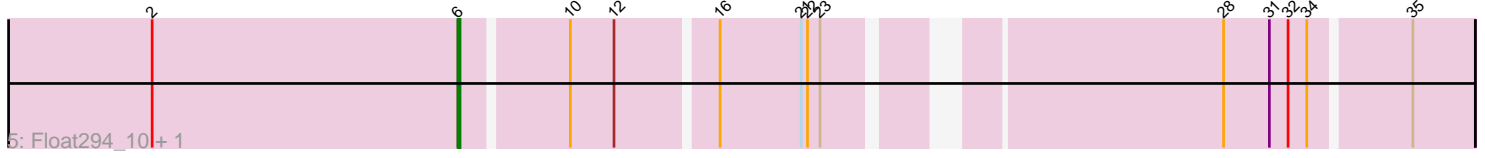
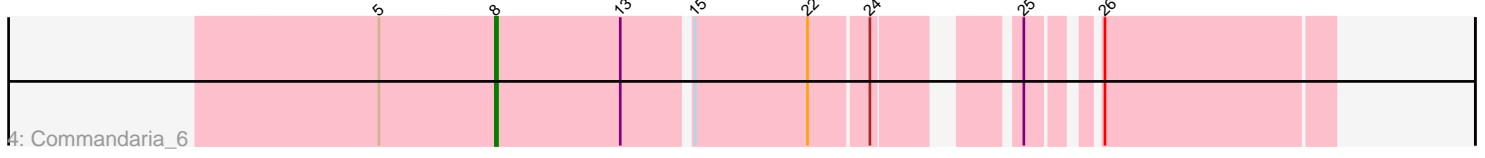
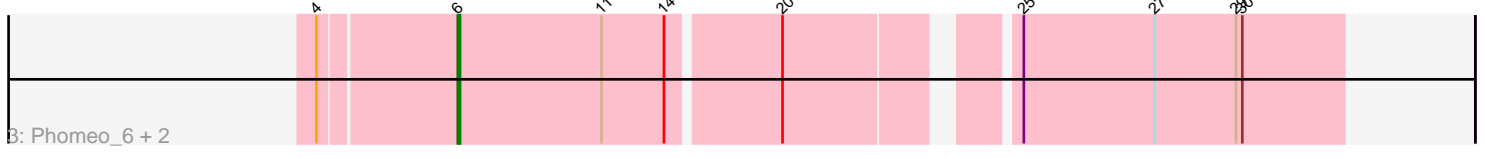
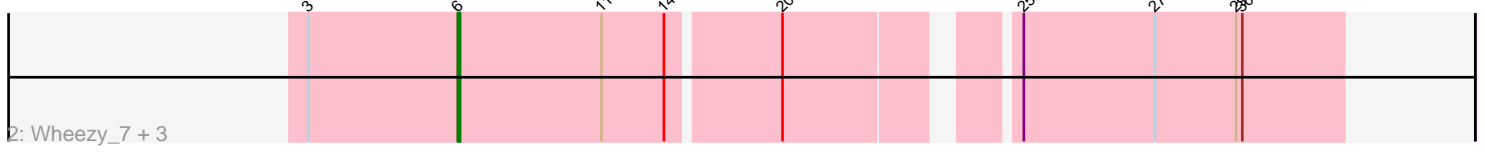
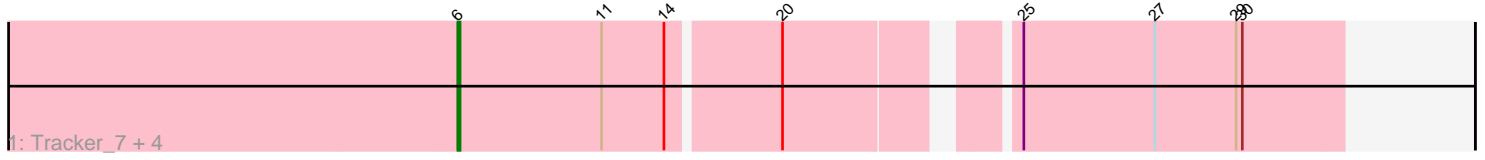


# Pham 223410



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 223410 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223410 has 22 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Tracker\_7, Kurt\_7, Foxboro\_7, KidneyBean\_7, Emianna\_7
- Track 2 : Wheezy\_7, GrootJr\_9, Arti\_7, NovumRegina\_7
- Track 3 : Phomeo\_6, NatB6\_7, Jifall16\_6
- Track 4 : Commandaria\_6
- Track 5 : Float294\_10, Skysand\_10
- Track 6 : Patio\_11
- Track 7 : Ennea\_11, Lollipop1437\_10
- Track 8 : RedRaider\_11
- Track 9 : Scuba\_10
- Track 10 : Fury\_10, Pleakley\_10

### ***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 17 of the 20 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arti\_7, Emianna\_7, Ennea\_11, Float294\_10, Foxboro\_7, GrootJr\_9, Jifall16\_6, KidneyBean\_7, Kurt\_7, Lollipop1437\_10, NatB6\_7, NovumRegina\_7, Patio\_11, Phomeo\_6, RedRaider\_11, Skysand\_10, Tracker\_7, Wheezy\_7,

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

- Scuba\_10,

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

- Commandaria\_6, Fury\_10, Pleakley\_10,

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

Start 6:

- Found in 19 of 22 ( 86.4% ) of genes in pham
- Manual Annotations of this start: 17 of 20
- Called 94.7% of time when present

- Phage (with cluster) where this start called: Arti\_7 (CR2), Emianna\_7 (CR2), Ennea\_11 (CR3), Float294\_10 (CR3), Foxboro\_7 (CR2), GrootJr\_9 (CR2), Jifall16\_6 (CR2), KidneyBean\_7 (CR2), Kurt\_7 (CR2), Lollipop1437\_10 (CR3), NatB6\_7 (CR2), NovumRegina\_7 (CR2), Patio\_11 (CR3), Phomeo\_6 (CR2), RedRaider\_11 (CR3), Skysand\_10 (CR3), Tracker\_7 (CR2), Wheezy\_7 (CR2),

#### Start 7:

- Found in 3 of 22 ( 13.6% ) of genes in pham
- Manual Annotations of this start: 2 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fury\_10 (CR5), Pleakley\_10 (CR5), Scuba\_10 (CR5),

#### Start 8:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 20
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Commandaria\_6 (CR2),

### Summary by clusters:

There are 3 clusters represented in this pham: CR2, CR3, CR5,

Info for manual annotations of cluster CR2:

- Start number 6 was manually annotated 11 times for cluster CR2.
- Start number 8 was manually annotated 1 time for cluster CR2.

Info for manual annotations of cluster CR3:

- Start number 6 was manually annotated 6 times for cluster CR3.

Info for manual annotations of cluster CR5:

- Start number 7 was manually annotated 2 times for cluster CR5.

### Gene Information:

Gene: Arti\_7 Start: 5140, Stop: 5535, Start Num: 6

Candidate Starts for Arti\_7:

(3, 5071), (Start: 6 @5140 has 17 MA's), (11, 5209), (14, 5239), (20, 5290), (25, 5383), (27, 5446), (29, 5485), (30, 5488),

Gene: Commandaria\_6 Start: 4204, Stop: 4557, Start Num: 8

Candidate Starts for Commandaria\_6:

(5, 4150), (Start: 8 @4204 has 1 MA's), (13, 4264), (15, 4294), (22, 4348), (24, 4375), (25, 4426), (26, 4450),

Gene: Emianna\_7 Start: 5108, Stop: 5503, Start Num: 6

Candidate Starts for Emianna\_7:

(Start: 6 @5108 has 17 MA's), (11, 5177), (14, 5207), (20, 5258), (25, 5351), (27, 5414), (29, 5453), (30, 5456),

Gene: Ennea\_11 Start: 6085, Stop: 6513, Start Num: 6

Candidate Starts for Ennea\_11:

(3, 6016), (Start: 6 @6085 has 17 MA's), (10, 6133), (12, 6154), (16, 6205), (18, 6223), (21, 6244), (22, 6247), (23, 6253), (28, 6418), (31, 6439), (32, 6448), (35, 6484),

Gene: Float294\_10 Start: 5905, Stop: 6345, Start Num: 6

Candidate Starts for Float294\_10:

(2, 5761), (Start: 6 @5905 has 17 MA's), (10, 5953), (12, 5974), (16, 6019), (21, 6058), (22, 6061), (23, 6067), (28, 6232), (31, 6253), (32, 6262), (34, 6271), (35, 6316),

Gene: Foxboro\_7 Start: 5119, Stop: 5514, Start Num: 6

Candidate Starts for Foxboro\_7:

(Start: 6 @5119 has 17 MA's), (11, 5188), (14, 5218), (20, 5269), (25, 5362), (27, 5425), (29, 5464), (30, 5467),

Gene: Fury\_10 Start: 4783, Stop: 5187, Start Num: 7

Candidate Starts for Fury\_10:

(Start: 7 @4783 has 2 MA's), (17, 4903), (23, 4942), (28, 5134), (33, 5173),

Gene: GrootJr\_9 Start: 5535, Stop: 5930, Start Num: 6

Candidate Starts for GrootJr\_9:

(3, 5466), (Start: 6 @5535 has 17 MA's), (11, 5604), (14, 5634), (20, 5685), (25, 5778), (27, 5841), (29, 5880), (30, 5883),

Gene: Jifall16\_6 Start: 4580, Stop: 4975, Start Num: 6

Candidate Starts for Jifall16\_6:

(4, 4520), (Start: 6 @4580 has 17 MA's), (11, 4649), (14, 4679), (20, 4730), (25, 4823), (27, 4886), (29, 4925), (30, 4928),

Gene: KidneyBean\_7 Start: 4925, Stop: 5320, Start Num: 6

Candidate Starts for KidneyBean\_7:

(Start: 6 @4925 has 17 MA's), (11, 4994), (14, 5024), (20, 5075), (25, 5168), (27, 5231), (29, 5270), (30, 5273),

Gene: Kurt\_7 Start: 5108, Stop: 5503, Start Num: 6

Candidate Starts for Kurt\_7:

(Start: 6 @5108 has 17 MA's), (11, 5177), (14, 5207), (20, 5258), (25, 5351), (27, 5414), (29, 5453), (30, 5456),

Gene: Lollipop1437\_10 Start: 6073, Stop: 6501, Start Num: 6

Candidate Starts for Lollipop1437\_10:

(3, 6004), (Start: 6 @6073 has 17 MA's), (10, 6121), (12, 6142), (16, 6193), (18, 6211), (21, 6232), (22, 6235), (23, 6241), (28, 6406), (31, 6427), (32, 6436), (35, 6472),

Gene: NatB6\_7 Start: 5187, Stop: 5582, Start Num: 6

Candidate Starts for NatB6\_7:

(4, 5127), (Start: 6 @5187 has 17 MA's), (11, 5256), (14, 5286), (20, 5337), (25, 5430), (27, 5493), (29, 5532), (30, 5535),

Gene: NovumRegina\_7 Start: 5534, Stop: 5929, Start Num: 6

Candidate Starts for NovumRegina\_7:

(3, 5465), (Start: 6 @5534 has 17 MA's), (11, 5603), (14, 5633), (20, 5684), (25, 5777), (27, 5840), (29, 5879), (30, 5882),

Gene: Patio\_11 Start: 6581, Stop: 7021, Start Num: 6

Candidate Starts for Patio\_11:

(Start: 6 @6581 has 17 MA's), (10, 6629), (12, 6650), (16, 6695), (21, 6734), (22, 6737), (23, 6743), (28, 6908), (31, 6929), (32, 6938), (35, 6992),

Gene: Phomeo\_6 Start: 4761, Stop: 5156, Start Num: 6

Candidate Starts for Phomeo\_6:

(4, 4701), (Start: 6 @4761 has 17 MA's), (11, 4830), (14, 4860), (20, 4911), (25, 5004), (27, 5067), (29, 5106), (30, 5109),

Gene: Pleakley\_10 Start: 4783, Stop: 5187, Start Num: 7

Candidate Starts for Pleakley\_10:

(Start: 7 @4783 has 2 MA's), (17, 4903), (23, 4942), (28, 5134), (33, 5173),

Gene: RedRaider\_11 Start: 5995, Stop: 6447, Start Num: 6

Candidate Starts for RedRaider\_11:

(1, 5812), (3, 5926), (Start: 6 @5995 has 17 MA's), (10, 6043), (16, 6115), (21, 6154), (22, 6157), (23, 6163), (28, 6328), (31, 6349), (32, 6358), (35, 6418),

Gene: Scuba\_10 Start: 4881, Stop: 5285, Start Num: 7

Candidate Starts for Scuba\_10:

(Start: 6 @4872 has 17 MA's), (Start: 7 @4881 has 2 MA's), (9, 4896), (19, 5013), (23, 5040), (28, 5232), (33, 5271),

Gene: Skysand\_10 Start: 5907, Stop: 6347, Start Num: 6

Candidate Starts for Skysand\_10:

(2, 5763), (Start: 6 @5907 has 17 MA's), (10, 5955), (12, 5976), (16, 6021), (21, 6060), (22, 6063), (23, 6069), (28, 6234), (31, 6255), (32, 6264), (34, 6273), (35, 6318),

Gene: Tracker\_7 Start: 4900, Stop: 5295, Start Num: 6

Candidate Starts for Tracker\_7:

(Start: 6 @4900 has 17 MA's), (11, 4969), (14, 4999), (20, 5050), (25, 5143), (27, 5206), (29, 5245), (30, 5248),

Gene: Wheezy\_7 Start: 5152, Stop: 5547, Start Num: 6

Candidate Starts for Wheezy\_7:

(3, 5083), (Start: 6 @5152 has 17 MA's), (11, 5221), (14, 5251), (20, 5302), (25, 5395), (27, 5458), (29, 5497), (30, 5500),