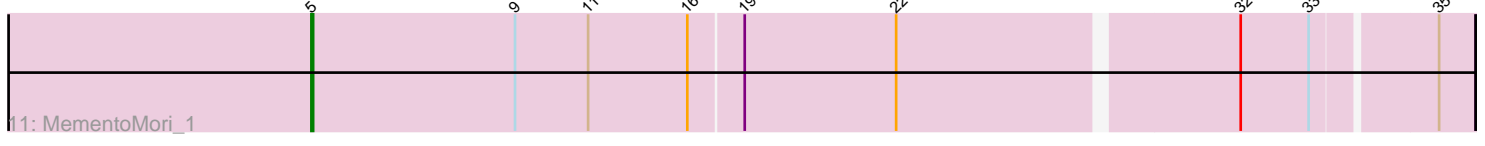
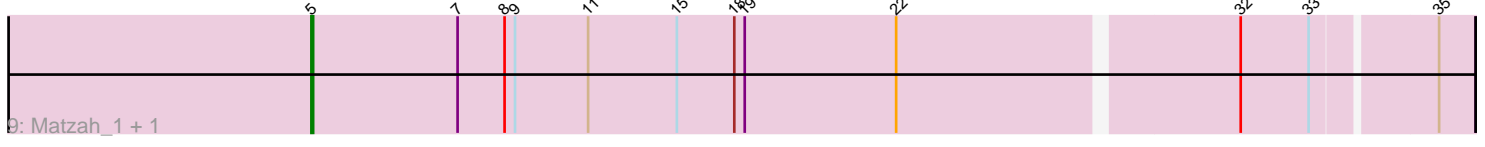
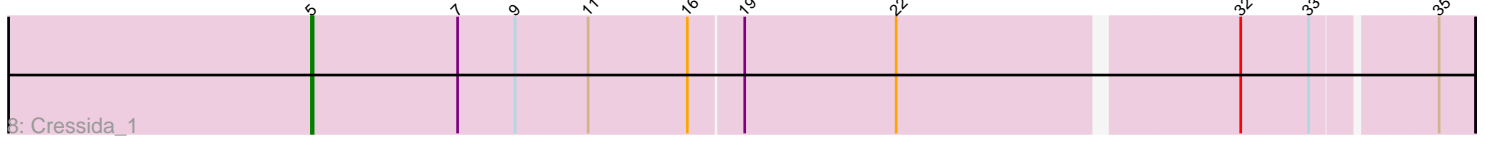
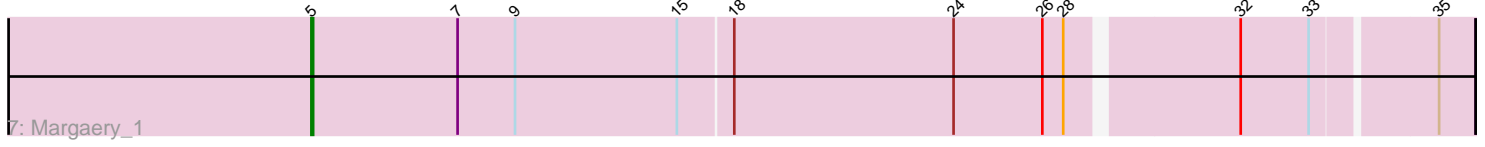
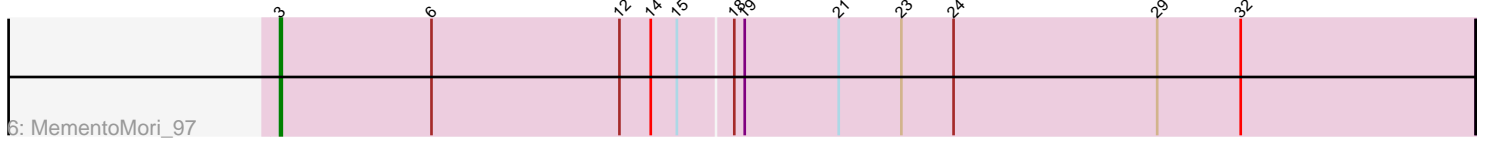
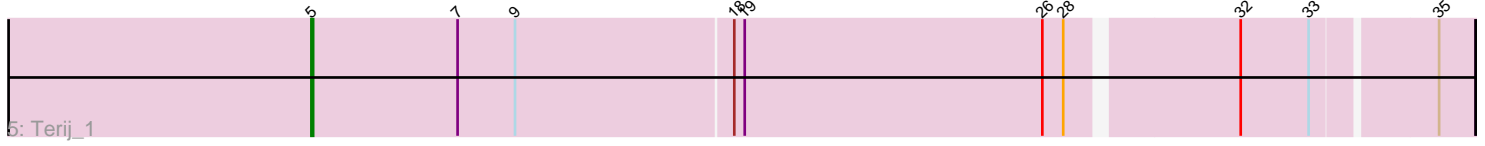
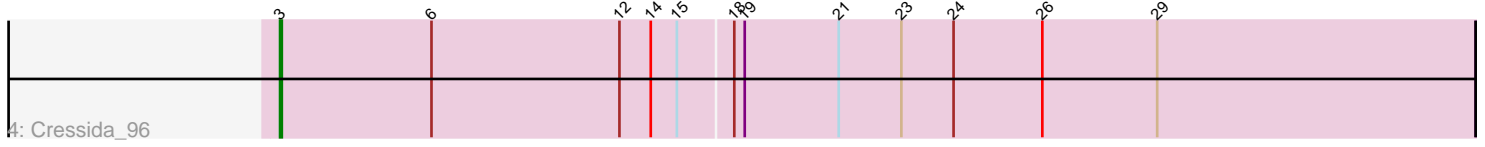
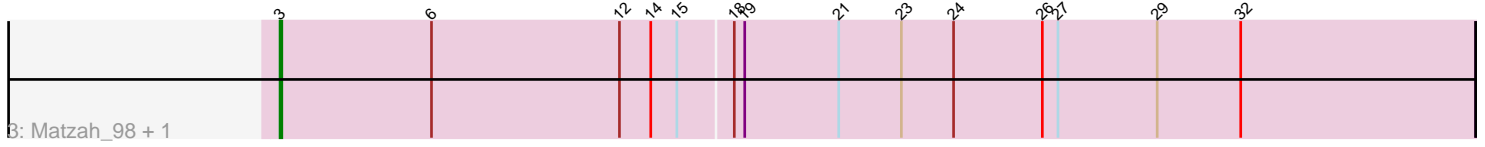
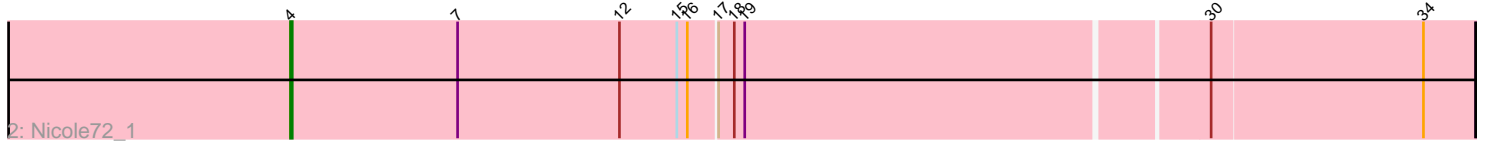
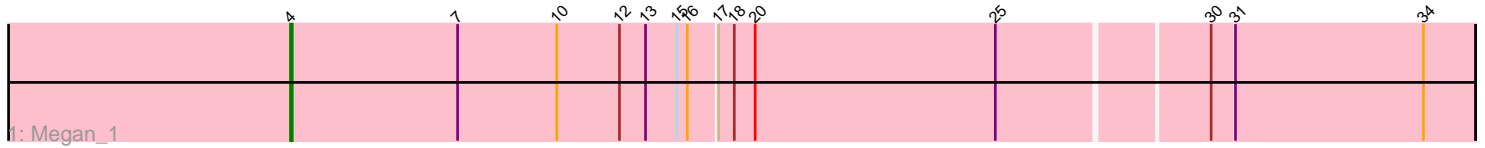


Pham 295242



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 295242 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295242 has 13 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Megan\_1
- Track 2 : Nicole72\_1
- Track 3 : Matzah\_98, Cinna\_94
- Track 4 : Cressida\_96
- Track 5 : Terij\_1
- Track 6 : MementoMori\_97
- Track 7 : Margaery\_1
- Track 8 : Cressida\_1
- Track 9 : Matzah\_1, Cinna\_1
- Track 10 : Margaery\_97
- Track 11 : MementoMori\_1

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

The start number called the most often in the published annotations is 5, it was called in 6 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Cinna\_1, Cressida\_1, Margaery\_1, Matzah\_1, MementoMori\_1, Terij\_1,

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

- 

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

- Cinna\_94, Cressida\_96, Margaery\_97, Matzah\_98, Megan\_1, MementoMori\_97, Nicole72\_1,

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

Start 2:

- Found in 1 of 13 ( 7.7% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Margaery\_97 (EI),

Start 3:

- Found in 5 of 13 ( 38.5% ) of genes in pham
- Manual Annotations of this start: 4 of 13
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Cinna\_94 (EI), Cressida\_96 (EI), Matzah\_98 (EI), MementoMori\_97 (EI),

Start 4:

- Found in 2 of 13 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 2 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Megan\_1 (EC), Nicole72\_1 (EC),

Start 5:

- Found in 6 of 13 ( 46.2% ) of genes in pham
- Manual Annotations of this start: 6 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna\_1 (EI), Cressida\_1 (EI), Margaery\_1 (EI), Matzah\_1 (EI), MementoMori\_1 (EI), Terij\_1 (EI),

**Summary by clusters:**

There are 2 clusters represented in this pham: EI, EC,

Info for manual annotations of cluster EC:

- Start number 4 was manually annotated 2 times for cluster EC.

Info for manual annotations of cluster EI:

- Start number 2 was manually annotated 1 time for cluster EI.
- Start number 3 was manually annotated 4 times for cluster EI.
- Start number 5 was manually annotated 6 times for cluster EI.

**Gene Information:**

Gene: Cinna\_94 Start: 54580, Stop: 55263, Start Num: 3

Candidate Starts for Cinna\_94:

(Start: 3 @54580 has 4 MA's), (6, 54667), (12, 54775), (14, 54793), (15, 54808), (18, 54838), (19, 54844), (21, 54898), (23, 54934), (24, 54964), (26, 55015), (27, 55024), (29, 55081), (32, 55129),

Gene: Cinna\_1 Start: 1, Stop: 648, Start Num: 5

Candidate Starts for Cinna\_1:

(Start: 5 @1 has 6 MA's), (7, 85), (8, 112), (9, 118), (11, 160), (15, 211), (18, 244), (19, 250), (22, 337), (32, 523), (33, 562), (35, 628),

Gene: Cressida\_96 Start: 55174, Stop: 55857, Start Num: 3

Candidate Starts for Cressida\_96:

(Start: 3 @55174 has 4 MA's), (6, 55261), (12, 55369), (14, 55387), (15, 55402), (18, 55432), (19, 55438), (21, 55492), (23, 55528), (24, 55558), (26, 55609), (29, 55675),

Gene: Cressida\_1 Start: 1, Stop: 645, Start Num: 5

Candidate Starts for Cressida\_1:

(Start: 5 @1 has 6 MA's), (7, 85), (9, 118), (11, 160), (16, 217), (19, 247), (22, 334), (32, 520), (33, 559), (35, 625),

Gene: Margaery\_1 Start: 1, Stop: 645, Start Num: 5

Candidate Starts for Margaery\_1:

(Start: 5 @1 has 6 MA's), (7, 85), (9, 118), (15, 211), (18, 241), (24, 367), (26, 418), (28, 430), (32, 520), (33, 559), (35, 625),

Gene: Margaery\_97 Start: 55238, Stop: 55930, Start Num: 2

Candidate Starts for Margaery\_97:

(1, 55121), (Start: 2 @55238 has 1 MA's), (Start: 3 @55247 has 4 MA's), (6, 55334), (12, 55442), (14, 55460), (15, 55475), (24, 55631), (32, 55796),

Gene: Matzah\_98 Start: 54900, Stop: 55583, Start Num: 3

Candidate Starts for Matzah\_98:

(Start: 3 @54900 has 4 MA's), (6, 54987), (12, 55095), (14, 55113), (15, 55128), (18, 55158), (19, 55164), (21, 55218), (23, 55254), (24, 55284), (26, 55335), (27, 55344), (29, 55401), (32, 55449),

Gene: Matzah\_1 Start: 1, Stop: 648, Start Num: 5

Candidate Starts for Matzah\_1:

(Start: 5 @1 has 6 MA's), (7, 85), (8, 112), (9, 118), (11, 160), (15, 211), (18, 244), (19, 250), (22, 337), (32, 523), (33, 562), (35, 628),

Gene: Megan\_1 Start: 1, Stop: 666, Start Num: 4

Candidate Starts for Megan\_1:

(Start: 4 @1 has 2 MA's), (7, 97), (10, 154), (12, 190), (13, 205), (15, 223), (16, 229), (17, 244), (18, 253), (20, 265), (25, 403), (30, 517), (31, 529), (34, 637),

Gene: MementoMori\_97 Start: 54789, Stop: 55472, Start Num: 3

Candidate Starts for MementoMori\_97:

(Start: 3 @54789 has 4 MA's), (6, 54876), (12, 54984), (14, 55002), (15, 55017), (18, 55047), (19, 55053), (21, 55107), (23, 55143), (24, 55173), (29, 55290), (32, 55338),

Gene: MementoMori\_1 Start: 1, Stop: 645, Start Num: 5

Candidate Starts for MementoMori\_1:

(Start: 5 @1 has 6 MA's), (9, 118), (11, 160), (16, 217), (19, 247), (22, 334), (32, 520), (33, 559), (35, 625),

Gene: Nicole72\_1 Start: 1, Stop: 666, Start Num: 4

Candidate Starts for Nicole72\_1:

(Start: 4 @1 has 2 MA's), (7, 97), (12, 190), (15, 223), (16, 229), (17, 244), (18, 253), (19, 259), (30, 517), (34, 637),

Gene: Terij\_1 Start: 1, Stop: 645, Start Num: 5

Candidate Starts for Terij\_1:

(Start: 5 @1 has 6 MA's), (7, 85), (9, 118), (18, 241), (19, 247), (26, 418), (28, 430), (32, 520), (33, 559), (35, 625),