

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 87689 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87689 has 9 members, 0 are drafts.

Phages represented in each track:

Track 1 : Nicole72\_90Track 2 : Megan\_90

Track 3: Cressida\_89, MementoMori\_90

Track 4 : Terij\_88Track 5 : Matzah\_91Track 6 : Cinna\_88

Track 7 : Margaery\_89Track 8 : Kozie 84

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

The start number called the most often in the published annotations is 12, it was called in 6 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Cinna\_88, Cressida\_89, Kozie\_84, Matzah\_91, MementoMori\_90, Terij\_88,

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

Margaery\_89,

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

Megan\_90, Nicole72\_90,

# Summary by start number:

### Start 11:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Margaery\_89 (EI),

### Start 12:

- Found in 7 of 9 (77.8%) of genes in pham
- Manual Annotations of this start: 6 of 9

- Called 85.7% of time when present
- Phage (with cluster) where this start called: Cinna\_88 (EI), Cressida\_89 (EI), Kozie\_84 (EI), Matzah\_91 (EI), MementoMori\_90 (EI), Terij\_88 (EI),

#### Start 13:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Nicole72\_90 (EC),

### Start 14:

- Found in 1 of 9 (11.1%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Megan\_90 (EC),

## Summary by clusters:

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

Info for manual annotations of cluster EC:

- •Start number 13 was manually annotated 1 time for cluster EC.
- •Start number 14 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster EI:

- •Start number 11 was manually annotated 1 time for cluster EI.
- •Start number 12 was manually annotated 6 times for cluster EI.

#### Gene Information:

Gene: Cinna 88 Start: 51926, Stop: 52369, Start Num: 12

Candidate Starts for Cinna 88:

(4, 51785), (7, 51794), (8, 51854), (Start: 12 @51926 has 6 MA's), (16, 51950), (20, 52001), (22, 52124), (23, 52148), (24, 52184), (25, 52196), (27, 52217), (30, 52286), (33, 52316), (34, 52328),

Gene: Cressida\_89 Start: 51894, Stop: 52337, Start Num: 12

Candidate Starts for Cressida 89:

(Start: 12 @51894 has 6 MA's), (20, 51969), (22, 52092), (23, 52116), (24, 52152), (25, 52164), (27, 52185), (30, 52254), (33, 52284), (34, 52296),

Gene: Kozie 84 Start: 50636, Stop: 51091, Start Num: 12

Candidate Starts for Kozie\_84:

(Start: 12 @50636 has 6 MA's), (22, 50846), (23, 50870), (27, 50939), (30, 51008), (33, 51038), (34, 51050),

Gene: Margaery\_89 Start: 52139, Stop: 52621, Start Num: 11

Candidate Starts for Margaery 89:

(1, 51899), (3, 51998), (Start: 11 @52139 has 1 MA's), (Start: 12 @52175 has 6 MA's), (16, 52211), (20, 52262), (22, 52376), (24, 52436), (25, 52448), (27, 52469), (28, 52490), (29, 52535), (33, 52568), (34, 52580), (35, 52592),

Gene: Matzah\_91 Start: 52212, Stop: 52655, Start Num: 12

Candidate Starts for Matzah\_91:

(6, 52083), (9, 52158), (10, 52161), (Start: 12 @52212 has 6 MA's), (16, 52236), (20, 52287), (22, 52410), (23, 52434), (24, 52470), (25, 52482), (27, 52503), (30, 52572), (33, 52602),

Gene: Megan\_90 Start: 54674, Stop: 55114, Start Num: 14

Candidate Starts for Megan\_90:

(2, 54410), (5, 54512), (Start: 14 @54674 has 1 MA's), (15, 54680), (19, 54728), (20, 54737), (21, 54857), (24, 54926), (27, 54959), (31, 55037),

Gene: MementoMori\_90 Start: 51615, Stop: 52058, Start Num: 12

Candidate Starts for MementoMori 90:

(Start: 12 @51615 has 6 MA's), (20, 51690), (22, 51813), (23, 51837), (24, 51873), (25, 51885), (27, 51906), (30, 51975), (33, 52005), (34, 52017),

Gene: Nicole72\_90 Start: 54883, Stop: 55335, Start Num: 13

Candidate Starts for Nicole72 90:

(Start: 13 @54883 has 1 MA's), (17, 54916), (18, 54922), (21, 55075), (23, 55108), (27, 55177), (29, 55243), (31, 55255), (32, 55273),

Gene: Terij\_88 Start: 51745, Stop: 52203, Start Num: 12

Candidate Starts for Terij\_88:

(1, 51469), (3, 51568), (Start: 12 @51745 has 6 MA's), (20, 51829), (22, 51958), (23, 51982), (24, 52018), (25, 52030), (26, 52039), (27, 52051), (29, 52117), (30, 52120), (33, 52150), (34, 52162),