

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 158428 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158428 has 8 members, 0 are drafts.

Phages represented in each track:

Track 1 : Nicole72\_54

Track 2: Cinna\_53, MementoMori\_54

Track 3 : Kozie\_52Track 4 : Cressida\_56

Track 5 : Matzah\_55

• Track 6 : Terij\_53

Track 7 : Margaery\_52

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

The start number called the most often in the published annotations is 8, it was called in 5 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Cinna\_53, Cressida\_56, Matzah\_55, MementoMori\_54, Terij\_53,

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

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

Kozie\_52, Margaery\_52, Nicole72\_54,

## Summary by start number:

#### Start 6:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Margaery\_52 (EI),

### Start 7:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present

Phage (with cluster) where this start called: Nicole72\_54 (EC),

#### Start 8:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 5 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cinna\_53 (EI), Cressida\_56 (EI), Matzah\_55 (EI), MementoMori\_54 (EI), Terij\_53 (EI),

### Start 9:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kozie\_52 (EI),

## Summary by clusters:

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

Info for manual annotations of cluster EC:

•Start number 7 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster EI:

- •Start number 6 was manually annotated 1 time for cluster EI.
- •Start number 8 was manually annotated 5 times for cluster El.
- •Start number 9 was manually annotated 1 time for cluster El.

### Gene Information:

Gene: Cinna 53 Start: 37502, Stop: 38152, Start Num: 8

Candidate Starts for Cinna\_53:

(Start: 8 @ 37502 has 5 MA's), (16, 37643), (19, 37685), (22, 37724), (36, 38009), (38, 38117),

Gene: Cressida\_56 Start: 37153, Stop: 37803, Start Num: 8

Candidate Starts for Cressida\_56:

(Start: 8 @37153 has 5 MA's), (12, 37228), (16, 37294), (18, 37312), (19, 37336), (22, 37375), (36, 37660), (38, 37768), (39, 37783),

Gene: Kozie 52 Start: 36741, Stop: 37397, Start Num: 9

Candidate Starts for Kozie 52:

(1, 36522), (2, 36555), (3, 36585), (5, 36714), (Start: 9 @ 36741 has 1 MA's), (14, 36849), (16, 36879), (19, 36921), (20, 36942), (22, 36960), (26, 37023), (29, 37056), (30, 37071), (39, 37368),

Gene: Margaery\_52 Start: 36729, Stop: 37385, Start Num: 6

Candidate Starts for Margaery 52:

(4, 36705), (Start: 6 @36729 has 1 MA's), (10, 36768), (11, 36798), (13, 36813), (15, 36846), (21, 36933), (23, 36942), (24, 36996), (25, 36999), (27, 37023), (32, 37164), (36, 37242), (38, 37350), (39, 37365),

Gene: Matzah 55 Start: 37583, Stop: 38230, Start Num: 8

Candidate Starts for Matzah\_55:

(Start: 8 @ 37583 has 5 MA's), (17, 37736), (19, 37766), (26, 37865), (28, 37883), (33, 38024),

Gene: MementoMori\_54 Start: 37160, Stop: 37810, Start Num: 8

Candidate Starts for MementoMori\_54:

(Start: 8 @ 37160 has 5 MA's), (16, 37301), (19, 37343), (22, 37382), (36, 37667), (38, 37775),

Gene: Nicole72\_54 Start: 40409, Stop: 40975, Start Num: 7

Candidate Starts for Nicole72\_54:

(Start: 7 @ 40409 has 1 MA's), (23, 40637), (28, 40709), (34, 40859), (35, 40901), (37, 40970),

Gene: Terij\_53 Start: 36221, Stop: 36874, Start Num: 8

Candidate Starts for Terij\_53:

 $(Start: 8 @ 36221 \ has 5 \ MA's), (19, 36404), (26, 36503), (28, 36527), (31, 36617), (32, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36653), (36, 36$ 

36731), (38, 36839), (39, 36854),