

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 203510 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203510 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1 : Jayden\_68

• Track 2 : Nicole72\_65

Track 3 : PierreOrion\_67

Track 4 : Megan\_64

Track 5 : MementoMori\_66

Track 6 : Kozie\_65

• Track 7 : Matzah 67

• Track 8 : Cressida\_68

Track 9 : Terij\_65

Track 10 : Margaery\_64

• Track 11 : Cinna\_65

# 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 9 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Cinna\_65, Cressida\_68, Kozie\_65, Margaery\_64, Matzah\_67, Megan\_64, MementoMori\_66, Nicole72\_65, Terij\_65,

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

Jayden\_68, PierreOrion\_67,

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

Summary by start number:

## Start 6:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 9 of 10
- Called 81.8% of time when present

Phage (with cluster) where this start called: Cinna\_65 (EI), Cressida\_68 (EI),
Kozie\_65 (EI), Margaery\_64 (EI), Matzah\_67 (EI), Megan\_64 (EC), MementoMori\_66 (EI),
Nicole72\_65 (EC), Terij\_65 (EI),

#### Start 10:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Jayden\_68 (EC),

## Start 16:

- Found in 1 of 11 (9.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PierreOrion\_67 (EC),

# Summary by clusters:

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

Info for manual annotations of cluster EC:

- •Start number 6 was manually annotated 2 times for cluster EC.
- •Start number 10 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster EI:

•Start number 6 was manually annotated 7 times for cluster El.

## Gene Information:

Gene: Cinna\_65 Start: 43270, Stop: 43929, Start Num: 6

Candidate Starts for Cinna\_65:

(4, 43228), (Start: 6 @43270 has 9 MA's), (11, 43447), (15, 43513), (19, 43567), (22, 43603), (26, 43681), (29, 43726), (30, 43735), (36, 43834), (38, 43858), (41, 43912),

Gene: Cressida\_68 Start: 42876, Stop: 43529, Start Num: 6

Candidate Starts for Cressida\_68:

(4, 42834), (5, 42858), (Start: 6 @42876 has 9 MA's), (14, 43092), (15, 43119), (19, 43173), (25, 43245), (26, 43281), (28, 43323), (29, 43326), (30, 43335), (36, 43434), (38, 43458), (41, 43512),

Gene: Jayden\_68 Start: 42363, Stop: 42914, Start Num: 10

Candidate Starts for Jayden 68:

(1, 42096), (2, 42120), (Start: 6 @ 42207 has 9 MA's), (Start: 10 @ 42363 has 1 MA's), (15, 42444), (26, 42591), (28, 42636), (29, 42639), (31, 42687), (44, 42807), (46, 42882), (47, 42885),

Gene: Kozie\_65 Start: 42511, Stop: 43170, Start Num: 6

Candidate Starts for Kozie 65:

(5, 42493), (Start: 6 @ 42511 has 9 MA's), (12, 42706), (17, 42784), (26, 42913), (29, 42958), (32, 43018), (33, 43033), (37, 43087), (42, 43156),

Gene: Margaery 64 Start: 42479, Stop: 43135, Start Num: 6

Candidate Starts for Margaery\_64:

(5, 42458), (Start: 6 @ 42479 has 9 MA's), (17, 42755), (20, 42779), (21, 42785), (22, 42809), (23, 42833), (25, 42851), (28, 42929), (29, 42932), (36, 43040), (38, 43064), (41, 43118),

Gene: Matzah\_67 Start: 43337, Stop: 43996, Start Num: 6

Candidate Starts for Matzah\_67:

(4, 43295), (Start: 6 @ 43337 has 9 MA's), (11, 43514), (19, 43634), (22, 43670), (26, 43748), (29, 43793), (30, 43802), (36, 43901), (38, 43925), (41, 43979),

Gene: Megan\_64 Start: 45834, Stop: 46541, Start Num: 6

Candidate Starts for Megan\_64:

(Start: 6 @45834 has 9 MA's), (7, 45867), (13, 46047), (17, 46116), (21, 46146), (23, 46200), (24, 46206), (26, 46254), (27, 46263), (29, 46305), (31, 46353), (37, 46458), (38, 46467), (39, 46473), (40, 46515),

Gene: MementoMori\_66 Start: 42932, Stop: 43591, Start Num: 6

Candidate Starts for MementoMori\_66:

(4, 42890), (Start: 6 @ 42932 has 9 MA's), (11, 43109), (22, 43265), (28, 43385), (29, 43388), (30, 43397), (36, 43496), (38, 43520), (41, 43574),

Gene: Nicole72\_65 Start: 46341, Stop: 47039, Start Num: 6

Candidate Starts for Nicole72 65:

(3, 46266), (Start: 6 @46341 has 9 MA's), (7, 46374), (8, 46380), (9, 46482), (13, 46554), (15, 46584), (17, 46623), (18, 46638), (21, 46653), (23, 46707), (24, 46713), (26, 46761), (27, 46770), (29, 46812), (31, 46860), (37, 46956), (38, 46965), (40, 47013),

Gene: PierreOrion\_67 Start: 42179, Stop: 42763, Start Num: 16

Candidate Starts for PierreOrion\_67:

(Start: 6 @41924 has 9 MA's), (Start: 10 @42080 has 1 MA's), (16, 42179), (23, 42257), (26, 42311), (29, 42359), (30, 42368), (31, 42407), (35, 42512), (43, 42653), (45, 42725), (47, 42734),

Gene: Terij\_65 Start: 41714, Stop: 42370, Start Num: 6

Candidate Starts for Terij\_65:

(Start: 6 @41714 has 9 MA's), (18, 42008), (22, 42047), (26, 42125), (29, 42170), (34, 42248), (36, 42275), (38, 42299), (41, 42353),