

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 5136 Report

This analysis was run 04/28/24 on database version 559.

Pham number 5136 has 12 members, 1 are drafts.

Phages represented in each track:

Track 1 : Turuncu\_78Track 2 : Flapper 78

• Track 3 : GTE8\_63

Track 4 : Skysand\_78

Track 5 : Patio\_76

• Track 6 : BiteSize\_74, Terapin\_75, Sienna\_74, Madi\_73, Djokovic\_74,

Beyoncage\_74Track 7 : Suzy\_71

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

The start number called the most often in the published annotations is 25, it was called in 6 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Beyoncage\_74, BiteSize\_74, Djokovic\_74, Madi\_73, Sienna\_74, Terapin\_75,

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

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

• Flapper\_78, GTE8\_63, Patio\_76, Skysand\_78, Suzy\_71, Turuncu\_78,

# Summary by start number:

#### Start 9:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Patio\_76 (CR3), Skysand\_78 (CR3),

### Start 10:

- Found in 1 of 12 (8.3%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: GTE8\_63 (CR2),

### Start 11:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Flapper\_78 (CR1), Turuncu\_78 (CR1),

### Start 12:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Suzy\_71 (DG1),

#### Start 25:

- Found in 6 of 12 (50.0%) of genes in pham
- Manual Annotations of this start: 6 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage\_74 (DG1), BiteSize\_74 (DG1), Djokovic\_74 (DG1), Madi\_73 (DG1), Sienna\_74 (DG1), Terapin\_75 (DG1),

### Summary by clusters:

There are 4 clusters represented in this pham: CR2, CR3, DG1, CR1,

Info for manual annotations of cluster CR1:

•Start number 11 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR3:

•Start number 9 was manually annotated 2 times for cluster CR3.

Info for manual annotations of cluster DG1:

- •Start number 12 was manually annotated 1 time for cluster DG1.
- •Start number 25 was manually annotated 6 times for cluster DG1.

#### Gene Information:

Gene: Beyoncage\_74 Start: 53684, Stop: 53854, Start Num: 25

Candidate Starts for Beyoncage 74:

(1, 52991), (2, 52997), (5, 53144), (6, 53186), (15, 53453), (Start: 25 @53684 has 6 MA's), (26, 53744), (27, 53750), (28, 53765), (29, 53768), (30, 53813), (31, 53816), (32, 53834),

Gene: BiteSize\_74 Start: 53770, Stop: 53940, Start Num: 25

Candidate Starts for BiteSize\_74:

(1, 53077), (2, 53083), (5, 53230), (6, 53272), (15, 53539), (Start: 25 @53770 has 6 MA's), (26, 53830), (27, 53836), (28, 53851), (29, 53854), (30, 53899), (31, 53902), (32, 53920),

Gene: Djokovic\_74 Start: 53683, Stop: 53853, Start Num: 25

Candidate Starts for Djokovic\_74:

(1, 52990), (2, 52996), (5, 53143), (6, 53185), (15, 53452), (Start: 25 @53683 has 6 MA's), (26, 53743), (27, 53749), (28, 53764), (29, 53767), (30, 53812), (31, 53815), (32, 53833),

Gene: Flapper\_78 Start: 57814, Stop: 57629, Start Num: 11

Candidate Starts for Flapper\_78:

(Start: 11 @57814 has 2 MA's), (16, 57742), (17, 57739), (21, 57679),

Gene: GTE8 63 Start: 50618, Stop: 50412, Start Num: 10

Candidate Starts for GTE8\_63:

(3, 50882), (10, 50618), (18, 50534), (19, 50531), (21, 50483), (22, 50468), (24, 50429),

Gene: Madi 73 Start: 53520, Stop: 53690, Start Num: 25

Candidate Starts for Madi 73:

(1, 52827), (2, 52833), (5, 52980), (6, 53022), (15, 53289), (Start: 25 @53520 has 6 MA's), (26, 53580), (27, 53586), (28, 53601), (29, 53604), (30, 53649), (31, 53652), (32, 53670),

Gene: Patio\_76 Start: 57501, Stop: 57316, Start Num: 9

Candidate Starts for Patio\_76:

(4, 57768), (Start: 9 @57501 has 2 MA's), (13, 57483), (14, 57438), (18, 57417), (21, 57366),

Gene: Sienna\_74 Start: 53761, Stop: 53931, Start Num: 25

Candidate Starts for Sienna 74:

(1, 53068), (2, 53074), (5, 53221), (6, 53263), (15, 53530), (Start: 25 @53761 has 6 MA's), (26, 53821), (27, 53827), (28, 53842), (29, 53845), (30, 53890), (31, 53893), (32, 53911),

Gene: Skysand\_78 Start: 58164, Stop: 57979, Start Num: 9

Candidate Starts for Skysand\_78:

(4, 58431), (Start: 9 @58164 has 2 MA's), (13, 58146), (16, 58092), (21, 58029),

Gene: Suzy\_71 Start: 53884, Stop: 54054, Start Num: 12

Candidate Starts for Suzy\_71:

(7, 53752), (8, 53803), (Start: 12 @53884 has 1 MA's), (15, 53950), (17, 53956), (20, 53971), (21, 54016), (23, 54034),

Gene: Terapin\_75 Start: 53685, Stop: 53855, Start Num: 25

Candidate Starts for Terapin\_75:

(1, 52992), (2, 52998), (5, 53145), (6, 53187), (15, 53454), (Start: 25 @53685 has 6 MA's), (26, 53745), (27, 53751), (28, 53766), (29, 53769), (30, 53814), (31, 53817), (32, 53835),

Gene: Turuncu\_78 Start: 57636, Stop: 57451, Start Num: 11

Candidate Starts for Turuncu\_78:

(Start: 11 @57636 has 2 MA's), (17, 57561), (21, 57501), (22, 57486),