



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 193069 Report

This analysis was run 11/02/24 on database version 579.

Pham number 193069 has 10 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Flapper\_7
- Track 2 : Turuncu\_7
- Track 3 : Buggaboo\_4
- Track 4 : Bonum\_4, Kabluna\_4
- Track 5 : MerCougar\_4
- Track 6 : SuperSulley\_4
- Track 7 : NosilaM\_4
- Track 8 : Outis\_4, StarStruck\_4

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- MerCougar\_4, Outis\_4, StarStruck\_4, SuperSulley\_4,

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

- Bonum\_4, Buggaboo\_4, Kabluna\_4, NosilaM\_4,

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

- Flapper\_7, Turuncu\_7,

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

Start 2:

- Found in 2 of 10 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Flapper\_7 (CR1), Turuncu\_7 (CR1),

Start 4:

- Found in 8 of 10 ( 80.0% ) of genes in pham
- Manual Annotations of this start: 4 of 10

- Called 50.0% of time when present
- Phage (with cluster) where this start called: MerCougar\_4 (CR2), Outis\_4 (CR2), StarStruck\_4 (CR2), SuperSulley\_4 (CR2),

Start 6:

- Found in 5 of 10 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 20.0% of time when present
- Phage (with cluster) where this start called: NosilaM\_4 (CR2),

Start 7:

- Found in 8 of 10 ( 80.0% ) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 37.5% of time when present
- Phage (with cluster) where this start called: Bonum\_4 (CR2), Buggaboo\_4 (CR2), Kabluna\_4 (CR2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: CR2, CR1,

Info for manual annotations of cluster CR1:

- Start number 2 was manually annotated 2 times for cluster CR1.

Info for manual annotations of cluster CR2:

- Start number 4 was manually annotated 4 times for cluster CR2.
- Start number 6 was manually annotated 1 time for cluster CR2.
- Start number 7 was manually annotated 3 times for cluster CR2.

### **Gene Information:**

Gene: Bonum\_4 Start: 3830, Stop: 4321, Start Num: 7

Candidate Starts for Bonum\_4:

(Start: 4 @3794 has 4 MA's), (Start: 6 @3812 has 1 MA's), (Start: 7 @3830 has 3 MA's), (11, 3941), (12, 3971), (16, 4034), (20, 4106), (28, 4277),

Gene: Buggaboo\_4 Start: 3485, Stop: 3976, Start Num: 7

Candidate Starts for Buggaboo\_4:

(Start: 4 @3449 has 4 MA's), (Start: 6 @3467 has 1 MA's), (Start: 7 @3485 has 3 MA's), (13, 3632), (16, 3689), (17, 3737), (20, 3761), (25, 3842), (27, 3866), (28, 3932),

Gene: Flapper\_7 Start: 4082, Stop: 4723, Start Num: 2

Candidate Starts for Flapper\_7:

(1, 3974), (Start: 2 @4082 has 2 MA's), (3, 4115), (8, 4211), (9, 4232), (10, 4271), (14, 4391), (15, 4400), (18, 4484), (19, 4505), (21, 4529), (23, 4571), (24, 4583), (27, 4613), (28, 4679),

Gene: Kabluna\_4 Start: 3221, Stop: 3712, Start Num: 7

Candidate Starts for Kabluna\_4:

(Start: 4 @3185 has 4 MA's), (Start: 6 @3203 has 1 MA's), (Start: 7 @3221 has 3 MA's), (11, 3332), (12, 3362), (16, 3425), (20, 3497), (28, 3668),

Gene: MerCougar\_4 Start: 3823, Stop: 4344, Start Num: 4

Candidate Starts for MerCougar\_4:

(Start: 4 @3823 has 4 MA's), (5, 3838), (Start: 7 @3859 has 3 MA's), (11, 3958), (18, 4105), (25, 4210), (26, 4228),

Gene: NosilaM\_4 Start: 4091, Stop: 4600, Start Num: 6

Candidate Starts for NosilaM\_4:

(Start: 4 @4073 has 4 MA's), (Start: 6 @4091 has 1 MA's), (Start: 7 @4109 has 3 MA's), (11, 4220), (13, 4256), (16, 4313), (17, 4361), (20, 4385), (25, 4466), (27, 4490),

Gene: Outis\_4 Start: 3598, Stop: 4035, Start Num: 4

Candidate Starts for Outis\_4:

(Start: 4 @3598 has 4 MA's), (5, 3613), (Start: 7 @3634 has 3 MA's), (18, 3796), (20, 3820), (22, 3850), (27, 3925),

Gene: StarStruck\_4 Start: 3598, Stop: 4035, Start Num: 4

Candidate Starts for StarStruck\_4:

(Start: 4 @3598 has 4 MA's), (5, 3613), (Start: 7 @3634 has 3 MA's), (18, 3796), (20, 3820), (22, 3850), (27, 3925),

Gene: SuperSulley\_4 Start: 3449, Stop: 3976, Start Num: 4

Candidate Starts for SuperSulley\_4:

(Start: 4 @3449 has 4 MA's), (Start: 6 @3467 has 1 MA's), (Start: 7 @3485 has 3 MA's), (13, 3632), (16, 3689), (17, 3737), (20, 3761), (25, 3842), (27, 3866), (28, 3932),

Gene: Turuncu\_7 Start: 3978, Stop: 4619, Start Num: 2

Candidate Starts for Turuncu\_7:

(1, 3870), (Start: 2 @3978 has 2 MA's), (3, 4011), (8, 4107), (9, 4128), (10, 4167), (14, 4287), (15, 4296), (18, 4380), (19, 4401), (23, 4467), (24, 4479), (27, 4509), (28, 4575),