

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 86903 Report

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

Pham number 86903 has 18 members, 1 are drafts.

Phages represented in each track:

- Track 1: Nucci 7, Mandalorian 7
- Track 2 : Carostasia\_7, Quartz\_7
- Track 3 : Juanyo\_7
- Track 4 : YuuÝ 7
- Track 5: Saratos\_7, Glamour\_6, ColaCorta\_7, Andromedas\_7
- Track 6 : Finny\_7
- Track 7 : Zenitsu 7
- Track 8 : Eleri 7
- Track 9 : Shamu\_7
- Track 10 : MCubed 7
- Track 11 : Sansa 6
- Track 12 : ChikPic 7
- Track 13 : Schubert 8

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

The start number called the most often in the published annotations is 2, it was called in 7 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Carostasia\_7, ChikPic\_7, Mandalorian\_7, Nucci\_7, Quartz\_7, Shamu\_7, YuuY\_7, Zenitsu\_7,

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

Eleri\_7, MCubed\_7, Sansa\_6,

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

Andromedas\_7, ColaCorta\_7, Finny\_7, Glamour\_6, Juanyo\_7, Saratos\_7, Schubert\_8,

### Summary by start number:

#### Start 1:

Found in 8 of 18 (44.4%) of genes in pham

- Manual Annotations of this start: 4 of 17
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Eleri\_7 (EA2), Juanyo\_7 (EA10), MCubed\_7 (EA2), Sansa\_6 (EA2),

#### Start 2:

- Found in 11 of 18 (61.1%) of genes in pham
- Manual Annotation's of this start: 7 of 17
- Called 72.7% of time when present
- Phage (with cluster) where this start called: Carostasia\_7 (EA10), ChikPic\_7 (EA2), Mandalorian\_7 (EA10), Nucci\_7 (EA10), Quartz\_7 (EA10), Shamu\_7 (EA2), YuuY\_7 (EA10), Zenitsu\_7 (EA2),

#### Start 3:

- Found in 6 of 18 (33.3%) of genes in pham
- Manual Annotations of this start: 6 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Andromedas\_7 (EA2), ColaCorta\_7 (EA2), Finny\_7 (EA2), Glamour\_6 (EA2), Saratos\_7 (EA2), Schubert\_8 (EA8),

## **Summary by clusters:**

There are 3 clusters represented in this pham: EA8, EA2, EA10,

Info for manual annotations of cluster EA10:

- •Start number 1 was manually annotated 1 time for cluster EA10.
- •Start number 2 was manually annotated 4 times for cluster EA10.

Info for manual annotations of cluster EA2:

- •Start number 1 was manually annotated 3 times for cluster EA2.
- •Start number 2 was manually annotated 3 times for cluster EA2.
- •Start number 3 was manually annotated 5 times for cluster EA2.

Info for manual annotations of cluster EA8:

•Start number 3 was manually annotated 1 time for cluster EA8.

### Gene Information:

Gene: Andromedas 7 Start: 5823, Stop: 6071, Start Num: 3

Candidate Starts for Andromedas 7:

(Start: 3 @5823 has 6 MA's), (4, 5862), (7, 5958), (9, 5973),

Gene: Carostasia\_7 Start: 5977, Stop: 6258, Start Num: 2

Candidate Starts for Carostasia\_7:

(Start: 2 @5977 has 7 MA's), (6, 6049), (7, 6115),

Gene: ChikPic 7 Start: 5836, Stop: 6087, Start Num: 2

Candidate Starts for ChikPic 7:

(Start: 1 @5833 has 4 MA's), (Start: 2 @5836 has 7 MA's), (4, 5878), (7, 5974), (9, 5989),

Gene: ColaCorta\_7 Start: 5823, Stop: 6071, Start Num: 3

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Candidate Starts for ColaCorta 7:
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(Start: 3 @5823 has 6 MA's), (4, 5862), (7, 5958), (9, 5973),

Gene: Eleri\_7 Start: 5830, Stop: 6084, Start Num: 1

Candidate Starts for Eleri\_7:

(Start: 1 @5830 has 4 MA's), (Start: 2 @5833 has 7 MA's), (4, 5875), (7, 5971), (9, 5986),

Gene: Finny\_7 Start: 5824, Stop: 6072, Start Num: 3

Candidate Starts for Finny\_7:

(Start: 3 @5824 has 6 MA's), (4, 5863), (5, 5887), (7, 5959),

Gene: Glamour\_6 Start: 5824, Stop: 6072, Start Num: 3

Candidate Starts for Glamour\_6:

(Start: 3 @5824 has 6 MA's), (4, 5863), (7, 5959), (9, 5974),

Gene: Juanyo\_7 Start: 5964, Stop: 6221, Start Num: 1

Candidate Starts for Juanyo 7:

(Start: 1 @5964 has 4 MA's), (5, 6027), (9, 6102),

Gene: MCubed\_7 Start: 5842, Stop: 6096, Start Num: 1

Candidate Starts for MCubed\_7:

(Start: 1 @5842 has 4 MA's), (Start: 2 @5845 has 7 MA's), (4, 5887), (7, 5983), (9, 5998),

Gene: Mandalorian\_7 Start: 5977, Stop: 6258, Start Num: 2

Candidate Starts for Mandalorian\_7:

(Start: 2 @5977 has 7 MA's), (6, 6049), (7, 6115),

Gene: Nucci 7 Start: 5965, Stop: 6246, Start Num: 2

Candidate Starts for Nucci\_7:

(Start: 2 @5965 has 7 MA's), (6, 6037), (7, 6103),

Gene: Quartz\_7 Start: 5977, Stop: 6258, Start Num: 2

Candidate Starts for Quartz 7:

(Start: 2 @5977 has 7 MA's), (6, 6049), (7, 6115),

Gene: Sansa\_6 Start: 5838, Stop: 6092, Start Num: 1

Candidate Starts for Sansa\_6:

(Start: 1 @5838 has 4 MA's), (Start: 2 @5841 has 7 MA's), (4, 5883), (7, 5979), (9, 5994),

Gene: Saratos\_7 Start: 5824, Stop: 6072, Start Num: 3

Candidate Starts for Saratos\_7:

(Start: 3 @5824 has 6 MA's), (4, 5863), (7, 5959), (9, 5974),

Gene: Schubert 8 Start: 6233, Stop: 6475, Start Num: 3

Candidate Starts for Schubert\_8: (Start: 3 @6233 has 6 MA's), (8, 6371),

Gene: Shamu\_7 Start: 5833, Stop: 6084, Start Num: 2

Candidate Starts for Shamu\_7:

(Start: 1 @5830 has 4 MA's), (Start: 2 @5833 has 7 MA's), (4, 5875), (7, 5971), (9, 5986),

Gene: YuuY\_7 Start: 5949, Stop: 6248, Start Num: 2

Candidate Starts for YuuY\_7:

(Start: 1 @5946 has 4 MA's), (Start: 2 @5949 has 7 MA's), (5, 6015), (6, 6021), (7, 6087),

Gene: Zenitsu\_7 Start: 5845, Stop: 6096, Start Num: 2

Candidate Starts for Zenitsu\_7:

(Start: 1 @5842 has 4 MA's), (Start: 2 @5845 has 7 MA's), (4, 5887), (7, 5983), (9, 5998),