

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 158249 Report

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

Pham number 158249 has 15 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Tenno\_85
- Track 2 : ScienceWizSam\_85, Trustiboi\_82, DevitoJr\_83
- Track 3: Brunswick 81
- Track 4 : AreFloNak 88
- Track 5 : Issa 81
- Track 6 : Darby\_82
- Track 7 : MiniBagel 79
- Track 8 : Niktson\_83, ElephantMan\_83
- Track 9 : Castor Tray 87
- Track 10 : MiniBagel 77
- Track 11 : Tatanka 77
- Track 12 : Caterpillar 79

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

The start number called the most often in the published annotations is 10, it was called in 6 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AreFloNak\_88, CastorTray\_87, Caterpillar\_79, Darby\_82, DevitoJr\_83, MiniBagel\_77, ScienceWizSam\_85, Trustiboi\_82,

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:

• Brunswick\_81, ElephantMan\_83, Issa\_81, MiniBagel\_79, Niktson\_83, Tatanka\_77, Tenno\_85,

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

#### Start 6:

- Found in 2 of 15 (13.3%) of genes in pham
- No Manual Annotations of this start.

- Called 50.0% of time when present
- Phage (with cluster) where this start called: MiniBagel\_79 (AU1),

#### Start 10:

- Found in 8 of 15 (53.3%) of genes in pham
- Manual Annotations of this start: 6 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AreFloNak\_88 (AU1), CastorTray\_87 (AU1), Caterpillar\_79 (AU4), Darby\_82 (AU1), DevitoJr\_83 (AU1), MiniBagel\_77 (AU1), ScienceWizSam\_85 (AU1), Trustiboi\_82 (AU1),

#### Start 11:

- Found in 5 of 15 (33.3%) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brunswick\_81 (AU1), ElephantMan\_83 (AU1), Issa\_81 (AU1), Niktson\_83 (AU1), Tatanka\_77 (AU1),

### Start 12:

- Found in 2 of 15 (13.3%) 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: Tenno\_85 (AU1),

## **Summary by clusters:**

There are 2 clusters represented in this pham: AU1, AU4,

Info for manual annotations of cluster AU1:

- •Start number 10 was manually annotated 5 times for cluster AU1.
- •Start number 11 was manually annotated 3 times for cluster AU1.
- •Start number 12 was manually annotated 1 time for cluster AU1.

Info for manual annotations of cluster AU4:

•Start number 10 was manually annotated 1 time for cluster AU4.

### Gene Information:

Gene: AreFloNak 88 Start: 52445, Stop: 52612, Start Num: 10

Candidate Starts for AreFloNak 88:

(Start: 10 @52445 has 6 MA's), (15, 52538),

Gene: Brunswick 81 Start: 52520, Stop: 52675, Start Num: 11

Candidate Starts for Brunswick 81:

(1, 52379), (2, 52421), (3, 52430), (8, 52514), (Start: 11 @52520 has 3 MA's), (13, 52565), (18, 52664),

Gene: CastorTray 87 Start: 53174, Stop: 53338, Start Num: 10

Candidate Starts for CastorTray\_87: (4, 53123), (Start: 10 @53174 has 6 MA's),

Gene: Caterpillar\_79 Start: 51167, Stop: 51328, Start Num: 10 Candidate Starts for Caterpillar\_79: (5, 51155), (7, 51164), (Start: 10 @51167 has 6 MA's), (14, 51257),

Gene: Darby\_82 Start: 52663, Stop: 52830, Start Num: 10 Candidate Starts for Darby\_82: (4, 52612), (Start: 10 @52663 has 6 MA's), (15, 52756),

Gene: DevitoJr\_83 Start: 52322, Stop: 52489, Start Num: 10 Candidate Starts for DevitoJr\_83: (4, 52271), (Start: 10 @52322 has 6 MA's), (15, 52415),

Gene: ElephantMan\_83 Start: 53050, Stop: 53205, Start Num: 11 Candidate Starts for ElephantMan\_83: (Start: 11 @53050 has 3 MA's), (13, 53095), (18, 53194),

Gene: Issa\_81 Start: 51886, Stop: 52041, Start Num: 11 Candidate Starts for Issa\_81: (Start: 11 @51886 has 3 MA's), (13, 51931), (18, 52030),

Gene: MiniBagel\_79 Start: 53043, Stop: 53216, Start Num: 6 Candidate Starts for MiniBagel\_79: (6, 53043), (Start: 12 @53055 has 1 MA's), (16, 53193), (17, 53196),

Gene: MiniBagel\_77 Start: 52634, Stop: 52801, Start Num: 10 Candidate Starts for MiniBagel\_77: (4, 52580), (Start: 10 @52634 has 6 MA's), (18, 52790),

Gene: Niktson\_83 Start: 53050, Stop: 53205, Start Num: 11 Candidate Starts for Niktson\_83: (Start: 11 @53050 has 3 MA's), (13, 53095), (18, 53194),

Gene: ScienceWizSam\_85 Start: 52495, Stop: 52662, Start Num: 10 Candidate Starts for ScienceWizSam\_85: (4, 52444), (Start: 10 @52495 has 6 MA's), (15, 52588),

Gene: Tatanka\_77 Start: 52245, Stop: 52400, Start Num: 11 Candidate Starts for Tatanka\_77: (9, 52242), (Start: 11 @52245 has 3 MA's), (13, 52290),

Gene: Tenno\_85 Start: 53263, Stop: 53424, Start Num: 12 Candidate Starts for Tenno\_85: (6, 53251), (Start: 12 @53263 has 1 MA's), (16, 53401), (17, 53404),

Gene: Trustiboi\_82 Start: 52682, Stop: 52849, Start Num: 10 Candidate Starts for Trustiboi\_82: (4, 52631), (Start: 10 @52682 has 6 MA's), (15, 52775),