

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 213051 Report

This analysis was run 02/22/25 on database version 588.

Pham number 213051 has 17 members, 5 are drafts.

Phages represented in each track:

- Track 1: Tenno\_79, Issa\_78, MiniBagel\_80, CapnMurica\_76
- Track 2 : CastorTray\_84
- Track 3 : AreFloNak\_85, Nivinsha\_82
- Track 4 : Darby\_78
- Track 5 : Lucy Swiss 80
- Track 6 : Gordon\_78
- Track 7 : Synepsis 76
- Track 8 : LilHuddy\_83
- Track 9 : Truckee 80
- Track 10 : Makai 83
- Track 11 : Elver\_208, Paella\_212, Qui\_212

# 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 11 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AreFloNak\_85, CapnMurica\_76, CastorTray\_84, Darby\_78, Elver\_208, Gordon\_78, Issa\_78, LilHuddy\_83, LucySwiss\_80, Makai\_83, MiniBagel\_80, Nivinsha\_82, Paella\_212, Qui\_212, Tenno\_79, Truckee\_80,

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:

• Synepsis\_76,

### Summary by start number:

#### Start 3:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present

Phage (with cluster) where this start called: Synepsis\_76 (AU1),

#### Start 4:

- Found in 16 of 17 (94.1%) of genes in pham
- Manual Annotations of this start: 11 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AreFloNak\_85 (AU1), CapnMurica\_76 (AU1), CastorTray\_84 (AU1), Darby\_78 (AU1), Elver\_208 (FK), Gordon\_78 (AU1), Issa\_78 (AU1), LilHuddy\_83 (AU2), LucySwiss\_80 (AU1), Makai\_83 (AU5), MiniBagel\_80 (AU1), Nivinsha\_82 (AU1), Paella\_212 (FK), Qui\_212 (FK), Tenno\_79 (AU1), Truckee\_80 (AU5),

## **Summary by clusters:**

There are 4 clusters represented in this pham: AU1, AU2, FK, AU5,

Info for manual annotations of cluster AU1:

- •Start number 3 was manually annotated 1 time for cluster AU1.
- •Start number 4 was manually annotated 6 times for cluster AU1.

Info for manual annotations of cluster AU2:

•Start number 4 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU5:

•Start number 4 was manually annotated 2 times for cluster AU5.

Info for manual annotations of cluster FK:

Start number 4 was manually annotated 2 times for cluster FK.

### Gene Information:

Gene: AreFloNak 85 Start: 51430, Stop: 51615, Start Num: 4

Candidate Starts for AreFloNak 85:

(Start: 4 @51430 has 11 MA's), (7, 51481), (9, 51487),

Gene: CapnMurica\_76 Start: 51657, Stop: 51839, Start Num: 4

Candidate Starts for CapnMurica 76:

(Start: 4 @51657 has 11 MA's), (9, 51717), (11, 51768), (16, 51831),

Gene: CastorTray\_84 Start: 52198, Stop: 52383, Start Num: 4

Candidate Starts for CastorTray 84:

(Start: 4 @ 52198 has 11 MA's), (7, 52249), (9, 52255),

Gene: Darby 78 Start: 51244, Stop: 51429, Start Num: 4

Candidate Starts for Darby\_78:

(Start: 4 @51244 has 11 MA's), (7, 51295), (9, 51301),

Gene: Elver 208 Start: 97960, Stop: 98163, Start Num: 4

Candidate Starts for Elver 208:

(Start: 4 @ 97960 has 11 MA's), (8, 98011), (9, 98014), (13, 98098), (17, 98149),

Gene: Gordon\_78 Start: 51987, Stop: 52169, Start Num: 4

Candidate Starts for Gordon\_78:

(Start: 4 @51987 has 11 MA's), (6, 52032), (9, 52044),

Gene: Issa\_78 Start: 50728, Stop: 50910, Start Num: 4

Candidate Starts for Issa\_78:

(Start: 4 @ 50728 has 11 MA's), (9, 50788), (11, 50839), (16, 50902),

Gene: LilHuddy\_83 Start: 51535, Stop: 51714, Start Num: 4

Candidate Starts for LilHuddy\_83:

(1, 51433), (Start: 4 @51535 has 11 MA's), (7, 51586), (9, 51592), (10, 51622),

Gene: LucySwiss\_80 Start: 51150, Stop: 51335, Start Num: 4

Candidate Starts for LucySwiss\_80:

(2, 51141), (Start: 4 @51150 has 11 MA's), (9, 51207), (12, 51267), (14, 51306),

Gene: Makai 83 Start: 52100, Stop: 52285, Start Num: 4

Candidate Starts for Makai\_83:

(Start: 4 @ 52100 has 11 MA's), (9, 52160), (12, 52223), (13, 52238), (15, 52271), (16, 52277),

Gene: MiniBagel\_80 Start: 51661, Stop: 51843, Start Num: 4

Candidate Starts for MiniBagel\_80:

(Start: 4 @ 51661 has 11 MA's), (9, 51721), (11, 51772), (16, 51835),

Gene: Nivinsha\_82 Start: 51431, Stop: 51616, Start Num: 4

Candidate Starts for Nivinsha\_82:

(Start: 4 @51431 has 11 MA's), (7, 51482), (9, 51488),

Gene: Paella\_212 Start: 98845, Stop: 99048, Start Num: 4

Candidate Starts for Paella\_212:

(Start: 4 @ 98845 has 11 MA's), (8, 98896), (9, 98899), (13, 98983), (17, 99034),

Gene: Qui\_212 Start: 98833, Stop: 99036, Start Num: 4

Candidate Starts for Qui 212:

(Start: 4 @ 98833 has 11 MA's), (8, 98884), (9, 98887), (13, 98971), (17, 99022),

Gene: Synepsis\_76 Start: 51357, Stop: 51542, Start Num: 3

Candidate Starts for Synepsis\_76:

(Start: 3 @51357 has 1 MA's), (7, 51408), (9, 51414),

Gene: Tenno\_79 Start: 51694, Stop: 51876, Start Num: 4

Candidate Starts for Tenno\_79:

(Start: 4 @51694 has 11 MA's), (9, 51754), (11, 51805), (16, 51868),

Gene: Truckee\_80 Start: 51793, Stop: 51978, Start Num: 4

Candidate Starts for Truckee\_80:

(Start: 4 @51793 has 11 MA's), (5, 51817), (9, 51853), (12, 51916), (13, 51931), (15, 51964), (16, 51970),