

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 87022 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87022 has 15 members, 0 are drafts.

Phages represented in each track:

• Track 1 : SoJo\_2

Track 2 : Raleigh\_2

Track 3 : Darolandstone\_2

Track 4 : Ididsumtinwong\_2, Bioscum\_2

Track 5 : Austintatious\_2, PapayaSalad\_2

Track 6: Eklok\_3, Eastland\_3, AxeJC\_3
Track 7: HFrancette 3, Vondra 3, Ignacio 3

• Track 8 : Piccadilly\_3, Cumberbatch\_3

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

The start number called the most often in the published annotations is 15, it was called in 9 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• AxeJC\_3, Cumberbatch\_3, Eastland\_3, Eklok\_3, HFrancette\_3, Ignacio\_3, Piccadilly\_3, SoJo\_2, Vondra\_3,

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

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

 Austintatious\_2, Bioscum\_2, Darolandstone\_2, Ididsumtinwong\_2, PapayaSalad\_2, Raleigh\_2,

## Summary by start number:

#### Start 15:

- Found in 9 of 15 (60.0%) of genes in pham
- Manual Annotations of this start: 9 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC\_3 (BP), Cumberbatch\_3 (BP), Eastland\_3 (BP), Eklok\_3 (BP), HFrancette\_3 (BP), Ignacio\_3 (BP), Piccadilly\_3 (BP), SoJo\_2 (BC1), Vondra\_3 (BP),

#### Start 16:

- Found in 4 of 15 (26.7%) of genes in pham
- Manual Annotations of this start: 4 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Austintatious\_2 (BC3), Bioscum\_2 (BC3), Ididsumtinwong\_2 (BC3), PapayaSalad\_2 (BC3),

### Start 17:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darolandstone\_2 (BC2), Raleigh\_2 (BC2),

## Summary by clusters:

There are 4 clusters represented in this pham: BP, BC1, BC2, BC3,

Info for manual annotations of cluster BC1:

•Start number 15 was manually annotated 1 time for cluster BC1.

Info for manual annotations of cluster BC2:

•Start number 17 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

•Start number 16 was manually annotated 4 times for cluster BC3.

Info for manual annotations of cluster BP:

•Start number 15 was manually annotated 8 times for cluster BP.

#### Gene Information:

Gene: Austintatious\_2 Start: 1284, Stop: 1505, Start Num: 16

Candidate Starts for Austintatious\_2:

(1, 78), (2, 540), (3, 618), (4, 645), (5, 678), (8, 888), (9, 951), (10, 996), (11, 1104), (12, 1140), (14, 1242), (Start: 16 @1284 has 4 MA's), (24, 1482),

Gene: AxeJC 3 Start: 1795, Stop: 2001, Start Num: 15

Candidate Starts for AxeJC 3:

(10, 1507), (12, 1651), (13, 1711), (14, 1753), (Start: 15 @1795 has 9 MA's), (22, 1921), (23, 1939), (24, 1987),

Gene: Bioscum\_2 Start: 1284, Stop: 1508, Start Num: 16

Candidate Starts for Bioscum 2:

(2, 540), (3, 618), (4, 645), (5, 678), (8, 888), (9, 951), (10, 996), (11, 1104), (12, 1140), (14, 1242), (Start: 16 @1284 has 4 MA's), (24, 1485),

Gene: Cumberbatch 3 Start: 1788, Stop: 1994, Start Num: 15

Candidate Starts for Cumberbatch 3:

(14, 1746), (Start: 15 @1788 has 9 MA's), (22, 1914), (23, 1932), (24, 1980),

Gene: Darolandstone\_2 Start: 1251, Stop: 1427, Start Num: 17

Candidate Starts for Darolandstone\_2:

(14, 1209), (Start: 17 @1251 has 2 MA's), (21, 1362),

Gene: Eastland\_3 Start: 1789, Stop: 1995, Start Num: 15

Candidate Starts for Eastland\_3:

(10, 1501), (12, 1645), (13, 1705), (14, 1747), (Start: 15 @1789 has 9 MA's), (22, 1915), (23, 1933), (24, 1981),

Gene: Eklok 3 Start: 1795, Stop: 2001, Start Num: 15

Candidate Starts for Eklok 3:

(10, 1507), (12, 1651), (13, 1711), (14, 1753), (Start: 15 @1795 has 9 MA's), (22, 1921), (23, 1939), (24, 1987),

Gene: HFrancette\_3 Start: 1788, Stop: 1994, Start Num: 15

Candidate Starts for HFrancette\_3:

(14, 1746), (Start: 15 @1788 has 9 MA's), (22, 1914), (24, 1980),

Gene: Ididsumtinwong\_2 Start: 1284, Stop: 1508, Start Num: 16

Candidate Starts for Ididsumtinwong\_2:

(2, 540), (3, 618), (4, 645), (5, 678), (8, 888), (9, 951), (10, 996), (11, 1104), (12, 1140), (14, 1242), (Start: 16 @1284 has 4 MA's), (24, 1485),

Gene: Ignacio\_3 Start: 1788, Stop: 1994, Start Num: 15

Candidate Starts for Ignacio\_3:

(14, 1746), (Start: 15 @1788 has 9 MA's), (22, 1914), (24, 1980),

Gene: PapayaSalad\_2 Start: 1284, Stop: 1505, Start Num: 16

Candidate Starts for PapayaSalad\_2:

(1, 78), (2, 540), (3, 618), (4, 645), (5, 678), (8, 888), (9, 951), (10, 996), (11, 1104), (12, 1140), (14, 1242), (Start: 16 @1284 has 4 MA's), (24, 1482),

Gene: Piccadilly\_3 Start: 1788, Stop: 1994, Start Num: 15

Candidate Starts for Piccadilly 3:

(14, 1746), (Start: 15 @1788 has 9 MA's), (22, 1914), (23, 1932), (24, 1980),

Gene: Raleigh\_2 Start: 1248, Stop: 1427, Start Num: 17

Candidate Starts for Raleigh\_2:

(1, 78), (2, 540), (3, 618), (4, 645), (5, 678), (6, 732), (7, 819), (8, 888), (9, 918), (10, 963), (11, 1071), (14, 1209), (Start: 17 @1248 has 2 MA's), (21, 1359),

Gene: SoJo\_2 Start: 1285, Stop: 1509, Start Num: 15

Candidate Starts for SoJo 2:

(Start: 15 @1285 has 9 MA's), (18, 1315), (19, 1351), (20, 1405), (24, 1486),

Gene: Vondra\_3 Start: 1788, Stop: 1994, Start Num: 15

Candidate Starts for Vondra\_3:

(14, 1746), (Start: 15 @1788 has 9 MA's), (22, 1914), (24, 1980),