	Ŷ)	· 6	
1: StarStuff_33 + 2				
n. Glarotun_do n 2				
	7		· 6	8
2: Naji_33 + 2				
Naji_50 1 2 1				
	Դ)	, 6	
8: Tomathan_3 \$ + 2				
b. Tomathan_sw 1 2				
	n	.	· 6	1
4: C3_28 + 5				
F. 03_20 + 3				
	γ	> D	· 6	8
5: Travvers_33				

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 216655 Report

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

Pham number 216655 has 16 members, 1 are drafts.

Phages represented in each track:

• Track 1: StarStuff 33, DBQu4n 33, Duplo 33

• Track 2 : Naji_33, D29_30, D32_33

Track 3: Tomathan_33, Kerberos_33, Pomar16_33

Track 4: C3_28, ANI8_33, AN3_30, VA6_30, AN9_33, VC3_33

Track 5 : Travvers_33

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

The start number called the most often in the published annotations is 3, it was called in 15 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

AN3_30, AN9_33, ANI8_33, C3_28, D29_30, D32_33, DBQu4n_33, Duplo_33, Kerberos_33, Naji_33, Pomar16_33, StarStuff_33, Tomathan_33, VA6_30, VC3_33,

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

• Travvers 33,

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

•

Summary by start number:

Start 3:

- Found in 16 of 16 (100.0%) of genes in pham
- Manual Annotations of this start: 15 of 15
- Called 93.8% of time when present
- Phage (with cluster) where this start called: AN3_30 (A2), AN9_33 (A2), ANI8_33 (A2), C3_28 (A2), D29_30 (A2), D32_33 (A2), DBQu4n_33 (A2), Duplo_33 (A2), Kerberos_33 (A2), Naji_33 (A2), Pomar16_33 (A2), StarStuff_33 (A2), Tomathan_33 (A2), VA6_30 (A2), VC3_33 (A2),

Start 4:

• Found in 16 of 16 (100.0%) of genes in pham

- No Manual Annotations of this start.
- Called 6.2% of time when present
- Phage (with cluster) where this start called: Travvers_33 (A2),

Summary by clusters:

There is one cluster represented in this pham: A2

Info for manual annotations of cluster A2:

Gene: Naji_33 Start: 22296, Stop: 22562, Start Num: 3

Candidate Starts for Naji_33:

•Start number 3 was manually annotated 15 times for cluster A2.

Gene Information:

Gene: AN3 30 Start: 22452, Stop: 22718, Start Num: 3 Candidate Starts for AN3 30: (1, 22296), (Start: 3 @ 22452 has 15 MA's), (4, 22497), (5, 22506), (7, 22521), Gene: AN9_33 Start: 22440, Stop: 22706, Start Num: 3 Candidate Starts for AN9 33: (1, 22284), (Start: 3 @ 22440 has 15 MA's), (4, 22485), (5, 22494), (7, 22509), Gene: ANI8 33 Start: 22440, Stop: 22706, Start Num: 3 Candidate Starts for ANI8_33: (1, 22284), (Start: 3 @ 22440 has 15 MA's), (4, 22485), (5, 22494), (7, 22509), Gene: C3 28 Start: 22440, Stop: 22706, Start Num: 3 Candidate Starts for C3 28: (1, 22284), (Start: 3 @22440 has 15 MA's), (4, 22485), (5, 22494), (7, 22509), Gene: D29 30 Start: 22296, Stop: 22562, Start Num: 3 Candidate Starts for D29 30: (1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353), (8, 22377), Gene: D32_33 Start: 22296, Stop: 22562, Start Num: 3 Candidate Starts for D32 33: (1, 22140), (2, 22248), (Start: 3 @ 22296 has 15 MA's), (4, 22341), (6, 22353), (8, 22377), Gene: DBQu4n_33 Start: 22296, Stop: 22562, Start Num: 3 Candidate Starts for DBQu4n 33: (1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353), Gene: Duplo 33 Start: 22334, Stop: 22600, Start Num: 3 Candidate Starts for Duplo 33: (1, 22178), (2, 22286), (Start: 3 @22334 has 15 MA's), (4, 22379), (6, 22391), Gene: Kerberos_33 Start: 22296, Stop: 22562, Start Num: 3 Candidate Starts for Kerberos 33: (1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353),

(1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353), (8, 22377),

Gene: Pomar16_33 Start: 22337, Stop: 22603, Start Num: 3

Candidate Starts for Pomar16_33:

(1, 22181), (2, 22289), (Start: 3 @22337 has 15 MA's), (4, 22382), (6, 22394),

Gene: StarStuff_33 Start: 22296, Stop: 22562, Start Num: 3

Candidate Starts for StarStuff 33:

(1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353),

Gene: Tomathan_33 Start: 22296, Stop: 22562, Start Num: 3

Candidate Starts for Tomathan 33:

(1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353),

Gene: Travvers_33 Start: 22341, Stop: 22562, Start Num: 4

Candidate Starts for Travvers_33:

(1, 22140), (2, 22248), (Start: 3 @22296 has 15 MA's), (4, 22341), (6, 22353), (8, 22377),

Gene: VA6_30 Start: 22452, Stop: 22718, Start Num: 3

Candidate Starts for VA6_30:

(1, 22296), (Start: 3 @22452 has 15 MA's), (4, 22497), (5, 22506), (7, 22521),

Gene: VC3_33 Start: 22440, Stop: 22706, Start Num: 3

Candidate Starts for VC3_33:

(1, 22284), (Start: 3 @22440 has 15 MA's), (4, 22485), (5, 22494), (7, 22509),