

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 5317 Report

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

Pham number 5317 has 12 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Dubu 11

• Track 2 : phiSASD1\_33

Track 3: Gibson\_19, Lizz\_19, Rooney\_19, ShakeNBake\_19

• Track 4 : Yara 16

• Track 5 : PHTowN 19

Track 6 : Dryad\_21

Track 7: Wilkos 19

Track 8 : Wentworth\_19

Track 9 : Chymera\_12

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

The start number called the most often in the published annotations is 6, it was called in 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Dryad\_21, Gibson\_19, Lizz\_19, PHTowN\_19, Rooney\_19, ShakeNBake\_19, Wentworth\_19, Wilkos\_19,

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

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

Chymera\_12, Dubu\_11, Yara\_16, phiSASD1\_33,

## **Summary by start number:**

### Start 3

- Found in 1 of 12 (8.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: phiSASD1\_33 (BJ),

#### Start 4:

- Found in 1 of 12 (8.3%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera 12 (singleton),

### Start 5:

- Found in 3 of 12 (25.0%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dubu\_11 (BJ), Yara\_16 (BN),

## Start 6:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 7 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dryad\_21 (BN), Gibson\_19 (BN), Lizz\_19 (BN), PHTowN\_19 (BN), Rooney\_19 (BN), ShakeNBake\_19 (BN), Wentworth\_19 (BN), Wilkos\_19 (BN),

## **Summary by clusters:**

There are 3 clusters represented in this pham: BN, singleton, BJ,

Info for manual annotations of cluster BJ:

•Start number 5 was manually annotated 1 time for cluster BJ.

Info for manual annotations of cluster BN:

- •Start number 5 was manually annotated 1 time for cluster BN.
- •Start number 6 was manually annotated 7 times for cluster BN.

## Gene Information:

Gene: Chymera 12 Start: 8938, Stop: 9363, Start Num: 4

Candidate Starts for Chymera\_12:

(Start: 4 @ 8938 has 1 MA's), (7, 8965), (14, 9061), (16, 9079), (20, 9154), (21, 9184),

Gene: Dryad\_21 Start: 11826, Stop: 12239, Start Num: 6

Candidate Starts for Dryad 21:

(2, 11766), (Start: 6 @11826 has 7 MA's), (9, 11886), (13, 11922), (17, 11955), (18, 11964), (20, 12027), (22, 12090), (26, 12153), (28, 12219), (29, 12234),

Gene: Dubu\_11 Start: 7603, Stop: 8007, Start Num: 5

Candidate Starts for Dubu\_11:

(Start: 5 @7603 has 2 MA's), (10, 7669), (11, 7678), (12, 7687), (19, 7792),

Gene: Gibson 19 Start: 11384, Stop: 11800, Start Num: 6

Candidate Starts for Gibson 19:

(2, 11324), (Start: 6 @11384 has 7 MA's), (12, 11471), (17, 11516), (18, 11525), (20, 11588), (23, 11678), (26, 11714), (28, 11780), (29, 11795),

Gene: Lizz\_19 Start: 11300, Stop: 11716, Start Num: 6

Candidate Starts for Lizz 19:

(2, 11240), (Start: 6 @11300 has 7 MA's), (12, 11387), (17, 11432), (18, 11441), (20, 11504), (23, 11594), (26, 11630), (28, 11696), (29, 11711),

Gene: PHTowN\_19 Start: 11300, Stop: 11716, Start Num: 6

Candidate Starts for PHTowN 19:

(2, 11240), (Start: 6 @11300 has 7 MA's), (12, 11387), (17, 11432), (18, 11441), (20, 11504), (23, 11594), (26, 11630), (28, 11696), (29, 11711),

Gene: Rooney\_19 Start: 11381, Stop: 11797, Start Num: 6

Candidate Starts for Rooney 19:

(2, 11321), (Start: 6 @11381 has 7 MA's), (12, 11468), (17, 11513), (18, 11522), (20, 11585), (23, 11675), (26, 11711), (28, 11777), (29, 11792),

Gene: ShakeNBake\_19 Start: 11300, Stop: 11716, Start Num: 6

Candidate Starts for ShakeNBake\_19:

(2, 11240), (Start: 6 @11300 has 7 MA's), (12, 11387), (17, 11432), (18, 11441), (20, 11504), (23, 11594), (26, 11630), (28, 11696), (29, 11711),

Gene: Wentworth\_19 Start: 11090, Stop: 11503, Start Num: 6

Candidate Starts for Wentworth 19:

(2, 11030), (Start: 6 @11090 has 7 MA's), (9, 11150), (17, 11219), (18, 11228), (20, 11291), (23, 11381), (26, 11417), (27, 11462), (28, 11483), (29, 11498),

Gene: Wilkos\_19 Start: 11259, Stop: 11672, Start Num: 6

Candidate Starts for Wilkos\_19:

(Start: 6 @11259 has 7 MA's), (9, 11319), (17, 11388), (18, 11397), (20, 11460), (23, 11550), (26, 11586), (27, 11631), (28, 11652), (29, 11667),

Gene: Yara\_16 Start: 10200, Stop: 10607, Start Num: 5

Candidate Starts for Yara\_16:

(2, 10143), (Start: 5 @10200 has 2 MA's), (8, 10242), (12, 10278), (13, 10290), (18, 10332), (20, 10395), (23, 10485), (24, 10503), (25, 10506), (27, 10566), (28, 10587),

Gene: phiSASD1\_33 Start: 8110, Stop: 8547, Start Num: 3

Candidate Starts for phiSASD1\_33:

(1, 8002), (3, 8110), (Start: 5 @8143 has 2 MA's), (8, 8188), (15, 8266), (18, 8281),