

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 5185 Report

This analysis was run 04/28/24 on database version 559.

Pham number 5185 has 12 members, 2 are drafts.

Phages represented in each track:

• Track 1: Dubu 9

• Track 2 : phiSASD1\_30

Track 3 : Yara\_14

Track 4: PHTowN\_16, Lizz\_16, ShakeNBake\_16

Track 5 : Dryad\_18

• Track 6 : Gibson\_16, Rooney\_16

Track 7 : Wentworth\_16

Track 8: Wilkos\_16

• Track 9 : Chymera\_10

# 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 8 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Dryad\_18, Dubu\_9, Gibson\_16, Lizz\_16, PHTowN\_16, Rooney\_16, ShakeNBake\_16, Wentworth\_16, Wilkos\_16,

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

phiSASD1\_30,

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

Chymera\_10, Yara\_14,

## **Summary by start number:**

#### Start 3:

- 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: Yara\_14 (BN),

### Start 4:

- Found in 10 of 12 (83.3%) of genes in pham
- Manual Annotations of this start: 8 of 10
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Dryad\_18 (BN), Dubu\_9 (BJ), Gibson\_16 (BN), Lizz\_16 (BN), PHTowN\_16 (BN), Rooney\_16 (BN), ShakeNBake\_16 (BN), Wentworth\_16 (BN), Wilkos\_16 (BN),

### Start 5:

- 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\_10 (singleton),

### Start 10:

- Found in 2 of 12 (16.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: phiSASD1 30 (BJ),

## **Summary by clusters:**

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

Info for manual annotations of cluster BJ:

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

Info for manual annotations of cluster BN:

- •Start number 3 was manually annotated 1 time for cluster BN.
- •Start number 4 was manually annotated 7 times for cluster BN.

### Gene Information:

Gene: Chymera\_10 Start: 8233, Stop: 8565, Start Num: 5

Candidate Starts for Chymera\_10:

(Start: 5 @8233 has 1 MA's), (8, 8269), (15, 8419),

Gene: Dryad 18 Start: 10966, Stop: 11307, Start Num: 4

Candidate Starts for Dryad 18:

(1, 10840), (2, 10924), (Start: 4 @10966 has 8 MA's), (7, 10975), (9, 11023), (11, 11044), (14, 11143), (15, 11155), (16, 11224), (17, 11227), (18, 11257), (20, 11275),

Gene: Dubu\_9 Start: 6888, Stop: 7220, Start Num: 4

Candidate Starts for Dubu\_9:

(Start: 4 @6888 has 8 MA's), (10, 6957), (12, 7008),

Gene: Gibson\_16 Start: 10527, Stop: 10868, Start Num: 4

Candidate Starts for Gibson 16:

(Start: 4 @ 10527 has 8 MA's), (6, 10533), (7, 10536), (9, 10584), (11, 10605), (14, 10704), (15, 10716), (17, 10706), (17

10716), (16, 10785), (17, 10788), (18, 10818),

Gene: Lizz\_16 Start: 10443, Stop: 10784, Start Num: 4

Candidate Starts for Lizz 16:

(Start: 4 @10443 has 8 MA's), (7, 10452), (9, 10500), (11, 10521), (14, 10620), (15, 10632), (16, 10701), (17, 10704), (18, 10734),

Gene: PHTowN\_16 Start: 10443, Stop: 10784, Start Num: 4

Candidate Starts for PHTowN 16:

(Start: 4 @10443 has 8 MA's), (7, 10452), (9, 10500), (11, 10521), (14, 10620), (15, 10632), (16, 10701), (17, 10704), (18, 10734),

Gene: Rooney\_16 Start: 10524, Stop: 10865, Start Num: 4

Candidate Starts for Rooney 16:

(Start: 4 @10524 has 8 MA's), (6, 10530), (7, 10533), (9, 10581), (11, 10602), (14, 10701), (15, 10713), (16, 10782), (17, 10785), (18, 10815),

Gene: ShakeNBake\_16 Start: 10443, Stop: 10784, Start Num: 4

Candidate Starts for ShakeNBake\_16:

(Start: 4 @10443 has 8 MA's), (7, 10452), (9, 10500), (11, 10521), (14, 10620), (15, 10632), (16, 10701), (17, 10704), (18, 10734),

Gene: Wentworth\_16 Start: 10239, Stop: 10580, Start Num: 4

Candidate Starts for Wentworth\_16:

(Start: 4 @10239 has 8 MA's), (7, 10248), (9, 10296), (11, 10317), (14, 10416), (15, 10428), (16, 10497), (17, 10500), (18, 10530), (22, 10575),

Gene: Wilkos\_16 Start: 10408, Stop: 10749, Start Num: 4

Candidate Starts for Wilkos\_16:

(Start: 4 @10408 has 8 MA's), (6, 10414), (7, 10417), (11, 10486), (15, 10597), (16, 10666), (17, 10669), (18, 10699), (19, 10705), (22, 10744),

Gene: Yara\_14 Start: 9509, Stop: 9856, Start Num: 3

Candidate Starts for Yara\_14:

(Start: 3 @ 9509 has 1 MA's), (14, 9689), (16, 9770), (18, 9803), (21, 9845),

Gene: phiSASD1 30 Start: 7168, Stop: 7437, Start Num: 10

Candidate Starts for phiSASD1\_30:

(Start: 4 @7099 has 8 MA's), (10, 7168), (13, 7255), (14, 7279),