

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 158312 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158312 has 12 members, 2 are drafts.

Phages represented in each track:

Track 1: MAnor\_30, Pons\_30, Mayweather\_31

• Track 2 : SheckWes 29

Track 3 : Elinal\_31

Track 4 : KayGee\_29

• Track 5 : Vine\_30

• Track 6 : CherryonLim\_31

• Track 7 : PCoral7 33, Toast 33

Track 8 : William\_33Track 9 : Ghobes 28

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

Genes that call this "Most Annotated" start:

CherryonLim\_31, Elinal\_31, MAnor\_30, Mayweather\_31, Pons\_30, SheckWes\_29, Vine 30.

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

KayGee\_29,

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

Ghobes\_28, PCoral7\_33, Toast\_33, William\_33,

## Summary by start number:

#### Start 1:

- Found in 11 of 12 (91.7%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 9.1% of time when present
- Phage (with cluster) where this start called: Ghobes\_28 (DA),

### Start 2:

- 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: William\_33 (CV),

#### Start 4:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 6 of 10
- Called 87.5% of time when present
- Phage (with cluster) where this start called: CherryonLim\_31 (CT), Elinal\_31 (CT), MAnor\_30 (CT), Mayweather\_31 (CT), Pons\_30 (CT), SheckWes\_29 (CT), Vine\_30 (CT),

### Start 5:

- Found in 2 of 12 (16.7%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PCoral7\_33 (CV), Toast\_33 (CV),

### Start 10:

- Found in 6 of 12 (50.0%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: KayGee\_29 (CT),

## **Summary by clusters:**

There are 3 clusters represented in this pham: DA, CV, CT,

Info for manual annotations of cluster CT:

•Start number 4 was manually annotated 6 times for cluster CT.

Info for manual annotations of cluster CV:

- •Start number 2 was manually annotated 1 time for cluster CV.
- •Start number 5 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster DA:

•Start number 1 was manually annotated 1 time for cluster DA.

#### Gene Information:

Gene: CherryonLim\_31 Start: 25039, Stop: 25467, Start Num: 4

Candidate Starts for CherryonLim\_31:

(Start: 1 @25027 has 1 MA's), (Start: 4 @25039 has 6 MA's), (7, 25054), (17, 25168), (21, 25189), (23, 25201), (30, 25276), (35, 25339), (37, 25351), (39, 25381),

Gene: Elinal 31 Start: 24276, Stop: 24707, Start Num: 4

Candidate Starts for Elinal 31:

(Start: 1 @24264 has 1 MA's), (Start: 4 @24276 has 6 MA's), (7, 24291), (10, 24318), (12, 24339), (14, 24381), (16, 24393), (18, 24408), (22, 24435), (23, 24438), (36, 24585), (41, 24672), (44, 24687),

Gene: Ghobes\_28 Start: 24501, Stop: 24941, Start Num: 1

Candidate Starts for Ghobes 28:

(Start: 1 @24501 has 1 MA's), (9, 24549), (16, 24627), (19, 24654), (20, 24657), (25, 24702), (31, 24750), (32, 24771), (33, 24777), (34, 24786), (38, 24837), (42, 24915), (43, 24918), (45, 24927),

Gene: KayGee\_29 Start: 24318, Stop: 24707, Start Num: 10

Candidate Starts for KayGee\_29:

(Start: 1 @24264 has 1 MA's), (Start: 4 @24276 has 6 MA's), (7, 24291), (10, 24318), (12, 24339), (14, 24381), (16, 24393), (18, 24408), (22, 24435), (23, 24438), (36, 24585), (41, 24672), (44, 24687),

Gene: MAnor 30 Start: 24302, Stop: 24733, Start Num: 4

Candidate Starts for MAnor 30:

(Start: 1 @24290 has 1 MA's), (Start: 4 @24302 has 6 MA's), (7, 24317), (10, 24344), (12, 24365), (14, 24407), (16, 24419), (22, 24461), (23, 24464), (31, 24542), (41, 24698), (44, 24713),

Gene: Mayweather\_31 Start: 24918, Stop: 25349, Start Num: 4

Candidate Starts for Mayweather\_31:

(Start: 1 @24906 has 1 MA's), (Start: 4 @24918 has 6 MA's), (7, 24933), (10, 24960), (12, 24981), (14, 25023), (16, 25035), (22, 25077), (23, 25080), (31, 25158), (41, 25314), (44, 25329),

Gene: PCoral7\_33 Start: 27814, Stop: 28248, Start Num: 5

Candidate Starts for PCoral7\_33:

(Start: 1 @27793 has 1 MA's), (Start: 5 @27814 has 2 MA's), (6, 27817), (12, 27880), (14, 27922), (15, 27928), (16, 27934), (22, 27976), (23, 27979), (27, 28021), (29, 28051), (32, 28078), (40, 28171), (41, 28213),

Gene: Pons\_30 Start: 24291, Stop: 24722, Start Num: 4

Candidate Starts for Pons 30:

(Start: 1 @24279 has 1 MA's), (Start: 4 @24291 has 6 MA's), (7, 24306), (10, 24333), (12, 24354), (14, 24396), (16, 24408), (22, 24450), (23, 24453), (31, 24531), (41, 24687), (44, 24702),

Gene: SheckWes\_29 Start: 23268, Stop: 23699, Start Num: 4

Candidate Starts for SheckWes 29:

(Start: 1 @23256 has 1 MA's), (Start: 4 @23268 has 6 MA's), (7, 23283), (23, 23436), (24, 23460), (28, 23484),

Gene: Toast\_33 Start: 27814, Stop: 28248, Start Num: 5

Candidate Starts for Toast\_33:

(Start: 1 @27793 has 1 MA's), (Start: 5 @27814 has 2 MA's), (6, 27817), (12, 27880), (14, 27922), (15, 27928), (16, 27934), (22, 27976), (23, 27979), (27, 28021), (29, 28051), (32, 28078), (40, 28171), (41, 28213),

Gene: Vine\_30 Start: 24262, Stop: 24693, Start Num: 4

Candidate Starts for Vine 30:

(Start: 1 @24250 has 1 MA's), (Start: 4 @24262 has 6 MA's), (8, 24286), (10, 24304), (11, 24307), (12, 24325), (16, 24379), (22, 24421), (23, 24424), (26, 24457), (41, 24658), (44, 24673),

Gene: William\_33 Start: 27647, Stop: 28078, Start Num: 2

Candidate Starts for William\_33:

(Start: 2 @27647 has 1 MA's), (3, 27650), (12, 27710), (13, 27728), (24, 27842), (25, 27848), (28, 27866),