

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 191726 Report

This analysis was run 11/02/24 on database version 579.

Pham number 191726 has 7 members, 1 are drafts.

Phages represented in each track:

Track 1 : Faja\_32Track 2 : Barco\_32Track 3 : Mellie 31

Track 4 : CheeseTouch\_32

Track 5 : Fizzles\_30Track 6 : Mendel\_24Track 7 : REQ2 14

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

Genes that call this "Most Annotated" start:

Barco\_32, CheeseTouch\_32, Fizzles\_30, Mellie\_31, Mendel\_24, REQ2\_14,

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

•

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

Faja\_32,

### Summary by start number:

#### Start 4:

- Found in 6 of 7 (85.7%) of genes in pham
- Manual Annotations of this start: 5 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Barco\_32 (CV), CheeseTouch\_32 (DN1), Fizzles\_30 (EG), Mellie\_31 (CV), Mendel\_24 (FD), REQ2\_14 (singleton),

### Start 5:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 6

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Faja\_32 (AY),

## **Summary by clusters:**

There are 6 clusters represented in this pham: singleton, EG, DN1, AY, FD, CV,

Info for manual annotations of cluster AY:

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

Info for manual annotations of cluster CV:

Start number 4 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster DN1:

•Start number 4 was manually annotated 1 time for cluster DN1.

Info for manual annotations of cluster EG:

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

Info for manual annotations of cluster FD:

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

#### Gene Information:

Gene: Barco\_32 Start: 26939, Stop: 27814, Start Num: 4

Candidate Starts for Barco\_32:

(Start: 4 @26939 has 5 MA's), (6, 26972), (7, 26990), (19, 27125), (29, 27287), (36, 27425), (39, 27491), (42, 27509), (43, 27527), (44, 27530), (46, 27536), (51, 27689), (56, 27800),

Gene: CheeseTouch 32 Start: 24869, Stop: 25744, Start Num: 4

Candidate Starts for CheeseTouch\_32:

(2, 24617), (Start: 4 @24869 has 5 MA's), (6, 24902), (29, 25217), (36, 25355), (39, 25421), (43, 25457), (44, 25460), (46, 25466), (51, 25619),

Gene: Faja\_32 Start: 23314, Stop: 24066, Start Num: 5

Candidate Starts for Faja 32:

(3, 23302), (Start: 5 @23314 has 1 MA's), (8, 23374), (12, 23401), (20, 23482), (21, 23512), (22, 23575), (24, 23593), (26, 23620), (27, 23623), (28, 23629), (29, 23641), (47, 23920), (50, 23989),

Gene: Fizzles\_30 Start: 19351, Stop: 20256, Start Num: 4

Candidate Starts for Fizzles 30:

(1, 19051), (Start: 4 @19351 has 5 MA's), (11, 19444), (14, 19468), (16, 19498), (17, 19501), (23, 19642), (25, 19663), (29, 19702), (31, 19714), (36, 19840), (37, 19888), (39, 19906), (45, 19948), (47, 19975), (50, 20047), (52, 20137), (53, 20191),

Gene: Mellie\_31 Start: 26706, Stop: 27581, Start Num: 4

Candidate Starts for Mellie 31:

(Start: 4 @ 26706 has 5 MA's), (6, 26739), (7, 26757), (29, 27054), (33, 27120), (36, 27192), (38, 27243), (39, 27258), (40, 27261), (42, 27276), (43, 27294), (44, 27297), (46, 27303), (48, 27390), (51, 27456), (56, 27567),

Gene: Mendel\_24 Start: 17434, Stop: 18315, Start Num: 4

Candidate Starts for Mendel\_24:

(Start: 4 @17434 has 5 MA's), (10, 17512), (13, 17524), (15, 17548), (21, 17656), (29, 17785), (34, 17854), (39, 17992), (47, 18061), (48, 18124), (49, 18127), (54, 18265), (57, 18301),

Gene: REQ2\_14 Start: 9904, Stop: 10818, Start Num: 4

Candidate Starts for REQ2\_14:

 $(Start: 4 @ 9904 \ has \ 5 \ MA's), \ (9, 9982), \ (18, 10069), \ (26, 10243), \ (29, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (30, 10273), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264), \ (32, 10264),$ 

10321), (35, 10345), (39, 10489), (41, 10498), (51, 10690), (55, 10801),