

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 194523 Report

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

Pham number 194523 has 11 members, 3 are drafts.

Phages represented in each track:

Track 1: FlagStaff\_35, Pace1224\_35

Track 2 : Cambiare\_37

Track 3 : Avocado\_35

Track 4: MOOREtheMARYer 37

Track 5 : Pinnie\_36

• Track 6 : Mercurio\_38

• Track 7 : Lemuria 37

Track 8 : Jolie2\_35

Track 9 : Antsirabe\_35

Track 10 : Stargaze\_36

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

The start number called the most often in the published annotations is 14, it was called in 6 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Antsirabe\_35, Avocado\_35, Cambiare\_37, FlagStaff\_35, MOOREtheMARYer\_37, Pace1224\_35, Pinnie\_36, Stargaze\_36,

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

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

Jolie2\_35, Lemuria\_37, Mercurio\_38,

### Summary by start number:

#### Start 14:

- Found in 8 of 11 (72.7%) of genes in pham
- Manual Annotations of this start: 6 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antsirabe\_35 (G5), Avocado\_35 (G2), Cambiare\_37 (G2), FlagStaff\_35 (G2), MOOREtheMARYer\_37 (G3), Pace1224\_35

(G2), Pinnie\_36 (G3), Stargaze\_36 (G5),

#### Start 17:

- Found in 3 of 11 (27.3%) of genes in pham
- Manual Annotations of this start: 2 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jolie2\_35 (G4), Lemuria\_37 (G4), Mercurio\_38 (G4),

## **Summary by clusters:**

There are 4 clusters represented in this pham: G5, G4, G3, G2,

Info for manual annotations of cluster G2:

•Start number 14 was manually annotated 3 times for cluster G2.

Info for manual annotations of cluster G3:

•Start number 14 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

•Start number 17 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

•Start number 14 was manually annotated 1 time for cluster G5.

#### Gene Information:

Gene: Antsirabe 35 Start: 30939, Stop: 31310, Start Num: 14

Candidate Starts for Antsirabe 35:

(1, 30342), (2, 30366), (3, 30486), (4, 30495), (5, 30663), (6, 30702), (8, 30843), (11, 30873), (Start: 14 @30939 has 6 MA's), (16, 30963), (20, 30999), (22, 31023), (24, 31125), (27, 31170), (32, 31245),

Gene: Avocado 35 Start: 31259, Stop: 31633, Start Num: 14

Candidate Starts for Avocado\_35:

(13, 31238), (Start: 14 @31259 has 6 MA's), (16, 31283), (19, 31313), (21, 31322), (34, 31571),

Gene: Cambiare 37 Start: 31924, Stop: 32235, Start Num: 14

Candidate Starts for Cambiare 37:

(13, 31903), (Start: 14 @ 31924 has 6 MA's), (25, 32065), (27, 32095), (32, 32170),

Gene: FlagStaff 35 Start: 31073, Stop: 31381, Start Num: 14

Candidate Starts for FlagStaff\_35:

(13, 31046), (Start: 14 @ 31073 has 6 MA's), (15, 31094), (18, 31124), (22, 31157),

Gene: Jolie2\_35 Start: 29990, Stop: 30325, Start Num: 17

Candidate Starts for Jolie 2 35:

(7, 29843), (10, 29894), (Start: 17 @ 29990 has 2 MA's), (34, 30242), (36, 30257), (37, 30263),

Gene: Lemuria 37 Start: 31386, Stop: 31667, Start Num: 17

Candidate Starts for Lemuria 37:

(9, 31257), (12, 31293), (Start: 17 @ 31386 has 2 MA's), (35, 31653),

Gene: MOOREtheMARYer\_37 Start: 31546, Stop: 31938, Start Num: 14

Candidate Starts for MOOREtheMARYer\_37:

(Start: 14 @31546 has 6 MA's), (20, 31606), (22, 31630), (26, 31792), (29, 31840), (30, 31846), (31,

31849), (33, 31876), (38, 31906),

Gene: Mercurio\_38 Start: 31784, Stop: 32167, Start Num: 17

Candidate Starts for Mercurio 38:

(9, 31655), (12, 31691), (Start: 17 @31784 has 2 MA's), (28, 31964), (34, 32033),

Gene: Pace1224\_35 Start: 31073, Stop: 31381, Start Num: 14

Candidate Starts for Pace1224 35:

(13, 31046), (Start: 14 @ 31073 has 6 MA's), (15, 31094), (18, 31124), (22, 31157),

Gene: Pinnie\_36 Start: 31664, Stop: 31972, Start Num: 14

Candidate Starts for Pinnie\_36:

(8, 31568), (Start: 14 @31664 has 6 MA's), (20, 31724), (22, 31748),

Gene: Stargaze\_36 Start: 31262, Stop: 31633, Start Num: 14

Candidate Starts for Stargaze\_36:

(Start: 14 @31262 has 6 MA's), (15, 31283), (23, 31376), (24, 31448), (27, 31493), (32, 31568),