

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 5797 Report

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

Pham number 5797 has 11 members, 3 are drafts.

Phages represented in each track:

 Track 1 : Avocado 33 • Track 2 : Cambiare\_34

Track 3 : Pace1224\_33, FlagStaff\_33

Track 4: MOOREtheMARYer 35

• Track 5 : Pinnie\_35

Track 6 : Jolie2\_34 • Track 7 : Mercurio 36

 Track 8 : Lemuria 35 • Track 9 : Antsirabe 34

Track 10 : Stargaze 34

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

The start number called the most often in the published annotations is 5, it was called in 5 of the 8 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Antsirabe\_34, Avocado\_33, FlagStaff\_33, MOOREtheMARYer\_35, Pace1224\_33, Pinnie\_35, Stargaze\_34,

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

Cambiare\_34,

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

Jolie2\_34, Lemuria\_35, Mercurio\_36,

### Summary by start number:

### Start 1:

- Found in 2 of 11 (18.2%) 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: Lemuria 35 (G4), Mercurio 36 (G4).

#### Start 2:

- Found in 1 of 11 (9.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jolie2\_34 (G4),

#### Start 4:

- Found in 1 of 11 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 8
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Cambiare\_34 (G2),

#### Start 5:

- Found in 8 of 11 (72.7%) of genes in pham
- Manual Annotations of this start: 5 of 8
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Antsirabe\_34 (G5), Avocado\_33 (G2), FlagStaff\_33 (G2), MOOREtheMARYer\_35 (G3), Pace1224\_33 (G2), Pinnie\_35 (G3), Stargaze\_34 (G5),

## Summary by clusters:

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

Info for manual annotations of cluster G2:

- •Start number 4 was manually annotated 1 time for cluster G2.
- •Start number 5 was manually annotated 2 times for cluster G2.

Info for manual annotations of cluster G3:

•Start number 5 was manually annotated 2 times for cluster G3.

Info for manual annotations of cluster G4:

•Start number 1 was manually annotated 2 times for cluster G4.

Info for manual annotations of cluster G5:

•Start number 5 was manually annotated 1 time for cluster G5.

#### Gene Information:

Gene: Antsirabe 34 Start: 30235, Stop: 30942, Start Num: 5

Candidate Starts for Antsirabe 34:

(Start: 5 @ 30235 has 5 MA's), (14, 30265), (19, 30427), (25, 30550), (29, 30616), (32, 30631), (38, 30700), (40, 30763), (43, 30838), (45, 30901), (46, 30925),

Gene: Avocado\_33 Start: 30289, Stop: 30993, Start Num: 5

Candidate Starts for Avocado 33:

(Start: 5 @ 30289 has 5 MA's), (37, 30697), (41, 30841), (43, 30892), (46, 30976), (47, 30979),

Gene: Cambiare 34 Start: 30691, Stop: 31476, Start Num: 4

Candidate Starts for Cambiare 34:

(3, 30637), (Start: 4 @30691 has 1 MA's), (Start: 5 @30760 has 5 MA's), (15, 30802), (19, 30964), (23, 31078), (29, 31153), (31, 31162), (33, 31171), (35, 31180), (43, 31375), (46, 31459), (47, 31462),

Gene: FlagStaff\_33 Start: 30079, Stop: 30789, Start Num: 5

Candidate Starts for FlagStaff\_33:

(Start: 5 @30079 has 5 MA's), (13, 30109), (17, 30190), (23, 30391), (24, 30394), (27, 30430), (28, 30436), (29, 30466), (30, 30472), (32, 30481), (35, 30493), (36, 30496), (39, 30574), (40, 30613), (43, 30688), (45, 30748), (46, 30772).

Gene: Jolie2\_34 Start: 29088, Stop: 29993, Start Num: 2

Candidate Starts for Jolie 2 34:

(2, 29088), (6, 29241), (9, 29268), (12, 29301), (17, 29391), (19, 29478), (20, 29532), (26, 29625), (29, 29667), (40, 29814), (43, 29889), (47, 29979),

Gene: Lemuria\_35 Start: 30287, Stop: 31195, Start Num: 1

Candidate Starts for Lemuria\_35:

(Start: 1 @30287 has 2 MA's), (8, 30443), (10, 30485), (18, 30653), (19, 30689), (20, 30728), (21, 30767), (22, 30770), (29, 30869), (42, 31052), (43, 31091), (45, 31154), (46, 31178), (47, 31181),

Gene: MOOREtheMARYer\_35 Start: 30579, Stop: 31352, Start Num: 5

Candidate Starts for MOOREtheMARYer 35:

(Start: 5 @ 30579 has 5 MA's), (11, 30642), (14, 30669), (18, 30798), (19, 30834), (21, 30921), (23, 30948), (24, 30951), (29, 31026), (34, 31047), (40, 31173), (43, 31248), (45, 31311), (46, 31335),

Gene: Mercurio\_36 Start: 30751, Stop: 31593, Start Num: 1

Candidate Starts for Mercurio\_36:

(Start: 1 @30751 has 2 MA's), (16, 30946), (17, 31009), (19, 31096), (20, 31150), (31, 31276), (35, 31294), (38, 31351), (42, 31450), (43, 31489), (45, 31552), (46, 31576),

Gene: Pace1224\_33 Start: 30079, Stop: 30789, Start Num: 5

Candidate Starts for Pace1224\_33:

(Start: 5 @30079 has 5 MA's), (13, 30109), (17, 30190), (23, 30391), (24, 30394), (27, 30430), (28, 30436), (29, 30466), (30, 30472), (32, 30481), (35, 30493), (36, 30496), (39, 30574), (40, 30613), (43, 30688), (45, 30748), (46, 30772),

Gene: Pinnie\_35 Start: 30951, Stop: 31667, Start Num: 5

Candidate Starts for Pinnie 35:

(Start: 5 @30951 has 5 MA's), (7, 30969), (14, 30984), (19, 31149), (21, 31236), (23, 31263), (24, 31266), (29, 31341), (34, 31362), (40, 31488), (43, 31563), (45, 31626), (46, 31650),

Gene: Stargaze\_34 Start: 30280, Stop: 30978, Start Num: 5

Candidate Starts for Stargaze\_34:

(Start: 5 @30280 has 5 MA's), (14, 30310), (19, 30475), (29, 30652), (33, 30670), (35, 30679), (40, 30799), (42, 30835), (43, 30874), (44, 30892), (45, 30937), (46, 30961),