

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 158230 Report

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

Pham number 158230 has 17 members, 0 are drafts.

Phages represented in each track:

- Track 1: Trike 33
- Track 2: KittenMittens 33, Drake94 34, PeaceMeal1 34, Poompha 34
- Track 3 : Severus 34
- Track 4: Rebeuca\_37, Kristoff\_37
- Track 5: OKCentral2016 35, Chupacabra 35, Goose 36
- Track 6: WalterMcMickey\_36, Twister\_36
- Track 7 : Topanga\_36
- Track 8 : AvatarAhPeg\_36
- Track 9 : GreenWeasel 36
- Track 10 : phiHau3\_36

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

The start number called the most often in the published annotations is 6, it was called in 9 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Chupacabra\_35, Drake94\_34, Goose\_36, KittenMittens\_33, OKCentral2016\_35, PeaceMeal1\_34, Poompha\_34, Severus\_34, Trike\_33,

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

AvatarAhPeg\_36, GreenWeasel\_36, phiHau3\_36,

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

Kristoff\_37, Rebeuca\_37, Topanga\_36, Twister\_36, WalterMcMickey\_36,

## Summary by start number:

#### Start 2:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AvatarAhPeg 36 (A4),

## Start 4:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 2 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GreenWeasel\_36 (BD4), phiHau3\_36 (BD4),

#### Start 5:

- Found in 5 of 17 (29.4%) of genes in pham
- Manual Annotations of this start: 5 of 17
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kristoff\_37 (A10), Rebeuca\_37 (A10), Topanga\_36 (A10), Twister\_36 (A10), WalterMcMickey\_36 (A10),

#### Start 6:

- Found in 12 of 17 (70.6%) of genes in pham
- Manual Annotations of this start: 9 of 17
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Chupacabra\_35 (A10), Drake94\_34 (A10), Goose\_36 (A10), KittenMittens\_33 (A10), OKCentral2016\_35 (A10), PeaceMeal1\_34 (A10), Poompha\_34 (A10), Severus\_34 (A10), Trike\_33 (A10),

## Summary by clusters:

There are 3 clusters represented in this pham: BD4, A10, A4,

Info for manual annotations of cluster A10:

- •Start number 5 was manually annotated 5 times for cluster A10.
- •Start number 6 was manually annotated 9 times for cluster A10.

Info for manual annotations of cluster A4:

•Start number 2 was manually annotated 1 time for cluster A4.

Info for manual annotations of cluster BD4:

•Start number 4 was manually annotated 2 times for cluster BD4.

### Gene Information:

Gene: AvatarAhPeg 36 Start: 28482, Stop: 27874, Start Num: 2

Candidate Starts for AvatarAhPeg 36:

(Start: 2 @ 28482 has 1 MA's), (Start: 6 @ 28353 has 9 MA's), (13, 27993), (16, 27975), (17, 27942),

Gene: Chupacabra\_35 Start: 27785, Stop: 27258, Start Num: 6

Candidate Starts for Chupacabra 35:

(Start: 6 @27785 has 9 MA's), (12, 27440), (13, 27425),

Gene: Drake94 34 Start: 26656, Stop: 26072, Start Num: 6

Candidate Starts for Drake94 34:

(1, 26851), (Start: 6 @ 26656 has 9 MA's), (13, 26296), (14, 26278),

Gene: Goose\_36 Start: 27589, Stop: 27062, Start Num: 6

Candidate Starts for Goose 36:

(Start: 6 @27589 has 9 MA's), (12, 27244), (13, 27229),

Gene: GreenWeasel\_36 Start: 26199, Stop: 26711, Start Num: 4

Candidate Starts for GreenWeasel\_36:

(3, 26163), (Start: 4 @ 26199 has 2 MA's), (Start: 6 @ 26235 has 9 MA's), (7, 26280), (8, 26313), (9,

26322), (10, 26346), (11, 26550), (18, 26679),

Gene: KittenMittens\_33 Start: 26664, Stop: 26080, Start Num: 6

Candidate Starts for KittenMittens\_33:

(1, 26859), (Start: 6 @ 26664 has 9 MA's), (13, 26304), (14, 26286),

Gene: Kristoff\_37 Start: 28181, Stop: 27642, Start Num: 5

Candidate Starts for Kristoff\_37:

(Start: 5 @28181 has 5 MA's), (12, 27824), (13, 27809),

Gene: OKCentral2016\_35 Start: 27492, Stop: 26965, Start Num: 6

Candidate Starts for OKCentral2016\_35:

(Start: 6 @27492 has 9 MA's), (12, 27147), (13, 27132),

Gene: PeaceMeal1\_34 Start: 26665, Stop: 26081, Start Num: 6

Candidate Starts for PeaceMeal 34:

(1, 26860), (Start: 6 @ 26665 has 9 MA's), (13, 26305), (14, 26287),

Gene: Poompha\_34 Start: 26663, Stop: 26079, Start Num: 6

Candidate Starts for Poompha\_34:

(1, 26858), (Start: 6 @ 26663 has 9 MA's), (13, 26303), (14, 26285),

Gene: Rebeuca\_37 Start: 28182, Stop: 27643, Start Num: 5

Candidate Starts for Rebeuca\_37:

(Start: 5 @28182 has 5 MA's), (12, 27825), (13, 27810),

Gene: Severus\_34 Start: 26663, Stop: 26079, Start Num: 6

Candidate Starts for Severus 34:

(1, 26858), (Start: 6 @ 26663 has 9 MA's), (13, 26303), (14, 26285), (15, 26249),

Gene: Topanga\_36 Start: 28017, Stop: 27481, Start Num: 5

Candidate Starts for Topanga\_36:

(Start: 5 @28017 has 5 MA's), (7, 27960), (8, 27927), (9, 27918), (12, 27663), (13, 27648),

Gene: Trike 33 Start: 26496, Stop: 25912, Start Num: 6

Candidate Starts for Trike\_33:

(Start: 6 @ 26496 has 9 MA's), (13, 26136), (14, 26118),

Gene: Twister 36 Start: 27928, Stop: 27389, Start Num: 5

Candidate Starts for Twister\_36:

(Start: 5 @ 27928 has 5 MA's), (12, 27571), (13, 27556),

Gene: WalterMcMickey\_36 Start: 27928, Stop: 27389, Start Num: 5

Candidate Starts for WalterMcMickey 36:

(Start: 5 @ 27928 has 5 MA's), (12, 27571), (13, 27556),

Gene: phiHau3\_36 Start: 26164, Stop: 26676, Start Num: 4

Candidate Starts for phiHau3\_36: (3, 26128), (Start: 4 @26164 has 2 MA's), (Start: 6 @26200 has 9 MA's), (7, 26245), (8, 26278), (9, 26287), (10, 26311), (18, 26644),