

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 136195 Report

This analysis was run 04/05/24 on database version 557.

Pham number 136195 has 7 members, 2 are drafts.

Phages represented in each track:

Track 1 : StewieG\_35Track 2 : Target 39

Track 3 : Mule\_36Track 4 : Carlyle 38

• Track 5 : Agaliana\_35

• Track 6 : Gyzlar\_35

Track 7: Rubeus\_37

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

The start number called the most often in the published annotations is 12, it was called in 1 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Mule\_36,

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

Rubeus\_37,

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

• Agaliana\_35, Carlyle\_38, Gyzlar\_35, StewieG\_35, Target\_39,

## Summary by start number:

#### Start 2:

- Found in 1 of 7 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gyzlar\_35 (A1),

### Start 12:

- Found in 2 of 7 (28.6%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 50.0% of time when present

Phage (with cluster) where this start called: Mule\_36 (A1),

#### Start 19:

- Found in 3 of 7 (42.9%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Rubeus\_37 (A1),

#### Start 21:

- Found in 1 of 7 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: StewieG\_35 (A1),

### Start 24:

- Found in 2 of 7 (28.6%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Agaliana\_35 (A1),

#### Start 25:

- Found in 6 of 7 (85.7%) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Carlyle\_38 (A1),

#### Start 26:

- Found in 7 of 7 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 5
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Target\_39 (A1),

#### Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- •Start number 2 was manually annotated 1 time for cluster A1.
- •Start number 12 was manually annotated 1 time for cluster A1.
- •Start number 19 was manually annotated 1 time for cluster A1.
- •Start number 25 was manually annotated 1 time for cluster A1.
- •Start number 26 was manually annotated 1 time for cluster A1.

## Gene Information:

Gene: Agaliana\_35 Start: 27302, Stop: 27787, Start Num: 24 Candidate Starts for Agaliana\_35: (7, 27092), (24, 27302), (Start: 26 @27341 has 1 MA's), (27, 27344), (28, 27422), (29, 27437), (31, 27656), (32, 27755), (33, 27779),

Gene: Carlyle\_38 Start: 29159, Stop: 29638, Start Num: 25

Candidate Starts for Carlyle\_38:

(Start: 25 @29159 has 1 MA's), (Start: 26 @29192 has 1 MA's), (28, 29273), (29, 29288), (30, 29393), (31, 29507), (32, 29606), (33, 29630),

Gene: Gyzlar\_35 Start: 28769, Stop: 29605, Start Num: 2

Candidate Starts for Gyzlar\_35:

(1, 28766), (Start: 2 @28769 has 1 MA's), (4, 28793), (6, 28877), (8, 28895), (11, 28913), (17, 29003), (18, 29006), (Start: 19 @29018 has 1 MA's), (23, 29087), (Start: 25 @29126 has 1 MA's), (Start: 26 @29159 has 1 MA's), (28, 29240), (29, 29255), (30, 29360), (31, 29474), (32, 29573), (33, 29597),

Gene: Mule 36 Start: 28491, Stop: 29147, Start Num: 12

Candidate Starts for Mule 36:

(9, 28467), (Start: 12 @28491 has 1 MA's), (16, 28518), (17, 28545), (18, 28548), (Start: 19 @28560 has 1 MA's), (Start: 25 @28668 has 1 MA's), (Start: 26 @28701 has 1 MA's), (28, 28782), (29, 28797), (31, 29016), (32, 29115), (33, 29139),

Gene: Rubeus\_37 Start: 28670, Stop: 29269, Start Num: 19

Candidate Starts for Rubeus 37:

(3, 28442), (5, 28481), (10, 28562), (Start: 12 @28601 has 1 MA's), (17, 28655), (Start: 19 @28670 has 1 MA's), (Start: 25 @28778 has 1 MA's), (Start: 26 @28811 has 1 MA's), (28, 28892), (29, 28907), (31, 29126),

Gene: StewieG\_35 Start: 28134, Stop: 28676, Start Num: 21

Candidate Starts for StewieG\_35:

(13, 28038), (14, 28041), (15, 28053), (16, 28059), (20, 28125), (21, 28134), (22, 28152), (Start: 25 @28197 has 1 MA's), (Start: 26 @28230 has 1 MA's), (28, 28311), (29, 28326), (31, 28545), (32, 28644), (33, 28668),

Gene: Target\_39 Start: 29828, Stop: 30274, Start Num: 26

Candidate Starts for Target\_39:

(24, 29789), (Start: 25 @29795 has 1 MA's), (Start: 26 @29828 has 1 MA's), (28, 29909), (29, 29924), (31, 30143), (32, 30242), (33, 30266),