

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 87298 Report

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

Pham number 87298 has 12 members, 0 are drafts.

Phages represented in each track:

- Track 1: Sekhmet\_39, Beenie\_32, Clark\_38, Samman98\_39, Adora\_36
- Track 2 : Hortense\_39, MichaelScott\_39, WinkNick\_40, Twinkle\_38
- Track 3: Shlim410\_37, Dolores\_39, Howe\_39

## 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 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Adora\_36, Beenie\_32, Clark\_38, Samman98\_39, Sekhmet\_39,

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

Dolores\_39, Hortense\_39, Howe\_39, MichaelScott\_39, Shlim410\_37, Twinkle\_38, WinkNick\_40,

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

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#### Summary by start number:

#### Start 1:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Hortense\_39 (CZ4), MichaelScott\_39 (CZ4), Twinkle\_38 (CZ4), WinkNick\_40 (CZ4),

### Start 3:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 3 of 12
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Dolores\_39 (CZ4), Howe\_39 (CZ4), Shlim410\_37 (CZ4),

#### Start 4:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 41.7% of time when present
- Phage (with cluster) where this start called: Adora\_36 (CZ4), Beenie\_32 (CZ4), Clark\_38 (CZ4), Samman98\_39 (CZ4), Sekhmet\_39 (CZ4),

## **Summary by clusters:**

There is one cluster represented in this pham: CZ4

Info for manual annotations of cluster CZ4:

- •Start number 1 was manually annotated 4 times for cluster CZ4.
- •Start number 3 was manually annotated 3 times for cluster CZ4.
- Start number 4 was manually annotated 5 times for cluster CZ4.

#### Gene Information:

Gene: Adora 36 Start: 31027, Stop: 31194, Start Num: 4

Candidate Starts for Adora\_36:

(Start: 1 @30979 has 4 MA's), (2, 31006), (Start: 3 @31012 has 3 MA's), (Start: 4 @31027 has 5 MA's), (5, 31078), (6, 31120),

Gene: Beenie\_32 Start: 29012, Stop: 29179, Start Num: 4

Candidate Starts for Beenie\_32:

(Start: 1 @28964 has 4 MA's), (2, 28991), (Start: 3 @28997 has 3 MA's), (Start: 4 @29012 has 5 MA's), (5, 29063), (6, 29105),

Gene: Clark 38 Start: 28829, Stop: 28996, Start Num: 4

Candidate Starts for Clark 38:

(Start: 1 @28781 has 4 MA's), (2, 28808), (Start: 3 @28814 has 3 MA's), (Start: 4 @28829 has 5 MA's), (5, 28880), (6, 28922),

Gene: Dolores\_39 Start: 29686, Stop: 29868, Start Num: 3

Candidate Starts for Dolores 39:

(Start: 1 @29653 has 4 MA's), (2, 29680), (Start: 3 @29686 has 3 MA's), (Start: 4 @29701 has 5 MA's), (5, 29752), (6, 29794),

Gene: Hortense\_39 Start: 32334, Stop: 32549, Start Num: 1

Candidate Starts for Hortense 39:

(Start: 1 @32334 has 4 MA's), (2, 32361), (Start: 3 @32367 has 3 MA's), (Start: 4 @32382 has 5 MA's), (5, 32433), (6, 32475),

Gene: Howe\_39 Start: 32367, Stop: 32549, Start Num: 3

Candidate Starts for Howe 39:

(Start: 1 @32334 has 4 MA's), (2, 32361), (Start: 3 @32367 has 3 MA's), (Start: 4 @32382 has 5 MA's), (5, 32433), (6, 32475),

Gene: MichaelScott\_39 Start: 30257, Stop: 30472, Start Num: 1

Candidate Starts for MichaelScott\_39:

(Start: 1 @30257 has 4 MA's), (2, 30284), (Start: 3 @30290 has 3 MA's), (Start: 4 @30305 has 5 MA's), (5, 30356), (6, 30398),

Gene: Samman98\_39 Start: 28932, Stop: 29099, Start Num: 4

Candidate Starts for Samman98\_39:

(Start: 1 @28884 has 4 MA's), (2, 28911), (Start: 3 @28917 has 3 MA's), (Start: 4 @28932 has 5 MA's), (5, 28983), (6, 29025),

Gene: Sekhmet\_39 Start: 29832, Stop: 29999, Start Num: 4

Candidate Starts for Sekhmet\_39:

(Start: 1 @29784 has 4 MA's), (2, 29811), (Start: 3 @29817 has 3 MA's), (Start: 4 @29832 has 5 MA's), (5, 29883), (6, 29925),

Gene: Shlim410\_37 Start: 32367, Stop: 32549, Start Num: 3

Candidate Starts for Shlim410\_37:

(Start: 1 @32334 has 4 MA's), (2, 32361), (Start: 3 @32367 has 3 MA's), (Start: 4 @32382 has 5 MA's), (5, 32433), (6, 32475),

Gene: Twinkle\_38 Start: 33393, Stop: 33608, Start Num: 1

Candidate Starts for Twinkle\_38:

(Start: 1 @33393 has 4 MA's), (2, 33420), (Start: 3 @33426 has 3 MA's), (Start: 4 @33441 has 5 MA's), (5, 33492), (6, 33534),

Gene: WinkNick\_40 Start: 29576, Stop: 29791, Start Num: 1

Candidate Starts for WinkNick\_40:

(Start: 1 @29576 has 4 MA's), (2, 29603), (Start: 3 @29609 has 3 MA's), (Start: 4 @29624 has 5 MA's), (5, 29675), (6, 29717),