

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 134265 Report

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

Pham number 134265 has 9 members, 5 are drafts.

Phages represented in each track:

Track 1 : Giantsbane\_52

Track 2 : Uzumaki\_1

Track 3: Lewando\_1

Track 4 : BarbieDoll\_1, Renaldo\_1

Track 5 : Zeina\_1

Track 6: Jazzy4900\_2, Sunny4976\_2

• Track 7 : Arzan 2

## 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 2 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Arzan\_2, Giantsbane\_52, Uzumaki\_1,

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

BarbieDoll\_1, Jazzy4900\_2, Lewando\_1, Renaldo\_1, Sunny4976\_2, Zeina\_1,

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

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## Summary by start number:

#### Start 2:

- Found in 5 of 9 (55.6%) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 40.0% of time when present
- Phage (with cluster) where this start called: Lewando\_1 (AU6), Zeina\_1 (AU6),

#### Start 3:

- Found in 3 of 9 (33.3%) of genes in pham
- No Manual Annotations of this start.
- Called 66.7% of time when present

Phage (with cluster) where this start called: BarbieDoll\_1 (AU6), Renaldo\_1 (AU6),

#### Start 4:

- Found in 9 of 9 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 4
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Arzan\_2 (FI), Giantsbane\_52 (AU2), Uzumaki\_1 (AU6),

### Start 6:

- Found in 8 of 9 (88.9%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Jazzy4900\_2 (FI), Sunny4976\_2 (FI),

### Summary by clusters:

There are 3 clusters represented in this pham: FI, AU2, AU6,

Info for manual annotations of cluster AU2:

•Start number 4 was manually annotated 1 time for cluster AU2.

Info for manual annotations of cluster AU6:

- •Start number 2 was manually annotated 2 times for cluster AU6.
- •Start number 4 was manually annotated 1 time for cluster AU6.

### Gene Information:

Gene: Arzan 2 Start: 879, Stop: 1118, Start Num: 4

Candidate Starts for Arzan 2:

(Start: 4 @ 879 has 2 MA's), (5, 888), (6, 906), (9, 1011), (10, 1053),

Gene: BarbieDoll\_1 Start: 334, Stop: 627, Start Num: 3

Candidate Starts for BarbieDoll\_1:

(1, 277), (Start: 2 @283 has 2 MA's), (3, 334), (Start: 4 @385 has 2 MA's), (5, 394), (6, 412), (12, 604),

Gene: Giantsbane 52 Start: 34712, Stop: 34954, Start Num: 4

Candidate Starts for Giantsbane 52:

(Start: 4 @ 34712 has 2 MA's), (5, 34721), (6, 34739), (8, 34799), (12, 34931),

Gene: Jazzy4900\_2 Start: 932, Stop: 1144, Start Num: 6

Candidate Starts for Jazzy4900\_2:

(Start: 4 @ 905 has 2 MA's), (5, 914), (6, 932), (7, 959), (9, 1037),

Gene: Lewando\_1 Start: 283, Stop: 627, Start Num: 2

Candidate Starts for Lewando 1:

(1, 277), (Start: 2 @ 283 has 2 MA's), (3, 334), (Start: 4 @ 385 has 2 MA's), (5, 394), (6, 412), (12, 604),

Gene: Renaldo\_1 Start: 334, Stop: 627, Start Num: 3

Candidate Starts for Renaldo\_1:

(1, 277), (Start: 2 @283 has 2 MA's), (3, 334), (Start: 4 @385 has 2 MA's), (5, 394), (6, 412), (12, 604),

Gene: Sunny4976\_2 Start: 932, Stop: 1144, Start Num: 6

Candidate Starts for Sunny4976\_2:

(Start: 4 @ 905 has 2 MA's), (5, 914), (6, 932), (7, 959), (9, 1037),

Gene: Uzumaki\_1 Start: 385, Stop: 624, Start Num: 4

Candidate Starts for Uzumaki\_1:

(1, 277), (Start: 2 @283 has 2 MA's), (Start: 4 @385 has 2 MA's), (9, 517), (12, 601),

Gene: Zeina\_1 Start: 283, Stop: 624, Start Num: 2

Candidate Starts for Zeina\_1:

(1, 277), (Start: 2 @283 has 2 MA's), (Start: 4 @385 has 2 MA's), (6, 412), (9, 517), (11, 571),