1: Gollum_69 + 23	

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 86432 Report

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

Pham number 86432 has 24 members, 1 are drafts.

Phages represented in each track:

Track 1: Gollum\_69, Nancinator\_68, Alatin\_68, Espica\_70, Rasputin\_69, RER2\_63, Alpacados\_68, UhSalsa\_69, Yoncess\_68, Harlequin\_69, Jester\_68, TWAMP\_69, StCroix\_68, AppleCloud\_66, Bryce\_68, Swann\_69, Phrankenstein\_69, CosmicSans\_69, RexFury\_68, Belenaria\_70, Lillie\_69, Naiad\_68, Rhodalysa\_69, Erik 69

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

The start number called the most often in the published annotations is 1, it was called in 23 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Alatin\_68, Alpacados\_68, AppleCloud\_66, Belenaria\_70, Bryce\_68,
CosmicSans\_69, Erik\_69, Espica\_70, Gollum\_69, Harlequin\_69, Jester\_68, Lillie\_69,
Naiad\_68, Nancinator\_68, Phrankenstein\_69, RER2\_63, Rasputin\_69, RexFury\_68,
Rhodalysa\_69, StCroix\_68, Swann\_69, TWAMP\_69, UhSalsa\_69, Yoncess\_68,

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

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

## Summary by start number:

#### Start 1:

- Found in 24 of 24 (100.0%) of genes in pham
- Manual Annotations of this start: 23 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Alatin\_68 (CA), Alpacados\_68 (CA), AppleCloud\_66 (CA), Belenaria\_70 (CA), Bryce\_68 (CA), CosmicSans\_69 (CA), Erik\_69 (CA), Espica\_70 (CA), Gollum\_69 (CA), Harlequin\_69 (CA), Jester\_68 (CA), Lillie\_69 (CA), Naiad\_68 (CA), Nancinator\_68 (CA), Phrankenstein\_69 (CA), RER2\_63 (CA), Rasputin\_69 (CA), RexFury\_68 (CA), Rhodalysa\_69 (CA),

StCroix\_68 (CA), Swann\_69 (CA), TWAMP\_69 (CA), UhSalsa\_69 (CA), Yoncess\_68 (CA),

## **Summary by clusters:**

There is one cluster represented in this pham: CA

Info for manual annotations of cluster CA:

•Start number 1 was manually annotated 23 times for cluster CA.

### Gene Information:

Gene: Alatin\_68 Start: 45991, Stop: 45839, Start Num: 1

Candidate Starts for Alatin 68:

(Start: 1 @45991 has 23 MA's), (2, 45934),

Gene: Alpacados\_68 Start: 45814, Stop: 45662, Start Num: 1

Candidate Starts for Alpacados\_68:

(Start: 1 @45814 has 23 MA's), (2, 45757),

Gene: AppleCloud\_66 Start: 45708, Stop: 45556, Start Num: 1

Candidate Starts for AppleCloud\_66: (Start: 1 @45708 has 23 MA's), (2, 45651),

Gene: Belenaria\_70 Start: 45856, Stop: 45704, Start Num: 1

Candidate Starts for Belenaria\_70:

(Start: 1 @ 45856 has 23 MA's), (2, 45799),

Gene: Bryce\_68 Start: 45670, Stop: 45518, Start Num: 1

Candidate Starts for Bryce\_68:

(Start: 1 @45670 has 23 MA's), (2, 45613),

Gene: CosmicSans 69 Start: 45915, Stop: 45763, Start Num: 1

Candidate Starts for CosmicSans\_69: (Start: 1 @45915 has 23 MA's), (2, 45858),

Gene: Erik 69 Start: 45746, Stop: 45594, Start Num: 1

Candidate Starts for Erik 69:

(Start: 1 @45746 has 23 MA's), (2, 45689),

Gene: Espica 70 Start: 45856, Stop: 45704, Start Num: 1

Candidate Starts for Espica\_70:

(Start: 1 @ 45856 has 23 MA's), (2, 45799),

Gene: Gollum\_69 Start: 45857, Stop: 45705, Start Num: 1

Candidate Starts for Gollum\_69:

(Start: 1 @45857 has 23 MA's), (2, 45800),

Gene: Harlequin 69 Start: 45705, Stop: 45553, Start Num: 1

Candidate Starts for Harlequin\_69:

(Start: 1 @45705 has 23 MA's), (2, 45648),

Gene: Jester\_68 Start: 45636, Stop: 45484, Start Num: 1

Candidate Starts for Jester\_68:

(Start: 1 @45636 has 23 MA's), (2, 45579),

Gene: Lillie\_69 Start: 45915, Stop: 45763, Start Num: 1

Candidate Starts for Lillie\_69:

(Start: 1 @45915 has 23 MA's), (2, 45858),

Gene: Naiad\_68 Start: 45937, Stop: 45785, Start Num: 1

Candidate Starts for Naiad 68:

(Start: 1 @45937 has 23 MA's), (2, 45880),

Gene: Nancinator\_68 Start: 45254, Stop: 45102, Start Num: 1

Candidate Starts for Nancinator\_68:

(Start: 1 @45254 has 23 MA's), (2, 45197),

Gene: Phrankenstein\_69 Start: 45861, Stop: 45709, Start Num: 1

Candidate Starts for Phrankenstein\_69: (Start: 1 @45861 has 23 MA's), (2, 45804),

Gene: RER2\_63 Start: 42787, Stop: 42635, Start Num: 1

Candidate Starts for RER2 63:

(Start: 1 @ 42787 has 23 MA's), (2, 42730),

Gene: Rasputin\_69 Start: 45885, Stop: 45733, Start Num: 1

Candidate Starts for Rasputin\_69:

(Start: 1 @45885 has 23 MA's), (2, 45828),

Gene: RexFury\_68 Start: 45945, Stop: 45793, Start Num: 1

Candidate Starts for RexFury\_68:

(Start: 1 @45945 has 23 MA's), (2, 45888),

Gene: Rhodalysa 69 Start: 45915, Stop: 45763, Start Num: 1

Candidate Starts for Rhodalysa\_69:

(Start: 1 @45915 has 23 MA's), (2, 45858),

Gene: StCroix\_68 Start: 45937, Stop: 45785, Start Num: 1

Candidate Starts for StCroix\_68:

(Start: 1 @45937 has 23 MA's), (2, 45880),

Gene: Swann\_69 Start: 45913, Stop: 45761, Start Num: 1

Candidate Starts for Swann 69:

(Start: 1 @ 45913 has 23 MA's), (2, 45856),

Gene: TWAMP\_69 Start: 45915, Stop: 45763, Start Num: 1

Candidate Starts for TWAMP\_69:

(Start: 1 @45915 has 23 MA's), (2, 45858),

Gene: UhSalsa\_69 Start: 45856, Stop: 45704, Start Num: 1

Candidate Starts for UhSalsa\_69:

(Start: 1 @45856 has 23 MA's), (2, 45799),

Gene: Yoncess\_68 Start: 45674, Stop: 45522, Start Num: 1 Candidate Starts for Yoncess\_68: (Start: 1 @45674 has 23 MA's), (2, 45617),