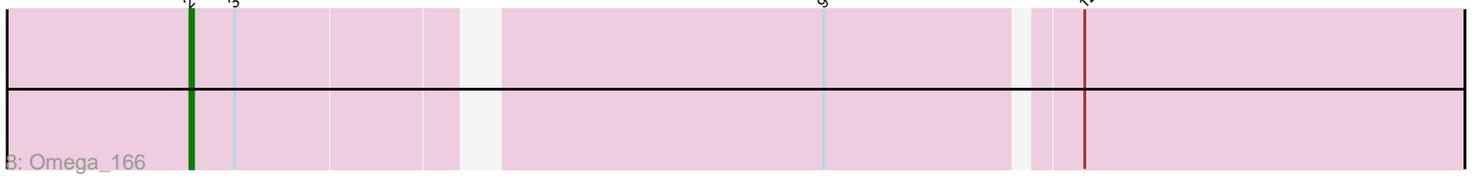
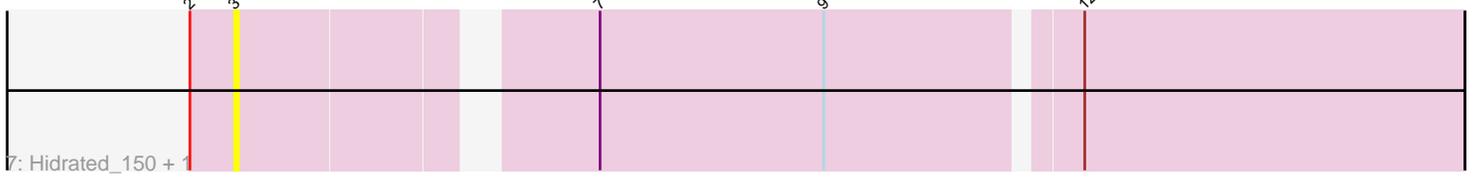
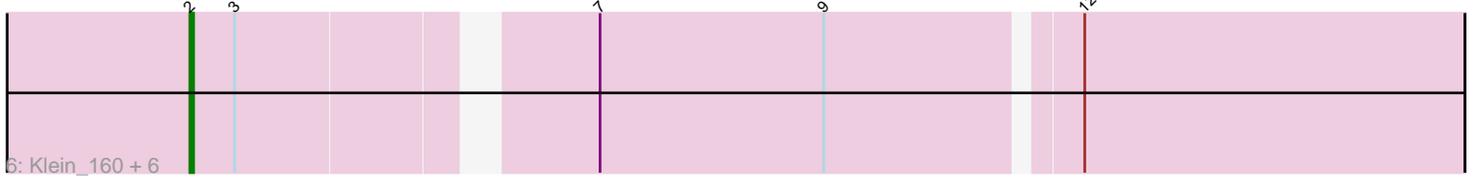
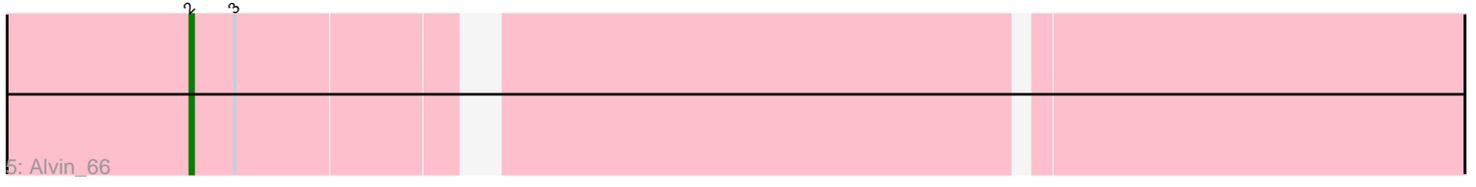
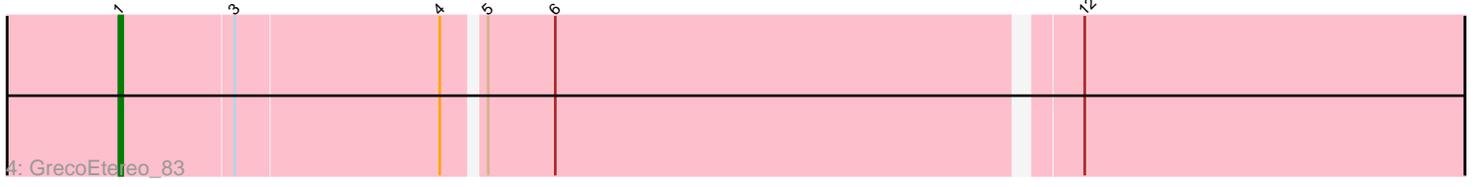
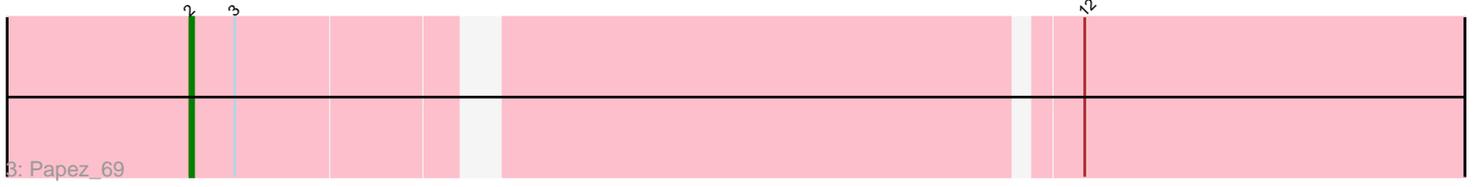
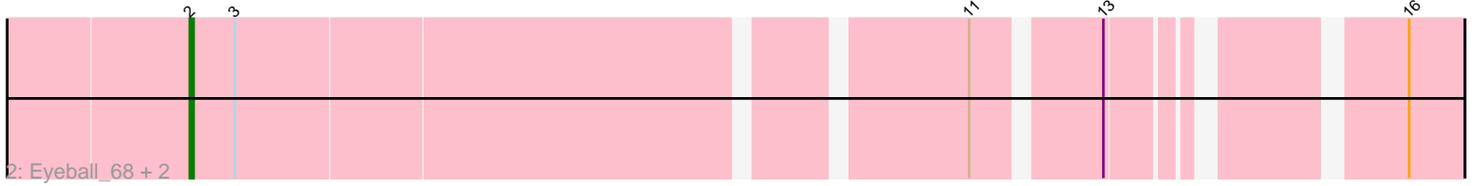
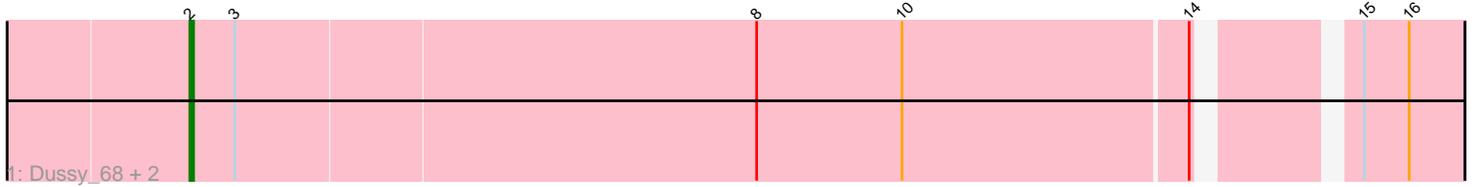


Pham 284216



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 284216 Report

This analysis was run 02/23/26 on database version 636.

Pham number 284216 has 19 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Dussy\_68, Kenmech\_71, Abbyshoes\_69
- Track 2 : Eyeball\_68, Bones\_65, Puppet\_64
- Track 3 : Papez\_69
- Track 4 : GrecoEtereo\_83
- Track 5 : Alvin\_66
- Track 6 : Klein\_160, Constella\_153, BAKA\_162, EricMillard\_155, Kalah2\_153, Optimus\_153, Duke13\_159
- Track 7 : Hidrated\_150, Bagrid\_165
- Track 8 : Omega\_166

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

The start number called the most often in the published annotations is 2, it was called in 15 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abbyshoes\_69, Alvin\_66, BAKA\_162, Bones\_65, Constella\_153, Duke13\_159, Dussy\_68, EricMillard\_155, Eyeball\_68, Kalah2\_153, Kenmech\_71, Klein\_160, Omega\_166, Optimus\_153, Papez\_69, Puppet\_64,

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

- Bagrid\_165, Hidrated\_150,

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

- GrecoEtereo\_83,

### **Summary by start number:**

Start 1:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GrecoEtereo\_83 (A1),

#### Start 2:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 15 of 16
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Abbyshoes\_69 (A1), Alvin\_66 (A1), BAKA\_162 (J), Bones\_65 (A1), Constella\_153 (J), Duke13\_159 (J), Dussy\_68 (A1), EricMillard\_155 (J), Eyeball\_68 (A1), Kalah2\_153 (J), Kenmech\_71 (A1), Klein\_160 (J), Omega\_166 (J), Optimus\_153 (J), Papez\_69 (A1), Puppet\_64 (A1),

#### Start 3:

- Found in 19 of 19 ( 100.0% ) of genes in pham
- No Manual Annotations of this start.
- Called 10.5% of time when present
- Phage (with cluster) where this start called: Bagrid\_165 (J), Hidrated\_150 (J),

#### Summary by clusters:

There are 2 clusters represented in this pham: A1, J,

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 1 time for cluster A1.
- Start number 2 was manually annotated 7 times for cluster A1.

Info for manual annotations of cluster J:

- Start number 2 was manually annotated 8 times for cluster J.

#### **Gene Information:**

Gene: Abbyshoes\_69 Start: 43592, Stop: 43269, Start Num: 2

Candidate Starts for Abbyshoes\_69:

(Start: 2 @43592 has 15 MA's), (3, 43580), (8, 43442), (10, 43403), (14, 43328), (15, 43295), (16, 43283),

Gene: Alvin\_66 Start: 42916, Stop: 42596, Start Num: 2

Candidate Starts for Alvin\_66:

(Start: 2 @42916 has 15 MA's), (3, 42904),

Gene: BAKA\_162 Start: 85804, Stop: 86124, Start Num: 2

Candidate Starts for BAKA\_162:

(Start: 2 @85804 has 15 MA's), (3, 85816), (7, 85900), (9, 85960), (12, 86023),

Gene: Bagrid\_165 Start: 87045, Stop: 87353, Start Num: 3

Candidate Starts for Bagrid\_165:

(Start: 2 @87033 has 15 MA's), (3, 87045), (7, 87129), (9, 87189), (12, 87252),

Gene: Bones\_65 Start: 43789, Stop: 43487, Start Num: 2

Candidate Starts for Bones\_65:

(Start: 2 @43789 has 15 MA's), (3, 43777), (11, 43594), (13, 43564), (16, 43501),

Gene: Constella\_153 Start: 84035, Stop: 84355, Start Num: 2

Candidate Starts for Constella\_153:

(Start: 2 @84035 has 15 MA's), (3, 84047), (7, 84131), (9, 84191), (12, 84254),

Gene: Duke13\_159 Start: 84300, Stop: 84620, Start Num: 2

Candidate Starts for Duke13\_159:

(Start: 2 @84300 has 15 MA's), (3, 84312), (7, 84396), (9, 84456), (12, 84519),

Gene: Dussy\_68 Start: 43612, Stop: 43289, Start Num: 2

Candidate Starts for Dussy\_68:

(Start: 2 @43612 has 15 MA's), (3, 43600), (8, 43462), (10, 43423), (14, 43348), (15, 43315), (16, 43303),

Gene: EricMillard\_155 Start: 85643, Stop: 85963, Start Num: 2

Candidate Starts for EricMillard\_155:

(Start: 2 @85643 has 15 MA's), (3, 85655), (7, 85739), (9, 85799), (12, 85862),

Gene: Eyeball\_68 Start: 43697, Stop: 43395, Start Num: 2

Candidate Starts for Eyeball\_68:

(Start: 2 @43697 has 15 MA's), (3, 43685), (11, 43502), (13, 43472), (16, 43409),

Gene: GrecoEtereo\_83 Start: 49393, Stop: 49046, Start Num: 1

Candidate Starts for GrecoEtereo\_83:

(Start: 1 @49393 has 1 MA's), (3, 49363), (4, 49309), (5, 49300), (6, 49282), (12, 49147),

Gene: Hidrated\_150 Start: 85542, Stop: 85850, Start Num: 3

Candidate Starts for Hidrated\_150:

(Start: 2 @85530 has 15 MA's), (3, 85542), (7, 85626), (9, 85686), (12, 85749),

Gene: Kalah2\_153 Start: 85231, Stop: 85551, Start Num: 2

Candidate Starts for Kalah2\_153:

(Start: 2 @85231 has 15 MA's), (3, 85243), (7, 85327), (9, 85387), (12, 85450),

Gene: Kenmech\_71 Start: 44738, Stop: 44415, Start Num: 2

Candidate Starts for Kenmech\_71:

(Start: 2 @44738 has 15 MA's), (3, 44726), (8, 44588), (10, 44549), (14, 44474), (15, 44441), (16, 44429),

Gene: Klein\_160 Start: 83591, Stop: 83911, Start Num: 2

Candidate Starts for Klein\_160:

(Start: 2 @83591 has 15 MA's), (3, 83603), (7, 83687), (9, 83747), (12, 83810),

Gene: Omega\_166 Start: 86624, Stop: 86944, Start Num: 2

Candidate Starts for Omega\_166:

(Start: 2 @86624 has 15 MA's), (3, 86636), (9, 86780), (12, 86843),

Gene: Optimus\_153 Start: 84120, Stop: 84440, Start Num: 2

Candidate Starts for Optimus\_153:

(Start: 2 @84120 has 15 MA's), (3, 84132), (7, 84216), (9, 84276), (12, 84339),

Gene: Papez\_69 Start: 44344, Stop: 44024, Start Num: 2

Candidate Starts for Papez\_69:

(Start: 2 @44344 has 15 MA's), (3, 44332), (12, 44125),

Gene: Puppet\_64 Start: 44109, Stop: 43807, Start Num: 2

Candidate Starts for Puppet\_64:

(Start: 2 @44109 has 15 MA's), (3, 44097), (11, 43914), (13, 43884), (16, 43821),