

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 106734 Report

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

Pham number 106734 has 14 members, 2 are drafts.

Phages represented in each track:

- Track 1: Cheesy\_89, Tribby\_90, JEGGS\_87, Heisenberger\_87
- Track 2: Mudcat 83
- Track 3: KeaneyLin\_85, Dynamite\_88, NapoleonB\_89, Circum\_88
- Track 4 : Xenomorph\_83
- Track 5 : Benllo\_87, Hankly\_87
- Track 6: Mooshroom 87, Kardesai 87

### 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 11 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Benllo\_87, Cheesy\_89, Circum\_88, Dynamite\_88, Hankly\_87, Heisenberger\_87, JEGGS\_87, Kardesai\_87, KeaneyLin\_85, Mooshroom\_87, NapoleonB\_89, Tribby\_90, Xenomorph\_83,

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

Mudcat 83.

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

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# Summary by start number:

#### Start 1:

- Found in 5 of 14 (35.7%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Mudcat\_83 (AM),

#### Start 2:

- Found in 14 of 14 (100.0%) of genes in pham
- Manual Annotations of this start: 11 of 12

Called 92.9% of time when present

Phage (with cluster) where this start called: Benllo\_87 (AM), Cheesy\_89 (AM), Circum\_88 (AM), Dynamite\_88 (AM), Hankly\_87 (AM), Heisenberger\_87 (AM), JEGGS\_87 (AM), Kardesai\_87 (AM), KeaneyLin\_85 (AM), Mooshroom\_87 (AM), NapoleonB\_89 (AM), Tribby\_90 (AM), Xenomorph\_83 (AM),

### **Summary by clusters:**

There is one cluster represented in this pham: AM

Info for manual annotations of cluster AM:

•Start number 1 was manually annotated 1 time for cluster AM.

•Start number 2 was manually annotated 11 times for cluster AM.

#### Gene Information:

Gene: Benllo\_87 Start: 51676, Stop: 52035, Start Num: 2

Candidate Starts for Benllo\_87:

(Start: 1 @51673 has 1 MA's), (Start: 2 @51676 has 11 MA's), (3, 51697), (4, 51754), (5, 51787), (8, 51904), (9, 52021),

Gene: Cheesy\_89 Start: 51806, Stop: 52084, Start Num: 2

Candidate Starts for Cheesy\_89:

(Start: 2 @51806 has 11 MA's), (3, 51827), (4, 51884), (7, 51938), (8, 52004),

Gene: Circum\_88 Start: 51863, Stop: 52192, Start Num: 2

Candidate Starts for Circum\_88:

(Start: 2 @51863 has 11 MA's), (3, 51884), (4, 51941), (6, 51986),

Gene: Dynamite\_88 Start: 51379, Stop: 51708, Start Num: 2

Candidate Starts for Dynamite 88:

(Start: 2 @51379 has 11 MA's), (3, 51400), (4, 51457), (6, 51502),

Gene: Hankly\_87 Start: 50787, Stop: 51146, Start Num: 2

Candidate Starts for Hankly\_87:

(Start: 1 @50784 has 1 MA's), (Start: 2 @50787 has 11 MA's), (3, 50808), (4, 50865), (5, 50898), (8, 51015), (9, 51132),

Gene: Heisenberger\_87 Start: 51271, Stop: 51549, Start Num: 2

Candidate Starts for Heisenberger\_87:

(Start: 2 @51271 has 11 MA's), (3, 51292), (4, 51349), (7, 51403), (8, 51469),

Gene: JEGGS\_87 Start: 51350, Stop: 51628, Start Num: 2

Candidate Starts for JEGGS\_87:

(Start: 2 @51350 has 11 MA's), (3, 51371), (4, 51428), (7, 51482), (8, 51548),

Gene: Kardesai 87 Start: 50724, Stop: 51074, Start Num: 2

Candidate Starts for Kardesai 87:

(Start: 1 @50721 has 1 MA's), (Start: 2 @50724 has 11 MA's), (3, 50745), (4, 50802), (5, 50835), (8, 50952),

Gene: KeaneyLin\_85 Start: 51085, Stop: 51414, Start Num: 2

Candidate Starts for KeaneyLin\_85:

(Start: 2 @51085 has 11 MA's), (3, 51106), (4, 51163), (6, 51208),

Gene: Mooshroom\_87 Start: 50724, Stop: 51074, Start Num: 2

Candidate Starts for Mooshroom 87:

(Start: 1 @50721 has 1 MA's), (Start: 2 @50724 has 11 MA's), (3, 50745), (4, 50802), (5, 50835), (8, 50952),

Gene: Mudcat\_83 Start: 52472, Stop: 52783, Start Num: 1

Candidate Starts for Mudcat\_83:

(Start: 1 @52472 has 1 MA's), (Start: 2 @52475 has 11 MA's), (3, 52496), (4, 52553), (5, 52586), (8, 52703),

Gene: NapoleonB\_89 Start: 51379, Stop: 51708, Start Num: 2

Candidate Starts for NapoleonB\_89:

(Start: 2 @51379 has 11 MA's), (3, 51400), (4, 51457), (6, 51502),

Gene: Tribby\_90 Start: 52141, Stop: 52419, Start Num: 2

Candidate Starts for Tribby\_90:

(Start: 2 @52141 has 11 MA's), (3, 52162), (4, 52219), (7, 52273), (8, 52339),

Gene: Xenomorph\_83 Start: 51668, Stop: 51997, Start Num: 2

Candidate Starts for Xenomorph\_83:

(Start: 2 @51668 has 11 MA's), (3, 51689), (4, 51746), (6, 51791),