



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 87585 Report

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

Pham number 87585 has 9 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Gray\_104, ChisanaKitsune\_104
- Track 2 : Alok\_i\_98, Kabocha\_107, Chidiebere\_106
- Track 3 : Oogie\_102, Schomber\_104, Pakusa\_99
- Track 4 : Hanem\_105

### ***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 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alok\_i\_98, Chidiebere\_106, Kabocha\_107, Oogie\_102, Pakusa\_99, Schomber\_104,

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

- ChisanaKitsune\_104, Gray\_104, Hanem\_105,

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

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

Start 1:

- Found in 9 of 9 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 33.3% of time when present
- Phage (with cluster) where this start called: ChisanaKitsune\_104 (DQ), Gray\_104 (DQ), Hanem\_105 (DQ),

Start 2:

- Found in 9 of 9 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Alok\_i\_98 (DQ), Chidiebere\_106 (DQ), Kabocha\_107 (DQ), Oogie\_102 (DQ), Pakusa\_99 (DQ), Schomber\_104 (DQ),

## Summary by clusters:

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:

- Start number 1 was manually annotated 3 times for cluster DQ.
- Start number 2 was manually annotated 3 times for cluster DQ.

### **Gene Information:**

Gene: Alok\_i\_98 Start: 75639, Stop: 75995, Start Num: 2

Candidate Starts for Alok\_i\_98:

(Start: 1 @75603 has 3 MA's), (Start: 2 @75639 has 3 MA's), (3, 75654), (4, 75657), (5, 75678), (6, 75738), (8, 75774), (9, 75795), (10, 75807), (11, 75825), (12, 75903),

Gene: Chidiebere\_106 Start: 76769, Stop: 77125, Start Num: 2

Candidate Starts for Chidiebere\_106:

(Start: 1 @76733 has 3 MA's), (Start: 2 @76769 has 3 MA's), (3, 76784), (4, 76787), (5, 76808), (6, 76868), (8, 76904), (9, 76925), (10, 76937), (11, 76955), (12, 77033),

Gene: ChisanaKitsune\_104 Start: 75601, Stop: 75993, Start Num: 1

Candidate Starts for ChisanaKitsune\_104:

(Start: 1 @75601 has 3 MA's), (Start: 2 @75637 has 3 MA's), (3, 75652), (4, 75655), (5, 75676), (6, 75736), (7, 75760), (8, 75772), (9, 75793), (10, 75805), (11, 75823), (12, 75901),

Gene: Gray\_104 Start: 75864, Stop: 76256, Start Num: 1

Candidate Starts for Gray\_104:

(Start: 1 @75864 has 3 MA's), (Start: 2 @75900 has 3 MA's), (3, 75915), (4, 75918), (5, 75939), (6, 75999), (7, 76023), (8, 76035), (9, 76056), (10, 76068), (11, 76086), (12, 76164),

Gene: Hanem\_105 Start: 75603, Stop: 75995, Start Num: 1

Candidate Starts for Hanem\_105:

(Start: 1 @75603 has 3 MA's), (Start: 2 @75639 has 3 MA's), (3, 75654), (4, 75657), (5, 75678), (6, 75738), (8, 75774), (9, 75795), (10, 75807), (11, 75825), (12, 75903),

Gene: Kabocha\_107 Start: 77582, Stop: 77938, Start Num: 2

Candidate Starts for Kabocha\_107:

(Start: 1 @77546 has 3 MA's), (Start: 2 @77582 has 3 MA's), (3, 77597), (4, 77600), (5, 77621), (6, 77681), (8, 77717), (9, 77738), (10, 77750), (11, 77768), (12, 77846),

Gene: Oogie\_102 Start: 77577, Stop: 77933, Start Num: 2

Candidate Starts for Oogie\_102:

(Start: 1 @77541 has 3 MA's), (Start: 2 @77577 has 3 MA's), (3, 77592), (4, 77595), (5, 77616), (6, 77676), (7, 77700), (8, 77712), (9, 77733), (10, 77745), (11, 77763), (12, 77841),

Gene: Pakusa\_99 Start: 75365, Stop: 75721, Start Num: 2

Candidate Starts for Pakusa\_99:

(Start: 1 @75329 has 3 MA's), (Start: 2 @75365 has 3 MA's), (3, 75380), (4, 75383), (5, 75404), (6, 75464), (7, 75488), (8, 75500), (9, 75521), (10, 75533), (11, 75551), (12, 75629),

Gene: Schomber\_104 Start: 75970, Stop: 76326, Start Num: 2

Candidate Starts for Schomber\_104:

(Start: 1 @75934 has 3 MA's), (Start: 2 @75970 has 3 MA's), (3, 75985), (4, 75988), (5, 76009), (6, 76069), (7, 76093), (8, 76105), (9, 76126), (10, 76138), (11, 76156), (12, 76234),