

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 9418 Report

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

Pham number 9418 has 13 members, 7 are drafts.

Phages represented in each track:

• Track 1 : Gray 106

• Track 2 : ScarletRaider 108

Track 3 : ChisanaKitsune\_107

Track 4 : Oogie\_105

• Track 5 : Aloki 101, Kabocha 110, Hanem 108, Chidiebere 109, Schomber 107

• Track 6 : GMA6 90

Track 7: UBSmoodge 109, FlyingTortilla 107

Track 8 : Pakusa\_102

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

The start number called the most often in the published annotations is 5, it was called in 5 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Aloki\_101, Chidiebere\_109, ChisanaKitsune\_107, Hanem\_108, Kabocha\_110, Oogie\_105, Schomber\_107,

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

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

• FlyingTortilla\_107, GMA6\_90, Gray\_106, Pakusa\_102, ScarletRaider\_108, UBSmoodge\_109,

### Summary by start number:

#### Start 3:

- Found in 4 of 13 (30.8%) of genes in pham
- No Manual Annotations of this start.
- Called 75.0% of time when present
- Phage (with cluster) where this start called: FlyingTortilla\_107 (DQ), ScarletRaider\_108 (DQ), UBSmoodge\_109 (DQ),

## Start 4:

- Found in 1 of 13 (7.7%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: GMA6\_90 (DQ),

### Start 5:

- Found in 7 of 13 (53.8%) of genes in pham
- Manual Annotations of this start: 5 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aloki\_101 (DQ), Chidiebere\_109 (DQ), ChisanaKitsune\_107 (DQ), Hanem\_108 (DQ), Kabocha\_110 (DQ), Oogie\_105 (DQ), Schomber\_107 (DQ),

### Start 6:

- Found in 2 of 13 (15.4%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gray\_106 (DQ), Pakusa\_102 (DQ),

## **Summary by clusters:**

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:

- •Start number 5 was manually annotated 5 times for cluster DQ.
- •Start number 6 was manually annotated 1 time for cluster DQ.

### Gene Information:

Gene: Aloki\_101 Start: 76297, Stop: 76437, Start Num: 5

Candidate Starts for Aloki 101:

(Start: 5 @ 76297 has 5 MA's), (8, 76333), (9, 76339), (10, 76357), (11, 76363),

Gene: Chidiebere\_109 Start: 77427, Stop: 77567, Start Num: 5

Candidate Starts for Chidiebere 109:

(Start: 5 @77427 has 5 MA's), (8, 77463), (9, 77469), (10, 77487), (11, 77493),

Gene: ChisanaKitsune 107 Start: 76295, Stop: 76435, Start Num: 5

Candidate Starts for ChisanaKitsune 107:

(Start: 5 @76295 has 5 MA's), (8, 76331), (10, 76355), (11, 76361),

Gene: FlyingTortilla\_107 Start: 80198, Stop: 80335, Start Num: 3

Candidate Starts for FlyingTortilla\_107:

(1, 80093), (3, 80198), (10, 80255), (11, 80261), (12, 80276), (13, 80282), (14, 80330),

Gene: GMA6 90 Start: 67738, Stop: 67881, Start Num: 4

Candidate Starts for GMA6\_90:

(3, 67735), (4, 67738),

Gene: Gray\_106 Start: 76570, Stop: 76710, Start Num: 6

Candidate Starts for Gray\_106:

(Start: 6 @ 76570 has 1 MA's), (8, 76606), (10, 76630), (11, 76636),

Gene: Hanem\_108 Start: 76297, Stop: 76437, Start Num: 5

Candidate Starts for Hanem\_108:

(Start: 5 @ 76297 has 5 MA's), (8, 76333), (9, 76339), (10, 76357), (11, 76363),

Gene: Kabocha\_110 Start: 78240, Stop: 78380, Start Num: 5

Candidate Starts for Kabocha\_110:

(Start: 5 @78240 has 5 MA's), (8, 78276), (9, 78282), (10, 78300), (11, 78306),

Gene: Oogie\_105 Start: 78235, Stop: 78375, Start Num: 5

Candidate Starts for Oogie\_105:

(2, 78184), (Start: 5 @78235 has 5 MA's), (8, 78271), (9, 78277), (10, 78295), (11, 78301),

Gene: Pakusa\_102 Start: 76035, Stop: 76175, Start Num: 6

Candidate Starts for Pakusa\_102:

(Start: 6 @ 76035 has 1 MA's), (7, 76062), (8, 76071), (10, 76095), (11, 76101),

Gene: ScarletRaider\_108 Start: 79540, Stop: 79677, Start Num: 3

Candidate Starts for ScarletRaider\_108:

(3, 79540), (10, 79597), (11, 79603), (12, 79618), (13, 79624), (14, 79672),

Gene: Schomber\_107 Start: 76628, Stop: 76768, Start Num: 5

Candidate Starts for Schomber\_107:

(Start: 5 @76628 has 5 MA's), (8, 76664), (9, 76670), (10, 76688), (11, 76694),

Gene: UBSmoodge 109 Start: 79985, Stop: 80122, Start Num: 3

Candidate Starts for UBSmoodge\_109:

(1, 79880), (3, 79985), (10, 80042), (11, 80048), (12, 80063), (13, 80069), (14, 80117),