

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 100009 Report

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

Pham number 100009 has 12 members, 6 are drafts.

Phages represented in each track:

Track 1 : Gray\_123, Chidiebere\_127

• Track 2 : FlyingTortilla\_125, ScarletRaider\_125

Track 3: Kabocha\_128, Schomber\_125, Hanem\_125, ChisanaKitsune\_125

• Track 4 : Aloki\_119

Track 5 : Oogie\_124

• Track 6 : UBSmoodge\_127

Track 7 : Pakusa\_121

# 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 4 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

ChisanaKitsune\_125, Hanem\_125, Kabocha\_128, Schomber\_125,

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

Aloki\_119, Chidiebere\_127, Gray\_123, Oogie\_124, Pakusa\_121,

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

• FlyingTortilla\_125, ScarletRaider\_125, UBSmoodge\_127,

## Summary by start number:

#### Start 1:

- Found in 9 of 12 (75.0%) of genes in pham
- Manual Annotations of this start: 2 of 6
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Chidiebere\_127 (DQ), Gray\_123 (DQ),

### Start 2:

- Found in 9 of 12 (75.0%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 44.4% of time when present

• Phage (with cluster) where this start called: ChisanaKitsune\_125 (DQ), Hanem\_125 (DQ), Kabocha\_128 (DQ), Schomber\_125 (DQ),

### Start 3:

- Found in 3 of 12 (25.0%) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: UBSmoodge\_127 (DQ),

### Start 4:

- Found in 12 of 12 (100.0%) of genes in pham
- No Manual Annotations of this start.
- Called 16.7% of time when present
- Phage (with cluster) where this start called: FlyingTortilla\_125 (DQ),
  ScarletRaider 125 (DQ),

#### Start 5:

- Found in 9 of 12 (75.0%) of genes in pham
- No Manual Annotations of this start.
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Pakusa\_121 (DQ),

#### Start 8:

- Found in 9 of 12 (75.0%) of genes in pham
- No Manual Annotations of this start.
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Aloki\_119 (DQ), Oogie\_124 (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 2 times for cluster DQ.
- •Start number 2 was manually annotated 4 times for cluster DQ.

## Gene Information:

Gene: Aloki\_119 Start: 87877, Stop: 88002, Start Num: 8

Candidate Starts for Aloki 119:

(Start: 1 @87763 has 2 MA's), (Start: 2 @87766 has 4 MA's), (4, 87820), (5, 87826), (6, 87850), (8, 87877), (9, 87883), (10, 87898), (14, 87994),

Gene: Chidiebere\_127 Start: 89666, Stop: 89905, Start Num: 1

Candidate Starts for Chidiebere 127:

(Start: 1 @89666 has 2 MA's), (Start: 2 @89669 has 4 MA's), (4, 89723), (5, 89729), (6, 89753), (8, 89780), (9, 89786), (10, 89801), (14, 89897),

Gene: ChisanaKitsune\_125 Start: 87912, Stop: 88148, Start Num: 2 Candidate Starts for ChisanaKitsune 125:

(Start: 1 @87909 has 2 MA's), (Start: 2 @87912 has 4 MA's), (4, 87966), (5, 87972), (6, 87996), (8, 88023), (9, 88029), (10, 88044), (14, 88140),

Gene: FlyingTortilla\_125 Start: 92296, Stop: 92478, Start Num: 4

Candidate Starts for FlyingTortilla\_125:

(3, 92260), (4, 92296), (6, 92326), (7, 92347), (10, 92374), (11, 92386), (12, 92395),

Gene: Gray 123 Start: 88222, Stop: 88461, Start Num: 1

Candidate Starts for Gray\_123:

(Start: 1 @88222 has 2 MA's), (Start: 2 @88225 has 4 MA's), (4, 88279), (5, 88285), (6, 88309), (8, 88336), (9, 88342), (10, 88357), (14, 88453),

Gene: Hanem\_125 Start: 87766, Stop: 88002, Start Num: 2

Candidate Starts for Hanem\_125:

(Start: 1 @87763 has 2 MA's), (Start: 2 @87766 has 4 MA's), (4, 87820), (5, 87826), (6, 87850), (8, 87877), (9, 87883), (10, 87898), (14, 87994),

Gene: Kabocha\_128 Start: 90461, Stop: 90697, Start Num: 2

Candidate Starts for Kabocha 128:

(Start: 1 @90458 has 2 MA's), (Start: 2 @90461 has 4 MA's), (4, 90515), (5, 90521), (6, 90545), (8, 90572), (9, 90578), (10, 90593), (14, 90689),

Gene: Oogie\_124 Start: 90304, Stop: 90429, Start Num: 8

Candidate Starts for Oogie\_124:

(Start: 1 @90190 has 2 MA's), (Start: 2 @90193 has 4 MA's), (4, 90247), (5, 90253), (6, 90277), (8, 90304), (9, 90310), (10, 90325), (14, 90421),

Gene: Pakusa 121 Start: 87754, Stop: 87930, Start Num: 5

Candidate Starts for Pakusa\_121:

(Start: 1 @87691 has 2 MA's), (Start: 2 @87694 has 4 MA's), (4, 87748), (5, 87754), (6, 87778), (8, 87805), (9, 87811), (10, 87826), (14, 87922),

Gene: ScarletRaider 125 Start: 91501, Stop: 91683, Start Num: 4

Candidate Starts for ScarletRaider 125:

(3, 91465), (4, 91501), (6, 91531), (7, 91552), (10, 91579), (11, 91591), (12, 91600),

Gene: Schomber\_125 Start: 88870, Stop: 89106, Start Num: 2

Candidate Starts for Schomber\_125:

(Start: 1 @88867 has 2 MA's), (Start: 2 @88870 has 4 MA's), (4, 88924), (5, 88930), (6, 88954), (8, 88981), (9, 88987), (10, 89002), (14, 89098),

Gene: UBSmoodge\_127 Start: 92064, Stop: 92282, Start Num: 3

Candidate Starts for UBSmoodge 127:

(3, 92064), (4, 92100), (6, 92130), (7, 92151), (10, 92178), (11, 92190), (12, 92199), (13, 92256),