

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 87656 Report

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

Pham number 87656 has 10 members, 1 are drafts.

Phages represented in each track:

Track 1 : Shrooms\_90

• Track 2 : Kovu 93

Track 3: Laroye\_91, Edmundo\_90, LiSara\_88, Salgado\_91

Track 4 : Wheelbite\_87

• Track 5: Waltz 88

Track 6: Kharcho\_59, Ottawa\_59

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

The start number called the most often in the published annotations is 4, it was called in 6 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Edmundo\_90, Laroye\_91, LiSara\_88, Salgado\_91, Waltz\_88, Wheelbite\_87,

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

• Shrooms 90.

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

Kharcho\_59, Kovu\_93, Ottawa\_59,

# **Summary by start number:**

#### Start 3:

- Found in 1 of 10 (10.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kovu\_93 (AL),

### Start 4:

- Found in 7 of 10 (70.0%) of genes in pham
- Manual Annotations of this start: 6 of 9
- Called 85.7% of time when present

• Phage (with cluster) where this start called: Edmundo\_90 (AL), Laroye\_91 (AL), LiSara\_88 (AL), Salgado\_91 (AL), Waltz\_88 (AL), Wheelbite\_87 (AL),

## Start 5:

- Found in 2 of 10 (20.0%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kharcho\_59 (FM), Ottawa\_59 (FM),

## Start 6:

- Found in 8 of 10 (80.0%) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Shrooms 90 (AL),

## Summary by clusters:

There are 2 clusters represented in this pham: AL, FM,

Info for manual annotations of cluster AL:

- •Start number 4 was manually annotated 6 times for cluster AL.
- •Start number 6 was manually annotated 1 time for cluster AL.

Info for manual annotations of cluster FM:

•Start number 5 was manually annotated 2 times for cluster FM.

### Gene Information:

Gene: Edmundo\_90 Start: 53795, Stop: 54046, Start Num: 4

Candidate Starts for Edmundo 90:

(1, 53720), (2, 53762), (Start: 4 @53795 has 6 MA's), (Start: 6 @53834 has 1 MA's), (10, 53960), (13, 53990),

Gene: Kharcho\_59 Start: 33398, Stop: 33661, Start Num: 5

Candidate Starts for Kharcho\_59:

(Start: 5 @ 33398 has 2 MA's), (8, 33446), (9, 33542), (10, 33569), (11, 33575), (15, 33623),

Gene: Kovu 93 Start: 54642, Stop: 54896, Start Num: 3

Candidate Starts for Kovu 93:

(3, 54642), (Start: 6 @54690 has 1 MA's), (7, 54693), (8, 54708), (10, 54816), (12, 54831), (13, 54846),

Gene: Laroye\_91 Start: 53598, Stop: 53849, Start Num: 4

Candidate Starts for Laroye\_91:

(1, 53523), (2, 53565), (Start: 4 @53598 has 6 MA's), (Start: 6 @53637 has 1 MA's), (10, 53763), (13, 53793),

Gene: LiSara 88 Start: 53730, Stop: 53981, Start Num: 4

Candidate Starts for LiSara 88:

(1, 53655), (2, 53697), (Start: 4 @53730 has 6 MA's), (Start: 6 @53769 has 1 MA's), (10, 53895), (13, 53925),

Gene: Ottawa\_59 Start: 33348, Stop: 33611, Start Num: 5

Candidate Starts for Ottawa\_59:

(Start: 5 @ 33348 has 2 MA's), (8, 33396), (9, 33492), (10, 33519), (11, 33525), (15, 33573),

Gene: Salgado\_91 Start: 53400, Stop: 53651, Start Num: 4

Candidate Starts for Salgado\_91:

(1, 53325), (2, 53367), (Start: 4 @53400 has 6 MA's), (Start: 6 @53439 has 1 MA's), (10, 53565), (13, 53595),

Gene: Shrooms\_90 Start: 53069, Stop: 53281, Start Num: 6

Candidate Starts for Shrooms 90:

(Start: 4 @53027 has 6 MA's), (Start: 6 @53069 has 1 MA's), (7, 53072), (10, 53195), (12, 53210), (13, 53225),

Gene: Waltz\_88 Start: 51815, Stop: 52069, Start Num: 4

Candidate Starts for Waltz 88:

(Start: 4 @51815 has 6 MA's), (Start: 6 @51857 has 1 MA's), (7, 51860), (8, 51875), (10, 51983), (12, 51998), (13, 52013), (14, 52016),

Gene: Wheelbite\_87 Start: 53494, Stop: 53745, Start Num: 4

Candidate Starts for Wheelbite\_87:

(2, 53461), (Start: 4 @53494 has 6 MA's), (Start: 6 @53533 has 1 MA's), (10, 53659), (13, 53689),