

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 160974 Report

This analysis was run 05/04/24 on database version 560.

Pham number 160974 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1 : Laroye\_94Track 2 : Kovu 96

• Track 3 : Shrooms\_92

• Track 4 : Edmundo\_93

Track 5 : LiSara\_91, Salgado\_94

Track 6 : Waltz\_90Track 7 : Wheelbite\_89

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

The start number called the most often in the published annotations is 3, it was called in 6 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Edmundo\_93, Laroye\_94, LiSara\_91, Salgado\_94, Waltz\_90, Wheelbite\_89,

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

Kovu\_96, Shrooms\_92,

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

Summary by start number:

#### Start 2:

- Found in 2 of 8 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Shrooms\_92 (AL),

### Start 3:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 6 of 7
- Called 75.0% of time when present

• Phage (with cluster) where this start called: Edmundo\_93 (AL), Laroye\_94 (AL), LiSara\_91 (AL), Salgado\_94 (AL), Waltz\_90 (AL), Wheelbite\_89 (AL),

#### Start 5:

- Found in 4 of 8 (50.0%) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Kovu\_96 (AL),

### **Summary by clusters:**

There is one cluster represented in this pham: AL

Info for manual annotations of cluster AL:

- •Start number 2 was manually annotated 1 time for cluster AL.
- Start number 3 was manually annotated 6 times for cluster AL.

#### Gene Information:

Gene: Edmundo\_93 Start: 54507, Stop: 55298, Start Num: 3

Candidate Starts for Edmundo\_93:

(1, 54456), (Start: 3 @54507 has 6 MA's), (4, 54579), (5, 54639), (6, 54651), (11, 54765), (12, 54789), (13, 54855), (14, 54870), (15, 54873), (16, 54912), (19, 54972), (20, 54993), (22, 55011), (23, 55026), (27, 55173),

Gene: Kovu\_96 Start: 55519, Stop: 56145, Start Num: 5

Candidate Starts for Kovu\_96:

(Start: 3 @55384 has 6 MA's), (5, 55519), (6, 55531), (8, 55591), (9, 55603), (13, 55735), (18, 55825), (19, 55852), (20, 55873), (21, 55888), (22, 55891), (23, 55906), (28, 56089), (29, 56095),

Gene: Laroye 94 Start: 54308, Stop: 55111, Start Num: 3

Candidate Starts for Laroye 94:

(Start: 3 @54308 has 6 MA's), (6, 54452), (11, 54569), (12, 54593), (15, 54677), (18, 54749), (19, 54776), (20, 54797), (22, 54815), (23, 54830), (24, 54860), (26, 54890), (30, 55025),

Gene: LiSara 91 Start: 54440, Stop: 55243, Start Num: 3

Candidate Starts for LiSara 91:

(Start: 3 @54440 has 6 MA's), (6, 54584), (11, 54701), (12, 54725), (13, 54791), (15, 54809), (18, 54881), (19, 54908), (20, 54929), (22, 54947), (23, 54962), (30, 55157),

Gene: Salgado 94 Start: 54110, Stop: 54913, Start Num: 3

Candidate Starts for Salgado\_94:

(Start: 3 @54110 has 6 MA's), (6, 54254), (11, 54371), (12, 54395), (13, 54461), (15, 54479), (18, 54551), (19, 54578), (20, 54599), (22, 54617), (23, 54632), (30, 54827),

Gene: Shrooms\_92 Start: 53698, Stop: 54537, Start Num: 2

Candidate Starts for Shrooms 92:

(Start: 2 @53698 has 1 MA's), (Start: 3 @53740 has 6 MA's), (6, 53884), (11, 53998), (13, 54088), (14, 54103), (15, 54106), (19, 54205), (20, 54226), (22, 54244), (23, 54259), (26, 54319), (28, 54442), (30, 54454), (31, 54520),

Gene: Waltz\_90 Start: 52528, Stop: 53325, Start Num: 3

Candidate Starts for Waltz\_90:

(Start: 2 @52486 has 1 MA's), (Start: 3 @52528 has 6 MA's), (5, 52660), (6, 52672), (7, 52681), (11, 52786), (13, 52876), (14, 52891), (15, 52894), (17, 52957), (18, 52966), (19, 52993), (20, 53014), (22, 53032), (23, 53047), (25, 53101), (30, 53242), (31, 53308),

Gene: Wheelbite\_89 Start: 54204, Stop: 54995, Start Num: 3

Candidate Starts for Wheelbite\_89:

(1, 54153), (Start: 3 @54204 has 6 MA's), (4, 54276), (5, 54336), (6, 54348), (10, 54429), (11, 54462), (12, 54486), (13, 54552), (14, 54567), (15, 54570), (16, 54609), (19, 54669), (20, 54690), (22, 54708), (23, 54723), (25, 54777), (27, 54870),