

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 87443 Report

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

Pham number 87443 has 11 members, 1 are drafts.

Phages represented in each track:

Track 1 : LiSara\_61, Laroye\_64, Salgado\_64

• Track 2 : Wheelbite 60

• Track 3 : Kovu 62

• Track 4 : Edmundo\_63

• Track 5 : Shrooms 62

• Track 6: Waltz\_61

Track 7: Ottawa 39, Kharcho 39

Track 8: ValentiniPuff 64

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

The start number called the most often in the published annotations is 1, it was called in 7 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Edmundo\_63, Kovu\_62, Laroye\_64, LiSara\_61, Salgado\_64, Shrooms\_62, Waltz 61, Wheelbite 60,

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

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

Kharcho\_39, Ottawa\_39, ValentiniPuff\_64,

### Summary by start number:

#### Start 1:

- Found in 8 of 11 (72.7%) of genes in pham
- Manual Annotations of this start: 7 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Edmundo\_63 (AL), Kovu\_62 (AL), Laroye\_64 (AL), LiSara\_61 (AL), Salgado\_64 (AL), Shrooms\_62 (AL), Waltz\_61 (AL), Wheelbite\_60 (AL),

#### Start 4:

- Found in 2 of 11 (18.2%) of genes in pham
- Manual Annotations of this start: 2 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kharcho\_39 (FM), Ottawa\_39 (FM),

#### Start 5:

- Found in 1 of 11 (9.1%) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ValentiniPuff\_64 (singleton),

## **Summary by clusters:**

There are 3 clusters represented in this pham: singleton, AL, FM,

Info for manual annotations of cluster AL:

Start number 1 was manually annotated 7 times for cluster AL.

Info for manual annotations of cluster FM:

•Start number 4 was manually annotated 2 times for cluster FM.

#### Gene Information:

Gene: Edmundo 63 Start: 35161, Stop: 35907, Start Num: 1

Candidate Starts for Edmundo\_63:

(Start: 1 @35161 has 7 MA's), (2, 35170), (12, 35320), (14, 35374), (22, 35458), (24, 35476), (26, 35506), (39, 35683), (47, 35752), (50, 35800), (53, 35887),

Gene: Kharcho 39 Start: 15407, Stop: 16144, Start Num: 4

Candidate Starts for Kharcho 39:

(Start: 4 @ 15407 has 2 MA's), (19, 15650), (21, 15674), (24, 15710), (25, 15719), (47, 15989),

Gene: Kovu\_62 Start: 34448, Stop: 35200, Start Num: 1

Candidate Starts for Kovu\_62:

(Start: 1 @34448 has 7 MA's), (2, 34457), (7, 34502), (24, 34766), (27, 34817), (28, 34820), (33, 34886), (34, 34919), (35, 34931), (38, 34970), (41, 34997), (46, 35039), (47, 35045), (48, 35063), (49, 35069), (52, 35117), (53, 35180),

Gene: Laroye\_64 Start: 34551, Stop: 35297, Start Num: 1

Candidate Starts for Laroye 64:

(Start: 1 @34551 has 7 MA's), (10, 34662), (12, 34710), (18, 34803), (22, 34848), (24, 34866), (26, 34896), (34, 35016), (37, 35061), (40, 35076), (45, 35124), (47, 35142), (53, 35277),

Gene: LiSara\_61 Start: 34713, Stop: 35459, Start Num: 1

Candidate Starts for LiSara\_61:

(Start: 1 @34713 has 7 MA's), (10, 34824), (12, 34872), (18, 34965), (22, 35010), (24, 35028), (26, 35058), (34, 35178), (37, 35223), (40, 35238), (45, 35286), (47, 35304), (53, 35439),

Gene: Ottawa 39 Start: 15405, Stop: 16142, Start Num: 4

Candidate Starts for Ottawa\_39:

(Start: 4 @ 15405 has 2 MA's), (19, 15648), (21, 15672), (24, 15708), (25, 15717), (47, 15987),

Gene: Salgado\_64 Start: 34367, Stop: 35113, Start Num: 1

Candidate Starts for Salgado\_64:

(Start: 1 @34367 has 7 MA's), (10, 34478), (12, 34526), (18, 34619), (22, 34664), (24, 34682), (26, 34712), (34, 34832), (37, 34877), (40, 34892), (45, 34940), (47, 34958), (53, 35093),

Gene: Shrooms\_62 Start: 32497, Stop: 33246, Start Num: 1

Candidate Starts for Shrooms\_62:

(Start: 1 @32497 has 7 MA's), (2, 32506), (3, 32509), (10, 32608), (13, 32665), (19, 32758), (20, 32770), (23, 32809), (24, 32815), (29, 32881), (30, 32893), (34, 32965), (40, 33025), (42, 33049), (46, 33085), (50, 33139), (53, 33226),

Gene: ValentiniPuff\_64 Start: 31679, Stop: 32407, Start Num: 5

Candidate Starts for ValentiniPuff\_64:

(Start: 5 @31679 has 1 MA's), (9, 31748), (11, 31814), (17, 31898), (21, 31949), (24, 31985), (31, 32078), (36, 32168), (43, 32216), (44, 32222), (47, 32252), (51, 32309),

Gene: Waltz\_61 Start: 32792, Stop: 33541, Start Num: 1

Candidate Starts for Waltz\_61:

(Start: 1 @ 32792 has 7 MA's), (2, 32801), (6, 32834), (12, 32951), (13, 32960), (15, 33008), (19, 33053), (20, 33065), (23, 33104), (24, 33110), (29, 33176), (30, 33188), (32, 33215), (40, 33320), (42, 33344), (45, 33368), (46, 33380), (50, 33434), (53, 33521),

Gene: Wheelbite\_60 Start: 34517, Stop: 35263, Start Num: 1

Candidate Starts for Wheelbite\_60:

(Start: 1 @34517 has 7 MA's), (2, 34526), (8, 34595), (10, 34628), (12, 34676), (16, 34751), (23, 34826), (24, 34832), (39, 35039), (47, 35108), (50, 35156), (53, 35243),