

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 197097 Report

This analysis was run 12/09/24 on database version 580.

Pham number 197097 has 9 members, 0 are drafts.

Phages represented in each track:

Track 1 : Bantam\_87, SpeedDemon\_880

Track 2 : Mollymur\_87Track 3 : Daredevil\_77

• Track 4 : Ziko\_103

Track 5 : Volt\_104, Guey18\_105, Ronaldo\_102

• Track 6 : Beakin 72

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

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

Genes that call this "Most Annotated" start:

Guey18\_105, Ronaldo\_102, Volt\_104, Ziko\_103,

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

•

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

Bantam\_87, Beakin\_72, Daredevil\_77, Mollymur\_87, SpeedDemon\_880,

# Summary by start number:

### Start 3:

- Found in 2 of 9 (22.2%) 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: Daredevil\_77 (DL), Mollymur\_87 (DL),

## Start 4:

- Found in 6 of 9 (66.7%) of genes in pham
- Manual Annotations of this start: 2 of 9
- Called 33.3% of time when present

Phage (with cluster) where this start called: Bantam\_87 (DL), SpeedDemon\_880 (DL),

## Start 7:

- Found in 3 of 9 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Beakin\_72 (F1),

### Start 9:

- Found in 4 of 9 (44.4%) of genes in pham
- Manual Annotations of this start: 4 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Guey18\_105 (DP), Ronaldo\_102 (DP), Volt\_104 (DP), Ziko\_103 (DP),

# **Summary by clusters:**

There are 3 clusters represented in this pham: F1, DL, DP,

Info for manual annotations of cluster DL:

- •Start number 3 was manually annotated 2 times for cluster DL.
- •Start number 4 was manually annotated 2 times for cluster DL.

Info for manual annotations of cluster DP:

•Start number 9 was manually annotated 4 times for cluster DP.

Info for manual annotations of cluster F1:

•Start number 7 was manually annotated 1 time for cluster F1.

### Gene Information:

Gene: Bantam 87 Start: 59627, Stop: 59082, Start Num: 4

Candidate Starts for Bantam\_87:

(Start: 4 @59627 has 2 MA's), (Start: 7 @59603 has 1 MA's), (11, 59540), (19, 59399), (21, 59387), (22, 59375), (28, 59294),

Gene: Beakin 72 Start: 43119, Stop: 43616, Start Num: 7

Candidate Starts for Beakin 72:

(6, 43116), (Start: 7 @ 43119 has 1 MA's), (10, 43155), (11, 43188), (13, 43209), (16, 43257), (19, 43323), (21, 43335), (24, 43374), (26, 43398), (27, 43416), (29, 43452),

Gene: Daredevil\_77 Start: 55211, Stop: 54663, Start Num: 3

Candidate Starts for Daredevil\_77:

 $(Start: 3 @ 55211 \ has 2 \ MA's), (11, 55115), (16, 55046), (17, 55028), (19, 54980), (23, 54947), (28, 54875), (30, 54770), \\$ 

Gene: Guey18 105 Start: 50683, Stop: 51120, Start Num: 9

Candidate Starts for Guey18 105:

(1, 50566), (2, 50599), (Start: 4 @50650 has 2 MA's), (5, 50653), (8, 50677), (Start: 9 @50683 has 4 MA's), (15, 50788), (16, 50809), (19, 50872), (20, 50878), (31, 51082), (32, 51097),

Gene: Mollymur\_87 Start: 60351, Stop: 59803, Start Num: 3

Candidate Starts for Mollymur\_87:

(Start: 3 @60351 has 2 MA's), (10, 60288), (11, 60255), (14, 60222), (16, 60186), (18, 60159), (19, 60120), (25, 60060),

Gene: Ronaldo\_102 Start: 50265, Stop: 50702, Start Num: 9

Candidate Starts for Ronaldo 102:

(1, 50148), (2, 50181), (Start: 4 @50232 has 2 MA's), (5, 50235), (8, 50259), (Start: 9 @50265 has 4 MA's), (15, 50370), (16, 50391), (19, 50454), (20, 50460), (31, 50664), (32, 50679),

Gene: SpeedDemon\_880 Start: 61548, Stop: 61003, Start Num: 4

Candidate Starts for SpeedDemon\_880:

(Start: 4 @61548 has 2 MA's), (Start: 7 @61524 has 1 MA's), (11, 61461), (19, 61320), (21, 61308), (22, 61296), (28, 61215),

Gene: Volt\_104 Start: 50429, Stop: 50866, Start Num: 9

Candidate Starts for Volt\_104:

(1, 50312), (2, 50345), (Start: 4 @50396 has 2 MA's), (5, 50399), (8, 50423), (Start: 9 @50429 has 4 MA's), (15, 50534), (16, 50555), (19, 50618), (20, 50624), (31, 50828), (32, 50843),

Gene: Ziko\_103 Start: 50271, Stop: 50708, Start Num: 9

Candidate Starts for Ziko\_103:

(1, 50154), (2, 50187), (Start: 4 @50238 has 2 MA's), (5, 50241), (8, 50265), (Start: 9 @50271 has 4 MA's), (12, 50343), (15, 50376), (16, 50397), (19, 50460), (20, 50466), (31, 50670), (32, 50685),