



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 87161 Report

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

Pham number 87161 has 15 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Arcanine\_90
- Track 2 : Smairt\_92, PhrostyMug\_89, Fenn\_89, Ashballer\_86, Abrogate\_830, Mule\_87, Crispicous1\_79
- Track 3 : Ciao\_85, Pita2\_87, Peterson\_86, Kenmech\_88
- Track 4 : Barriga\_93
- Track 5 : Slagathor\_87
- Track 6 : Target\_84

### ***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 12 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abrogate\_830, Ashballer\_86, Ciao\_85, Crispicous1\_79, Fenn\_89, Kenmech\_88, Mule\_87, Peterson\_86, PhrostyMug\_89, Pita2\_87, Slagathor\_87, Smairt\_92,

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

- Arcanine\_90, Target\_84,

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

- Barriga\_93,

### **Summary by start number:**

Start 1:

- Found in 14 of 15 ( 93.3% ) of genes in pham
- Manual Annotations of this start: 12 of 15
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Abrogate\_830 (A1), Ashballer\_86 (A1), Ciao\_85 (A1), Crispicous1\_79 (A1), Fenn\_89 (A1), Kenmech\_88 (A1), Mule\_87 (A1), Peterson\_86 (A1), PhrostyMug\_89 (A1), Pita2\_87 (A1), Slagathor\_87 (A1), Smairt\_92 (A1),

#### Start 2:

- Found in 15 of 15 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 15
- Called 13.3% of time when present
- Phage (with cluster) where this start called: Arcanine\_90 (A1), Barriga\_93 (A1),

#### Start 3:

- Found in 9 of 15 ( 60.0% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Target\_84 (A1),

### Summary by clusters:

There is one cluster represented in this pham: A1

Info for manual annotations of cluster A1:

- Start number 1 was manually annotated 12 times for cluster A1.
- Start number 2 was manually annotated 2 times for cluster A1.
- Start number 3 was manually annotated 1 time for cluster A1.

### **Gene Information:**

Gene: Abrogate\_830 Start: 49758, Stop: 49645, Start Num: 1

Candidate Starts for Abrogate\_830:

(Start: 1 @49758 has 12 MA's), (Start: 2 @49731 has 2 MA's), (Start: 3 @49710 has 1 MA's), (4, 49704),

Gene: Arcanine\_90 Start: 50657, Stop: 50574, Start Num: 2

Candidate Starts for Arcanine\_90:

(Start: 1 @50684 has 12 MA's), (Start: 2 @50657 has 2 MA's), (4, 50630),

Gene: Ashballer\_86 Start: 49460, Stop: 49347, Start Num: 1

Candidate Starts for Ashballer\_86:

(Start: 1 @49460 has 12 MA's), (Start: 2 @49433 has 2 MA's), (Start: 3 @49412 has 1 MA's), (4, 49406),

Gene: Barriga\_93 Start: 49604, Stop: 49518, Start Num: 2

Candidate Starts for Barriga\_93:

(Start: 2 @49604 has 2 MA's), (4, 49577),

Gene: Ciao\_85 Start: 47888, Stop: 47775, Start Num: 1

Candidate Starts for Ciao\_85:

(Start: 1 @47888 has 12 MA's), (Start: 2 @47861 has 2 MA's), (4, 47834),

Gene: Crispicous1\_79 Start: 46486, Stop: 46373, Start Num: 1

Candidate Starts for Crispicous1\_79:

(Start: 1 @46486 has 12 MA's), (Start: 2 @46459 has 2 MA's), (Start: 3 @46438 has 1 MA's), (4, 46432),

Gene: Fenn\_89 Start: 49819, Stop: 49706, Start Num: 1

Candidate Starts for Fenn\_89:

(Start: 1 @49819 has 12 MA's), (Start: 2 @49792 has 2 MA's), (Start: 3 @49771 has 1 MA's), (4, 49765),

Gene: Kenmech\_88 Start: 50246, Stop: 50133, Start Num: 1

Candidate Starts for Kenmech\_88:

(Start: 1 @50246 has 12 MA's), (Start: 2 @50219 has 2 MA's), (4, 50192),

Gene: Mule\_87 Start: 48839, Stop: 48726, Start Num: 1

Candidate Starts for Mule\_87:

(Start: 1 @48839 has 12 MA's), (Start: 2 @48812 has 2 MA's), (Start: 3 @48791 has 1 MA's), (4, 48785),

Gene: Peterson\_86 Start: 50394, Stop: 50281, Start Num: 1

Candidate Starts for Peterson\_86:

(Start: 1 @50394 has 12 MA's), (Start: 2 @50367 has 2 MA's), (4, 50340),

Gene: PhrostyMug\_89 Start: 51009, Stop: 50896, Start Num: 1

Candidate Starts for PhrostyMug\_89:

(Start: 1 @51009 has 12 MA's), (Start: 2 @50982 has 2 MA's), (Start: 3 @50961 has 1 MA's), (4, 50955),

Gene: Pita2\_87 Start: 49050, Stop: 48937, Start Num: 1

Candidate Starts for Pita2\_87:

(Start: 1 @49050 has 12 MA's), (Start: 2 @49023 has 2 MA's), (4, 48996),

Gene: Slagathor\_87 Start: 49995, Stop: 49882, Start Num: 1

Candidate Starts for Slagathor\_87:

(Start: 1 @49995 has 12 MA's), (Start: 2 @49968 has 2 MA's), (Start: 3 @49947 has 1 MA's), (4, 49941), (5, 49929),

Gene: Smairt\_92 Start: 52026, Stop: 51913, Start Num: 1

Candidate Starts for Smairt\_92:

(Start: 1 @52026 has 12 MA's), (Start: 2 @51999 has 2 MA's), (Start: 3 @51978 has 1 MA's), (4, 51972),

Gene: Target\_84 Start: 47459, Stop: 47394, Start Num: 3

Candidate Starts for Target\_84:

(Start: 1 @47507 has 12 MA's), (Start: 2 @47480 has 2 MA's), (Start: 3 @47459 has 1 MA's), (4, 47453),