



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 87445 Report

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

Pham number 87445 has 10 members, 0 are drafts.

Phages represented in each track:

- Track 1 : JoieB\_59, Huphlebuff\_60, Blackbeetle\_58, Raela\_58, Poise\_58, RedRaider77\_57
- Track 2 : Clarkson\_59
- Track 3 : LittleLaf\_58, Beelzebub\_62, Corazon\_56

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

The start number called the most often in the published annotations is 2, it was called in 6 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Blackbeetle\_58, Huphlebuff\_60, JoieB\_59, Poise\_58, Raela\_58, RedRaider77\_57,

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

- Beelzebub\_62, Clarkson\_59, Corazon\_56, LittleLaf\_58,

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

- 

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

Start 1:

- Found in 10 of 10 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 3 of 10
- Called 30.0% of time when present
- Phage (with cluster) where this start called: Beelzebub\_62 (S), Corazon\_56 (S), LittleLaf\_58 (S),

Start 2:

- Found in 10 of 10 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 6 of 10
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Blackbeetle\_58 (S), Huphlebuff\_60 (S), JoieB\_59 (S), Poise\_58 (S), Raela\_58 (S), RedRaider77\_57 (S),

Start 3:

- Found in 10 of 10 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 10.0% of time when present
- Phage (with cluster) where this start called: Clarkson\_59 (S),

### **Summary by clusters:**

There is one cluster represented in this pham: S

Info for manual annotations of cluster S:

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

### **Gene Information:**

Gene: Beelzebub\_62 Start: 34213, Stop: 34500, Start Num: 1

Candidate Starts for Beelzebub\_62:

(Start: 1 @34213 has 3 MA's), (Start: 2 @34240 has 6 MA's), (Start: 3 @34243 has 1 MA's), (4, 34249), (5, 34303), (6, 34309), (7, 34315), (8, 34375),

Gene: Blackbeetle\_58 Start: 33285, Stop: 33545, Start Num: 2

Candidate Starts for Blackbeetle\_58:

(Start: 1 @33258 has 3 MA's), (Start: 2 @33285 has 6 MA's), (Start: 3 @33288 has 1 MA's), (4, 33294), (5, 33348), (6, 33354), (7, 33360), (8, 33420),

Gene: Clarkson\_59 Start: 33971, Stop: 34228, Start Num: 3

Candidate Starts for Clarkson\_59:

(Start: 1 @33941 has 3 MA's), (Start: 2 @33968 has 6 MA's), (Start: 3 @33971 has 1 MA's), (4, 33977), (5, 34031), (7, 34043), (8, 34103),

Gene: Corazon\_56 Start: 34135, Stop: 34422, Start Num: 1

Candidate Starts for Corazon\_56:

(Start: 1 @34135 has 3 MA's), (Start: 2 @34162 has 6 MA's), (Start: 3 @34165 has 1 MA's), (4, 34171), (5, 34225), (6, 34231), (7, 34237), (8, 34297),

Gene: Huphlebuff\_60 Start: 33773, Stop: 34033, Start Num: 2

Candidate Starts for Huphlebuff\_60:

(Start: 1 @33746 has 3 MA's), (Start: 2 @33773 has 6 MA's), (Start: 3 @33776 has 1 MA's), (4, 33782), (5, 33836), (6, 33842), (7, 33848), (8, 33908),

Gene: JoieB\_59 Start: 34206, Stop: 34466, Start Num: 2

Candidate Starts for JoieB\_59:

(Start: 1 @34179 has 3 MA's), (Start: 2 @34206 has 6 MA's), (Start: 3 @34209 has 1 MA's), (4, 34215), (5, 34269), (6, 34275), (7, 34281), (8, 34341),

Gene: LittleLaf\_58 Start: 33671, Stop: 33958, Start Num: 1

Candidate Starts for LittleLaf\_58:

(Start: 1 @33671 has 3 MA's), (Start: 2 @33698 has 6 MA's), (Start: 3 @33701 has 1 MA's), (4, 33707), (5, 33761), (6, 33767), (7, 33773), (8, 33833),

Gene: Poise\_58 Start: 33285, Stop: 33545, Start Num: 2

Candidate Starts for Poise\_58:

(Start: 1 @33258 has 3 MA's), (Start: 2 @33285 has 6 MA's), (Start: 3 @33288 has 1 MA's), (4, 33294), (5, 33348), (6, 33354), (7, 33360), (8, 33420),

Gene: Raela\_58 Start: 33842, Stop: 34102, Start Num: 2

Candidate Starts for Raela\_58:

(Start: 1 @33815 has 3 MA's), (Start: 2 @33842 has 6 MA's), (Start: 3 @33845 has 1 MA's), (4, 33851), (5, 33905), (6, 33911), (7, 33917), (8, 33977),

Gene: RedRaider77\_57 Start: 33230, Stop: 33490, Start Num: 2

Candidate Starts for RedRaider77\_57:

(Start: 1 @33203 has 3 MA's), (Start: 2 @33230 has 6 MA's), (Start: 3 @33233 has 1 MA's), (4, 33239), (5, 33293), (6, 33299), (7, 33305), (8, 33365),