



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 86937 Report

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

Pham number 86937 has 17 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Margaret\_47
- Track 2 : GiKK\_46, Button\_44, Jamzy\_46
- Track 3 : Hexbug\_48, Orla\_48
- Track 4 : Nodigi\_48
- Track 5 : Walrus\_80
- Track 6 : Brandonk123\_66, Thing3\_61, Kamashten\_61
- Track 7 : Fitzgerald\_59, Jabberwocky\_60
- Track 8 : Sanjuju\_60
- Track 9 : Ailee\_59
- Track 10 : Bibwit\_62
- Track 11 : Love\_65

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

The start number called the most often in the published annotations is 19, it was called in 7 of the 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Button\_44, GiKK\_46, Hexbug\_48, Jamzy\_46, Margaret\_47, Nodigi\_48, Orla\_48,

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

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

- Ailee\_59, Bibwit\_62, Brandonk123\_66, Fitzgerald\_59, Jabberwocky\_60, Kamashten\_61, Love\_65, Sanjuju\_60, Thing3\_61, Walrus\_80,

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

Start 16:

- Found in 9 of 17 ( 52.9% ) 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: Sanjuju\_60 (DE1),

#### Start 17:

- Found in 1 of 17 ( 5.9% ) of genes in pham
- Manual Annotations of this start: 1 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Walrus\_80 (CV),

#### Start 18:

- Found in 9 of 17 ( 52.9% ) of genes in pham
- Manual Annotations of this start: 6 of 15
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Ailee\_59 (DE1), Bibwit\_62 (DE1), Brandonk123\_66 (DE1), Fitzgerald\_59 (DE1), Jabberwocky\_60 (DE1), Kamashten\_61 (DE1), Love\_65 (DE1), Thing3\_61 (DE1),

#### Start 19:

- Found in 7 of 17 ( 41.2% ) of genes in pham
- Manual Annotations of this start: 7 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Button\_44 (CT), GiKK\_46 (CT), Hexbug\_48 (CT), Jamzy\_46 (CT), Margaret\_47 (CT), Nodigi\_48 (CT), Orla\_48 (CT),

### Summary by clusters:

There are 3 clusters represented in this pham: DE1, CV, CT,

Info for manual annotations of cluster CT:

- Start number 19 was manually annotated 7 times for cluster CT.

Info for manual annotations of cluster CV:

- Start number 17 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster DE1:

- Start number 16 was manually annotated 1 time for cluster DE1.
- Start number 18 was manually annotated 6 times for cluster DE1.

### Gene Information:

Gene: Ailee\_59 Start: 49435, Stop: 49638, Start Num: 18

Candidate Starts for Ailee\_59:

(1, 48052), (2, 48313), (3, 48496), (4, 48529), (5, 48562), (6, 48616), (7, 48670), (9, 49228), (11, 49282), (12, 49312), (14, 49366), (Start: 16 @49423 has 1 MA's), (Start: 18 @49435 has 6 MA's), (22, 49585), (25, 49609), (26, 49627),

Gene: Bibwit\_62 Start: 49271, Stop: 49474, Start Num: 18

Candidate Starts for Bibwit\_62:

(8, 49037), (10, 49097), (13, 49178), (15, 49235), (Start: 16 @49259 has 1 MA's), (Start: 18 @49271 has 6 MA's), (22, 49421), (25, 49445), (26, 49463),

Gene: Brandonk123\_66 Start: 49721, Stop: 49921, Start Num: 18

Candidate Starts for Brandonk123\_66:

(Start: 16 @49709 has 1 MA's), (Start: 18 @49721 has 6 MA's), (25, 49895),

Gene: Button\_44 Start: 29409, Stop: 29227, Start Num: 19

Candidate Starts for Button\_44:

(Start: 19 @29409 has 7 MA's), (24, 29262), (26, 29232),

Gene: Fitzgerald\_59 Start: 50047, Stop: 50244, Start Num: 18

Candidate Starts for Fitzgerald\_59:

(Start: 16 @50035 has 1 MA's), (Start: 18 @50047 has 6 MA's), (20, 50092), (21, 50155), (22, 50194), (25, 50218),

Gene: GiKK\_46 Start: 29739, Stop: 29557, Start Num: 19

Candidate Starts for GiKK\_46:

(Start: 19 @29739 has 7 MA's), (24, 29592), (26, 29562),

Gene: Hexbug\_48 Start: 31508, Stop: 31341, Start Num: 19

Candidate Starts for Hexbug\_48:

(Start: 19 @31508 has 7 MA's), (26, 31346),

Gene: Jabberwocky\_60 Start: 50281, Stop: 50478, Start Num: 18

Candidate Starts for Jabberwocky\_60:

(Start: 16 @50269 has 1 MA's), (Start: 18 @50281 has 6 MA's), (20, 50326), (21, 50389), (22, 50428), (25, 50452),

Gene: Jamzy\_46 Start: 29722, Stop: 29540, Start Num: 19

Candidate Starts for Jamzy\_46:

(Start: 19 @29722 has 7 MA's), (24, 29575), (26, 29545),

Gene: Kamashten\_61 Start: 49154, Stop: 49354, Start Num: 18

Candidate Starts for Kamashten\_61:

(Start: 16 @49142 has 1 MA's), (Start: 18 @49154 has 6 MA's), (25, 49328),

Gene: Love\_65 Start: 50162, Stop: 50362, Start Num: 18

Candidate Starts for Love\_65:

(Start: 16 @50150 has 1 MA's), (Start: 18 @50162 has 6 MA's), (22, 50312), (25, 50336),

Gene: Margaret\_47 Start: 30462, Stop: 30289, Start Num: 19

Candidate Starts for Margaret\_47:

(Start: 19 @30462 has 7 MA's), (26, 30294),

Gene: Nodigi\_48 Start: 31494, Stop: 31327, Start Num: 19

Candidate Starts for Nodigi\_48:

(Start: 19 @31494 has 7 MA's), (23, 31359), (26, 31332),

Gene: Orla\_48 Start: 31467, Stop: 31300, Start Num: 19

Candidate Starts for Orla\_48:

(Start: 19 @31467 has 7 MA's), (26, 31305),

Gene: Sanjuju\_60 Start: 50167, Stop: 50376, Start Num: 16

Candidate Starts for Sanjuju\_60:

(Start: 16 @50167 has 1 MA's), (Start: 18 @50179 has 6 MA's), (20, 50224), (21, 50287), (22, 50326), (25, 50350),

Gene: Thing3\_61 Start: 49154, Stop: 49354, Start Num: 18

Candidate Starts for Thing3\_61:

(Start: 16 @49142 has 1 MA's), (Start: 18 @49154 has 6 MA's), (25, 49328),

Gene: Walrus\_80 Start: 50365, Stop: 50577, Start Num: 17

Candidate Starts for Walrus\_80:

(Start: 17 @50365 has 1 MA's), (22, 50524), (26, 50566),