

Pham 224999



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 224999 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224999 has 14 members, 2 are drafts.

Phages represented in each track:

- Track 1 : DobbysSock\_55
- Track 2 : Invectra\_62, Samman98\_61, Clark\_60
- Track 3 : Beenie\_55
- Track 4 : MichaelScott\_62
- Track 5 : Moosehead\_59
- Track 6 : Faith5x5\_54
- Track 7 : Morkie\_60
- Track 8 : Malisha\_80
- Track 9 : Spooky\_81
- Track 10 : Squiddly\_80
- Track 11 : Gudmit\_52
- Track 12 : REQ2\_66

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

The start number called the most often in the published annotations is 22, it was called in 8 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beenie\_55, Clark\_60, Gudmit\_52, Invectra\_62, Malisha\_80, Morkie\_60, Samman98\_61, Spooky\_81, Squiddly\_80,

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:

- DobbysSock\_55, Faith5x5\_54, MichaelScott\_62, Moosehead\_59, REQ2\_66,

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

Start 13:

- Found in 2 of 14 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Faith5x5\_54 (CZ6), Moosehead\_59 (CZ6),

Start 18:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MichaelScott\_62 (CZ4),

Start 22:

- Found in 9 of 14 ( 64.3% ) of genes in pham
- Manual Annotations of this start: 8 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beenie\_55 (CZ4), Clark\_60 (CZ4), Gudmit\_52 (singleton), Invectra\_62 (CZ4), Malisha\_80 (DN), Morkie\_60 (DH), Samman98\_61 (CZ4), Spooky\_81 (DN2), Squiddly\_80 (DN2),

Start 23:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: REQ2\_66 (singleton),

Start 30:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DobbysSock\_55 (CZ4),

### **Summary by clusters:**

There are 6 clusters represented in this pham: DN, singleton, DH, CZ6, CZ4, DN2,

Info for manual annotations of cluster CZ4:

- Start number 18 was manually annotated 1 time for cluster CZ4.
- Start number 22 was manually annotated 3 times for cluster CZ4.
- Start number 30 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster CZ6:

- Start number 13 was manually annotated 2 times for cluster CZ6.

Info for manual annotations of cluster DH:

- Start number 22 was manually annotated 1 time for cluster DH.

Info for manual annotations of cluster DN:

- Start number 22 was manually annotated 1 time for cluster DN.

Info for manual annotations of cluster DN2:

- Start number 22 was manually annotated 2 times for cluster DN2.

### **Gene Information:**

Gene: Beenie\_55 Start: 40138, Stop: 40506, Start Num: 22

Candidate Starts for Beenie\_55:

(Start: 22 @40138 has 8 MA's), (24, 40177), (34, 40240),

Gene: Clark\_60 Start: 39935, Stop: 40306, Start Num: 22

Candidate Starts for Clark\_60:

(Start: 22 @39935 has 8 MA's), (37, 40049), (39, 40073), (44, 40169), (53, 40226),

Gene: DobbysSock\_55 Start: 39516, Stop: 39908, Start Num: 30

Candidate Starts for DobbysSock\_55:

(1, 39198), (2, 39207), (3, 39222), (4, 39264), (10, 39330), (20, 39444), (21, 39453), (Start: 30 @39516 has 1 MA's), (46, 39750), (53, 39816),

Gene: Faith5x5\_54 Start: 34585, Stop: 35022, Start Num: 13

Candidate Starts for Faith5x5\_54:

(5, 34498), (6, 34507), (9, 34543), (Start: 13 @34585 has 2 MA's), (38, 34756), (40, 34765), (43, 34846), (52, 34924),

Gene: Gudmit\_52 Start: 32678, Stop: 33130, Start Num: 22

Candidate Starts for Gudmit\_52:

(Start: 22 @32678 has 8 MA's), (39, 32816), (40, 32822),

Gene: Invectra\_62 Start: 41508, Stop: 41879, Start Num: 22

Candidate Starts for Invectra\_62:

(Start: 22 @41508 has 8 MA's), (37, 41622), (39, 41646), (44, 41742), (53, 41799),

Gene: Malisha\_80 Start: 48865, Stop: 49314, Start Num: 22

Candidate Starts for Malisha\_80:

(Start: 22 @48865 has 8 MA's), (26, 48910), (29, 48916), (31, 48919), (38, 48997), (54, 49225),

Gene: MichaelScott\_62 Start: 41372, Stop: 41779, Start Num: 18

Candidate Starts for MichaelScott\_62:

(17, 41369), (Start: 18 @41372 has 1 MA's), (33, 41477), (35, 41501), (38, 41525), (47, 41648), (48, 41660),

Gene: Moosehead\_59 Start: 34924, Stop: 35379, Start Num: 13

Candidate Starts for Moosehead\_59:

(7, 34852), (8, 34861), (Start: 13 @34924 has 2 MA's), (32, 35059), (40, 35131), (42, 35206), (45, 35242), (49, 35269), (50, 35272), (51, 35275),

Gene: Morkie\_60 Start: 36373, Stop: 36831, Start Num: 22

Candidate Starts for Morkie\_60:

(11, 36250), (12, 36268), (14, 36289), (15, 36295), (Start: 22 @36373 has 8 MA's), (54, 36754), (55, 36805),

Gene: REQ2\_66 Start: 42263, Stop: 42595, Start Num: 23

Candidate Starts for REQ2\_66:

(23, 42263), (38, 42368), (39, 42371), (41, 42404), (47, 42473), (56, 42569),

Gene: Samman98\_61 Start: 40038, Stop: 40409, Start Num: 22

Candidate Starts for Samman98\_61:

(Start: 22 @40038 has 8 MA's), (37, 40152), (39, 40176), (44, 40272), (53, 40329),

Gene: Spooky\_81 Start: 46355, Stop: 46723, Start Num: 22

Candidate Starts for Spooky\_81:

(16, 46328), (19, 46343), (Start: 22 @46355 has 8 MA's), (25, 46400), (27, 46406), (28, 46409), (36, 46463), (39, 46490), (40, 46496), (53, 46643),

Gene: Squiddly\_80 Start: 48754, Stop: 49113, Start Num: 22

Candidate Starts for Squiddly\_80:

(Start: 22 @48754 has 8 MA's), (25, 48799), (27, 48805), (28, 48808), (38, 48886),