



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 87028 Report

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

Pham number 87028 has 14 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Brandonk123\_71
- Track 2 : Fosterous\_69, Charming\_69, Nordenberg\_64, Rofo\_66, Vivi2\_71, Tangent\_68
- Track 3 : MoontowerMania\_66, Love\_70, Affeca\_66, Angelicage\_65, Shivanishola\_65
- Track 4 : Jabberwocky\_65
- Track 5 : Ribeye\_65

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

The start number called the most often in the published annotations is 5, it was called in 12 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Affeca\_66, Angelicage\_65, Charming\_69, Fosterous\_69, Jabberwocky\_65, Love\_70, MoontowerMania\_66, Nordenberg\_64, Rofo\_66, Shivanishola\_65, Tangent\_68, Vivi2\_71,

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

- Brandonk123\_71,

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

- Ribeye\_65,

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

Start 4:

- Found in 1 of 14 ( 7.1% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ribeye\_65 (DE1),

Start 5:

- Found in 13 of 14 ( 92.9% ) of genes in pham

- Manual Annotations of this start: 12 of 14
- Called 92.3% of time when present
- Phage (with cluster) where this start called: Affeca\_66 (DE1), Angelicage\_65 (DE1), Charming\_69 (DE1), Fosterous\_69 (DE1), Jabberwocky\_65 (DE1), Love\_70 (DE1), MoontowerMania\_66 (DE1), Nordenberg\_64 (DE1), Rofo\_66 (DE1), Shivanishola\_65 (DE1), Tangent\_68 (DE1), Vivi2\_71 (DE1),

Start 6:

- Found in 14 of 14 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 7.1% of time when present
- Phage (with cluster) where this start called: Brandonk123\_71 (DE1),

### **Summary by clusters:**

There is one cluster represented in this pham: DE1

Info for manual annotations of cluster DE1:

- Start number 4 was manually annotated 1 time for cluster DE1.
- Start number 5 was manually annotated 12 times for cluster DE1.
- Start number 6 was manually annotated 1 time for cluster DE1.

### **Gene Information:**

Gene: Affeca\_66 Start: 51413, Stop: 51595, Start Num: 5

Candidate Starts for Affeca\_66:

(3, 51332), (Start: 5 @51413 has 12 MA's), (Start: 6 @51428 has 1 MA's), (7, 51485), (10, 51563), (11, 51581),

Gene: Angelicage\_65 Start: 51365, Stop: 51547, Start Num: 5

Candidate Starts for Angelicage\_65:

(3, 51284), (Start: 5 @51365 has 12 MA's), (Start: 6 @51380 has 1 MA's), (7, 51437), (10, 51515), (11, 51533),

Gene: Brandonk123\_71 Start: 51072, Stop: 51239, Start Num: 6

Candidate Starts for Brandonk123\_71:

(3, 50976), (Start: 5 @51057 has 12 MA's), (Start: 6 @51072 has 1 MA's), (7, 51129), (10, 51207), (11, 51225),

Gene: Charming\_69 Start: 50409, Stop: 50591, Start Num: 5

Candidate Starts for Charming\_69:

(3, 50328), (Start: 5 @50409 has 12 MA's), (Start: 6 @50424 has 1 MA's), (7, 50481), (10, 50559), (11, 50577),

Gene: Fosterous\_69 Start: 51403, Stop: 51585, Start Num: 5

Candidate Starts for Fosterous\_69:

(3, 51322), (Start: 5 @51403 has 12 MA's), (Start: 6 @51418 has 1 MA's), (7, 51475), (10, 51553), (11, 51571),

Gene: Jabberwocky\_65 Start: 51739, Stop: 51921, Start Num: 5

Candidate Starts for Jabberwocky\_65:

(3, 51658), (Start: 5 @51739 has 12 MA's), (Start: 6 @51754 has 1 MA's), (7, 51811), (10, 51889), (11, 51907),

Gene: Love\_70 Start: 51853, Stop: 52035, Start Num: 5

Candidate Starts for Love\_70:

(3, 51772), (Start: 5 @51853 has 12 MA's), (Start: 6 @51868 has 1 MA's), (7, 51925), (10, 52003), (11, 52021),

Gene: MoontowerMania\_66 Start: 51961, Stop: 52143, Start Num: 5

Candidate Starts for MoontowerMania\_66:

(3, 51880), (Start: 5 @51961 has 12 MA's), (Start: 6 @51976 has 1 MA's), (7, 52033), (10, 52111), (11, 52129),

Gene: Nordenberg\_64 Start: 49973, Stop: 50155, Start Num: 5

Candidate Starts for Nordenberg\_64:

(3, 49892), (Start: 5 @49973 has 12 MA's), (Start: 6 @49988 has 1 MA's), (7, 50045), (10, 50123), (11, 50141),

Gene: Ribeye\_65 Start: 49545, Stop: 49733, Start Num: 4

Candidate Starts for Ribeye\_65:

(1, 49107), (2, 49194), (3, 49467), (Start: 4 @49545 has 1 MA's), (Start: 6 @49563 has 1 MA's), (8, 49641), (9, 49683),

Gene: Rofo\_66 Start: 50985, Stop: 51167, Start Num: 5

Candidate Starts for Rofo\_66:

(3, 50904), (Start: 5 @50985 has 12 MA's), (Start: 6 @51000 has 1 MA's), (7, 51057), (10, 51135), (11, 51153),

Gene: Shivanishola\_65 Start: 49625, Stop: 49807, Start Num: 5

Candidate Starts for Shivanishola\_65:

(3, 49544), (Start: 5 @49625 has 12 MA's), (Start: 6 @49640 has 1 MA's), (7, 49697), (10, 49775), (11, 49793),

Gene: Tangent\_68 Start: 50690, Stop: 50872, Start Num: 5

Candidate Starts for Tangent\_68:

(3, 50609), (Start: 5 @50690 has 12 MA's), (Start: 6 @50705 has 1 MA's), (7, 50762), (10, 50840), (11, 50858),

Gene: Vivi2\_71 Start: 51745, Stop: 51927, Start Num: 5

Candidate Starts for Vivi2\_71:

(3, 51664), (Start: 5 @51745 has 12 MA's), (Start: 6 @51760 has 1 MA's), (7, 51817), (10, 51895), (11, 51913),