



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 106674 Report

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

Pham number 106674 has 15 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Lorelei\_63, Celeste\_64, Zemlya\_64, Brataylor\_65, Rana\_64, Danzina\_64, Dattran\_65
- Track 2 : Sujidade\_64, Godpower\_64, Goby\_64, Toma\_64, Lika\_63
- Track 3 : Nabi\_64
- Track 4 : R4\_68, ELB20\_67

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

Genes that call this "Most Annotated" start:

- Brataylor\_65, Celeste\_64, Danzina\_64, Dattran\_65, Goby\_64, Godpower\_64, Lika\_63, Lorelei\_63, Nabi\_64, Rana\_64, Sujidade\_64, Toma\_64, Zemlya\_64,

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:

- ELB20\_67, R4\_68,

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

Start 2:

- Found in 13 of 15 ( 86.7% ) of genes in pham
- Manual Annotations of this start: 13 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Brataylor\_65 (BD1), Celeste\_64 (BD1), Danzina\_64 (BD1), Dattran\_65 (BD1), Goby\_64 (BD1), Godpower\_64 (BD1), Lika\_63 (BD1), Lorelei\_63 (BD1), Nabi\_64 (BD1), Rana\_64 (BD1), Sujidade\_64 (BD1), Toma\_64 (BD1), Zemlya\_64 (BD1),

Start 3:

- Found in 2 of 15 ( 13.3% ) of genes in pham

- Manual Annotations of this start: 2 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ELB20\_67 (BD2), R4\_68 (BD2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BD1, BD2,

Info for manual annotations of cluster BD1:

- Start number 2 was manually annotated 13 times for cluster BD1.

Info for manual annotations of cluster BD2:

- Start number 3 was manually annotated 2 times for cluster BD2.

### **Gene Information:**

Gene: Brataylor\_65 Start: 44895, Stop: 44719, Start Num: 2

Candidate Starts for Brataylor\_65:

(Start: 2 @44895 has 13 MA's), (4, 44871), (6, 44826), (7, 44775), (8, 44769), (9, 44748),

Gene: Celeste\_64 Start: 44360, Stop: 44184, Start Num: 2

Candidate Starts for Celeste\_64:

(Start: 2 @44360 has 13 MA's), (4, 44336), (6, 44291), (7, 44240), (8, 44234), (9, 44213),

Gene: Danzina\_64 Start: 44609, Stop: 44433, Start Num: 2

Candidate Starts for Danzina\_64:

(Start: 2 @44609 has 13 MA's), (4, 44585), (6, 44540), (7, 44489), (8, 44483), (9, 44462),

Gene: Dattran\_65 Start: 44751, Stop: 44575, Start Num: 2

Candidate Starts for Dattran\_65:

(Start: 2 @44751 has 13 MA's), (4, 44727), (6, 44682), (7, 44631), (8, 44625), (9, 44604),

Gene: ELB20\_67 Start: 44234, Stop: 44061, Start Num: 3

Candidate Starts for ELB20\_67:

(1, 44300), (Start: 3 @44234 has 2 MA's), (5, 44201), (7, 44117),

Gene: Goby\_64 Start: 45207, Stop: 45031, Start Num: 2

Candidate Starts for Goby\_64:

(Start: 2 @45207 has 13 MA's), (4, 45183), (6, 45138), (7, 45087), (8, 45081), (9, 45060),

Gene: Godpower\_64 Start: 44483, Stop: 44307, Start Num: 2

Candidate Starts for Godpower\_64:

(Start: 2 @44483 has 13 MA's), (4, 44459), (6, 44414), (7, 44363), (8, 44357), (9, 44336),

Gene: Lika\_63 Start: 45036, Stop: 44860, Start Num: 2

Candidate Starts for Lika\_63:

(Start: 2 @45036 has 13 MA's), (4, 45012), (6, 44967), (7, 44916), (8, 44910), (9, 44889),

Gene: Lorelei\_63 Start: 44367, Stop: 44191, Start Num: 2

Candidate Starts for Lorelei\_63:

(Start: 2 @44367 has 13 MA's), (4, 44343), (6, 44298), (7, 44247), (8, 44241), (9, 44220),

Gene: Nabi\_64 Start: 44900, Stop: 44724, Start Num: 2

Candidate Starts for Nabi\_64:

(Start: 2 @44900 has 13 MA's), (4, 44876), (6, 44831), (7, 44780), (8, 44774), (9, 44753),

Gene: R4\_68 Start: 44394, Stop: 44221, Start Num: 3

Candidate Starts for R4\_68:

(1, 44460), (Start: 3 @44394 has 2 MA's), (5, 44361), (7, 44277),

Gene: Rana\_64 Start: 44789, Stop: 44613, Start Num: 2

Candidate Starts for Rana\_64:

(Start: 2 @44789 has 13 MA's), (4, 44765), (6, 44720), (7, 44669), (8, 44663), (9, 44642),

Gene: Sujidade\_64 Start: 45271, Stop: 45095, Start Num: 2

Candidate Starts for Sujidade\_64:

(Start: 2 @45271 has 13 MA's), (4, 45247), (6, 45202), (7, 45151), (8, 45145), (9, 45124),

Gene: Toma\_64 Start: 45210, Stop: 45034, Start Num: 2

Candidate Starts for Toma\_64:

(Start: 2 @45210 has 13 MA's), (4, 45186), (6, 45141), (7, 45090), (8, 45084), (9, 45063),

Gene: Zemlya\_64 Start: 44914, Stop: 44738, Start Num: 2

Candidate Starts for Zemlya\_64:

(Start: 2 @44914 has 13 MA's), (4, 44890), (6, 44845), (7, 44794), (8, 44788), (9, 44767),