



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 291574 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291574 has 19 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Dexers\_71, Sudan\_75, Conan\_74, Kaine\_73, Pavo\_74, Celery\_77, Verse\_73, Alsaber\_73, SunkenRoot\_74, Provolone\_74
- Track 2 : Amela\_72, phiCAM\_69, Verabelle\_75
- Track 3 : Vanseggelen\_78
- Track 4 : ZamZam\_77, Speedwell\_75
- Track 5 : Jhitchelle\_73
- Track 6 : ElGato\_74
- Track 7 : Saftant\_71

### ***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 9 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Alsaber\_73, Celery\_77, Conan\_74, Dexers\_71, ElGato\_74, Jhitchelle\_73, Kaine\_73, Pavo\_74, Provolone\_74, Speedwell\_75, Sudan\_75, SunkenRoot\_74, Vanseggelen\_78, Verse\_73, ZamZam\_77,

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

- Amela\_72, Verabelle\_75, phiCAM\_69,

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

- Saftant\_71,

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

Start 1:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 16.7% of time when present
- Phage (with cluster) where this start called: Amela\_72 (BD3), Verabelle\_75 (BD3), phiCAM\_69 (BD3),

#### Start 2:

- Found in 18 of 19 ( 94.7% ) of genes in pham
- Manual Annotations of this start: 9 of 11
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Alsaber\_73 (BD3), Celery\_77 (BD3), Conan\_74 (BD3), Dexers\_71 (BD3), ElGato\_74 (BD3), Jhitchelle\_73 (BD3), Kaine\_73 (BD3), Pavo\_74 (BD3), Provolone\_74 (BD3), Speedwell\_75 (BD3), Sudan\_75 (BD3), SunkenRoot\_74 (BD3), Vanseggelen\_78 (BD3), Verse\_73 (BD3), ZamZam\_77 (BD3),

#### Start 3:

- Found in 1 of 19 ( 5.3% ) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Saftant\_71 (BD3),

### **Summary by clusters:**

There is one cluster represented in this pham: BD3

Info for manual annotations of cluster BD3:

- Start number 1 was manually annotated 1 time for cluster BD3.
- Start number 2 was manually annotated 9 times for cluster BD3.
- Start number 3 was manually annotated 1 time for cluster BD3.

### **Gene Information:**

Gene: Alsaber\_73 Start: 46481, Stop: 46338, Start Num: 2

Candidate Starts for Alsaber\_73:

(Start: 1 @46490 has 1 MA's), (Start: 2 @46481 has 9 MA's),

Gene: Amela\_72 Start: 47090, Stop: 46938, Start Num: 1

Candidate Starts for Amela\_72:

(Start: 1 @47090 has 1 MA's), (Start: 2 @47081 has 9 MA's),

Gene: Celery\_77 Start: 46135, Stop: 45992, Start Num: 2

Candidate Starts for Celery\_77:

(Start: 1 @46144 has 1 MA's), (Start: 2 @46135 has 9 MA's),

Gene: Conan\_74 Start: 46733, Stop: 46590, Start Num: 2

Candidate Starts for Conan\_74:

(Start: 1 @46742 has 1 MA's), (Start: 2 @46733 has 9 MA's),

Gene: Dexers\_71 Start: 46699, Stop: 46553, Start Num: 2

Candidate Starts for Dexers\_71:

(Start: 1 @46708 has 1 MA's), (Start: 2 @46699 has 9 MA's),

Gene: ElGato\_74 Start: 46593, Stop: 46453, Start Num: 2

Candidate Starts for ElGato\_74:

(Start: 1 @46602 has 1 MA's), (Start: 2 @46593 has 9 MA's), (4, 46500),

Gene: Jhitchelle\_73 Start: 45770, Stop: 45624, Start Num: 2  
Candidate Starts for Jhitchelle\_73:  
(Start: 1 @45779 has 1 MA's), (Start: 2 @45770 has 9 MA's),

Gene: Kaine\_73 Start: 46505, Stop: 46362, Start Num: 2  
Candidate Starts for Kaine\_73:  
(Start: 1 @46514 has 1 MA's), (Start: 2 @46505 has 9 MA's),

Gene: Pavo\_74 Start: 46681, Stop: 46538, Start Num: 2  
Candidate Starts for Pavo\_74:  
(Start: 1 @46690 has 1 MA's), (Start: 2 @46681 has 9 MA's),

Gene: Provolone\_74 Start: 46822, Stop: 46679, Start Num: 2  
Candidate Starts for Provolone\_74:  
(Start: 1 @46831 has 1 MA's), (Start: 2 @46822 has 9 MA's),

Gene: Saftant\_71 Start: 46556, Stop: 46410, Start Num: 3  
Candidate Starts for Saftant\_71:  
(Start: 3 @46556 has 1 MA's), (5, 46451),

Gene: Speedwell\_75 Start: 47266, Stop: 47120, Start Num: 2  
Candidate Starts for Speedwell\_75:  
(Start: 1 @47275 has 1 MA's), (Start: 2 @47266 has 9 MA's), (5, 47161),

Gene: Sudan\_75 Start: 46488, Stop: 46345, Start Num: 2  
Candidate Starts for Sudan\_75:  
(Start: 1 @46497 has 1 MA's), (Start: 2 @46488 has 9 MA's),

Gene: SunkenRoot\_74 Start: 46855, Stop: 46712, Start Num: 2  
Candidate Starts for SunkenRoot\_74:  
(Start: 1 @46864 has 1 MA's), (Start: 2 @46855 has 9 MA's),

Gene: Vanseggelen\_78 Start: 46338, Stop: 46195, Start Num: 2  
Candidate Starts for Vanseggelen\_78:  
(Start: 1 @46347 has 1 MA's), (Start: 2 @46338 has 9 MA's),

Gene: Verabelle\_75 Start: 45786, Stop: 45634, Start Num: 1  
Candidate Starts for Verabelle\_75:  
(Start: 1 @45786 has 1 MA's), (Start: 2 @45777 has 9 MA's),

Gene: Verse\_73 Start: 47119, Stop: 46976, Start Num: 2  
Candidate Starts for Verse\_73:  
(Start: 1 @47128 has 1 MA's), (Start: 2 @47119 has 9 MA's),

Gene: ZamZam\_77 Start: 46868, Stop: 46722, Start Num: 2  
Candidate Starts for ZamZam\_77:  
(Start: 1 @46877 has 1 MA's), (Start: 2 @46868 has 9 MA's), (5, 46763),

Gene: phiCAM\_69 Start: 47950, Stop: 47798, Start Num: 1  
Candidate Starts for phiCAM\_69:  
(Start: 1 @47950 has 1 MA's), (Start: 2 @47941 has 9 MA's),