



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 297118 Report

This analysis was run 04/25/26 on database version 644.

Pham number 297118 has 13 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Cuco\_79, Midas2\_77, Dublin\_80, Theia\_80, Swirley\_80, MarysWell\_80, Coog\_77
- Track 2 : Benedict\_81, Chadwick\_83, Naca\_81, PetterN\_86, UnionJack\_82, Scorpia\_80

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

The start number called the most often in the published annotations is 1, it was called in 13 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Benedict\_81, Chadwick\_83, Coog\_77, Cuco\_79, Dublin\_80, MarysWell\_80, Midas2\_77, Naca\_81, PetterN\_86, Scorpia\_80, Swirley\_80, Theia\_80, UnionJack\_82,

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

- 

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

- 

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

Start 1:

- Found in 13 of 13 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 13 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Benedict\_81 (A5), Chadwick\_83 (A5), Coog\_77 (A5), Cuco\_79 (A5), Dublin\_80 (A5), MarysWell\_80 (A5), Midas2\_77 (A5), Naca\_81 (A5), PetterN\_86 (A5), Scorpia\_80 (A5), Swirley\_80 (A5), Theia\_80 (A5), UnionJack\_82 (A5),

### **Summary by clusters:**

There is one cluster represented in this pham: A5

Info for manual annotations of cluster A5:

•Start number 1 was manually annotated 13 times for cluster A5.

**Gene Information:**

Gene: Benedict\_81 Start: 46318, Stop: 46169, Start Num: 1

Candidate Starts for Benedict\_81:

(Start: 1 @46318 has 13 MA's), (4, 46267), (7, 46183),

Gene: Chadwick\_83 Start: 46383, Stop: 46234, Start Num: 1

Candidate Starts for Chadwick\_83:

(Start: 1 @46383 has 13 MA's), (4, 46332), (7, 46248),

Gene: Coog\_77 Start: 46766, Stop: 46626, Start Num: 1

Candidate Starts for Coog\_77:

(Start: 1 @46766 has 13 MA's), (2, 46757), (3, 46742), (4, 46721), (5, 46718), (6, 46646),

Gene: Cuco\_79 Start: 46626, Stop: 46486, Start Num: 1

Candidate Starts for Cuco\_79:

(Start: 1 @46626 has 13 MA's), (2, 46617), (3, 46602), (4, 46581), (5, 46578), (6, 46506),

Gene: Dublin\_80 Start: 46898, Stop: 46758, Start Num: 1

Candidate Starts for Dublin\_80:

(Start: 1 @46898 has 13 MA's), (2, 46889), (3, 46874), (4, 46853), (5, 46850), (6, 46778),

Gene: MarysWell\_80 Start: 47141, Stop: 47001, Start Num: 1

Candidate Starts for MarysWell\_80:

(Start: 1 @47141 has 13 MA's), (2, 47132), (3, 47117), (4, 47096), (5, 47093), (6, 47021),

Gene: Midas2\_77 Start: 46766, Stop: 46626, Start Num: 1

Candidate Starts for Midas2\_77:

(Start: 1 @46766 has 13 MA's), (2, 46757), (3, 46742), (4, 46721), (5, 46718), (6, 46646),

Gene: Naca\_81 Start: 47061, Stop: 46912, Start Num: 1

Candidate Starts for Naca\_81:

(Start: 1 @47061 has 13 MA's), (4, 47010), (7, 46926),

Gene: PetterN\_86 Start: 46848, Stop: 46699, Start Num: 1

Candidate Starts for PetterN\_86:

(Start: 1 @46848 has 13 MA's), (4, 46797), (7, 46713),

Gene: Scorpia\_80 Start: 46419, Stop: 46270, Start Num: 1

Candidate Starts for Scorpia\_80:

(Start: 1 @46419 has 13 MA's), (4, 46368), (7, 46284),

Gene: Swirley\_80 Start: 46798, Stop: 46658, Start Num: 1

Candidate Starts for Swirley\_80:

(Start: 1 @46798 has 13 MA's), (2, 46789), (3, 46774), (4, 46753), (5, 46750), (6, 46678),

Gene: Theia\_80 Start: 47129, Stop: 46989, Start Num: 1

Candidate Starts for Theia\_80:

(Start: 1 @47129 has 13 MA's), (2, 47120), (3, 47105), (4, 47084), (5, 47081), (6, 47009),

Gene: UnionJack\_82 Start: 46252, Stop: 46103, Start Num: 1

Candidate Starts for UnionJack\_82:

(Start: 1 @46252 has 13 MA's), (4, 46201), (7, 46117),