



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 281103 Report

This analysis was run 02/07/26 on database version 634.

Pham number 281103 has 11 members, 1 are drafts.

Phages represented in each track:

- Track 1 : FatCactus\_83
- Track 2 : Benedict\_91, Scorpia\_86, UnionJack\_86, Chadwick\_89, PetterN\_94, Jabiru\_87, Airmid\_90, ElTiger69\_93, Naca\_88
- Track 3 : Phillis\_98

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

The start number called the most often in the published annotations is 8, it was called in 9 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Airmid\_90, Benedict\_91, Chadwick\_89, ElTiger69\_93, Jabiru\_87, Naca\_88, PetterN\_94, Scorpia\_86, UnionJack\_86,

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:

- FatCactus\_83, Phillis\_98,

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

Start 7:

- Found in 1 of 11 ( 9.1% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phillis\_98 (A8),

Start 8:

- Found in 9 of 11 ( 81.8% ) of genes in pham
- Manual Annotations of this start: 9 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Airmid\_90 (A5), Benedict\_91 (A5), Chadwick\_89 (A5), ElTiger69\_93 (A5), Jabiru\_87 (A5), Naca\_88 (A5), PetterN\_94

(A5), Scorpia\_86 (A5), UnionJack\_86 (A5),

Start 10:

- Found in 1 of 11 ( 9.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FatCactus\_83 (A20),

### **Summary by clusters:**

There are 3 clusters represented in this pham: A20, A8, A5,

Info for manual annotations of cluster A5:

- Start number 8 was manually annotated 9 times for cluster A5.

Info for manual annotations of cluster A8:

- Start number 7 was manually annotated 1 time for cluster A8.

### **Gene Information:**

Gene: Airmid\_90 Start: 49856, Stop: 49605, Start Num: 8

Candidate Starts for Airmid\_90:

(Start: 8 @49856 has 9 MA's), (13, 49793), (15, 49772), (16, 49754), (19, 49679), (20, 49637),

Gene: Benedict\_91 Start: 49699, Stop: 49448, Start Num: 8

Candidate Starts for Benedict\_91:

(Start: 8 @49699 has 9 MA's), (13, 49636), (15, 49615), (16, 49597), (19, 49522), (20, 49480),

Gene: Chadwick\_89 Start: 48037, Stop: 47786, Start Num: 8

Candidate Starts for Chadwick\_89:

(Start: 8 @48037 has 9 MA's), (13, 47974), (15, 47953), (16, 47935), (19, 47860), (20, 47818),

Gene: ElTiger69\_93 Start: 50120, Stop: 49869, Start Num: 8

Candidate Starts for ElTiger69\_93:

(Start: 8 @50120 has 9 MA's), (13, 50057), (15, 50036), (16, 50018), (19, 49943), (20, 49901),

Gene: FatCactus\_83 Start: 48543, Stop: 48325, Start Num: 10

Candidate Starts for FatCactus\_83:

(3, 48630), (10, 48543), (12, 48510), (14, 48498), (17, 48438), (18, 48435), (19, 48402),

Gene: Jabiru\_87 Start: 49146, Stop: 48898, Start Num: 8

Candidate Starts for Jabiru\_87:

(Start: 8 @49146 has 9 MA's), (13, 49083), (15, 49065), (16, 49047), (19, 48972), (20, 48930),

Gene: Naca\_88 Start: 50210, Stop: 49959, Start Num: 8

Candidate Starts for Naca\_88:

(Start: 8 @50210 has 9 MA's), (13, 50147), (15, 50126), (16, 50108), (19, 50033), (20, 49991),

Gene: PetterN\_94 Start: 49736, Stop: 49485, Start Num: 8

Candidate Starts for PetterN\_94:

(Start: 8 @49736 has 9 MA's), (13, 49673), (15, 49652), (16, 49634), (19, 49559), (20, 49517),

Gene: Phillis\_98 Start: 50019, Stop: 49765, Start Num: 7

Candidate Starts for Phillis\_98:

(1, 50163), (2, 50103), (4, 50055), (5, 50043), (6, 50037), (Start: 7 @50019 has 1 MA's), (9, 49989), (11, 49974), (13, 49950), (15, 49929), (19, 49842), (21, 49797), (22, 49788),

Gene: Scorpia\_86 Start: 49308, Stop: 49057, Start Num: 8

Candidate Starts for Scorpia\_86:

(Start: 8 @49308 has 9 MA's), (13, 49245), (15, 49224), (16, 49206), (19, 49131), (20, 49089),

Gene: UnionJack\_86 Start: 47773, Stop: 47522, Start Num: 8

Candidate Starts for UnionJack\_86:

(Start: 8 @47773 has 9 MA's), (13, 47710), (15, 47689), (16, 47671), (19, 47596), (20, 47554),