



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 281088 Report

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

Pham number 281088 has 11 members, 8 are drafts.

Phages represented in each track:

- Track 1 : Panchaali\_172
- Track 2 : KSunshine22\_165, DunneganBoMo\_160, Artu\_162, Emmetator\_163
- Track 3 : BooTeria\_169
- Track 4 : Ellewin\_166, WaddleDee\_156
- Track 5 : Atuin\_163, ReginaGlobina\_176, LeoJr\_172

### ***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 2 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Artu\_162, Atuin\_163, BooTeria\_169, DunneganBoMo\_160, Emmetator\_163, KSunshine22\_165, LeoJr\_172, Panchaali\_172, ReginaGlobina\_176,

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

- Ellewin\_166, WaddleDee\_156,

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

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

Start 1:

- Found in 8 of 11 ( 72.7% ) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Ellewin\_166 (FC), WaddleDee\_156 (FC),

Start 2:

- Found in 11 of 11 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 2 of 3
- Called 81.8% of time when present

- Phage (with cluster) where this start called: Artu\_162 (FC), Atuin\_163 (FC), BooTeria\_169 (FC), DunneganBoMo\_160 (FC), Emmetator\_163 (FC), KSunshine22\_165 (FC), LeoJr\_172 (FC), Panchaali\_172 (FC), ReginaGlobina\_176 (FC),

### **Summary by clusters:**

There is one cluster represented in this pham: FC

Info for manual annotations of cluster FC:

- Start number 1 was manually annotated 1 time for cluster FC.
- Start number 2 was manually annotated 2 times for cluster FC.

### **Gene Information:**

Gene: Artu\_162 Start: 110968, Stop: 111345, Start Num: 2

Candidate Starts for Artu\_162:

(Start: 1 @110932 has 1 MA's), (Start: 2 @110968 has 2 MA's), (3, 111052), (4, 111079), (5, 111103), (6, 111202), (7, 111220), (9, 111295),

Gene: Atuin\_163 Start: 113494, Stop: 113901, Start Num: 2

Candidate Starts for Atuin\_163:

(Start: 2 @113494 has 2 MA's), (4, 113623), (8, 113812),

Gene: BooTeria\_169 Start: 111135, Stop: 111512, Start Num: 2

Candidate Starts for BooTeria\_169:

(Start: 1 @111099 has 1 MA's), (Start: 2 @111135 has 2 MA's), (3, 111219), (4, 111246), (6, 111369), (7, 111387), (9, 111462),

Gene: DunneganBoMo\_160 Start: 110317, Stop: 110694, Start Num: 2

Candidate Starts for DunneganBoMo\_160:

(Start: 1 @110281 has 1 MA's), (Start: 2 @110317 has 2 MA's), (3, 110401), (4, 110428), (5, 110452), (6, 110551), (7, 110569), (9, 110644),

Gene: Ellewin\_166 Start: 110388, Stop: 110801, Start Num: 1

Candidate Starts for Ellewin\_166:

(Start: 1 @110388 has 1 MA's), (Start: 2 @110424 has 2 MA's), (3, 110508), (4, 110535), (6, 110658), (7, 110676), (9, 110751),

Gene: Emmetator\_163 Start: 110633, Stop: 111010, Start Num: 2

Candidate Starts for Emmetator\_163:

(Start: 1 @110597 has 1 MA's), (Start: 2 @110633 has 2 MA's), (3, 110717), (4, 110744), (5, 110768), (6, 110867), (7, 110885), (9, 110960),

Gene: KSunshine22\_165 Start: 111380, Stop: 111757, Start Num: 2

Candidate Starts for KSunshine22\_165:

(Start: 1 @111344 has 1 MA's), (Start: 2 @111380 has 2 MA's), (3, 111464), (4, 111491), (5, 111515), (6, 111614), (7, 111632), (9, 111707),

Gene: LeoJr\_172 Start: 114114, Stop: 114521, Start Num: 2

Candidate Starts for LeoJr\_172:

(Start: 2 @114114 has 2 MA's), (4, 114243), (8, 114432),

Gene: Panchaali\_172 Start: 111232, Stop: 111618, Start Num: 2

Candidate Starts for Panchaali\_172:

(Start: 1 @111196 has 1 MA's), (Start: 2 @111232 has 2 MA's), (3, 111316), (4, 111343), (7, 111484),

Gene: ReginaGlobina\_176 Start: 115387, Stop: 115794, Start Num: 2

Candidate Starts for ReginaGlobina\_176:

(Start: 2 @115387 has 2 MA's), (4, 115516), (8, 115705),

Gene: WaddleDee\_156 Start: 109554, Stop: 109967, Start Num: 1

Candidate Starts for WaddleDee\_156:

(Start: 1 @109554 has 1 MA's), (Start: 2 @109590 has 2 MA's), (3, 109674), (4, 109701), (6, 109824),  
(7, 109842), (9, 109917),