

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 221995 Report

This analysis was run 03/28/25 on database version 593.

Pham number 221995 has 11 members, 4 are drafts.

Phages represented in each track:

• Track 1 : Garak_86, ToneTone_82, Temprado_86, Helmet_86, Artemis2UCLA_84, Zaka 85. BlessJoy 84

Track 2 : Tucker_85, Indra_88

Track 3 : CloudWang3_85, Hammer_85

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

The start number called the most often in the published annotations is 5, it was called in 4 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

CloudWang3_85, Hammer_85, Indra_88, Tucker_85,

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

 Artemis2UCLA_84, BlessJoy_84, Garak_86, Helmet_86, Temprado_86, ToneTone_82, Zaka_85,

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

Summary by start number:

Start 4:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 63.6% of time when present
- Phage (with cluster) where this start called: Artemis2UCLA_84 (A6), BlessJoy_84 (A6), Garak_86 (A6), Helmet_86 (A6), Temprado_86 (A6), ToneTone_82 (A6), Zaka_85 (A6),

Start 5:

- Found in 11 of 11 (100.0%) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 36.4% of time when present

• Phage (with cluster) where this start called: CloudWang3_85 (A6), Hammer_85 (A6), Indra_88 (A6), Tucker_85 (A6),

Summary by clusters:

There is one cluster represented in this pham: A6

Info for manual annotations of cluster A6:

- •Start number 4 was manually annotated 3 times for cluster A6.
- •Start number 5 was manually annotated 4 times for cluster A6.

Gene Information:

Gene: Artemis2UCLA_84 Start: 45607, Stop: 45476, Start Num: 4

Candidate Starts for Artemis2UCLA 84:

(1, 45679), (2, 45667), (3, 45613), (Start: 4 @45607 has 3 MA's), (Start: 5 @45601 has 4 MA's), (6, 45565), (7, 45553), (10, 45508),

Gene: BlessJoy_84 Start: 46128, Stop: 45997, Start Num: 4

Candidate Starts for BlessJoy_84:

(1, 46200), (2, 46188), (3, 46134), (Start: 4 @46128 has 3 MA's), (Start: 5 @46122 has 4 MA's), (6, 46086), (7, 46074), (10, 46029),

Gene: CloudWang3_85 Start: 46130, Stop: 46005, Start Num: 5

Candidate Starts for CloudWang3 85:

(2, 46196), (3, 46142), (Start: 4 @46136 has 3 MA's), (Start: 5 @46130 has 4 MA's), (6, 46094), (7, 46082), (8, 46061), (9, 46049), (10, 46037),

Gene: Garak_86 Start: 46069, Stop: 45938, Start Num: 4

Candidate Starts for Garak 86:

(1, 46141), (2, 46129), (3, 46075), (Start: 4 @46069 has 3 MA's), (Start: 5 @46063 has 4 MA's), (6, 46027), (7, 46015), (10, 45970),

Gene: Hammer_85 Start: 45448, Stop: 45323, Start Num: 5

Candidate Starts for Hammer_85:

(2, 45514), (3, 45460), (Start: 4 @45454 has 3 MA's), (Start: 5 @45448 has 4 MA's), (6, 45412), (7, 45400), (8, 45379), (9, 45367), (10, 45355),

Gene: Helmet 86 Start: 46069, Stop: 45938, Start Num: 4

Candidate Starts for Helmet 86:

(1, 46141), (2, 46129), (3, 46075), (Start: 4 @46069 has 3 MA's), (Start: 5 @46063 has 4 MA's), (6, 46027), (7, 46015), (10, 45970),

Gene: Indra_88 Start: 46064, Stop: 45939, Start Num: 5

Candidate Starts for Indra 88:

(1, 46142), (2, 46130), (3, 46076), (Start: 4 @46070 has 3 MA's), (Start: 5 @46064 has 4 MA's), (6, 46028), (7, 46016), (10, 45971),

Gene: Temprado 86 Start: 46069, Stop: 45938, Start Num: 4

Candidate Starts for Temprado 86:

(1, 46141), (2, 46129), (3, 46075), (Start: 4 @46069 has 3 MA's), (Start: 5 @46063 has 4 MA's), (6, 46027), (7, 46015), (10, 45970),

Gene: ToneTone_82 Start: 45629, Stop: 45498, Start Num: 4

Candidate Starts for ToneTone_82:

(1, 45701), (2, 45689), (3, 45635), (Start: 4 @45629 has 3 MA's), (Start: 5 @45623 has 4 MA's), (6, 45587), (7, 45575), (10, 45530),

Gene: Tucker_85 Start: 45826, Stop: 45701, Start Num: 5

Candidate Starts for Tucker_85:

(1, 45904), (2, 45892), (3, 45838), (Start: 4 @45832 has 3 MA's), (Start: 5 @45826 has 4 MA's), (6, 45790), (7, 45778), (10, 45733),

Gene: Zaka_85 Start: 45700, Stop: 45569, Start Num: 4

Candidate Starts for Zaka_85:

(1, 45772), (2, 45760), (3, 45706), (Start: 4 @45700 has 3 MA's), (Start: 5 @45694 has 4 MA's), (6, 45658), (7, 45646), (10, 45601),