

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 221967 Report

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

Pham number 221967 has 12 members, 8 are drafts.

Phages represented in each track:

Track 1 : Poochiewood 83

• Track 2 : Enceladus 82

• Track 3 : Douzhi 85

Track 4: FarmResident\_86, Sheng711\_86

• Track 5 : Chaser 85

• Track 6 : BrainDrainer\_86, PYPDinur\_85

Track 7 : Kropertea\_81

• Track 8 : Quby\_86

Track 9 : Baudelaire\_93, Aegeus\_93

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

The start number called the most often in the published annotations is 10, it was called in 3 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Aegeus\_93, Baudelaire\_93, Enceladus\_82,

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

• BrainDrainer\_86, Chaser\_85, Douzhi\_85, FarmResident\_86, Kropertea\_81, PYPDinur\_85, Quby\_86, Sheng711\_86,

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

Poochiewood 83.

### Summary by start number:

#### Start 3:

- Found in 8 of 12 (66.7%) of genes in pham
- Manual Annotations of this start: 1 of 4
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Chaser\_85 (L4),

### Start 5:

- Found in 4 of 12 (33.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrainDrainer\_86 (L4), PYPDinur\_85 (L4), Poochiewood\_83 (L1), Quby\_86 (L4),

#### Start 7:

- Found in 8 of 12 (66.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Douzhi\_85 (L4), FarmResident\_86 (L4), Kropertea\_81 (L4), Sheng711\_86 (L4),

### Start 10:

- Found in 11 of 12 (91.7%) of genes in pham
- Manual Annotation's of this start: 3 of 4
- Called 27.3% of time when present
- Phage (with cluster) where this start called: Aegeus\_93 (L5), Baudelaire\_93 (L5), Enceladus\_82 (L1),

## Summary by clusters:

There are 3 clusters represented in this pham: L4, L5, L1,

Info for manual annotations of cluster L1:

•Start number 10 was manually annotated 1 time for cluster L1.

Info for manual annotations of cluster L4:

•Start number 3 was manually annotated 1 time for cluster L4.

Info for manual annotations of cluster L5:

•Start number 10 was manually annotated 2 times for cluster L5.

### Gene Information:

Gene: Aegeus\_93 Start: 57447, Stop: 57713, Start Num: 10

Candidate Starts for Aegeus\_93:

(Start: 10 @57447 has 3 MA's), (12, 57561), (13, 57588), (14, 57597), (18, 57657),

Gene: Baudelaire\_93 Start: 57447, Stop: 57713, Start Num: 10

Candidate Starts for Baudelaire 93:

(Start: 10 @57447 has 3 MA's), (12, 57561), (13, 57588), (14, 57597), (18, 57657),

Gene: BrainDrainer 86 Start: 55106, Stop: 55468, Start Num: 5

Candidate Starts for BrainDrainer 86:

(1, 55040), (Start: 3 @55052 has 1 MA's), (5, 55106), (7, 55130), (9, 55151), (Start: 10 @55208 has 3

MA's), (11, 55229), (12, 55319), (13, 55346), (18, 55415),

Gene: Chaser 85 Start: 54673, Stop: 55089, Start Num: 3

Candidate Starts for Chaser 85:

(1, 54661), (Start: 3 @54673 has 1 MA's), (7, 54751), (9, 54772), (Start: 10 @54829 has 3 MA's), (11, 54850), (12, 54940), (13, 54967), (18, 55036),

Gene: Douzhi\_85 Start: 54789, Stop: 55127, Start Num: 7

Candidate Starts for Douzhi\_85:

(2, 54702), (Start: 3 @54711 has 1 MA's), (7, 54789), (9, 54810), (Start: 10 @54867 has 3 MA's), (11, 54888), (12, 54978), (13, 55005), (17, 55044), (18, 55074),

Gene: Enceladus\_82 Start: 54621, Stop: 54881, Start Num: 10

Candidate Starts for Enceladus 82:

(4, 54468), (Start: 10 @54621 has 3 MA's), (13, 54759), (15, 54780), (16, 54786), (18, 54828),

Gene: FarmResident\_86 Start: 54528, Stop: 54866, Start Num: 7

Candidate Starts for FarmResident 86:

(1, 54438), (2, 54441), (Start: 3 @54450 has 1 MA's), (7, 54528), (9, 54549), (Start: 10 @54606 has 3 MA's), (11, 54627), (12, 54717), (13, 54744), (17, 54783), (18, 54813),

Gene: Kropertea\_81 Start: 54741, Stop: 55079, Start Num: 7

Candidate Starts for Kropertea 81:

(Start: 3 @54663 has 1 MA's), (7, 54741), (8, 54750), (9, 54762), (Start: 10 @54819 has 3 MA's), (11, 54840), (13, 54957), (18, 55026),

Gene: PYPDinur 85 Start: 55358, Stop: 55720, Start Num: 5

Candidate Starts for PYPDinur\_85:

(1, 55292), (Start: 3 @55304 has 1 MA's), (5, 55358), (7, 55382), (9, 55403), (Start: 10 @55460 has 3 MA's), (11, 55481), (12, 55571), (13, 55598), (18, 55667),

Gene: Poochiewood 83 Start: 55082, Stop: 55444, Start Num: 5

Candidate Starts for Poochiewood 83:

(4, 55031), (5, 55082), (6, 55088), (13, 55322), (15, 55343), (16, 55349), (18, 55391),

Gene: Quby\_86 Start: 54686, Stop: 55048, Start Num: 5

Candidate Starts for Quby\_86:

(1, 54620), (Start: 3 @54632 has 1 MA's), (5, 54686), (7, 54710), (9, 54731), (Start: 10 @54788 has 3 MA's), (11, 54809), (12, 54899), (13, 54926), (17, 54965), (18, 54995),

Gene: Sheng711\_86 Start: 54858, Stop: 55196, Start Num: 7

Candidate Starts for Sheng711\_86:

(1, 54768), (2, 54771), (Start: 3 @54780 has 1 MA's), (7, 54858), (9, 54879), (Start: 10 @54936 has 3 MA's), (11, 54957), (12, 55047), (13, 55074), (17, 55113), (18, 55143),