

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 214968 Report

This analysis was run 02/22/25 on database version 588.

Pham number 214968 has 8 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Brunswick 44

Track 2 : ElephantMan_42, Niktson_42

Track 3 : CastorTray_45

Track 4 : Darby_42

Track 5 : LilHuddy_45

• Track 6 : LeoJr_278

Track 7 : ReginaGlobina_281

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 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Brunswick_44, CastorTray_45, ElephantMan_42, Niktson_42,

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

Darby_42,

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

LeoJr_278, LilHuddy_45, ReginaGlobina_281,

Summary by start number:

Start 4:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Darby_42 (AU1),

Start 5:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 4 of 6
- Called 80.0% of time when present

• Phage (with cluster) where this start called: Brunswick_44 (AU1), CastorTray_45 (AU1), ElephantMan_42 (AU1), Niktson_42 (AU1),

Start 7:

- Found in 2 of 8 (25.0%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LeoJr_278 (FC), ReginaGlobina_281 (FC),

Start 8:

- Found in 1 of 8 (12.5%) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LilHuddy_45 (AU2),

Summary by clusters:

There are 3 clusters represented in this pham: AU1, AU2, FC,

Info for manual annotations of cluster AU1:

- •Start number 4 was manually annotated 1 time for cluster AU1.
- •Start number 5 was manually annotated 4 times for cluster AU1.

Info for manual annotations of cluster AU2:

•Start number 8 was manually annotated 1 time for cluster AU2.

Gene Information:

```
Gene: Brunswick_44 Start: 32781, Stop: 33044, Start Num: 5
```

Candidate Starts for Brunswick 44:

(2, 32742), (3, 32769), (Start: 5 @32781 has 4 MA's), (10, 32880), (14, 32988),

Gene: CastorTray_45 Start: 33509, Stop: 33772, Start Num: 5

Candidate Starts for CastorTray_45:

(3, 33497), (Start: 5 @33509 has 4 MA's), (10, 33608), (11, 33614), (14, 33716),

Gene: Darby 42 Start: 32677, Stop: 32943, Start Num: 4

Candidate Starts for Darby_42:

(1, 32617), (Start: 4 @32677 has 1 MA's), (Start: 5 @32683 has 4 MA's), (11, 32788), (14, 32887), (15, 32920),

Gene: ElephantMan 42 Start: 33354, Stop: 33617, Start Num: 5

Candidate Starts for ElephantMan_42:

(3, 33342), (Start: 5 @33354 has 4 MA's), (10, 33453), (14, 33561),

Gene: LeoJr 278 Start: 165382, Stop: 165585, Start Num: 7

Candidate Starts for LeoJr 278:

(6, 165367), (7, 165382), (13, 165517), (14, 165529), (15, 165562),

Gene: LilHuddy_45 Start: 33068, Stop: 33277, Start Num: 8

Candidate Starts for LilHuddy_45:

(Start: 8 @ 33068 has 1 MA's), (14, 33221), (15, 33254),

Gene: Niktson_42 Start: 33354, Stop: 33617, Start Num: 5

Candidate Starts for Niktson_42:

(3, 33342), (Start: 5 @33354 has 4 MA's), (10, 33453), (14, 33561),

Gene: ReginaGlobina_281 Start: 166823, Stop: 167026, Start Num: 7

Candidate Starts for ReginaGlobina_281:

(6, 166808), (7, 166823), (9, 166859), (11, 166877), (12, 166937), (13, 166958), (14, 166970), (15, 166808), (14, 166970), (15, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16, 166808), (16

167003),