

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 153659 Report

This analysis was run 04/28/24 on database version 559.

Pham number 153659 has 13 members, 2 are drafts.

Phages represented in each track:

Track 1: Yeezus 85, Jaek 85, Boersma 87, Ichor 85, Amigo 85

• Track 2 : Heylee\_83, Amavida\_83

Track 3 : SorJuana\_85, Gorgeous\_85

• Track 4 : Anansi 85 • Track 5: Rings 85

• Track 6 : Molivia\_90

Track 7: Thunderclap 84

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

The start number called the most often in the published annotations is 1, it was called in 10 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Amavida\_83, Amigo\_85, Boersma\_87, Gorgeous\_85, Heylee\_83, Ichor\_85, Jaek\_85, Molivia\_90, Rings\_85, SorJuana\_85, Thunderclap\_84, Yeezus\_85,

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

Genes that do not have the "Most Annotated" start: Anansi\_85,

## Summary by start number:

#### Start 1:

- Found in 12 of 13 (92.3%) of genes in pham
- Manual Annotation's of this start: 10 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amavida\_83 (AQ), Amigo\_85 (AQ), Boersma\_87 (AQ), Gorgeous\_85 (AQ), Heylee\_83 (AQ), Ichor\_85 (AQ), Jaek\_85 (AQ), Molivia\_90 (AQ), Rings\_85 (AQ), SorJuana\_85 (AQ), Thunderclap 84 (AQ), Yeezus\_85 (AQ),

#### Start 7:

- Found in 12 of 13 (92.3%) of genes in pham
- Manual Annotation's of this start: 1 of 11
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Anansi\_85 (AQ),

### **Summary by clusters:**

There is one cluster represented in this pham: AQ

Info for manual annotations of cluster AQ:

- •Start number 1 was manually annotated 10 times for cluster AQ.
- •Start number 7 was manually annotated 1 time for cluster AQ.

#### Gene Information:

Gene: Amavida\_83 Start: 53647, Stop: 54477, Start Num: 1

Candidate Starts for Amavida 83:

(Start: 1 @53647 has 10 MA's), (2, 53746), (3, 53794), (Start: 7 @53884 has 1 MA's), (8, 53902), (12, 54055), (13, 54061), (15, 54100), (17, 54130), (21, 54190),

Gene: Amigo\_85 Start: 53898, Stop: 54728, Start Num: 1

Candidate Starts for Amigo\_85:

(Start: 1 @53898 has 10 MA's), (3, 54045), (4, 54054), (Start: 7 @54135 has 1 MA's), (9, 54237), (12, 54306), (13, 54312), (15, 54351), (21, 54441),

Gene: Anansi\_85 Start: 53802, Stop: 54398, Start Num: 7

Candidate Starts for Anansi\_85:

(Start: 7 @53802 has 1 MA's), (9, 53904), (12, 53973), (13, 53979), (15, 54018), (17, 54048), (19, 54096), (21, 54108),

Gene: Boersma 87 Start: 53898, Stop: 54728, Start Num: 1

Candidate Starts for Boersma 87:

(Start: 1 @53898 has 10 MA's), (3, 54045), (4, 54054), (Start: 7 @54135 has 1 MA's), (9, 54237), (12, 54306), (13, 54312), (15, 54351), (21, 54441),

Gene: Gorgeous\_85 Start: 53698, Stop: 54609, Start Num: 1

Candidate Starts for Gorgeous 85:

(Start: 1 @53698 has 10 MA's), (3, 53845), (4, 53854), (Start: 7 @53935 has 1 MA's), (9, 54037), (12, 54106), (13, 54112), (15, 54151), (17, 54181), (21, 54241), (24, 54550),

Gene: Heylee\_83 Start: 53647, Stop: 54477, Start Num: 1

Candidate Starts for Heylee\_83:

(Start: 1 @53647 has 10 MA's), (2, 53746), (3, 53794), (Start: 7 @53884 has 1 MA's), (8, 53902), (12, 54055), (13, 54061), (15, 54100), (17, 54130), (21, 54190),

Gene: Ichor 85 Start: 53898, Stop: 54728, Start Num: 1

Candidate Starts for Ichor 85:

(Start: 1 @53898 has 10 MA's), (3, 54045), (4, 54054), (Start: 7 @54135 has 1 MA's), (9, 54237), (12, 54306), (13, 54312), (15, 54351), (21, 54441),

Gene: Jaek\_85 Start: 53898, Stop: 54728, Start Num: 1

Candidate Starts for Jaek\_85:

(Start: 1 @53898 has 10 MA's), (3, 54045), (4, 54054), (Start: 7 @54135 has 1 MA's), (9, 54237), (12, 54306), (13, 54312), (15, 54351), (21, 54441),

Gene: Molivia 90 Start: 53052, Stop: 53885, Start Num: 1

Candidate Starts for Molivia\_90:

(Start: 1 @53052 has 10 MA's), (5, 53211), (6, 53262), (10, 53379), (11, 53394), (14, 53448), (16, 53496), (18, 53517), (20, 53559), (22, 53667), (23, 53772),

Gene: Rings\_85 Start: 53890, Stop: 54720, Start Num: 1

Candidate Starts for Rings 85:

(Start: 1 @53890 has 10 MA's), (2, 53989), (3, 54037), (Start: 7 @54127 has 1 MA's), (12, 54298), (13, 54304), (15, 54343), (17, 54373), (21, 54433),

Gene: SorJuana\_85 Start: 53698, Stop: 54609, Start Num: 1

Candidate Starts for SorJuana 85:

(Start: 1 @53698 has 10 MA's), (3, 53845), (4, 53854), (Start: 7 @53935 has 1 MA's), (9, 54037), (12, 54106), (13, 54112), (15, 54151), (17, 54181), (21, 54241), (24, 54550),

Gene: Thunderclap\_84 Start: 53885, Stop: 54718, Start Num: 1

Candidate Starts for Thunderclap\_84:

(Start: 1 @53885 has 10 MA's), (2, 53984), (3, 54032), (4, 54041), (Start: 7 @54122 has 1 MA's), (12, 54293), (13, 54299), (15, 54338), (17, 54368), (21, 54428),

Gene: Yeezus\_85 Start: 53897, Stop: 54727, Start Num: 1

Candidate Starts for Yeezus\_85:

(Start: 1 @53897 has 10 MA's), (3, 54044), (4, 54053), (Start: 7 @54134 has 1 MA's), (9, 54236), (12, 54305), (13, 54311), (15, 54350), (21, 54440),