



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 87163 Report

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

Pham number 87163 has 13 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Boersma\_35, Yeezus\_33, Jaek\_33, Ichor\_33
- Track 2 : Rings\_33, Anansi\_34, Amavida\_33, Gorgeous\_34, Heylee\_33, SorJuana\_34, Amigo\_34, Thunderclap\_34
- Track 3 : Molivia\_38

### ***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 7 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Amavida\_33, Amigo\_34, Anansi\_34, Gorgeous\_34, Heylee\_33, Molivia\_38, Rings\_33, SorJuana\_34, Thunderclap\_34,

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

- Boersma\_35, Ichor\_33, Jaek\_33, Yeezus\_33,

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

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

Start 1:

- Found in 12 of 13 ( 92.3% ) of genes in pham
- Manual Annotations of this start: 4 of 11
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Boersma\_35 (AQ), Ichor\_33 (AQ), Jaek\_33 (AQ), Yeezus\_33 (AQ),

Start 2:

- Found in 13 of 13 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 7 of 11
- Called 69.2% of time when present

- Phage (with cluster) where this start called: Amavida\_33 (AQ), Amigo\_34 (AQ), Anansi\_34 (AQ), Gorgeous\_34 (AQ), Heylee\_33 (AQ), Molivia\_38 (AQ), Rings\_33 (AQ), SorJuana\_34 (AQ), Thunderclap\_34 (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 4 times for cluster AQ.
- Start number 2 was manually annotated 7 times for cluster AQ.

### **Gene Information:**

Gene: Amavida\_33 Start: 17864, Stop: 18478, Start Num: 2

Candidate Starts for Amavida\_33:

(Start: 1 @17852 has 4 MA's), (Start: 2 @17864 has 7 MA's), (3, 17894), (4, 17906), (5, 17951), (7, 18140), (8, 18149), (11, 18320), (12, 18371), (14, 18464),

Gene: Amigo\_34 Start: 17738, Stop: 18352, Start Num: 2

Candidate Starts for Amigo\_34:

(Start: 1 @17726 has 4 MA's), (Start: 2 @17738 has 7 MA's), (3, 17768), (4, 17780), (5, 17825), (7, 18014), (8, 18023), (11, 18194), (12, 18245), (14, 18338),

Gene: Anansi\_34 Start: 17747, Stop: 18361, Start Num: 2

Candidate Starts for Anansi\_34:

(Start: 1 @17735 has 4 MA's), (Start: 2 @17747 has 7 MA's), (3, 17777), (4, 17789), (5, 17834), (7, 18023), (8, 18032), (11, 18203), (12, 18254), (14, 18347),

Gene: Boersma\_35 Start: 17726, Stop: 18352, Start Num: 1

Candidate Starts for Boersma\_35:

(Start: 1 @17726 has 4 MA's), (Start: 2 @17738 has 7 MA's), (3, 17768), (4, 17780), (5, 17825), (7, 18014), (8, 18023), (11, 18194), (12, 18245), (14, 18338),

Gene: Gorgeous\_34 Start: 17747, Stop: 18361, Start Num: 2

Candidate Starts for Gorgeous\_34:

(Start: 1 @17735 has 4 MA's), (Start: 2 @17747 has 7 MA's), (3, 17777), (4, 17789), (5, 17834), (7, 18023), (8, 18032), (11, 18203), (12, 18254), (14, 18347),

Gene: Heylee\_33 Start: 17864, Stop: 18478, Start Num: 2

Candidate Starts for Heylee\_33:

(Start: 1 @17852 has 4 MA's), (Start: 2 @17864 has 7 MA's), (3, 17894), (4, 17906), (5, 17951), (7, 18140), (8, 18149), (11, 18320), (12, 18371), (14, 18464),

Gene: Ichor\_33 Start: 17726, Stop: 18352, Start Num: 1

Candidate Starts for Ichor\_33:

(Start: 1 @17726 has 4 MA's), (Start: 2 @17738 has 7 MA's), (3, 17768), (4, 17780), (5, 17825), (7, 18014), (8, 18023), (11, 18194), (12, 18245), (14, 18338),

Gene: Jaek\_33 Start: 17726, Stop: 18352, Start Num: 1

Candidate Starts for Jaek\_33:

(Start: 1 @17726 has 4 MA's), (Start: 2 @17738 has 7 MA's), (3, 17768), (4, 17780), (5, 17825), (7, 18014), (8, 18023), (11, 18194), (12, 18245), (14, 18338),

Gene: Molivia\_38 Start: 17990, Stop: 18604, Start Num: 2

Candidate Starts for Molivia\_38:

(Start: 2 @17990 has 7 MA's), (4, 18032), (5, 18077), (6, 18257), (7, 18266), (8, 18275), (9, 18404), (10, 18425), (13, 18530), (14, 18590),

Gene: Rings\_33 Start: 17869, Stop: 18483, Start Num: 2

Candidate Starts for Rings\_33:

(Start: 1 @17857 has 4 MA's), (Start: 2 @17869 has 7 MA's), (3, 17899), (4, 17911), (5, 17956), (7, 18145), (8, 18154), (11, 18325), (12, 18376), (14, 18469),

Gene: SorJuana\_34 Start: 17747, Stop: 18361, Start Num: 2

Candidate Starts for SorJuana\_34:

(Start: 1 @17735 has 4 MA's), (Start: 2 @17747 has 7 MA's), (3, 17777), (4, 17789), (5, 17834), (7, 18023), (8, 18032), (11, 18203), (12, 18254), (14, 18347),

Gene: Thunderclap\_34 Start: 17767, Stop: 18381, Start Num: 2

Candidate Starts for Thunderclap\_34:

(Start: 1 @17755 has 4 MA's), (Start: 2 @17767 has 7 MA's), (3, 17797), (4, 17809), (5, 17854), (7, 18043), (8, 18052), (11, 18223), (12, 18274), (14, 18367),

Gene: Yeezus\_33 Start: 17725, Stop: 18351, Start Num: 1

Candidate Starts for Yeezus\_33:

(Start: 1 @17725 has 4 MA's), (Start: 2 @17737 has 7 MA's), (3, 17767), (4, 17779), (5, 17824), (7, 18013), (8, 18022), (11, 18193), (12, 18244), (14, 18337),