

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 87913 Report

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

Pham number 87913 has 8 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Araxxi\_24

Track 2 : Casino\_23Track 3 : Hannabella 24

• Track 4: Arete 24, Gshelby23 22

Track 5 : Burro\_24Track 6 : Scruffy\_24Track 7 : DoTi 24

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

The start number called the most often in the published annotations is 3, it was called in 6 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

 Araxxi\_24, Arete\_24, Burro\_24, Casino\_23, DoTi\_24, Gshelby23\_22, Hannabella\_24, Scruffy\_24,

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

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

# Summary by start number:

#### Start 3:

- Found in 8 of 8 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 6 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Araxxi\_24 (EM1), Arete\_24 (EM1), Burro\_24 (EM1), Casino\_23 (EM1), DoTi\_24 (EM1), Gshelby23\_22 (EM1), Hannabella\_24 (EM1), Scruffy\_24 (EM1),

### Summary by clusters:

There is one cluster represented in this pham: EM1

Info for manual annotations of cluster EM1:

•Start number 3 was manually annotated 6 times for cluster EM1.

#### Gene Information:

Gene: Araxxi\_24 Start: 17944, Stop: 17555, Start Num: 3

Candidate Starts for Araxxi 24:

(1, 18178), (2, 17971), (Start: 3 @17944 has 6 MA's), (5, 17908), (6, 17902), (8, 17872), (9, 17866), (12, 17803), (13, 17728), (16, 17635), (17, 17605), (18, 17596),

Gene: Arete 24 Start: 17640, Stop: 17248, Start Num: 3

Candidate Starts for Arete 24:

(1, 17871), (Start: 3 @17640 has 6 MA's), (4, 17604), (6, 17595), (7, 17568), (10, 17553), (11, 17514), (13, 17421), (14, 17349), (15, 17334), (17, 17298), (18, 17289),

Gene: Burro 24 Start: 17321, Stop: 16941, Start Num: 3

Candidate Starts for Burro 24:

(Start: 3 @ 17321 has 6 MA's), (6, 17279), (9, 17243), (13, 17108), (14, 17039), (19, 16979),

Gene: Casino\_23 Start: 17628, Stop: 17236, Start Num: 3

Candidate Starts for Casino 23:

(Start: 3 @17628 has 6 MA's), (6, 17586), (8, 17556), (9, 17550), (13, 17406), (15, 17319), (18, 17274),

Gene: DoTi 24 Start: 18028, Stop: 17636, Start Num: 3

Candidate Starts for DoTi 24:

(1, 18262), (2, 18055), (Start: 3 @18028 has 6 MA's), (6, 17986), (8, 17956), (9, 17950), (12, 17887), (13, 17812), (16, 17719), (17, 17689),

Gene: Gshelby23 22 Start: 17586, Stop: 17194, Start Num: 3

Candidate Starts for Gshelby23\_22:

(1, 17817), (Start: 3 @17586 has 6 MA's), (4, 17550), (6, 17541), (7, 17514), (10, 17499), (11, 17460), (13, 17367), (14, 17295), (15, 17280), (17, 17244), (18, 17235),

Gene: Hannabella 24 Start: 17626, Stop: 17234, Start Num: 3

Candidate Starts for Hannabella 24:

(1, 17860), (Start: 3 @17626 has 6 MA's), (4, 17590), (6, 17581), (7, 17554), (10, 17539), (11, 17500), (14, 17335), (15, 17320), (17, 17284), (18, 17275),

Gene: Scruffy\_24 Start: 17874, Stop: 17482, Start Num: 3

Candidate Starts for Scruffy\_24:

(Start: 3 @ 17874 has 6 MA's), (4, 17838), (6, 17829), (7, 17802), (10, 17787), (11, 17748), (14, 17583), (15, 17568), (17, 17532), (18, 17523),