

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 197136 Report

This analysis was run 12/09/24 on database version 580.

Pham number 197136 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1 : Hannabella\_45, Casino\_44, Gshelby23\_43

Track 2 : Burro\_45Track 3 : DoTi\_45Track 4 : Arete 45

Track 5 : MissAmericana\_48

Track 6 : Kikiko\_45

### 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 6 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Arete\_45, Burro\_45, Casino\_44, DoTi\_45, Gshelby23\_43, Hannabella\_45,

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

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

Kikiko\_45, MissAmericana\_48,

## Summary by start number:

#### Start 2:

- Found in 6 of 8 (75.0%) of genes in pham
- Manual Annotations of this start: 6 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arete\_45 (EM1), Burro\_45 (EM1), Casino\_44 (EM1), DoTi\_45 (EM1), Gshelby23\_43 (EM1), Hannabella\_45 (EM1),

### Start 3:

- Found in 2 of 8 (25.0%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present

Phage (with cluster) where this start called: Kikiko\_45 (EM2), MissAmericana\_48 (EM2),

### **Summary by clusters:**

There are 2 clusters represented in this pham: EM1, EM2,

Info for manual annotations of cluster EM1:

•Start number 2 was manually annotated 6 times for cluster EM1.

Info for manual annotations of cluster EM2:

Start number 3 was manually annotated 1 time for cluster EM2.

#### Gene Information:

Gene: Arete 45 Start: 50281, Stop: 51378, Start Num: 2

Candidate Starts for Arete 45:

(1, 50221), (Start: 2 @50281 has 6 MA's), (4, 50398), (8, 50566), (12, 50770), (13, 50806), (18, 50905), (20, 50950), (21, 50956), (22, 50977), (25, 51055), (26, 51070), (27, 51091), (28, 51112),

Gene: Burro\_45 Start: 51075, Stop: 52154, Start Num: 2

Candidate Starts for Burro\_45:

(Start: 2 @51075 has 6 MA's), (4, 51195), (8, 51363), (11, 51510), (13, 51579), (18, 51678), (20, 51723), (23, 51774), (24, 51825), (26, 51843), (28, 51885), (30, 51921),

Gene: Casino\_44 Start: 50256, Stop: 51353, Start Num: 2

Candidate Starts for Casino\_44:

(1, 50196), (Start: 2 @50256 has 6 MA's), (4, 50373), (8, 50541), (12, 50745), (13, 50781), (18, 50880), (20, 50925), (21, 50931), (22, 50952), (25, 51030), (26, 51045), (27, 51066), (28, 51087),

Gene: DoTi 45 Start: 50660, Stop: 51769, Start Num: 2

Candidate Starts for DoTi 45:

(Start: 2 @50660 has 6 MA's), (4, 50777), (8, 50945), (10, 51119), (13, 51197), (18, 51296), (20, 51341), (21, 51347), (25, 51446), (26, 51461), (27, 51482), (28, 51503),

Gene: Gshelby23 43 Start: 50192, Stop: 51289, Start Num: 2

Candidate Starts for Gshelbv23 43:

(1, 50132), (Start: 2 @50192 has 6 MA's), (4, 50309), (8, 50477), (12, 50681), (13, 50717), (18, 50816), (20, 50861), (21, 50867), (22, 50888), (25, 50966), (26, 50981), (27, 51002), (28, 51023),

Gene: Hannabella 45 Start: 50232, Stop: 51329, Start Num: 2

Candidate Starts for Hannabella\_45:

(1, 50172), (Start: 2 @50232 has 6 MA's), (4, 50349), (8, 50517), (12, 50721), (13, 50757), (18, 50856), (20, 50901), (21, 50907), (22, 50928), (25, 51006), (26, 51021), (27, 51042), (28, 51063),

Gene: Kikiko 45 Start: 50581, Stop: 51609, Start Num: 3

Candidate Starts for Kikiko 45:

(Start: 3 @50581 has 1 MA's), (4, 50659), (6, 50671), (7, 50758), (9, 50914), (14, 51052), (15, 51055), (16, 51067), (17, 51076), (19, 51181), (20, 51184), (29, 51364), (31, 51538), (32, 51571),

Gene: MissAmericana\_48 Start: 50516, Stop: 51553, Start Num: 3

Candidate Starts for MissAmericana\_48:

(Start: 3 @50516 has 1 MA's), (4, 50594), (5, 50603), (7, 50693), (9, 50858), (14, 50996), (15, 50999), (16, 51011), (19, 51125), (20, 51128), (29, 51308), (31, 51482), (32, 51515),