

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 170516 Report

This analysis was run 07/09/24 on database version 566.

Pham number 170516 has 10 members, 1 are drafts.

Phages represented in each track:

Track 1 : Survivors\_51, Azira\_51, Zareef\_53, MaVan\_51

• Track 2 : Gibbous\_52, Cleo\_49, Dre3\_52

Track 3 : HippoPololi\_52

Track 4 : Fribs8\_51Track 5 : Nibbles 50

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

The start number called the most often in the published annotations is 4, it was called in 9 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Azira\_51, Cleo\_49, Dre3\_52, Fribs8\_51, Gibbous\_52, HippoPololi\_52, MaVan\_51, Nibbles\_50, Survivors\_51, Zareef\_53,

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:

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## Summary by start number:

#### Start 4:

- Found in 10 of 10 (100.0%) of genes in pham
- Manual Annotations of this start: 9 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azira\_51 (CT), Cleo\_49 (CT), Dre3\_52 (CT), Fribs8\_51 (CT), Gibbous\_52 (CT), HippoPololi\_52 (CT), MaVan\_51 (CT), Nibbles\_50 (CT), Survivors\_51 (CT), Zareef\_53 (CT),

### Summary by clusters:

There is one cluster represented in this pham: CT

Info for manual annotations of cluster CT:

•Start number 4 was manually annotated 9 times for cluster CT.

#### Gene Information:

Gene: Azira 51 Start: 38488, Stop: 38276, Start Num: 4

Candidate Starts for Azira\_51:

(2, 38626), (3, 38539), (Start: 4 @38488 has 9 MA's), (5, 38458), (7, 38428), (11, 38341),

Gene: Cleo 49 Start: 38249, Stop: 38037, Start Num: 4

Candidate Starts for Cleo\_49:

(1, 38396), (2, 38387), (3, 38300), (Start: 4 @38249 has 9 MA's), (5, 38219), (6, 38216), (7, 38189), (8, 38168), (9, 38162), (11, 38102),

Gene: Dre3 52 Start: 39093, Stop: 38881, Start Num: 4

Candidate Starts for Dre3 52:

(1, 39240), (2, 39231), (3, 39144), (Start: 4 @39093 has 9 MA's), (5, 39063), (6, 39060), (7, 39033), (8, 39012), (9, 39006), (11, 38946),

Gene: Fribs8\_51 Start: 39165, Stop: 38953, Start Num: 4

Candidate Starts for Fribs8\_51:

(1, 39312), (2, 39303), (3, 39216), (Start: 4 @39165 has 9 MA's), (5, 39135), (7, 39105), (11, 39018), (12, 39009),

Gene: Gibbous\_52 Start: 39093, Stop: 38881, Start Num: 4

Candidate Starts for Gibbous\_52:

(1, 39240), (2, 39231), (3, 39144), (Start: 4 @39093 has 9 MA's), (5, 39063), (6, 39060), (7, 39033), (8, 39012), (9, 39006), (11, 38946),

Gene: HippoPololi 52 Start: 38402, Stop: 38190, Start Num: 4

Candidate Starts for HippoPololi 52:

(Start: 4 @38402 has 9 MA's), (5, 38372), (6, 38369), (7, 38342), (8, 38321), (9, 38315), (10, 38297), (11, 38255),

Gene: MaVan\_51 Start: 38517, Stop: 38305, Start Num: 4

Candidate Starts for MaVan 51:

(2, 38655), (3, 38568), (Start: 4 @38517 has 9 MA's), (5, 38487), (7, 38457), (11, 38370),

Gene: Nibbles\_50 Start: 38210, Stop: 37998, Start Num: 4

Candidate Starts for Nibbles 50:

(2, 38348), (3, 38261), (Start: 4 @38210 has 9 MA's), (5, 38180), (7, 38150), (11, 38063), (12, 38054),

Gene: Survivors\_51 Start: 38410, Stop: 38198, Start Num: 4

Candidate Starts for Survivors 51:

(2, 38548), (3, 38461), (Start: 4 @38410 has 9 MA's), (5, 38380), (7, 38350), (11, 38263),

Gene: Zareef 53 Start: 38507, Stop: 38295, Start Num: 4

Candidate Starts for Zareef 53:

(2, 38645), (3, 38558), (Start: 4 @38507 has 9 MA's), (5, 38477), (7, 38447), (11, 38360),