

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 172032 Report

This analysis was run 07/10/24 on database version 566.

Pham number 172032 has 7 members, 0 are drafts.

Phages represented in each track:

• Track 1 : Circum 20

• Track 2 : BenitoAntonio\_20

Track 3 : Tribby\_20, Cheesy\_20

Track 4 : CarolAnn\_32, Blino\_32, Lilas\_30

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

Genes that call this "Most Annotated" start:

BenitoAntonio\_20, Cheesy\_20, Circum\_20, Tribby\_20,

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

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

Blino\_32, CarolAnn\_32, Lilas\_30,

#### Summary by start number:

#### Start 4:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BenitoAntonio\_20 (AM), Cheesy\_20 (AM), Circum\_20 (AM), Tribby\_20 (AM),

#### Start 12:

- Found in 3 of 7 (42.9%) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Blino\_32 (CV), CarolAnn\_32 (CV), Lilas 30 (CY1),

### Summary by clusters:

There are 3 clusters represented in this pham: CY1, AM, CV,

Info for manual annotations of cluster AM:

•Start number 4 was manually annotated 4 times for cluster AM.

Info for manual annotations of cluster CV:

•Start number 12 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster CY1:

•Start number 12 was manually annotated 1 time for cluster CY1.

#### Gene Information:

Gene: BenitoAntonio\_20 Start: 16181, Stop: 16888, Start Num: 4

Candidate Starts for BenitoAntonio 20:

(3, 16169), (Start: 4 @ 16181 has 4 MA's), (6, 16349), (8, 16382), (9, 16430), (10, 16508), (13, 16574), (14, 16607), (16, 16664), (17, 16718), (19, 16736), (23, 16802), (24, 16808), (25, 16859), (26, 16883),

Gene: Blino\_32 Start: 27487, Stop: 28173, Start Num: 12

Candidate Starts for Blino 32:

(1, 26551), (2, 26692), (11, 27478), (Start: 12 @27487 has 3 MA's), (18, 27679), (20, 27706), (22, 27745), (27, 27940), (28, 27991), (29, 28108), (30, 28156),

Gene: CarolAnn\_32 Start: 27486, Stop: 28172, Start Num: 12

Candidate Starts for CarolAnn 32:

(1, 26550), (2, 26691), (11, 27477), (Start: 12 @27486 has 3 MA's), (18, 27678), (20, 27705), (22, 27744), (27, 27939), (28, 27990), (29, 28107), (30, 28155),

Gene: Cheesy\_20 Start: 16279, Stop: 16986, Start Num: 4

Candidate Starts for Cheesy 20:

(3, 16267), (Start: 4 @16279 has 4 MA's), (5, 16408), (6, 16447), (7, 16459), (8, 16480), (9, 16528), (10, 16606), (13, 16672), (14, 16705), (15, 16726), (16, 16762), (17, 16816), (19, 16834), (24, 16906), (25, 16957),

Gene: Circum 20 Start: 16286, Stop: 16993, Start Num: 4

Candidate Starts for Circum 20:

(3, 16274), (Start: 4 @16286 has 4 MA's), (5, 16415), (6, 16454), (7, 16466), (8, 16487), (9, 16535), (10, 16613), (13, 16679), (14, 16712), (15, 16733), (16, 16769), (17, 16823), (19, 16841), (21, 16883), (23, 16907), (26, 16988),

Gene: Lilas\_30 Start: 26682, Stop: 27368, Start Num: 12

Candidate Starts for Lilas 30:

(1, 25746), (2, 25887), (11, 26673), (Start: 12 @26682 has 3 MA's), (18, 26874), (20, 26901), (22, 26940), (27, 27135), (28, 27186), (29, 27303), (30, 27351),

Gene: Tribby 20 Start: 16279, Stop: 16986, Start Num: 4

Candidate Starts for Tribby 20:

(3, 16267), (Start: 4 @16279 has 4 MA's), (5, 16408), (6, 16447), (7, 16459), (8, 16480), (9, 16528), (10, 16606), (13, 16672), (14, 16705), (15, 16726), (16, 16762), (17, 16816), (19, 16834), (24, 16906), (25, 16957),