

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 171833 Report

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

Pham number 171833 has 17 members, 2 are drafts.

Phages represented in each track:

Track 1 : Bunnybear\_12

Track 2 : WelcomeAyanna\_12, ThankyouJordi\_12

Track 3: TuertoX\_12, Ebert\_12, Savage\_12, Sproutie\_12, Mocha12\_12

• Track 4 : Sahara 12

Track 5: Whiteclaw\_12, Clap\_12, Gizermo\_12, Haley23\_12, GemG\_12, Cynthia\_12

Track 6 : JCole\_12Track 7 : Mbo4 12

## 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 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Clap\_12, Cynthia\_12, GemG\_12, Gizermo\_12, Haley23\_12, JCole\_12, Whiteclaw\_12,

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

Ebert\_12, Mocha12\_12, Sahara\_12, Savage\_12, Sproutie\_12, TuertoX\_12,

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

Bunnybear\_12, Mbo4\_12, ThankyouJordi\_12, WelcomeAyanna\_12,

## Summary by start number:

#### Start 1:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bunnybear\_12 (CZ), ThankyouJordi\_12 (CZ1), WelcomeAyanna\_12 (CZ1),

#### Start 2:

• Found in 14 of 17 (82.4%) of genes in pham

- Manual Annotations of this start: 6 of 15
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Ebert\_12 (CZ2), Mbo4\_12 (singleton), Mocha12\_12 (CZ2), Sahara\_12 (CZ2), Savage\_12 (CZ2), Sproutie\_12 (CZ2), TuertoX\_12 (CZ2),

#### Start 3:

- Found in 13 of 17 (76.5%) of genes in pham
- Manual Annotations of this start: 6 of 15
- Called 53.8% of time when present
- Phage (with cluster) where this start called: Clap\_12 (CZ2), Cynthia\_12 (CZ2), GemG\_12 (CZ2), Gizermo\_12 (CZ2), Haley23\_12 (CZ2), JCole\_12 (CZ2), Whiteclaw\_12 (CZ2),

### Summary by clusters:

There are 4 clusters represented in this pham: CZ2, CZ, singleton, CZ1,

Info for manual annotations of cluster CZ:

•Start number 1 was manually annotated 1 time for cluster CZ.

Info for manual annotations of cluster CZ1:

•Start number 1 was manually annotated 2 times for cluster CZ1.

Info for manual annotations of cluster CZ2:

- •Start number 2 was manually annotated 6 times for cluster CZ2.
- •Start number 3 was manually annotated 6 times for cluster CZ2.

#### Gene Information:

Gene: Bunnybear 12 Start: 8469, Stop: 9230, Start Num: 1

Candidate Starts for Bunnybear 12:

(Start: 1 @8469 has 3 MA's), (5, 8517), (9, 8652), (10, 8703), (20, 8985), (21, 9021), (24, 9111), (27, 9168),

Gene: Clap\_12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for Clap 12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: Cynthia 12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for Cynthia\_12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: Ebert\_12 Start: 7616, Stop: 8428, Start Num: 2

Candidate Starts for Ebert 12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: GemG\_12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for GemG 12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: Gizermo\_12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for Gizermo 12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: Haley23 12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for Haley23 12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: JCole\_12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for JCole\_12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (32, 8345), (35, 8387),

Gene: Mbo4\_12 Start: 8308, Stop: 9102, Start Num: 2

Candidate Starts for Mbo4 12:

(Start: 2 @8308 has 6 MA's), (4, 8323), (12, 8572), (14, 8617), (19, 8788), (23, 8875), (25, 8950), (26, 8953), (30, 9007), (31, 9013), (36, 9073),

Gene: Mocha12\_12 Start: 7616, Stop: 8428, Start Num: 2

Candidate Starts for Mocha12\_12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: Sahara\_12 Start: 7633, Stop: 8445, Start Num: 2

Candidate Starts for Sahara\_12:

(Start: 2 @7633 has 6 MA's), (Start: 3 @7636 has 6 MA's), (6, 7705), (7, 7768), (8, 7801), (13, 7912), (15, 7954), (16, 7960), (18, 8116), (22, 8182), (25, 8293), (28, 8332), (29, 8341), (33, 8365), (34, 8383), (35, 8404),

Gene: Savage\_12 Start: 7616, Stop: 8428, Start Num: 2

Candidate Starts for Savage\_12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: Sproutie 12 Start: 7616, Stop: 8428, Start Num: 2

Candidate Starts for Sproutie\_12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: ThankyouJordi\_12 Start: 8476, Stop: 9237, Start Num: 1

Candidate Starts for ThankyouJordi\_12:

(Start: 1 @8476 has 3 MA's), (5, 8524), (9, 8659), (11, 8716), (12, 8770), (17, 8884), (20, 8992), (27, 9175),

Gene: TuertoX\_12 Start: 7616, Stop: 8428, Start Num: 2

Candidate Starts for TuertoX 12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943), (18, 8099), (25, 8276), (28, 8315), (35, 8387),

Gene: WelcomeAyanna\_12 Start: 8476, Stop: 9237, Start Num: 1

Candidate Starts for WelcomeAyanna\_12:

(Start: 1 @8476 has 3 MA's), (5, 8524), (9, 8659), (11, 8716), (12, 8770), (17, 8884), (20, 8992), (27, 9175),

Gene: Whiteclaw\_12 Start: 7619, Stop: 8428, Start Num: 3

Candidate Starts for Whiteclaw\_12:

(Start: 2 @7616 has 6 MA's), (Start: 3 @7619 has 6 MA's), (7, 7751), (8, 7784), (15, 7937), (16, 7943),

(18, 8099), (25, 8276), (28, 8315), (35, 8387),