

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 87236 Report

This analysis was run 04/05/24 on database version 557.

Pham number 87236 has 12 members, 0 are drafts.

Phages represented in each track:

• Track 1 : MacnCheese 53

• Track 2 : Bryler\_52, Cain\_52, Phrank\_52

Track 3: PhelpsODU\_51, Tierra\_52

Track 4: Sunflower1121\_55, Ximenita\_55, Shadow1\_54

Track 5 : Unicorn\_51Track 6 : Syra333\_54

Track 7 : Krueger\_55

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

The start number called the most often in the published annotations is 7, it was called in 7 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• MacnCheese\_53, PhelpsODU\_51, Shadow1\_54, Sunflower1121\_55, Syra333\_54, Tierra\_52, Ximenita\_55,

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

Bryler\_52, Cain\_52, Krueger\_55, Phrank\_52, Unicorn\_51,

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

Summary by start number:

#### Start 5:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Unicorn\_51 (K6),

### Start 6:

- Found in 11 of 12 (91.7%) of genes in pham
- Manual Annotations of this start: 4 of 12

- Called 36.4% of time when present
- Phage (with cluster) where this start called: Bryler\_52 (K6), Cain\_52 (K6), Krueger\_55 (K6), Phrank\_52 (K6),

#### Start 7:

- Found in 12 of 12 (100.0%) of genes in pham
- Manual Annotations of this start: 7 of 12
- Called 58.3% of time when present
- Phage (with cluster) where this start called: MacnCheese\_53 (K3), PhelpsODU\_51 (K6), Shadow1\_54 (K6), Sunflower1121\_55 (K6), Syra333\_54 (K6), Tierra\_52 (K6), Ximenita\_55 (K6),

### **Summary by clusters:**

There are 2 clusters represented in this pham: K3, K6,

Info for manual annotations of cluster K3:

Start number 7 was manually annotated 1 time for cluster K3.

Info for manual annotations of cluster K6:

- •Start number 5 was manually annotated 1 time for cluster K6.
- •Start number 6 was manually annotated 4 times for cluster K6.
- •Start number 7 was manually annotated 6 times for cluster K6.

### Gene Information:

Gene: Bryler\_52 Start: 36334, Stop: 36465, Start Num: 6

Candidate Starts for Bryler\_52:

(1, 36199), (2, 36226), (3, 36244), (4, 36265), (Start: 5 @ 36331 has 1 MA's), (Start: 6 @ 36334 has 4 MA's), (Start: 7 @ 36337 has 7 MA's), (8, 36451), (9, 36454),

Gene: Cain 52 Start: 36322, Stop: 36453, Start Num: 6

Candidate Starts for Cain 52:

(1, 36187), (2, 36214), (3, 36232), (4, 36253), (Start: 5 @36319 has 1 MA's), (Start: 6 @36322 has 4 MA's), (Start: 7 @36325 has 7 MA's), (8, 36439), (9, 36442),

Gene: Krueger\_55 Start: 37328, Stop: 37459, Start Num: 6

Candidate Starts for Krueger 55:

(1, 37193), (2, 37220), (3, 37238), (Start: 5 @ 37325 has 1 MA's), (Start: 6 @ 37328 has 4 MA's), (Start: 7 @ 37331 has 7 MA's), (8, 37445), (9, 37448),

Gene: MacnCheese\_53 Start: 38114, Stop: 38257, Start Num: 7

Candidate Starts for MacnCheese\_53:

(4, 38039), (Start: 5 @ 38105 has 1 MA's), (Start: 7 @ 38114 has 7 MA's),

Gene: PhelpsODU\_51 Start: 36358, Stop: 36486, Start Num: 7

Candidate Starts for PhelpsODU 51:

(1, 36220), (2, 36247), (3, 36265), (4, 36286), (Start: 5 @36352 has 1 MA's), (Start: 6 @36355 has 4 MA's), (Start: 7 @36358 has 7 MA's), (8, 36472), (9, 36475),

Gene: Phrank\_52 Start: 36312, Stop: 36443, Start Num: 6

Candidate Starts for Phrank 52:

(1, 36177), (2, 36204), (3, 36222), (4, 36243), (Start: 5 @36309 has 1 MA's), (Start: 6 @36312 has 4 MA's), (Start: 7 @36315 has 7 MA's), (8, 36429), (9, 36432),

Gene: Shadow1\_54 Start: 37476, Stop: 37604, Start Num: 7

Candidate Starts for Shadow1 54:

(1, 37338), (2, 37365), (3, 37383), (4, 37404), (Start: 5 @37470 has 1 MA's), (Start: 6 @37473 has 4 MA's), (Start: 7 @37476 has 7 MA's), (9, 37593),

Gene: Sunflower1121\_55 Start: 37577, Stop: 37705, Start Num: 7

Candidate Starts for Sunflower1121 55:

(1, 37439), (2, 37466), (3, 37484), (4, 37505), (Start: 5 @37571 has 1 MA's), (Start: 6 @37574 has 4 MA's), (Start: 7 @37577 has 7 MA's), (9, 37694),

Gene: Syra333\_54 Start: 37241, Stop: 37369, Start Num: 7

Candidate Starts for Syra333\_54:

(2, 37130), (3, 37148), (Start: 5 @37235 has 1 MA's), (Start: 6 @37238 has 4 MA's), (Start: 7 @37241 has 7 MA's), (9, 37358),

Gene: Tierra\_52 Start: 37126, Stop: 37254, Start Num: 7

Candidate Starts for Tierra\_52:

(1, 36988), (2, 37015), (3, 37033), (4, 37054), (Start: 5 @ 37120 has 1 MA's), (Start: 6 @ 37123 has 4 MA's), (Start: 7 @ 37126 has 7 MA's), (8, 37240), (9, 37243),

Gene: Unicorn\_51 Start: 36352, Stop: 36486, Start Num: 5

Candidate Starts for Unicorn\_51:

(1, 36220), (2, 36247), (3, 36265), (4, 36286), (Start: 5 @36352 has 1 MA's), (Start: 6 @36355 has 4 MA's), (Start: 7 @36358 has 7 MA's), (8, 36472), (9, 36475),

Gene: Ximenita\_55 Start: 37430, Stop: 37558, Start Num: 7

Candidate Starts for Ximenita\_55:

(1, 37292), (2, 37319), (3, 37337), (4, 37358), (Start: 5 @37424 has 1 MA's), (Start: 6 @37427 has 4 MA's), (Start: 7 @37430 has 7 MA's), (9, 37547),