

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 142951 Report

This analysis was run 04/28/24 on database version 559.

Pham number 142951 has 14 members, 12 are drafts.

Phages represented in each track:

- Track 1: Patbob 41, Patbob 331
- Track 2: Mimi\_50, Talia1610\_334, Mimi\_340, Talia1610\_47
- Track 3: Bloom 49, Bloom 336
- Track 4: Racecar\_45, Racecar\_334
- Track 5 : SJReid\_47, SJReid\_358
- Track 6 : DunneganBoMo\_41, DunneganBoMo\_344

## 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 2 of the 2 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Racecar\_334, Racecar\_45,

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

 Bloom\_336, Bloom\_49, Mimi\_340, Mimi\_50, Patbob\_331, Patbob\_41, Talia1610\_334, Talia1610\_47,

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

DunneganBoMo\_344, DunneganBoMo\_41, SJReid\_358, SJReid\_47,

# Summary by start number:

#### Start 3:

- Found in 10 of 14 (71.4%) of genes in pham
- Manual Annotations of this start: 2 of 2
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Racecar\_334 (FC), Racecar\_45 (FC),

### Start 5:

- Found in 10 of 14 (71.4%) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present

Phage (with cluster) where this start called: Bloom\_336 (FC), Bloom\_49 (FC),

#### Start 6:

- Found in 2 of 14 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SJReid\_358 (FC), SJReid\_47 (FC),

#### Start 9:

- Found in 2 of 14 (14.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DunneganBoMo\_344 (FC), DunneganBoMo\_41 (FC),

#### Start 10:

- Found in 12 of 14 (85.7%) of genes in pham
- No Manual Annotations of this start.
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Mimi\_340 (FC), Mimi\_50 (FC),
  Patbob\_331 (FC), Patbob\_41 (FC), Talia1610\_334 (FC), Talia1610\_47 (FC),

## Summary by clusters:

There is one cluster represented in this pham: FC

Info for manual annotations of cluster FC:

•Start number 3 was manually annotated 2 times for cluster FC.

### Gene Information:

Gene: Bloom 49 Start: 20379, Stop: 19762, Start Num: 5

Candidate Starts for Bloom 49:

(Start: 3 @20397 has 2 MA's), (4, 20391), (5, 20379), (10, 20322), (12, 20229), (14, 20151), (15, 20121), (17, 20097), (18, 20073), (20, 20010), (21, 19986), (23, 19953), (25, 19890), (31, 19782),

Gene: Bloom 336 Start: 193854, Stop: 193237, Start Num: 5

Candidate Starts for Bloom 336:

(Start: 3 @193872 has 2 MA's), (4, 193866), (5, 193854), (10, 193797), (12, 193704), (14, 193626), (15, 193596), (17, 193572), (18, 193548), (20, 193485), (21, 193461), (23, 193428), (25, 193365), (31, 193257),

Gene: DunneganBoMo\_41 Start: 16090, Stop: 15506, Start Num: 9

Candidate Starts for DunneganBoMo\_41:

(8, 16102), (9, 16090), (16, 15862), (18, 15820), (21, 15733), (24, 15658), (26, 15622), (27, 15613), (28, 15607),

Gene: DunneganBoMo 344 Start: 195502, Stop: 194918, Start Num: 9

Candidate Starts for DunneganBoMo 344:

(8, 195514), (9, 195502), (16, 195274), (18, 195232), (21, 195145), (24, 195070), (26, 195034), (27, 195025), (28, 195019),

Gene: Mimi\_50 Start: 19490, Stop: 18930, Start Num: 10

Candidate Starts for Mimi 50:

(1, 19730), (2, 19721), (Start: 3 @19565 has 2 MA's), (4, 19559), (5, 19547), (10, 19490), (12, 19397), (14, 19319), (15, 19289), (17, 19265), (18, 19241), (20, 19178), (21, 19154), (23, 19121), (25, 19058), (31, 18950),

Gene: Mimi 340 Start: 192150, Stop: 191590, Start Num: 10

Candidate Starts for Mimi\_340:

(1, 192390), (2, 192381), (Start: 3 @192225 has 2 MA's), (4, 192219), (5, 192207), (10, 192150), (12, 192057), (14, 191979), (15, 191949), (17, 191925), (18, 191901), (20, 191838), (21, 191814), (23, 191781), (25, 191718), (31, 191610),

Gene: Patbob 41 Start: 19048, Stop: 18494, Start Num: 10

Candidate Starts for Patbob\_41:

(Start: 3 @19123 has 2 MA's), (4, 19117), (5, 19105), (10, 19048), (12, 18961), (13, 18913), (14, 18883), (15, 18853), (17, 18829), (18, 18805), (20, 18742), (21, 18718), (22, 18709), (23, 18685), (25, 18622), (31, 18514),

Gene: Patbob\_331 Start: 194507, Stop: 193953, Start Num: 10

Candidate Starts for Patbob 331:

(Start: 3 @ 194582 has 2 MA's), (4, 194576), (5, 194564), (10, 194507), (12, 194420), (13, 194372), (14, 194342), (15, 194312), (17, 194288), (18, 194264), (20, 194201), (21, 194177), (22, 194168), (23, 194144), (25, 194081), (31, 193973),

Gene: Racecar\_45 Start: 20165, Stop: 19530, Start Num: 3

Candidate Starts for Racecar\_45:

(Start: 3 @ 20165 has 2 MA's), (4, 20159), (5, 20147), (10, 20090), (12, 19997), (14, 19919), (15, 19889), (17, 19865), (18, 19841), (20, 19778), (21, 19754), (23, 19721), (25, 19658), (31, 19550),

Gene: Racecar\_334 Start: 193874, Stop: 193239, Start Num: 3

Candidate Starts for Racecar 334:

(Start: 3 @193874 has 2 MA's), (4, 193868), (5, 193856), (10, 193799), (12, 193706), (14, 193628), (15, 193598), (17, 193574), (18, 193550), (20, 193487), (21, 193463), (23, 193430), (25, 193367), (31, 193259),

Gene: SJReid\_47 Start: 19758, Stop: 19144, Start Num: 6

Candidate Starts for SJReid\_47:

(6, 19758), (7, 19746), (10, 19713), (11, 19704), (19, 19431), (29, 19209), (30, 19206),

Gene: SJReid 358 Start: 192597, Stop: 191983, Start Num: 6

Candidate Starts for SJReid\_358:

(6, 192597), (7, 192585), (10, 192552), (11, 192543), (19, 192270), (29, 192048), (30, 192045),

Gene: Talia1610 334 Start: 193980, Stop: 193420, Start Num: 10

Candidate Starts for Talia1610 334:

(1, 194220), (2, 194211), (Start: 3 @ 194055 has 2 MA's), (4, 194049), (5, 194037), (10, 193980), (12, 193887), (14, 193809), (15, 193779), (17, 193755), (18, 193731), (20, 193668), (21, 193644), (23, 193611), (25, 193548), (31, 193440),

Gene: Talia1610\_47 Start: 19508, Stop: 18948, Start Num: 10

Candidate Starts for Talia1610 47:

(1, 19748), (2, 19739), (Start: 3 @19583 has 2 MA's), (4, 19577), (5, 19565), (10, 19508), (12, 19415), (14, 19337), (15, 19307), (17, 19283), (18, 19259), (20, 19196), (21, 19172), (23, 19139), (25, 19076), (31, 18968),