

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 8564 Report

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

Pham number 8564 has 10 members, 7 are drafts.

Phages represented in each track:

• Track 1 : Bloom\_193

• Track 2 : Talia1610 192

• Track 3 : Atuin\_188

• Track 4 : Mimi\_195

Track 5 : DunneganBoMo\_187

Track 6 : Racecar\_190Track 7 : SJReid 193

Track 8 : Qui\_82, Paella\_82, Elver\_79

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

The start number called the most often in the published annotations is 5, it was called in 2 of the 3 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Atuin\_188, Bloom\_193, Elver\_79, Mimi\_195, Paella\_82, Qui\_82, SJReid\_193, Talia1610\_192,

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

Racecar 190.

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

DunneganBoMo\_187,

### Summary by start number:

#### Start 2:

- Found in 4 of 10 (40.0%) of genes in pham
- Manual Annotations of this start: 1 of 3
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Racecar\_190 (FC),

#### Start 4:

• Found in 1 of 10 (10.0%) 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\_187 (FC),

#### Start 5:

- Found in 9 of 10 (90.0%) of genes in pham
- Manual Annotations of this start: 2 of 3
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Atuin\_188 (FC), Bloom\_193 (FC), Elver\_79 (FK), Mimi\_195 (FC), Paella\_82 (FK), Qui\_82 (FK), SJReid\_193 (FC), Talia1610\_192 (FC),

### **Summary by clusters:**

There are 2 clusters represented in this pham: FK, FC,

Info for manual annotations of cluster FC:

Start number 2 was manually annotated 1 time for cluster FC.

Info for manual annotations of cluster FK:

•Start number 5 was manually annotated 2 times for cluster FK.

#### Gene Information:

Gene: Atuin\_188 Start: 128357, Stop: 129127, Start Num: 5

Candidate Starts for Atuin\_188:

(Start: 2 @128303 has 1 MA's), (Start: 5 @128357 has 2 MA's), (9, 128387), (11, 128411), (12, 128444), (13, 128456), (15, 128576), (20, 128696), (24, 128771), (32, 128975),

Gene: Bloom\_193 Start: 131133, Stop: 131870, Start Num: 5

Candidate Starts for Bloom 193:

(Start: 2 @ 131079 has 1 MA's), (Start: 5 @ 131133 has 2 MA's), (7, 131154), (8, 131157), (9, 131163), (25, 131562), (35, 131748), (37, 131790), (38, 131820), (39, 131823), (40, 131847),

Gene: DunneganBoMo\_187 Start: 133110, Stop: 133877, Start Num: 4

Candidate Starts for DunneganBoMo\_187:

(1, 133047), (4, 133110), (10, 133152), (11, 133164), (14, 133278), (15, 133329), (16, 133383), (20, 133449), (26, 133563), (32, 133728),

Gene: Elver\_79 Start: 48558, Stop: 49277, Start Num: 5

Candidate Starts for Elver 79:

(Start: 5 @48558 has 2 MA's), (6, 48573), (9, 48588), (17, 48834), (19, 48870), (27, 49035), (30, 49104), (32, 49134), (33, 49137), (36, 49179), (38, 49227),

Gene: Mimi\_195 Start: 130741, Stop: 131490, Start Num: 5

Candidate Starts for Mimi\_195:

(3, 130726), (Start: 5 @130741 has 2 MA's), (10, 130783), (11, 130795), (18, 131041), (19, 131071), (23, 131137), (28, 131278), (29, 131299), (34, 131341), (37, 131410), (38, 131440), (39, 131443), (40, 131467),

Gene: Paella\_82 Start: 49151, Stop: 49870, Start Num: 5

Candidate Starts for Paella 82:

(Start: 5 @ 49151 has 2 MA's), (6, 49166), (9, 49181), (17, 49427), (19, 49463), (27, 49628), (30, 49697), (32, 49727), (33, 49730), (36, 49772), (38, 49820),

Gene: Qui\_82 Start: 49151, Stop: 49870, Start Num: 5

Candidate Starts for Qui 82:

(Start: 5 @ 49151 has 2 MA's), (6, 49166), (9, 49181), (17, 49427), (19, 49463), (27, 49628), (30, 49697), (32, 49727), (33, 49730), (36, 49772), (38, 49820),

Gene: Racecar\_190 Start: 130862, Stop: 131653, Start Num: 2

Candidate Starts for Racecar 190:

(Start: 2 @130862 has 1 MA's), (Start: 5 @130916 has 2 MA's), (7, 130937), (8, 130940), (9, 130946), (21, 131264), (25, 131345), (35, 131531), (37, 131573), (38, 131603), (39, 131606), (40, 131630),

Gene: SJReid\_193 Start: 123057, Stop: 123794, Start Num: 5

Candidate Starts for SJReid\_193:

(Start: 5 @123057 has 2 MA's), (22, 123435), (31, 123609), (35, 123672), (37, 123714), (38, 123744), (39, 123747),

Gene: Talia1610\_192 Start: 131212, Stop: 131949, Start Num: 5

Candidate Starts for Talia1610\_192:

(Start: 2 @131158 has 1 MA's), (Start: 5 @131212 has 2 MA's), (7, 131233), (9, 131242), (25,

131641), (35, 131827), (37, 131869), (38, 131899), (39, 131902), (40, 131926),