

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 171861 Report

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

Pham number 171861 has 15 members, 10 are drafts.

Phages represented in each track:

• Track 1 : BruhMoment 98

• Track 2: AWGoat 87

Track 3: SilentRX 87

Track 4: Racecar\_38, Bloom\_41, Racecar\_327, Bloom\_328

• Track 5 : Mimi 41, Mimi 331

Track 6: Patbob\_33, Patbob\_323

Track 7: Talia1610 325, Talia1610 38

Track 8 : Atuin\_333, Atuin\_26

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

The start number called the most often in the published annotations is 12, it was called in 3 of the 5 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

AWGoat\_87, BruhMoment\_98, SilentRX\_87,

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

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

Atuin\_26, Atuin\_333, Bloom\_328, Bloom\_41, Mimi\_331, Mimi\_41, Patbob\_323, Patbob\_33, Racecar\_327, Racecar\_38, Talia1610\_325, Talia1610\_38,

### Summary by start number:

#### Start 9:

- Found in 2 of 15 (13.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Talia1610\_325 (FC), Talia1610\_38 (FC),

#### Start 12:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AWGoat\_87 (AP4), BruhMoment\_98 (AP3), SilentRX\_87 (AP4),

#### Start 13:

- Found in 6 of 15 (40.0%) of genes in pham
- Manual Annotations of this start: 2 of 5
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bloom\_328 (FC), Bloom\_41 (FC), Patbob\_323 (FC), Patbob\_33 (FC), Racecar\_327 (FC), Racecar\_38 (FC),

### Start 15:

- Found in 4 of 15 (26.7%) 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 331 (FC), Mimi 41 (FC),

#### Start 16:

- Found in 2 of 15 (13.3%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin\_26 (FC), Atuin\_333 (FC),

## Summary by clusters:

There are 3 clusters represented in this pham: AP3, FC, AP4,

Info for manual annotations of cluster AP3:

•Start number 12 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster AP4:

•Start number 12 was manually annotated 2 times for cluster AP4.

Info for manual annotations of cluster FC:

•Start number 13 was manually annotated 2 times for cluster FC.

#### Gene Information:

Gene: AWGoat 87 Start: 57837, Stop: 57556, Start Num: 12

Candidate Starts for AWGoat\_87:

(4, 57936), (5, 57933), (Start: 12 @57837 has 3 MA's), (21, 57726), (22, 57720), (30, 57627),

Gene: Atuin\_333 Start: 188565, Stop: 188837, Start Num: 16

Candidate Starts for Atuin 333:

(16, 188565), (21, 188655), (23, 188682), (26, 188706), (31, 188763), (33, 188814),

Gene: Atuin 26 Start: 11677, Stop: 11949, Start Num: 16

Candidate Starts for Atuin 26:

(16, 11677), (21, 11767), (23, 11794), (26, 11818), (31, 11875), (33, 11926),

Gene: Bloom\_41 Start: 16957, Stop: 17226, Start Num: 13

Candidate Starts for Bloom 41:

(Start: 13 @16957 has 2 MA's), (21, 17059), (22, 17065), (24, 17101), (30, 17158), (33, 17218),

Gene: Bloom\_328 Start: 190432, Stop: 190701, Start Num: 13

Candidate Starts for Bloom 328:

(Start: 13 @190432 has 2 MA's), (21, 190534), (22, 190540), (24, 190576), (30, 190633), (33, 190693),

Gene: BruhMoment 98 Start: 60883, Stop: 60596, Start Num: 12

Candidate Starts for BruhMoment 98:

(10, 60922), (Start: 12 @60883 has 3 MA's), (14, 60868), (17, 60820), (18, 60790), (20, 60781), (21, 60769), (29, 60670),

Gene: Mimi\_41 Start: 16134, Stop: 16397, Start Num: 15

Candidate Starts for Mimi 41:

(1, 15975), (2, 15993), (3, 16011), (6, 16026), (7, 16041), (8, 16059), (11, 16074), (15, 16134), (19, 16206), (21, 16221), (22, 16227), (24, 16263), (25, 16266), (27, 16275), (28, 16308), (32, 16341), (33, 16380),

Gene: Mimi\_331 Start: 188794, Stop: 189057, Start Num: 15

Candidate Starts for Mimi\_331:

(1, 188635), (2, 188653), (3, 188671), (6, 188686), (7, 188701), (8, 188719), (11, 188734), (15, 188794), (19, 188866), (21, 188881), (22, 188887), (24, 188923), (25, 188926), (27, 188935), (28, 188968), (32, 189001), (33, 189040),

Gene: Patbob 33 Start: 15693, Stop: 15965, Start Num: 13

Candidate Starts for Patbob 33:

(Start: 13 @15693 has 2 MA's), (21, 15798), (28, 15882), (31, 15903),

Gene: Patbob\_323 Start: 191152, Stop: 191424, Start Num: 13

Candidate Starts for Patbob 323:

(Start: 13 @191152 has 2 MA's), (21, 191257), (28, 191341), (31, 191362),

Gene: Racecar\_38 Start: 16725, Stop: 16994, Start Num: 13

Candidate Starts for Racecar\_38:

(Start: 13 @16725 has 2 MA's), (21, 16827), (22, 16833), (24, 16869), (30, 16926), (33, 16986),

Gene: Racecar\_327 Start: 190434, Stop: 190703, Start Num: 13

Candidate Starts for Racecar 327:

(Start: 13 @190434 has 2 MA's), (21, 190536), (22, 190542), (24, 190578), (30, 190635), (33, 190695),

Gene: SilentRX 87 Start: 58117, Stop: 57836, Start Num: 12

Candidate Starts for SilentRX\_87:

(Start: 12 @58117 has 3 MA's), (21, 58006),

Gene: Talia1610\_325 Start: 190555, Stop: 190887, Start Num: 9

Candidate Starts for Talia1610 325:

(9, 190555), (15, 190624), (19, 190696), (21, 190711), (22, 190717), (24, 190753), (25, 190756), (27, 190765), (28, 190798), (32, 190831), (33, 190870),

Gene: Talia1610\_38 Start: 16083, Stop: 16415, Start Num: 9

Candidate Starts for Talia1610\_38:

(9, 16083), (15, 16152), (19, 16224), (21, 16239), (22, 16245), (24, 16281), (25, 16284), (27, 16293),

(28, 16326), (32, 16359), (33, 16398),