

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 153508 Report

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

Pham number 153508 has 21 members, 14 are drafts.

Phages represented in each track:

- Track 1 : BruhMoment 104
- Track 2 : BillNye_251, BillNye_5
- Track 3 : Circinus_249, Circinus_4
- Track 4 : Talia1610_305, Talia1610_18, Mimi_20, Mimi_310
- Track 5 : DunneganBoMo 10, DunneganBoMo 313
- Track 6 : Patbob_17, Patbob_307
- Track 7: SJReid 21, SJReid 332
- Track 8: Racecar_19, Bloom_307, Racecar_308, Bloom_20
- Track 9 : Atuin_21, Atuin_328

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

The start number called the most often in the published annotations is 4, it was called in 4 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

BillNye_251, BillNye_5, Circinus_249, Circinus_4,

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

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

• Atuin_21, Atuin_328, Bloom_20, Bloom_307, BruhMoment_104, DunneganBoMo_10, DunneganBoMo_313, Mimi_20, Mimi_310, Patbob_17, Patbob_307, Racecar_19, Racecar_308, SJReid_21, SJReid_332, Talia1610_18, Talia1610_305,

Summary by start number:

Start 1:

- Found in 14 of 21 (66.7%) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Bloom_20 (FC), Bloom_307 (FC), DunneganBoMo_10 (FC), DunneganBoMo_313 (FC), Mimi_20 (FC), Mimi_310 (FC), Patbob_17 (FC), Patbob_307 (FC), Racecar_19 (FC), Racecar_308 (FC), SJReid_21 (FC), SJReid_332 (FC), Talia1610_18 (FC), Talia1610_305 (FC),

Start 3:

- Found in 3 of 21 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atuin_21 (FC), Atuin_328 (FC), BruhMoment_104 (AP3),

Start 4:

- Found in 4 of 21 (19.0%) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillNye_251 (BK2), BillNye_5 (BK2), Circinus_249 (BK2), Circinus_4 (BK2),

Summary by clusters:

There are 3 clusters represented in this pham: AP3, FC, BK2,

Info for manual annotations of cluster AP3:

•Start number 3 was manually annotated 1 time for cluster AP3.

Info for manual annotations of cluster BK2:

•Start number 4 was manually annotated 4 times for cluster BK2.

Info for manual annotations of cluster FC:

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

Gene Information:

Gene: Atuin_21 Start: 9989, Stop: 10360, Start Num: 3

Candidate Starts for Atuin_21:

(Start: 3 @ 9989 has 1 MA's), (15, 10175), (23, 10268), (25, 10286),

Gene: Atuin_328 Start: 186877, Stop: 187248, Start Num: 3

Candidate Starts for Atuin 328:

(Start: 3 @186877 has 1 MA's), (15, 187063), (23, 187156), (25, 187174),

Gene: BillNye_251 Start: 126516, Stop: 126845, Start Num: 4

Candidate Starts for BillNye_251:

 $(Start: 4 @ 126516 \ has \ 4 \ MA's), \ (5,\ 126522), \ (6,\ 126552), \ (7,\ 126564), \ (8,\ 126603), \ (19,\ 126729), \ (22,\ 126753),$

Gene: BillNye 5 Start: 1694, Stop: 2023, Start Num: 4

Candidate Starts for BillNye 5:

(Start: 4 @ 1694 has 4 MA's), (5, 1700), (6, 1730), (7, 1742), (8, 1781), (19, 1907), (22, 1931),

Gene: Bloom_307 Start: 182892, Stop: 183299, Start Num: 1

Candidate Starts for Bloom_307:

(Start: 1 @182892 has 2 MA's), (7, 182958), (9, 183000), (12, 183054), (14, 183081), (22, 183183), (28, 183228), (29, 183279),

Gene: Bloom_20 Start: 9417, Stop: 9824, Start Num: 1

Candidate Starts for Bloom 20:

(Start: 1 @9417 has 2 MA's), (7, 9483), (9, 9525), (12, 9579), (14, 9606), (22, 9708), (28, 9753), (29, 9804),

Gene: BruhMoment 104 Start: 63229, Stop: 62861, Start Num: 3

Candidate Starts for BruhMoment 104:

(Start: 3 @63229 has 1 MA's), (7, 63178), (10, 63118), (11, 63088), (15, 63043), (27, 62914),

Gene: Circinus_249 Start: 125815, Stop: 126144, Start Num: 4

Candidate Starts for Circinus_249:

(2, 125806), (Start: 4 @125815 has 4 MA's), (6, 125851), (7, 125863), (8, 125902), (19, 126028), (22, 126052),

Gene: Circinus_4 Start: 1488, Stop: 1817, Start Num: 4

Candidate Starts for Circinus 4:

(2, 1479), (Start: 4 @1488 has 4 MA's), (6, 1524), (7, 1536), (8, 1575), (19, 1701), (22, 1725),

Gene: DunneganBoMo_10 Start: 4570, Stop: 4971, Start Num: 1

Candidate Starts for DunneganBoMo_10:

(Start: 1 @ 4570 has 2 MA's), (11, 4726), (14, 4759), (24, 4870),

Gene: DunneganBoMo 313 Start: 183982, Stop: 184383, Start Num: 1

Candidate Starts for DunneganBoMo_313:

(Start: 1 @183982 has 2 MA's), (11, 184138), (14, 184171), (24, 184282),

Gene: Mimi_20 Start: 8854, Stop: 9261, Start Num: 1

Candidate Starts for Mimi 20:

(Start: 1 @8854 has 2 MA's), (7, 8920), (9, 8962), (12, 9016), (14, 9043), (17, 9103), (22, 9145), (28, 9190), (29, 9241),

Gene: Mimi_310 Start: 181514, Stop: 181921, Start Num: 1

Candidate Starts for Mimi_310:

(Start: 1 @181514 has 2 MA's), (7, 181580), (9, 181622), (12, 181676), (14, 181703), (17, 181763), (22, 181805), (28, 181850), (29, 181901),

Gene: Patbob_17 Start: 8860, Stop: 9267, Start Num: 1

Candidate Starts for Patbob 17:

(Start: 1 @ 8860 has 2 MA's), (9, 8968), (12, 9022), (13, 9046), (22, 9151), (29, 9247),

Gene: Patbob_307 Start: 184319, Stop: 184726, Start Num: 1

Candidate Starts for Patbob_307:

(Start: 1 @184319 has 2 MA's), (9, 184427), (12, 184481), (13, 184505), (22, 184610), (29, 184706),

Gene: Racecar_19 Start: 9417, Stop: 9824, Start Num: 1

Candidate Starts for Racecar 19:

(Start: 1 @9417 has 2 MA's), (7, 9483), (9, 9525), (12, 9579), (14, 9606), (22, 9708), (28, 9753), (29, 9804),

Gene: Racecar_308 Start: 183126, Stop: 183533, Start Num: 1

Candidate Starts for Racecar_308:

(Start: 1 @183126 has 2 MA's), (7, 183192), (9, 183234), (12, 183288), (14, 183315), (22, 183417), (28, 183462), (29, 183513),

Gene: SJReid_21 Start: 9248, Stop: 9805, Start Num: 1

Candidate Starts for SJReid 21:

(Start: 1 @9248 has 2 MA's), (7, 9314), (11, 9404), (16, 9467), (18, 9500), (20, 9518), (21, 9536), (26, 9572), (30, 9668), (31, 9695), (32, 9701), (33, 9722), (34, 9740), (35, 9755),

Gene: SJReid 332 Start: 182087, Stop: 182644, Start Num: 1

Candidate Starts for SJReid_332:

(Start: 1 @182087 has 2 MA's), (7, 182153), (11, 182243), (16, 182306), (18, 182339), (20, 182357), (21, 182375), (26, 182411), (30, 182507), (31, 182534), (32, 182540), (33, 182561), (34, 182579), (35, 182594),

Gene: Talia1610_305 Start: 183328, Stop: 183735, Start Num: 1

Candidate Starts for Talia1610 305:

(Start: 1 @183328 has 2 MA's), (7, 183394), (9, 183436), (12, 183490), (14, 183517), (17, 183577), (22, 183619), (28, 183664), (29, 183715),

Gene: Talia1610 18 Start: 8856, Stop: 9263, Start Num: 1

Candidate Starts for Talia1610_18:

(Start: 1 @8856 has 2 MA's), (7, 8922), (9, 8964), (12, 9018), (14, 9045), (17, 9105), (22, 9147), (28, 9192), (29, 9243),