Pham 160853




| $\star$ | $*^{*}$ | 120 | $22^{3}$ | $20^{\circ}$ | 31 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| 4: Atuin_79 |  |  |  |  |  |






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 160853 Report

This analysis was run 04/28/24 on database version 559.
Pham number 160853 has 14 members, 7 are drafts.
Phages represented in each track:

- Track 1 : Talia1610_85, Bloom_85, Patbob_82, Racecar_82, Mimi_88
- Track 2 : DunneganBoMo_75
- Track 3 : SJReid 86
- Track 4 : Atuin 79
- Track 5 : A3Wālly_88, PauloDiaboli_88
- Track 6 : Zooman_73
- Track 7 : Big4_77
- Track 8 : Cece_71
- Track 9 : Pumpernickel_85


## 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 7 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- A3Wally_88, Atuin_79, Big4_77, Bloom_85, Cece_71, DunneganBoMo_75, Mimi_88, P̄atbob_8̄̄, PauloDī̄aboli_88, Pumpernickēl_85, Racecar_82, SJJReid_86, Taliā1610_85, Zōoman_73,

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

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

## Summary by start number:

Start 4:

- Found in 14 of 14 ( $100.0 \%$ ) of genes in pham
- Manual Annotations of this start: 7 of 7
- Called $100.0 \%$ of time when present
- Phage (with cluster) where this start called: A3Wally_88 (GD1), Atuin_79 (FC),

Big4_77 (GD2), Bloom_85 (FC), Cece_71 (GD3), DunneganBoMo_75 (FC), Mimi_88
(FC), Patbob_82 (FC), PauloDiaboli_88 (GD1), Pumpernickel_85 (GD4), Racecar_82 (FC), SJReid_86 (FC), Talia1610_85 (FC), Zooman_73 (GD2),

## Summary by clusters:

There are 5 clusters represented in this pham: GD3, GD1, GD2, FC, GD4,
Info for manual annotations of cluster FC:
-Start number 4 was manually annotated 1 time for cluster FC.
Info for manual annotations of cluster GD1:
-Start number 4 was manually annotated 2 times for cluster GD1.
Info for manual annotations of cluster GD2:
-Start number 4 was manually annotated 2 times for cluster GD2.
Info for manual annotations of cluster GD3:

- Start number 4 was manually annotated 1 time for cluster GD3.

Info for manual annotations of cluster GD4:
-Start number 4 was manually annotated 1 time for cluster GD4.

## Gene Information:

Gene: A3Wally_88 Start: 44936, Stop: 46945, Start Num: 4
Candidate Starts for A3Wally_88:
(Start: 4 @44936 has 7 MA's), (8, 45071), (9, 45089), (10, 45101), (15, 45644), (29, 46154), (30,
46199), (32, 46565), (34, 46631), (35, 46640), (38, 46835),

Gene: Atuin_79 Start: 46811, Stop: 48820, Start Num: 4
Candidate Starts for Atuin_79:
(Start: 4 @46811 has 7 MA's), (14, 47525), (17, 47660), (20, 47702), (22, 47825), (23, 47846), (27, 48011), (28, 48026), (31, 48206), (37, 48632),

Gene: Big4_77 Start: 43780, Stop: 45789, Start Num: 4
Candidate Starts for Big4_77:
(Start: 4 @43780 has 7 MA's), (5, 43801), (8, 43915), (9, 43933), (12, 44107), (15, 44488), (16, 44572), (18, 44644), (19, 44647), (29, 44995), (32, 45406), (38, 45676),

Gene: Bloom_85 Start: 48235, Stop: 50229, Start Num: 4
Candidate Starts for Bloom_85:
(Start: 4 @48235 has 7 MA's), (8, 48379), (14, 48925), (18, 49090), (20, 49111), (21, 49186), (31, 49615), (33, 49912),

Gene: Cece_71 Start: 39862, Stop: 41862, Start Num: 4
Candidate Starts for Cece_71:
(Start: 4 @39862 has 7 MA's), (8, 39997), (9, 40015), (10, 40027), (15, 40564), (16, 40648), (17, 40699), (18, 40720), (25, 40984), (29, 41071), (32, 41482), (34, 41548), (38, 41752),

Gene: DunneganBoMo_75 Start: 43679, Stop: 45682, Start Num: 4
Candidate Starts for DunneganBoMo_75:
(Start: 4 @43679 has 7 MA's), (6, 43733), (14, 44387), (17, 44522), (20, 44564), (21, 44639), (24, 44786), (27, 44873), (28, 44888), (31, 45068),

Gene: Mimi_88 Start: 47582, Stop: 49576, Start Num: 4
Candidate Starts for Mimi 88:
(Start: 4 @47582 has 7 MA's), (8, 47726), (14, 48272), (18, 48437), (20, 48458), (21, 48533), (31, 48962), (33, 49259),

Gene: Patbob_82 Start: 48454, Stop: 50448, Start Num: 4
Candidate Starts for Patbob_82:
(Start: 4 @48454 has 7 MA's), (8, 48598), (14, 49144), (18, 49309), (20, 49330), (21, 49405), (31, 49834), (33, 50131),

Gene: PauloDiaboli_88 Start: 44293, Stop: 46302, Start Num: 4
Candidate Starts for PauloDiaboli_88:
(Start: 4 @44293 has 7 MA's), (8, 44428), (9, 44446), (10, 44458), (15, 45001), (29, 45511), (30, 45556), (32, 45922), (34, 45988), (35, 45997), (38, 46192),

Gene: Pumpernickel_85 Start: 45481, Stop: 47517, Start Num: 4
Candidate Starts for Pumpernickel_85:
(Start: 4 @45481 has 7 MA's), (7, 45616), (8, 45625), (15, 46213), (16, 46297), (19, 46372), (29, 46717), (32, 47128), (38, 47404),

Gene: Racecar_82 Start: 48235, Stop: 50229, Start Num: 4
Candidate Starts for Racecar_82:
(Start: 4 @48235 has 7 MA's), (8, 48379), (14, 48925), (18, 49090), (20, 49111), (21, 49186), (31, 49615), (33, 49912),

Gene: SJReid_86 Start: 49478, Stop: 51490, Start Num: 4
Candidate Starts for SJReid_86:
(Start: 4 @49478 has 7 MA's), $(5,49499),(8,49622),(13,50066),(14,50186),(20,50372),(21$, $50447),(26,50645),(28,50696),(31,50876),(36,51188)$,

Gene: Talia1610_85 Start: 47600, Stop: 49594, Start Num: 4
Candidate Starts for Talia1610_85:
(Start: 4 @47600 has 7 MA's), (8, 47744), (14, 48290), (18, 48455), (20, 48476), (21, 48551), (31, 48980), (33, 49277),

Gene: Zooman_73 Start: 42476, Stop: 44485, Start Num: 4
Candidate Starts for Zooman_73:
(1, 42350), (2, 42356), (3, 423777), (Start: 4 @42476 has 7 MA's), (5, 42497), (8, 42611), (9, 42629), (10, 42641), (11, 42716), (15, 43187), (16, 43271), (18, 43343), (19, 43346), (29, 43694), (32, 44105), $(38,44375)$,

