

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 188526 Report

This analysis was run 11/02/24 on database version 579.

Pham number 188526 has 15 members, 1 are drafts.

Phages represented in each track:

- Track 1 : BobbyK_51, Frederick_51, Mithril_50
- Track 2: Waleliano_50, Zemanar_51, BrownCNA_52
- Track 3 : Fortunato_51
- Track 4: Hangman_50
- Track 5 : Knocker 56
- Track 6 : Myrna_4
- Track 7 : Greely_4
- Track 8 : Predator 70
- Track 9: Madruga_69, Patience_71, Labelle_71

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

The start number called the most often in the published annotations is 11, it was called in 8 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• BobbyK_51, BrownCNA_52, Fortunato_51, Frederick_51, Hangman_50, Mithril_50, Waleliano_50, Zemanar_51,

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

Predator_70,

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

Greely_4, Knocker_56, Labelle_71, Madruga_69, Myrna_4, Patience_71,

Summary by start number:

Start 9:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Predator_70 (H1),

Start 10:

- Found in 3 of 15 (20.0%) of genes in pham
- Manual Annotations of this start: 3 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Labelle_71 (U), Madruga_69 (U), Patience_71 (U),

Start 11:

- Found in 9 of 15 (60.0%) of genes in pham
- Manual Annotations of this start: 8 of 14
- Called 88.9% of time when present
- Phage (with cluster) where this start called: BobbyK_51 (B4), BrownCNA_52 (B4), Fortunato_51 (B4), Frederick_51 (B4), Hangman_50 (B4), Mithril_50 (B4), Waleliano_50 (B4), Zemanar_51 (B4),

Start 12:

- Found in 2 of 15 (13.3%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Greely_4 (C2), Myrna_4 (C2),

Start 13:

- Found in 1 of 15 (6.7%) of genes in pham
- Manual Annotations of this start: 1 of 14
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Knocker_56 (B9),

Summary by clusters:

There are 5 clusters represented in this pham: B4, C2, H1, U, B9,

Info for manual annotations of cluster B4:

•Start number 11 was manually annotated 8 times for cluster B4.

Info for manual annotations of cluster B9:

•Start number 13 was manually annotated 1 time for cluster B9.

Info for manual annotations of cluster C2:

•Start number 12 was manually annotated 1 time for cluster C2.

Info for manual annotations of cluster H1:

•Start number 9 was manually annotated 1 time for cluster H1.

Info for manual annotations of cluster U:

•Start number 10 was manually annotated 3 times for cluster U.

Gene Information:

Gene: BobbyK 51 Start: 48607, Stop: 48290, Start Num: 11

Candidate Starts for BobbyK 51:

(4, 48799), (Start: 11 @48607 has 8 MA's), (14, 48583), (17, 48541), (18, 48538), (24, 48364), (25, 48352), (27, 48343),

Gene: BrownCNA_52 Start: 48871, Stop: 48554, Start Num: 11

Candidate Starts for BrownCNA 52:

(1, 49525), (2, 49375), (4, 49063), (Start: 11 @48871 has 8 MA's), (14, 48847), (17, 48805), (18, 48802), (24, 48628), (25, 48616), (27, 48607), (30, 48565), (31, 48562),

Gene: Fortunato_51 Start: 48643, Stop: 48326, Start Num: 11

Candidate Starts for Fortunato 51:

(Start: 11 @48643 has 8 MA's), (14, 48619), (17, 48577), (25, 48388), (27, 48379), (30, 48337),

Gene: Frederick 51 Start: 48604, Stop: 48287, Start Num: 11

Candidate Starts for Frederick 51:

(4, 48796), (Start: 11 @48604 has 8 MA's), (14, 48580), (17, 48538), (18, 48535), (24, 48361), (25, 48349), (27, 48340),

Gene: Greely_4 Start: 1972, Stop: 2283, Start Num: 12

Candidate Starts for Greely_4:

(6, 1834), (8, 1882), (Start: 12 @1972 has 1 MA's), (20, 2128), (22, 2191), (23, 2197), (24, 2206), (26, 2233), (28, 2242),

Gene: Hangman_50 Start: 48689, Stop: 48372, Start Num: 11

Candidate Starts for Hangman_50:

(4, 48881), (Start: 11 @48689 has 8 MA's), (14, 48665), (17, 48623), (18, 48620), (24, 48446), (25, 48434), (27, 48425), (30, 48383), (31, 48380),

Gene: Knocker_56 Start: 50551, Stop: 50240, Start Num: 13

Candidate Starts for Knocker_56:

(3, 50878), (5, 50704), (7, 50668), (Start: 13 @50551 has 1 MA's), (17, 50494), (21, 50362), (24, 50317), (26, 50290), (29, 50257),

Gene: Labelle_71 Start: 47030, Stop: 47353, Start Num: 10

Candidate Starts for Labelle_71:

(Start: 10 @47030 has 3 MA's), (16, 47087), (20, 47201), (24, 47276),

Gene: Madruga_69 Start: 46679, Stop: 47002, Start Num: 10

Candidate Starts for Madruga 69:

(Start: 10 @ 46679 has 3 MA's), (16, 46736), (20, 46850), (24, 46925),

Gene: Mithril_50 Start: 48617, Stop: 48300, Start Num: 11

Candidate Starts for Mithril_50:

(4, 48809), (Start: 11 @48617 has 8 MA's), (14, 48593), (17, 48551), (18, 48548), (24, 48374), (25, 48362), (27, 48353),

Gene: Myrna_4 Start: 1823, Stop: 2134, Start Num: 12

Candidate Starts for Myrna 4:

(Start: 12 @1823 has 1 MA's), (20, 1979), (22, 2042), (23, 2048), (26, 2084),

Gene: Patience_71 Start: 47574, Stop: 47897, Start Num: 10

Candidate Starts for Patience_71:

(Start: 10 @47574 has 3 MA's), (16, 47631), (20, 47745), (24, 47820),

Gene: Predator 70 Start: 51316, Stop: 51663, Start Num: 9

Candidate Starts for Predator_70:

(Start: 9 @51316 has 1 MA's), (Start: 11 @51343 has 8 MA's), (14, 51367), (15, 51385), (19, 51424), (30, 51652), (31, 51655),

Gene: Waleliano_50 Start: 48603, Stop: 48286, Start Num: 11 Candidate Starts for Waleliano_50: (1, 49257), (2, 49107), (4, 48795), (Start: 11 @48603 has 8 MA's), (14, 48579), (15, 48579),

 $\begin{array}{l} (1,\,49257),\,(2,\,49107),\,(4,\,48795),\,(Start:\,11\,\,@48603\,\,has\,\,8\,\,MA's),\,(14,\,48579),\,(17,\,48537),\,(18,\,48534),\,(24,\,48360),\,(25,\,48348),\,(27,\,48339),\,(30,\,48297),\,(31,\,48294), \end{array}$

Gene: Zemanar_51 Start: 48584, Stop: 48267, Start Num: 11 Candidate Starts for Zemanar_51: (1, 49238), (2, 49088), (4, 48776), (Start: 11 @48584 has 8 MA's), (14, 48560), (17, 48518), (18, 48515), (24, 48341), (25, 48329), (27, 48320), (30, 48278), (31, 48275),