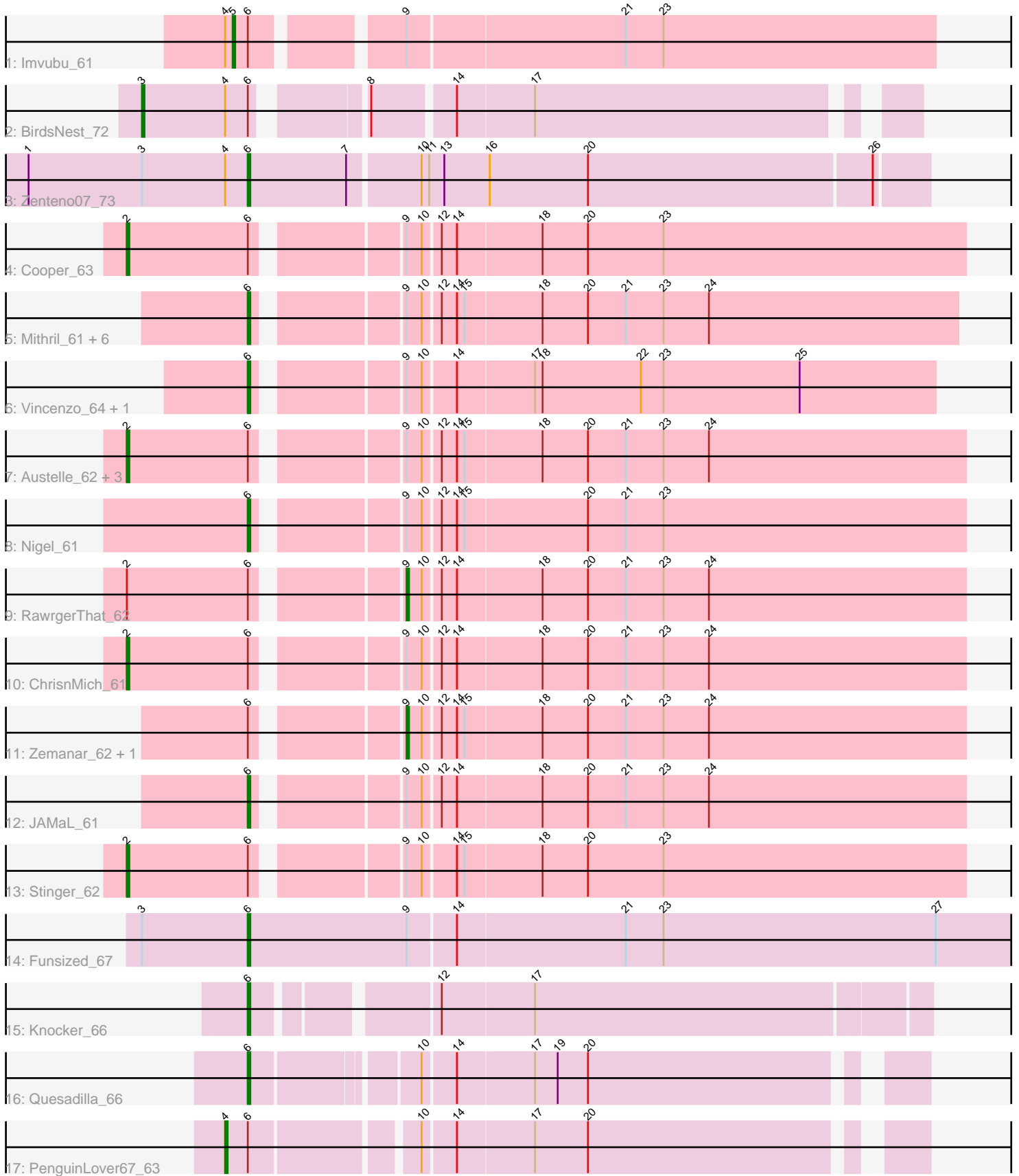


Pham 158106



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 158106 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158106 has 28 members, 0 are drafts.

Phages represented in each track:

- Track 1 : Imvubu_61
- Track 2 : BirdsNest_72
- Track 3 : Zenteno07_73
- Track 4 : Cooper_63
- Track 5 : Mithril_61, BrownCNA_63, VioletZ_63, Fortunato_62, Waleliano_61, Lolalove_62, Hangman_61
- Track 6 : Vincenzo_64, AlanGrant_65
- Track 7 : Austelle_62, Mudslide_61, Hydro_61, Apex_62
- Track 8 : Nigel_61
- Track 9 : RawrgerThat_62
- Track 10 : ChrisnMich_61
- Track 11 : Zemanar_62, Heath_60
- Track 12 : JAMaL_61
- Track 13 : Stinger_62
- Track 14 : Funsized_67
- Track 15 : Knocker_66
- Track 16 : Quesadilla_66
- Track 17 : PenguinLover67_63

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

The start number called the most often in the published annotations is 6, it was called in 15 of the 28 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AlanGrant_65, BrownCNA_63, Fortunato_62, Funsized_67, Hangman_61, JAMaL_61, Knocker_66, Lolalove_62, Mithril_61, Nigel_61, Quesadilla_66, Vincenzo_64, VioletZ_63, Waleliano_61, Zenteno07_73,

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

- Apex_62, Austelle_62, BirdsNest_72, ChrisnMich_61, Cooper_63, Heath_60, Hydro_61, Imvubu_61, Mudslide_61, PenguinLover67_63, RawrgerThat_62, Stinger_62, Zemanar_62,

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

-

Summary by start number:

Start 2:

- Found in 8 of 28 (28.6%) of genes in pham
- Manual Annotations of this start: 7 of 28
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Apex_62 (B4), Austelle_62 (B4), ChrisnMich_61 (B4), Cooper_63 (B4), Hydro_61 (B4), Mudslide_61 (B4), Stinger_62 (B4),

Start 3:

- Found in 3 of 28 (10.7%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 33.3% of time when present
- Phage (with cluster) where this start called: BirdsNest_72 (B13),

Start 4:

- Found in 4 of 28 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 25.0% of time when present
- Phage (with cluster) where this start called: PenguinLover67_63 (B9),

Start 5:

- Found in 1 of 28 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 28
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Imvubu_61 (B10),

Start 6:

- Found in 28 of 28 (100.0%) of genes in pham
- Manual Annotations of this start: 15 of 28
- Called 53.6% of time when present
- Phage (with cluster) where this start called: AlanGrant_65 (B4), BrownCNA_63 (B4), Fortunato_62 (B4), Funsized_67 (B9), Hangman_61 (B4), JAMaL_61 (B4), Knocker_66 (B9), Lolalove_62 (B4), Mithril_61 (B4), Nigel_61 (B4), Quesadilla_66 (B9), Vincenzo_64 (B4), VioletZ_63 (B4), Waleliano_61 (B4), Zenteno07_73 (B13),

Start 9:

- Found in 23 of 28 (82.1%) of genes in pham
- Manual Annotations of this start: 3 of 28
- Called 13.0% of time when present
- Phage (with cluster) where this start called: Heath_60 (B4), RawrgerThat_62 (B4), Zemanar_62 (B4),

Summary by clusters:

There are 4 clusters represented in this pham: B4, B9, B10, B13,

Info for manual annotations of cluster B10:

- Start number 5 was manually annotated 1 time for cluster B10.

Info for manual annotations of cluster B13:

- Start number 3 was manually annotated 1 time for cluster B13.
- Start number 6 was manually annotated 1 time for cluster B13.

Info for manual annotations of cluster B4:

- Start number 2 was manually annotated 7 times for cluster B4.
- Start number 6 was manually annotated 11 times for cluster B4.
- Start number 9 was manually annotated 3 times for cluster B4.

Info for manual annotations of cluster B9:

- Start number 4 was manually annotated 1 time for cluster B9.
- Start number 6 was manually annotated 3 times for cluster B9.

Gene Information:

Gene: AlanGrant_65 Start: 59138, Stop: 59395, Start Num: 6

Candidate Starts for AlanGrant_65:

(Start: 6 @59138 has 15 MA's), (Start: 9 @59189 has 3 MA's), (10, 59195), (14, 59207), (17, 59237), (18, 59240), (22, 59279), (23, 59288), (25, 59342),

Gene: Apex_62 Start: 58091, Stop: 58408, Start Num: 2

Candidate Starts for Apex_62:

(Start: 2 @58091 has 7 MA's), (Start: 6 @58139 has 15 MA's), (Start: 9 @58190 has 3 MA's), (10, 58196), (12, 58202), (14, 58208), (15, 58211), (18, 58241), (20, 58259), (21, 58274), (23, 58289), (24, 58307),

Gene: Austelle_62 Start: 58545, Stop: 58862, Start Num: 2

Candidate Starts for Austelle_62:

(Start: 2 @58545 has 7 MA's), (Start: 6 @58593 has 15 MA's), (Start: 9 @58644 has 3 MA's), (10, 58650), (12, 58656), (14, 58662), (15, 58665), (18, 58695), (20, 58713), (21, 58728), (23, 58743), (24, 58761),

Gene: BirdsNest_72 Start: 58539, Stop: 58814, Start Num: 3

Candidate Starts for BirdsNest_72:

(Start: 3 @58539 has 1 MA's), (Start: 4 @58572 has 1 MA's), (Start: 6 @58581 has 15 MA's), (8, 58617), (14, 58647), (17, 58677),

Gene: BrownCNA_63 Start: 58302, Stop: 58568, Start Num: 6

Candidate Starts for BrownCNA_63:

(Start: 6 @58302 has 15 MA's), (Start: 9 @58353 has 3 MA's), (10, 58359), (12, 58365), (14, 58371), (15, 58374), (18, 58404), (20, 58422), (21, 58437), (23, 58452), (24, 58470),

Gene: ChrisnMich_61 Start: 56895, Stop: 57212, Start Num: 2

Candidate Starts for ChrisnMich_61:

(Start: 2 @56895 has 7 MA's), (Start: 6 @56943 has 15 MA's), (Start: 9 @56994 has 3 MA's), (10, 57000), (12, 57006), (14, 57012), (18, 57045), (20, 57063), (21, 57078), (23, 57093), (24, 57111),

Gene: Cooper_63 Start: 57347, Stop: 57664, Start Num: 2

Candidate Starts for Cooper_63:

(Start: 2 @57347 has 7 MA's), (Start: 6 @57395 has 15 MA's), (Start: 9 @57446 has 3 MA's), (10, 57452), (12, 57458), (14, 57464), (18, 57497), (20, 57515), (23, 57545),

Gene: Fortunato_62 Start: 58000, Stop: 58269, Start Num: 6

Candidate Starts for Fortunato_62:

(Start: 6 @58000 has 15 MA's), (Start: 9 @58051 has 3 MA's), (10, 58057), (12, 58063), (14, 58069), (15, 58072), (18, 58102), (20, 58120), (21, 58135), (23, 58150), (24, 58168),

Gene: Funsized_67 Start: 60141, Stop: 60473, Start Num: 6

Candidate Starts for Funsized_67:

(Start: 3 @60099 has 1 MA's), (Start: 6 @60141 has 15 MA's), (Start: 9 @60204 has 3 MA's), (14, 60222), (21, 60288), (23, 60303), (27, 60411),

Gene: Hangman_61 Start: 58042, Stop: 58311, Start Num: 6

Candidate Starts for Hangman_61:

(Start: 6 @58042 has 15 MA's), (Start: 9 @58093 has 3 MA's), (10, 58099), (12, 58105), (14, 58111), (15, 58114), (18, 58144), (20, 58162), (21, 58177), (23, 58192), (24, 58210),

Gene: Heath_60 Start: 57720, Stop: 57938, Start Num: 9

Candidate Starts for Heath_60:

(Start: 6 @57669 has 15 MA's), (Start: 9 @57720 has 3 MA's), (10, 57726), (12, 57732), (14, 57738), (15, 57741), (18, 57771), (20, 57789), (21, 57804), (23, 57819), (24, 57837),

Gene: Hydro_61 Start: 57932, Stop: 58249, Start Num: 2

Candidate Starts for Hydro_61:

(Start: 2 @57932 has 7 MA's), (Start: 6 @57980 has 15 MA's), (Start: 9 @58031 has 3 MA's), (10, 58037), (12, 58043), (14, 58049), (15, 58052), (18, 58082), (20, 58100), (21, 58115), (23, 58130), (24, 58148),

Gene: Imvubu_61 Start: 56360, Stop: 56623, Start Num: 5

Candidate Starts for Imvubu_61:

(Start: 4 @56357 has 1 MA's), (Start: 5 @56360 has 1 MA's), (Start: 6 @56366 has 15 MA's), (Start: 9 @56417 has 3 MA's), (21, 56501), (23, 56516),

Gene: JAMaL_61 Start: 58031, Stop: 58300, Start Num: 6

Candidate Starts for JAMaL_61:

(Start: 6 @58031 has 15 MA's), (Start: 9 @58082 has 3 MA's), (10, 58088), (12, 58094), (14, 58100), (18, 58133), (20, 58151), (21, 58166), (23, 58181), (24, 58199),

Gene: Knocker_66 Start: 59276, Stop: 59527, Start Num: 6

Candidate Starts for Knocker_66:

(Start: 6 @59276 has 15 MA's), (12, 59339), (17, 59375),

Gene: Lolalove_62 Start: 58003, Stop: 58272, Start Num: 6

Candidate Starts for Lolalove_62:

(Start: 6 @58003 has 15 MA's), (Start: 9 @58054 has 3 MA's), (10, 58060), (12, 58066), (14, 58072), (15, 58075), (18, 58105), (20, 58123), (21, 58138), (23, 58153), (24, 58171),

Gene: Mithril_61 Start: 58157, Stop: 58423, Start Num: 6

Candidate Starts for Mithril_61:

(Start: 6 @58157 has 15 MA's), (Start: 9 @58208 has 3 MA's), (10, 58214), (12, 58220), (14, 58226), (15, 58229), (18, 58259), (20, 58277), (21, 58292), (23, 58307), (24, 58325),

Gene: Mudslide_61 Start: 58184, Stop: 58498, Start Num: 2

Candidate Starts for Mudslide_61:

(Start: 2 @58184 has 7 MA's), (Start: 6 @58232 has 15 MA's), (Start: 9 @58283 has 3 MA's), (10, 58289), (12, 58295), (14, 58301), (15, 58304), (18, 58334), (20, 58352), (21, 58367), (23, 58382), (24, 58400),

Gene: Nigel_61 Start: 57023, Stop: 57292, Start Num: 6

Candidate Starts for Nigel_61:

(Start: 6 @57023 has 15 MA's), (Start: 9 @57074 has 3 MA's), (10, 57080), (12, 57086), (14, 57092), (15, 57095), (20, 57143), (21, 57158), (23, 57173),

Gene: PenguinLover67_63 Start: 57825, Stop: 58076, Start Num: 4

Candidate Starts for PenguinLover67_63:

(Start: 4 @57825 has 1 MA's), (Start: 6 @57834 has 15 MA's), (10, 57894), (14, 57906), (17, 57936), (20, 57957),

Gene: Quesadilla_66 Start: 58228, Stop: 58470, Start Num: 6

Candidate Starts for Quesadilla_66:

(Start: 6 @58228 has 15 MA's), (10, 58288), (14, 58300), (17, 58330), (19, 58339), (20, 58351),

Gene: RawrgerThat_62 Start: 58029, Stop: 58247, Start Num: 9

Candidate Starts for RawrgerThat_62:

(Start: 2 @57930 has 7 MA's), (Start: 6 @57978 has 15 MA's), (Start: 9 @58029 has 3 MA's), (10, 58035), (12, 58041), (14, 58047), (18, 58080), (20, 58098), (21, 58113), (23, 58128), (24, 58146),

Gene: Stinger_62 Start: 56901, Stop: 57218, Start Num: 2

Candidate Starts for Stinger_62:

(Start: 2 @56901 has 7 MA's), (Start: 6 @56949 has 15 MA's), (Start: 9 @57000 has 3 MA's), (10, 57006), (14, 57018), (15, 57021), (18, 57051), (20, 57069), (23, 57099),

Gene: Vincenzo_64 Start: 59168, Stop: 59425, Start Num: 6

Candidate Starts for Vincenzo_64:

(Start: 6 @59168 has 15 MA's), (Start: 9 @59219 has 3 MA's), (10, 59225), (14, 59237), (17, 59267), (18, 59270), (22, 59309), (23, 59318), (25, 59372),

Gene: VioletZ_63 Start: 58094, Stop: 58360, Start Num: 6

Candidate Starts for VioletZ_63:

(Start: 6 @58094 has 15 MA's), (Start: 9 @58145 has 3 MA's), (10, 58151), (12, 58157), (14, 58163), (15, 58166), (18, 58196), (20, 58214), (21, 58229), (23, 58244), (24, 58262),

Gene: Waleliano_61 Start: 58034, Stop: 58300, Start Num: 6

Candidate Starts for Waleliano_61:

(Start: 6 @58034 has 15 MA's), (Start: 9 @58085 has 3 MA's), (10, 58091), (12, 58097), (14, 58103), (15, 58106), (18, 58136), (20, 58154), (21, 58169), (23, 58184), (24, 58202),

Gene: Zemanar_62 Start: 57920, Stop: 58138, Start Num: 9

Candidate Starts for Zemanar_62:

(Start: 6 @57869 has 15 MA's), (Start: 9 @57920 has 3 MA's), (10, 57926), (12, 57932), (14, 57938), (15, 57941), (18, 57971), (20, 57989), (21, 58004), (23, 58019), (24, 58037),

Gene: Zenteno07_73 Start: 58751, Stop: 59014, Start Num: 6

Candidate Starts for Zenteno07_73:

(1, 58664), (Start: 3 @58709 has 1 MA's), (Start: 4 @58742 has 1 MA's), (Start: 6 @58751 has 15 MA's), (7, 58790), (10, 58817), (11, 58820), (13, 58826), (16, 58844), (20, 58883), (26, 58994),