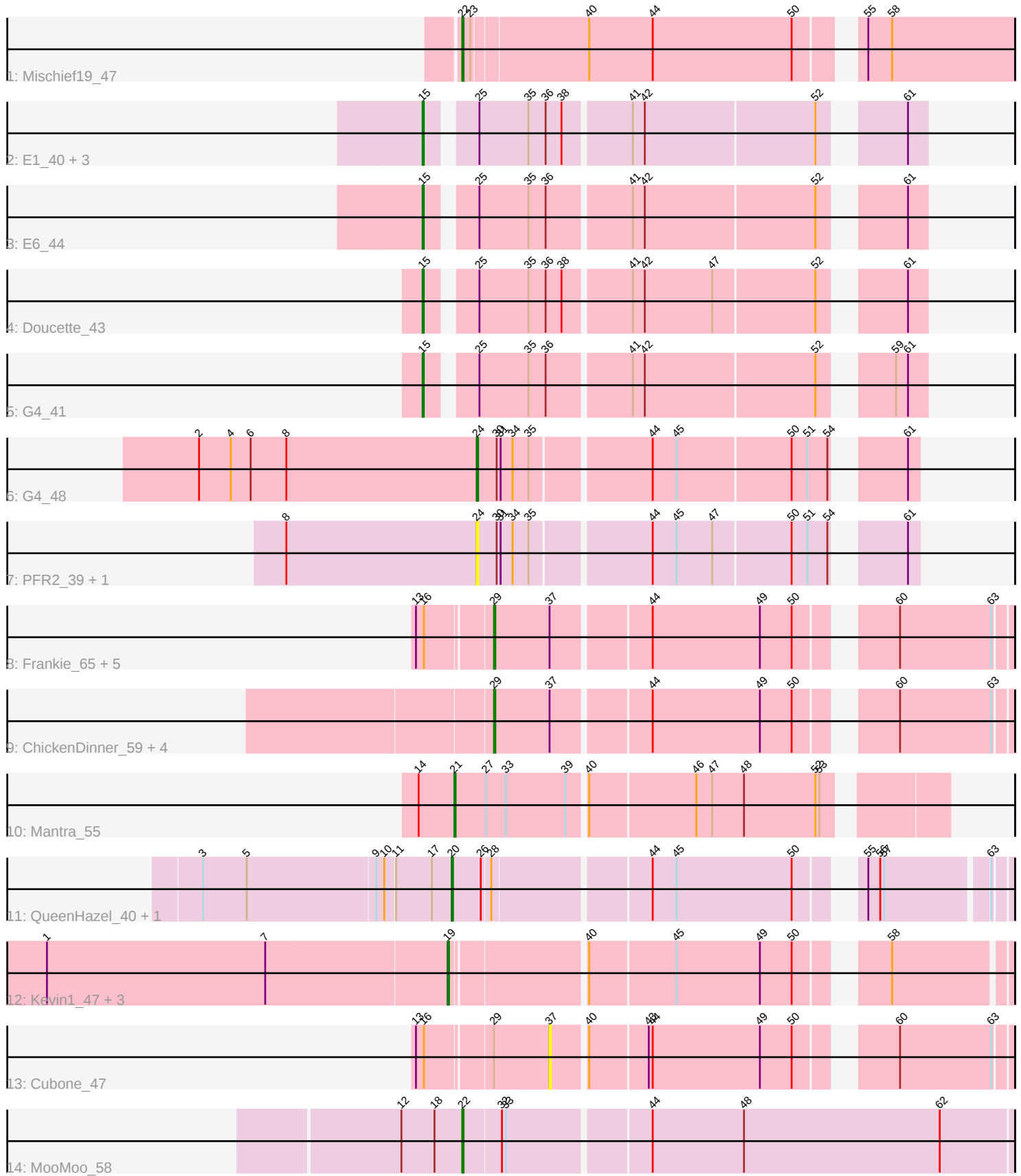


Pham 331100



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 331100 Report

This analysis was run 09/05/26 on database version 662.

Pham number 331100 has 31 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Mischief19_47
- Track 2 : E1_40, B3_39, Anatole_40, B22_42
- Track 3 : E6_44
- Track 4 : Doucette_43
- Track 5 : G4_41
- Track 6 : G4_48
- Track 7 : PFR2_39, PFR1_37
- Track 8 : Frankie_65, TootsiePop_57, Misha28_57, LilSpotty_59, LordVader_53, Awesomesauce_59
- Track 9 : ChickenDinner_59, DocMcStuffins_59, MulchSalad_59, Aloeri_60, Piper2020_60
- Track 10 : Mantra_55
- Track 11 : QueenHazel_40, Xula_39
- Track 12 : Kevin1_47, Rubeelu_48, MichelleMyBell_45, Butters_48
- Track 13 : Cubone_47
- Track 14 : MooMoo_58

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

The start number called the most often in the published annotations is 29, it was called in 10 of the 27 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aloeri_60, Awesomesauce_59, ChickenDinner_59, DocMcStuffins_59, Frankie_65, LilSpotty_59, LordVader_53, Misha28_57, MulchSalad_59, Piper2020_60, TootsiePop_57,

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

- Cubone_47,

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

- Anatole_40, B22_42, B3_39, Butters_48, Doucette_43, E1_40, E6_44, G4_41, G4_48, Kevin1_47, Mantra_55, MichelleMyBell_45, Mischief19_47, MooMoo_58, PFR1_37, PFR2_39, QueenHazel_40, Rubeelu_48, Xula_39,

Summary by start number:

Start 15:

- Found in 7 of 31 (22.6%) of genes in pham
- Manual Annotations of this start: 7 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anatole_40 (BV), B22_42 (BW), B3_39 (BV), Doucette_43 (BW), E1_40 (BV), E6_44 (BW), G4_41 (BW),

Start 19:

- Found in 4 of 31 (12.9%) of genes in pham
- Manual Annotations of this start: 4 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Butters_48 (N), Kevin1_47 (N), MichelleMyBell_45 (N), Rubeelu_48 (N),

Start 20:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: QueenHazel_40 (I1), Xula_39 (I1),

Start 21:

- Found in 1 of 31 (3.2%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mantra_55 (F1),

Start 22:

- Found in 2 of 31 (6.5%) of genes in pham
- Manual Annotations of this start: 2 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mischief19_47 (BG), MooMoo_58 (singleton),

Start 24:

- Found in 3 of 31 (9.7%) of genes in pham
- Manual Annotations of this start: 1 of 27
- Called 100.0% of time when present
- Phage (with cluster) where this start called: G4_48 (BW), PFR1_37 (BX), PFR2_39 (BX),

Start 29:

- Found in 12 of 31 (38.7%) of genes in pham
- Manual Annotations of this start: 10 of 27
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Aloeri_60 (F1), Awesomesauce_59 (F1), ChickenDinner_59 (F1), DocMcStuffins_59 (F1), Frankie_65 (F1), LilSpotty_59 (singleton), LordVader_53 (F), Misha28_57 (F1), MulchSalad_59 (F7), Piper2020_60 (F1), TootsiePop_57 (F1),

Start 37:

- Found in 12 of 31 (38.7%) of genes in pham
- No Manual Annotations of this start.
- Called 8.3% of time when present
- Phage (with cluster) where this start called: Cubone_47 (N),

Summary by clusters:

There are 10 clusters represented in this pham: F1, singleton, BG, F7, I1, F, N, BV, BW, BX,

Info for manual annotations of cluster BG:

- Start number 22 was manually annotated 1 time for cluster BG.

Info for manual annotations of cluster BV:

- Start number 15 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:

- Start number 15 was manually annotated 4 times for cluster BW.
- Start number 24 was manually annotated 1 time for cluster BW.

Info for manual annotations of cluster F:

- Start number 29 was manually annotated 1 time for cluster F.

Info for manual annotations of cluster F1:

- Start number 21 was manually annotated 1 time for cluster F1.
- Start number 29 was manually annotated 8 times for cluster F1.

Info for manual annotations of cluster I1:

- Start number 20 was manually annotated 2 times for cluster I1.

Info for manual annotations of cluster N:

- Start number 19 was manually annotated 4 times for cluster N.

Gene Information:

Gene: Aloeri_60 Start: 39346, Stop: 39699, Start Num: 29

Candidate Starts for Aloeri_60:

(Start: 29 @39346 has 10 MA's), (37, 39388), (44, 39457), (49, 39538), (50, 39562), (60, 39619), (63, 39688),

Gene: Anatole_40 Start: 28483, Stop: 28815, Start Num: 15

Candidate Starts for Anatole_40:

(Start: 15 @28483 has 7 MA's), (25, 28510), (35, 28546), (36, 28558), (38, 28570), (41, 28618), (42, 28627), (52, 28753), (61, 28801),

Gene: Awesomesauce_59 Start: 38429, Stop: 38782, Start Num: 29

Candidate Starts for Awesomesauce_59:

(13, 38378), (16, 38384), (Start: 29 @38429 has 10 MA's), (37, 38471), (44, 38540), (49, 38621), (50, 38645), (60, 38702), (63, 38771),

Gene: B22_42 Start: 28248, Stop: 28580, Start Num: 15

Candidate Starts for B22_42:

(Start: 15 @28248 has 7 MA's), (25, 28275), (35, 28311), (36, 28323), (38, 28335), (41, 28383), (42, 28392), (52, 28518), (61, 28566),

Gene: B3_39 Start: 27767, Stop: 28099, Start Num: 15

Candidate Starts for B3_39:

(Start: 15 @27767 has 7 MA's), (25, 27794), (35, 27830), (36, 27842), (38, 27854), (41, 27902), (42, 27911), (52, 28037), (61, 28085),

Gene: Butters_48 Start: 32426, Stop: 32803, Start Num: 19

Candidate Starts for Butters_48:

(1, 32126), (7, 32291), (Start: 19 @32426 has 4 MA's), (40, 32519), (45, 32582), (49, 32645), (50, 32669), (58, 32720),

Gene: ChickenDinner_59 Start: 39346, Stop: 39699, Start Num: 29

Candidate Starts for ChickenDinner_59:

(Start: 29 @39346 has 10 MA's), (37, 39388), (44, 39457), (49, 39538), (50, 39562), (60, 39619), (63, 39688),

Gene: Cubone_47 Start: 30625, Stop: 30936, Start Num: 37

Candidate Starts for Cubone_47:

(13, 30532), (16, 30538), (Start: 29 @30583 has 10 MA's), (37, 30625), (40, 30649), (43, 30691), (44, 30694), (49, 30775), (50, 30799), (60, 30856), (63, 30925),

Gene: DocMcStuffins_59 Start: 39346, Stop: 39699, Start Num: 29

Candidate Starts for DocMcStuffins_59:

(Start: 29 @39346 has 10 MA's), (37, 39388), (44, 39457), (49, 39538), (50, 39562), (60, 39619), (63, 39688),

Gene: Doucette_43 Start: 29654, Stop: 29986, Start Num: 15

Candidate Starts for Doucette_43:

(Start: 15 @29654 has 7 MA's), (25, 29681), (35, 29717), (36, 29729), (38, 29741), (41, 29789), (42, 29798), (47, 29849), (52, 29924), (61, 29972),

Gene: E1_40 Start: 28483, Stop: 28815, Start Num: 15

Candidate Starts for E1_40:

(Start: 15 @28483 has 7 MA's), (25, 28510), (35, 28546), (36, 28558), (38, 28570), (41, 28618), (42, 28627), (52, 28753), (61, 28801),

Gene: E6_44 Start: 31064, Stop: 31396, Start Num: 15

Candidate Starts for E6_44:

(Start: 15 @31064 has 7 MA's), (25, 31091), (35, 31127), (36, 31139), (41, 31199), (42, 31208), (52, 31334), (61, 31382),

Gene: Frankie_65 Start: 41824, Stop: 42177, Start Num: 29

Candidate Starts for Frankie_65:

(13, 41773), (16, 41779), (Start: 29 @41824 has 10 MA's), (37, 41866), (44, 41935), (49, 42016), (50, 42040), (60, 42097), (63, 42166),

Gene: G4_41 Start: 28598, Stop: 28930, Start Num: 15

Candidate Starts for G4_41:

(Start: 15 @28598 has 7 MA's), (25, 28625), (35, 28661), (36, 28673), (41, 28733), (42, 28742), (52, 28868), (59, 28907), (61, 28916),

Gene: G4_48 Start: 30679, Stop: 30978, Start Num: 24

Candidate Starts for G4_48:

(2, 30469), (4, 30493), (6, 30508), (8, 30535), (Start: 24 @30679 has 1 MA's), (30, 30694), (31, 30697), (34, 30706), (35, 30718), (44, 30802), (45, 30820), (50, 30904), (51, 30916), (54, 30931), (61, 30970),

Gene: Kevin1_47 Start: 31862, Stop: 32239, Start Num: 19

Candidate Starts for Kevin1_47:

(1, 31562), (7, 31727), (Start: 19 @31862 has 4 MA's), (40, 31955), (45, 32018), (49, 32081), (50, 32105), (58, 32156),

Gene: LilSpotty_59 Start: 37743, Stop: 38096, Start Num: 29

Candidate Starts for LilSpotty_59:

(13, 37692), (16, 37698), (Start: 29 @37743 has 10 MA's), (37, 37785), (44, 37854), (49, 37935), (50, 37959), (60, 38016), (63, 38085),

Gene: LordVader_53 Start: 35185, Stop: 35538, Start Num: 29

Candidate Starts for LordVader_53:

(13, 35134), (16, 35140), (Start: 29 @35185 has 10 MA's), (37, 35227), (44, 35296), (49, 35377), (50, 35401), (60, 35458), (63, 35527),

Gene: Mantra_55 Start: 38878, Stop: 39219, Start Num: 21

Candidate Starts for Mantra_55:

(14, 38851), (Start: 21 @38878 has 1 MA's), (27, 38902), (33, 38917), (39, 38962), (40, 38974), (46, 39052), (47, 39064), (48, 39088), (52, 39139), (53, 39142),

Gene: MichelleMyBell_45 Start: 30673, Stop: 31050, Start Num: 19

Candidate Starts for MichelleMyBell_45:

(1, 30373), (7, 30538), (Start: 19 @30673 has 4 MA's), (40, 30766), (45, 30829), (49, 30892), (50, 30916), (58, 30967),

Gene: Mischief19_47 Start: 42321, Stop: 41932, Start Num: 22

Candidate Starts for Mischief19_47:

(Start: 22 @42321 has 2 MA's), (23, 42315), (40, 42231), (44, 42183), (50, 42078), (55, 42042), (58, 42024),

Gene: Misha28_57 Start: 38434, Stop: 38787, Start Num: 29

Candidate Starts for Misha28_57:

(13, 38383), (16, 38389), (Start: 29 @38434 has 10 MA's), (37, 38476), (44, 38545), (49, 38626), (50, 38650), (60, 38707), (63, 38776),

Gene: MooMoo_58 Start: 39220, Stop: 39621, Start Num: 22

Candidate Starts for MooMoo_58:

(12, 39175), (18, 39199), (Start: 22 @39220 has 2 MA's), (32, 39247), (33, 39250), (44, 39352), (48, 39421), (62, 39568),

Gene: MulchSalad_59 Start: 37668, Stop: 38021, Start Num: 29

Candidate Starts for MulchSalad_59:

(Start: 29 @37668 has 10 MA's), (37, 37710), (44, 37779), (49, 37860), (50, 37884), (60, 37941), (63, 38010),

Gene: PFR1_37 Start: 28506, Stop: 28805, Start Num: 24

Candidate Starts for PFR1_37:

(8, 28362), (Start: 24 @28506 has 1 MA's), (30, 28521), (31, 28524), (34, 28533), (35, 28545), (44, 28629), (45, 28647), (47, 28674), (50, 28731), (51, 28743), (54, 28758), (61, 28797),

Gene: PFR2_39 Start: 30075, Stop: 30374, Start Num: 24

Candidate Starts for PFR2_39:

(8, 29931), (Start: 24 @30075 has 1 MA's), (30, 30090), (31, 30093), (34, 30102), (35, 30114), (44, 30198), (45, 30216), (47, 30243), (50, 30300), (51, 30312), (54, 30327), (61, 30366),

Gene: Piper2020_60 Start: 39329, Stop: 39682, Start Num: 29

Candidate Starts for Piper2020_60:

(Start: 29 @39329 has 10 MA's), (37, 39371), (44, 39440), (49, 39521), (50, 39545), (60, 39602), (63, 39671),

Gene: QueenHazel_40 Start: 31055, Stop: 31426, Start Num: 20

Candidate Starts for QueenHazel_40:

(3, 30872), (5, 30905), (9, 31001), (10, 31007), (11, 31013), (17, 31040), (Start: 20 @31055 has 2 MA's), (26, 31076), (28, 31082), (44, 31193), (45, 31211), (50, 31298), (55, 31331), (56, 31340), (57, 31343), (63, 31415),

Gene: Rubeelu_48 Start: 32426, Stop: 32803, Start Num: 19

Candidate Starts for Rubeelu_48:

(1, 32126), (7, 32291), (Start: 19 @32426 has 4 MA's), (40, 32519), (45, 32582), (49, 32645), (50, 32669), (58, 32720),

Gene: TootsiePop_57 Start: 38434, Stop: 38787, Start Num: 29

Candidate Starts for TootsiePop_57:

(13, 38383), (16, 38389), (Start: 29 @38434 has 10 MA's), (37, 38476), (44, 38545), (49, 38626), (50, 38650), (60, 38707), (63, 38776),

Gene: Xula_39 Start: 30657, Stop: 31028, Start Num: 20

Candidate Starts for Xula_39:

(3, 30474), (5, 30507), (9, 30603), (10, 30609), (11, 30615), (17, 30642), (Start: 20 @30657 has 2 MA's), (26, 30678), (28, 30684), (44, 30795), (45, 30813), (50, 30900), (55, 30933), (56, 30942), (57, 30945), (63, 31017),