Pham 289682

1: Juliette_77 + 4

2: Eponine_77

3: Ruthiejr_76

4: Fionnbharth_76 + 1

5: Slarp_75 + 3

6: Lebo14_74

7: Y10_72 + 1

8: Bobquesha_76 + 2

9: Taquito_74 + 1

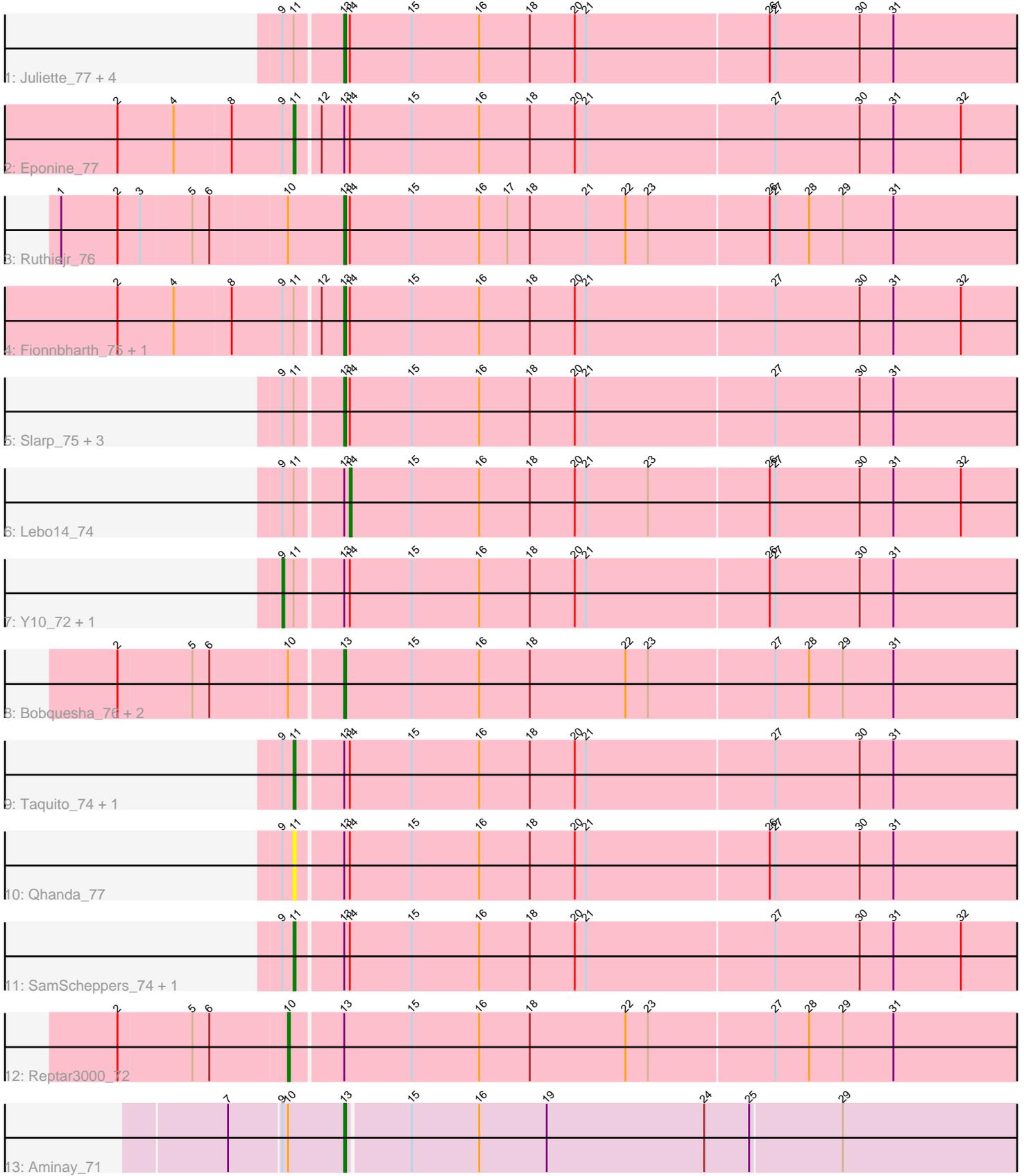10: Qhanda_77

11: SamScheppers_74 + 1

12: Reptar3000_72

13: Aminay_71

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 289682 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289682 has 26 members, 3 are drafts.

Phages represented in each track:
• Track 1 : Juliette_77, Malthus_76, JF1_75, Kraw_75, DanSyl44_78
• Track 2 : Eponine_77
• Track 3 : Ruthiejr_76
• Track 4 : Fionnbharth_75, Wintermute_75
• Track 5 : Slarp_75, YasnayaPolyana_74, Cheetobro_75, Mitti_75
• Track 6 : Lebo14_74
• Track 7 : Y10_72, Y2_72
• Track 8 : Bobquesha_76, Patt_71, MissDaisy_72
• Track 9 : Taquito_74, OmniCritical_75
• Track 10 : Qhanda_77
• Track 11 : SamScheppers_74, Chancellor_75
• Track 12 : Reptar3000_72
• Track 13 : Aminay_71

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

The start number called the most often in the published annotations is 13, it was called in 14 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Aminay_71, Bobquesha_76, Cheetobro_75, DanSyl44_78, Fionnbharth_75, JF1_75, Juliette_77, Kraw_75, Malthus_76, MissDaisy_72, Mitti_75, Patt_71, Ruthiejr_76, Slarp_75, Wintermute_75, YasnayaPolyana_74,

Genes that have the "Most Annotated" start but do not call it:
• Chancellor_75, Eponine_77, Lebo14_74, OmniCritical_75, Qhanda_77, Reptar3000_72, SamScheppers_74, Taquito_74, Y10_72, Y2_72,

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

Summary by start number:

Start 9:

• Found in 21 of 26 (80.8%) of genes in pham
• Manual Annotations of this start: 2 of 23
• Called 9.5% of time when present
• Phage (with cluster) where this start called: Y10_72 (K4), Y2_72 (K4),

Start 10:
• Found in 6 of 26 (23.1%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 16.7% of time when present
• Phage (with cluster) where this start called: Reptar3000_72 (K4),

Start 11:
• Found in 20 of 26 (76.9%) of genes in pham
• Manual Annotations of this start: 5 of 23
• Called 30.0% of time when present
• Phage (with cluster) where this start called: Chancellor_75 (K4), Eponine_77 (K4), OmniCritical_75 (K4), Qhanda_77 (K4), SamScheppers_74 (K4), Taquito_74 (K4),

Start 13:
• Found in 26 of 26 (100.0%) of genes in pham
• Manual Annotations of this start: 14 of 23
• Called 61.5% of time when present
• Phage (with cluster) where this start called: Aminay_71 (K7), Bobquesha_76 (K4), Cheetobro_75 (K4), DanSyl44_78 (K4), Fionnbharth_75 (K4), JF1_75 (K4), Juliette_77 (K4), Kraw_75 (K4), Malthus_76 (K4), MissDaisy_72 (K4), Mitti_75 (K4), Patt_71 (K4), Ruthiejr_76 (K4), Slarp_75 (K4), Wintermute_75 (K4), YasnayaPolyana_74 (K4),

Start 14:
• Found in 21 of 26 (80.8%) of genes in pham
• Manual Annotations of this start: 1 of 23
• Called 4.8% of time when present
• Phage (with cluster) where this start called: Lebo14_74 (K4),

Summary by clusters:

There are 2 clusters represented in this pham: K7, K4,

Info for manual annotations of cluster K4:
•Start number 9 was manually annotated 2 times for cluster K4.
•Start number 10 was manually annotated 1 time for cluster K4.
•Start number 11 was manually annotated 5 times for cluster K4.
•Start number 13 was manually annotated 13 times for cluster K4.
•Start number 14 was manually annotated 1 time for cluster K4.

Info for manual annotations of cluster K7:
•Start number 13 was manually annotated 1 time for cluster K7.

Gene Information:

Gene: Aminay_71 Start: 46904, Stop: 47275, Start Num: 13

Candidate Starts for Aminay_71:
(7, 46844), (Start: 9 @46871 has 2 MA's), (Start: 10 @46874 has 1 MA's), (Start: 13 @46904 has 14 MA's), (15, 46937), (16, 46973), (19, 47009), (24, 47093), (25, 47117), (29, 47165),

Gene: Bobquesha_76 Start: 46876, Stop: 47250, Start Num: 13
Candidate Starts for Bobquesha_76:
(2, 46762), (5, 46801), (6, 46810), (Start: 10 @46849 has 1 MA's), (Start: 13 @46876 has 14 MA's), (15, 46912), (16, 46948), (18, 46975), (22, 47026), (23, 47038), (27, 47104), (28, 47122), (29, 47140), (31, 47167),

Gene: Chancellor_75 Start: 47966, Stop: 48364, Start Num: 11
Candidate Starts for Chancellor_75:
(Start: 9 @47960 has 2 MA's), (Start: 11 @47966 has 5 MA's), (Start: 13 @47990 has 14 MA's), (Start: 14 @47993 has 1 MA's), (15, 48026), (16, 48062), (18, 48089), (20, 48113), (21, 48119), (27, 48218), (30, 48263), (31, 48281), (32, 48317),

Gene: Cheetobro_75 Start: 47987, Stop: 48361, Start Num: 13
Candidate Starts for Cheetobro_75:
(Start: 9 @47957 has 2 MA's), (Start: 11 @47963 has 5 MA's), (Start: 13 @47987 has 14 MA's), (Start: 14 @47990 has 1 MA's), (15, 48023), (16, 48059), (18, 48086), (20, 48110), (21, 48116), (27, 48215), (30, 48260), (31, 48278),

Gene: DanSyl44_78 Start: 49181, Stop: 49555, Start Num: 13
Candidate Starts for DanSyl44_78:
(Start: 9 @49151 has 2 MA's), (Start: 11 @49157 has 5 MA's), (Start: 13 @49181 has 14 MA's), (Start: 14 @49184 has 1 MA's), (15, 49217), (16, 49253), (18, 49280), (20, 49304), (21, 49310), (26, 49406), (27, 49409), (30, 49454), (31, 49472),

Gene: Eponine_77 Start: 48810, Stop: 49208, Start Num: 11
Candidate Starts for Eponine_77:
(2, 48717), (4, 48747), (8, 48777), (Start: 9 @48804 has 2 MA's), (Start: 11 @48810 has 5 MA's), (12, 48822), (Start: 13 @48834 has 14 MA's), (Start: 14 @48837 has 1 MA's), (15, 48870), (16, 48906), (18, 48933), (20, 48957), (21, 48963), (27, 49062), (30, 49107), (31, 49125), (32, 49161),

Gene: Fionnbharth_75 Start: 48232, Stop: 48606, Start Num: 13
Candidate Starts for Fionnbharth_75:
(2, 48115), (4, 48145), (8, 48175), (Start: 9 @48202 has 2 MA's), (Start: 11 @48208 has 5 MA's), (12, 48220), (Start: 13 @48232 has 14 MA's), (Start: 14 @48235 has 1 MA's), (15, 48268), (16, 48304), (18, 48331), (20, 48355), (21, 48361), (27, 48460), (30, 48505), (31, 48523), (32, 48559),

Gene: JF1_75 Start: 48197, Stop: 48571, Start Num: 13
Candidate Starts for JF1_75:
(Start: 9 @48167 has 2 MA's), (Start: 11 @48173 has 5 MA's), (Start: 13 @48197 has 14 MA's), (Start: 14 @48200 has 1 MA's), (15, 48233), (16, 48269), (18, 48296), (20, 48320), (21, 48326), (26, 48422), (27, 48425), (30, 48470), (31, 48488),

Gene: Juliette_77 Start: 48295, Stop: 48669, Start Num: 13
Candidate Starts for Juliette_77:
(Start: 9 @48265 has 2 MA's), (Start: 11 @48271 has 5 MA's), (Start: 13 @48295 has 14 MA's), (Start: 14 @48298 has 1 MA's), (15, 48331), (16, 48367), (18, 48394), (20, 48418), (21, 48424), (26, 48520), (27, 48523), (30, 48568), (31, 48586),

Gene: Kraw_75 Start: 47983, Stop: 48357, Start Num: 13

Candidate Starts for Kraw_75:
(Start: 9 @47953 has 2 MA's), (Start: 11 @47959 has 5 MA's), (Start: 13 @47983 has 14 MA's), (Start: 14 @47986 has 1 MA's), (15, 48019), (16, 48055), (18, 48082), (20, 48106), (21, 48112), (26, 48208), (27, 48211), (30, 48256), (31, 48274),

Gene: Lebo14_74 Start: 48331, Stop: 48702, Start Num: 14
Candidate Starts for Lebo14_74:
(Start: 9 @48298 has 2 MA's), (Start: 11 @48304 has 5 MA's), (Start: 13 @48328 has 14 MA's), (Start: 14 @48331 has 1 MA's), (15, 48364), (16, 48400), (18, 48427), (20, 48451), (21, 48457), (23, 48490), (26, 48553), (27, 48556), (30, 48601), (31, 48619), (32, 48655),

Gene: Malthus_76 Start: 47983, Stop: 48357, Start Num: 13
Candidate Starts for Malthus_76:
(Start: 9 @47953 has 2 MA's), (Start: 11 @47959 has 5 MA's), (Start: 13 @47983 has 14 MA's), (Start: 14 @47986 has 1 MA's), (15, 48019), (16, 48055), (18, 48082), (20, 48106), (21, 48112), (26, 48208), (27, 48211), (30, 48256), (31, 48274),

Gene: MissDaisy_72 Start: 46894, Stop: 47268, Start Num: 13
Candidate Starts for MissDaisy_72:
(2, 46780), (5, 46819), (6, 46828), (Start: 10 @46867 has 1 MA's), (Start: 13 @46894 has 14 MA's), (15, 46930), (16, 46966), (18, 46993), (22, 47044), (23, 47056), (27, 47122), (28, 47140), (29, 47158), (31, 47185),

Gene: Mitti_75 Start: 48138, Stop: 48512, Start Num: 13
Candidate Starts for Mitti_75:
(Start: 9 @48108 has 2 MA's), (Start: 11 @48114 has 5 MA's), (Start: 13 @48138 has 14 MA's), (Start: 14 @48141 has 1 MA's), (15, 48174), (16, 48210), (18, 48237), (20, 48261), (21, 48267), (27, 48366), (30, 48411), (31, 48429),

Gene: OmniCritical_75 Start: 48047, Stop: 48445, Start Num: 11
Candidate Starts for OmniCritical_75:
(Start: 9 @48041 has 2 MA's), (Start: 11 @48047 has 5 MA's), (Start: 13 @48071 has 14 MA's), (Start: 14 @48074 has 1 MA's), (15, 48107), (16, 48143), (18, 48170), (20, 48194), (21, 48200), (27, 48299), (30, 48344), (31, 48362),

Gene: Patt_71 Start: 46615, Stop: 46989, Start Num: 13
Candidate Starts for Patt_71:
(2, 46501), (5, 46540), (6, 46549), (Start: 10 @46588 has 1 MA's), (Start: 13 @46615 has 14 MA's), (15, 46651), (16, 46687), (18, 46714), (22, 46765), (23, 46777), (27, 46843), (28, 46861), (29, 46879), (31, 46906),

Gene: Qhanda_77 Start: 47975, Stop: 48373, Start Num: 11
Candidate Starts for Qhanda_77:
(Start: 9 @47969 has 2 MA's), (Start: 11 @47975 has 5 MA's), (Start: 13 @47999 has 14 MA's), (Start: 14 @48002 has 1 MA's), (15, 48035), (16, 48071), (18, 48098), (20, 48122), (21, 48128), (26, 48224), (27, 48227), (30, 48272), (31, 48290),

Gene: Reptar3000_72 Start: 46577, Stop: 46978, Start Num: 10
Candidate Starts for Reptar3000_72:
(2, 46490), (5, 46529), (6, 46538), (Start: 10 @46577 has 1 MA's), (Start: 13 @46604 has 14 MA's), (15, 46640), (16, 46676), (18, 46703), (22, 46754), (23, 46766), (27, 46832), (28, 46850), (29, 46868), (31, 46895),

Gene: Ruthiejr_76 Start: 48082, Stop: 48456, Start Num: 13
Candidate Starts for Ruthiejr_76:
(1, 47935), (2, 47965), (3, 47977), (5, 48004), (6, 48013), (Start: 10 @48052 has 1 MA's), (Start: 13 @48082 has 14 MA's), (Start: 14 @48085 has 1 MA's), (15, 48118), (16, 48154), (17, 48169), (18, 48181), (21, 48211), (22, 48232), (23, 48244), (26, 48307), (27, 48310), (28, 48328), (29, 48346), (31, 48373),

Gene: SamScheppers_74 Start: 48438, Stop: 48836, Start Num: 11
Candidate Starts for SamScheppers_74:
(Start: 9 @48432 has 2 MA's), (Start: 11 @48438 has 5 MA's), (Start: 13 @48462 has 14 MA's), (Start: 14 @48465 has 1 MA's), (15, 48498), (16, 48534), (18, 48561), (20, 48585), (21, 48591), (27, 48690), (30, 48735), (31, 48753), (32, 48789),

Gene: Slarp_75 Start: 47990, Stop: 48364, Start Num: 13
Candidate Starts for Slarp_75:
(Start: 9 @47960 has 2 MA's), (Start: 11 @47966 has 5 MA's), (Start: 13 @47990 has 14 MA's), (Start: 14 @47993 has 1 MA's), (15, 48026), (16, 48062), (18, 48089), (20, 48113), (21, 48119), (27, 48218), (30, 48263), (31, 48281),

Gene: Taquito_74 Start: 48171, Stop: 48569, Start Num: 11
Candidate Starts for Taquito_74:
(Start: 9 @48165 has 2 MA's), (Start: 11 @48171 has 5 MA's), (Start: 13 @48195 has 14 MA's), (Start: 14 @48198 has 1 MA's), (15, 48231), (16, 48267), (18, 48294), (20, 48318), (21, 48324), (27, 48423), (30, 48468), (31, 48486),

Gene: Wintermute_75 Start: 48221, Stop: 48595, Start Num: 13
Candidate Starts for Wintermute_75:
(2, 48104), (4, 48134), (8, 48164), (Start: 9 @48191 has 2 MA's), (Start: 11 @48197 has 5 MA's), (12, 48209), (Start: 13 @48221 has 14 MA's), (Start: 14 @48224 has 1 MA's), (15, 48257), (16, 48293), (18, 48320), (20, 48344), (21, 48350), (27, 48449), (30, 48494), (31, 48512), (32, 48548),

Gene: Y10_72 Start: 48167, Stop: 48571, Start Num: 9
Candidate Starts for Y10_72:
(Start: 9 @48167 has 2 MA's), (Start: 11 @48173 has 5 MA's), (Start: 13 @48197 has 14 MA's), (Start: 14 @48200 has 1 MA's), (15, 48233), (16, 48269), (18, 48296), (20, 48320), (21, 48326), (26, 48422), (27, 48425), (30, 48470), (31, 48488),

Gene: Y2_72 Start: 48167, Stop: 48571, Start Num: 9
Candidate Starts for Y2_72:
(Start: 9 @48167 has 2 MA's), (Start: 11 @48173 has 5 MA's), (Start: 13 @48197 has 14 MA's), (Start: 14 @48200 has 1 MA's), (15, 48233), (16, 48269), (18, 48296), (20, 48320), (21, 48326), (26, 48422), (27, 48425), (30, 48470), (31, 48488),

Gene: YasnayaPolyana_74 Start: 48046, Stop: 48420, Start Num: 13
Candidate Starts for YasnayaPolyana_74:
(Start: 9 @48016 has 2 MA's), (Start: 11 @48022 has 5 MA's), (Start: 13 @48046 has 14 MA's), (Start: 14 @48049 has 1 MA's), (15, 48082), (16, 48118), (18, 48145), (20, 48169), (21, 48175), (27, 48274), (30, 48319), (31, 48337),