Pham 344144


1: Grumio_37 + 5
2: Sting_36
3: Makar_38 + 1
4: Purplicious_35
5: Stillion_36
6: Lilbeanie_9
7: AnClar_74 + 2
8: Blackpen_74 + 2
9: Ligma_75 + 3
10: BobRoss2024_77
11: CharlottesWeb_73 + 3
12: MossRose_75 + 3
13: BiggityBass_75
14: LittleMunchkin_75
15: MakoManhole_72
16: NHagos_72 + 1
17: TraderJ_76
18: AnarQue_77
19: Pumpernickel_11 + 1
20: Jace_59
21: Finch_181
22: Yappy_123

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 344144 Report

This analysis was run 11/14/26 on database version 672.

Pham number 344144 has 43 members, 11 are drafts.

Phages represented in each track:
• Track 1 : Grumio_37, Jollymon_37, Amo99_38, ColdSoup_38, KingstonB_35, DonTron_37
• Track 2 : Sting_36
• Track 3 : Makar_38, Clawz_37
• Track 4 : Purplicious_35
• Track 5 : Stillion_36
• Track 6 : Lilbeanie_9
• Track 7 : AnClar_74, Sisko_75, Yago84_74
• Track 8 : Blackpen_74, Wooper_77, Yeshua_76
• Track 9 : Ligma_75, Fresco_75, Axumite_75, Shatter_75
• Track 10 : BobRoss2024_77
• Track 11 : CharlottesWeb_73, Coco2012_72, JellyBelly_72, Mariokart_73
• Track 12 : MossRose_75, FelixTres_76, CaiB_76, CloverMinnie_74
• Track 13 : BiggityBass_75
• Track 14 : LittleMunchkin_75
• Track 15 : MakoManhole_72
• Track 16 : NHagos_72, AksarBAT_76
• Track 17 : TraderJ_76
• Track 18 : AnarQue_77
• Track 19 : Pumpernickel_11, Pumpernickel_312
• Track 20 : Jace_59
• Track 21 : Finch_181
• Track 22 : Yappy_123

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

The start number called the most often in the published annotations is 19, it was called in 17 of the 32 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• AksarBAT_76, AnarQue_77, Axumite_75, Blackpen_74, BobRoss2024_77, CaiB_76, CharlottesWeb_73, CloverMinnie_74, Coco2012_72, FelixTres_76, Fresco_75, JellyBelly_72, Ligma_75, Lilbeanie_9, LittleMunchkin_75, MakoManhole_72, Mariokart_73, MossRose_75, NHagos_72, Shatter_75,

TraderJ_76, Wooper_77, Yeshua_76,

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

Genes that do not have the "Most Annotated" start:
• Amo99_38, AnClar_74, BiggityBass_75, Clawz_37, ColdSoup_38, DonTron_37, Finch_181, Grumio_37, Jace_59, Jollymon_37, KingstonB_35, Makar_38, Pumpernickel_11, Pumpernickel_312, Purplicious_35, Sisko_75, Stillion_36, Sting_36, Yago84_74, Yappy_123,

Summary by start number:

Start 17:
• Found in 2 of 43 (4.7%) of genes in pham
• Manual Annotations of this start: 2 of 32
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Pumpernickel_11 (GD4), Pumpernickel_312 (GD4),

Start 18:
• Found in 6 of 43 (14.0%) of genes in pham
• Manual Annotations of this start: 6 of 32
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AnClar_74 (DR), BiggityBass_75 (DR), Finch_181 (singleton), Jace_59 (singleton), Sisko_75 (DR), Yago84_74 (DR),

Start 19:
• Found in 23 of 43 (53.5%) of genes in pham
• Manual Annotations of this start: 17 of 32
• Called 100.0% of time when present
• Phage (with cluster) where this start called: AksarBAT_76 (DR), AnarQue_77 (DR), Axumite_75 (DR), Blackpen_74 (DR), BobRoss2024_77 (DR), CaiB_76 (DR), CharlottesWeb_73 (DR), CloverMinnie_74 (DR), Coco2012_72 (DR), FelixTres_76 (DR), Fresco_75 (DR), JellyBelly_72 (DR), Ligma_75 (DR), Lilbeanie_9 (DE5), LittleMunchkin_75 (DR), MakoManhole_72 (DR), Mariokart_73 (DR), MossRose_75 (DR), NHagos_72 (DR), Shatter_75 (DR), TraderJ_76 (DR), Wooper_77 (DR), Yeshua_76 (DR),

Start 20:
• Found in 11 of 43 (25.6%) of genes in pham
• Manual Annotations of this start: 6 of 32
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Amo99_38 (CP), Clawz_37 (CP), ColdSoup_38 (CP), DonTron_37 (CP), Grumio_37 (CP), Jollymon_37 (CP), KingstonB_35 (CP), Makar_38 (CP), Purplicious_35 (CP), Stillion_36 (CP), Sting_36 (CP),

Start 21:
• Found in 3 of 43 (7.0%) of genes in pham
• Manual Annotations of this start: 1 of 32
• Called 33.3% of time when present
• Phage (with cluster) where this start called: Yappy_123 (singleton),

Summary by clusters:

There are 5 clusters represented in this pham: GD4, singleton, CP, DR, DE5,

Info for manual annotations of cluster CP:
•Start number 20 was manually annotated 6 times for cluster CP.

Info for manual annotations of cluster DE5:
•Start number 19 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DR:
•Start number 18 was manually annotated 4 times for cluster DR.
•Start number 19 was manually annotated 16 times for cluster DR.

Info for manual annotations of cluster GD4:
•Start number 17 was manually annotated 2 times for cluster GD4.

Gene Information:

Gene: AksarBAT_76 Start: 56621, Stop: 56316, Start Num: 19
Candidate Starts for AksarBAT_76:
(Start: 19 @56621 has 17 MA's), (27, 56552), (28, 56525), (39, 56447), (43, 56411), (44, 56408), (47, 56399), (51, 56369), (52, 56357),

Gene: Amo99_38 Start: 17007, Stop: 17324, Start Num: 20
Candidate Starts for Amo99_38:
(4, 16872), (9, 16923), (15, 16953), (Start: 20 @17007 has 6 MA's), (22, 17031), (27, 17070), (28, 17097), (35, 17169), (47, 17232), (51, 17268), (53, 17301), (54, 17307),

Gene: AnClar_74 Start: 58788, Stop: 58465, Start Num: 18
Candidate Starts for AnClar_74:
(Start: 18 @58788 has 6 MA's), (28, 58686), (51, 58527), (54, 58488),

Gene: AnarQue_77 Start: 57768, Stop: 57472, Start Num: 19
Candidate Starts for AnarQue_77:
(5, 57876), (8, 57849), (14, 57822), (Start: 19 @57768 has 17 MA's), (27, 57702), (28, 57675), (44, 57561), (51, 57522),

Gene: Axumite_75 Start: 56453, Stop: 56142, Start Num: 19
Candidate Starts for Axumite_75:
(10, 56528), (16, 56492), (Start: 19 @56453 has 17 MA's), (28, 56360), (30, 56333), (51, 56192),

Gene: BiggityBass_75 Start: 58469, Stop: 58143, Start Num: 18
Candidate Starts for BiggityBass_75:
(Start: 18 @58469 has 6 MA's), (28, 58367), (33, 58313), (51, 58208), (53, 58175), (54, 58169),

Gene: Blackpen_74 Start: 56225, Stop: 55929, Start Num: 19
Candidate Starts for Blackpen_74:
(5, 56336), (8, 56309), (14, 56282), (Start: 19 @56225 has 17 MA's), (27, 56159), (28, 56132), (44, 56018), (51, 55979),

Gene: BobRoss2024_77 Start: 57065, Stop: 56745, Start Num: 19
Candidate Starts for BobRoss2024_77:
(Start: 19 @57065 has 17 MA's), (27, 56999), (28, 56972), (31, 56927), (32, 56921), (41, 56873), (42, 56867), (51, 56813),

Gene: CaiB_76 Start: 57561, Stop: 57265, Start Num: 19
Candidate Starts for CaiB_76:
(3, 57765), (Start: 19 @57561 has 17 MA's), (27, 57495), (28, 57468), (44, 57354), (51, 57315),

Gene: CharlottesWeb_73 Start: 55664, Stop: 55353, Start Num: 19
Candidate Starts for CharlottesWeb_73:
(Start: 19 @55664 has 17 MA's), (27, 55598), (28, 55571), (30, 55544), (36, 55496), (44, 55445), (51, 55403),

Gene: Clawz_37 Start: 16898, Stop: 17212, Start Num: 20
Candidate Starts for Clawz_37:
(6, 16808), (9, 16814), (15, 16844), (Start: 20 @16898 has 6 MA's), (22, 16922), (28, 16988), (51, 17156), (53, 17189), (54, 17195),

Gene: CloverMinnie_74 Start: 56730, Stop: 56434, Start Num: 19
Candidate Starts for CloverMinnie_74:
(3, 56934), (Start: 19 @56730 has 17 MA's), (27, 56664), (28, 56637), (44, 56523), (51, 56484),

Gene: Coco2012_72 Start: 55273, Stop: 54962, Start Num: 19
Candidate Starts for Coco2012_72:
(Start: 19 @55273 has 17 MA's), (27, 55207), (28, 55180), (30, 55153), (36, 55105), (44, 55054), (51, 55012),

Gene: ColdSoup_38 Start: 17007, Stop: 17324, Start Num: 20
Candidate Starts for ColdSoup_38:
(4, 16872), (9, 16923), (15, 16953), (Start: 20 @17007 has 6 MA's), (22, 17031), (27, 17070), (28, 17097), (35, 17169), (47, 17232), (51, 17268), (53, 17301), (54, 17307),

Gene: DonTron_37 Start: 17077, Stop: 17394, Start Num: 20
Candidate Starts for DonTron_37:
(4, 16942), (9, 16993), (15, 17023), (Start: 20 @17077 has 6 MA's), (22, 17101), (27, 17140), (28, 17167), (35, 17239), (47, 17302), (51, 17338), (53, 17371), (54, 17377),

Gene: FelixTres_76 Start: 57008, Stop: 56712, Start Num: 19
Candidate Starts for FelixTres_76:
(3, 57212), (Start: 19 @57008 has 17 MA's), (27, 56942), (28, 56915), (44, 56801), (51, 56762),

Gene: Finch_181 Start: 109541, Stop: 109891, Start Num: 18
Candidate Starts for Finch_181:
(12, 109487), (13, 109490), (Start: 18 @109541 has 6 MA's), (28, 109640), (39, 109733), (40, 109751), (45, 109775), (46, 109778), (51, 109820), (52, 109832), (53, 109853), (54, 109859),

Gene: Fresco_75 Start: 56459, Stop: 56148, Start Num: 19
Candidate Starts for Fresco_75:
(10, 56534), (16, 56498), (Start: 19 @56459 has 17 MA's), (28, 56366), (30, 56339), (51, 56198),

Gene: Grumio_37 Start: 16515, Stop: 16832, Start Num: 20

Candidate Starts for Grumio_37:
(4, 16380), (9, 16431), (15, 16461), (Start: 20 @16515 has 6 MA's), (22, 16539), (27, 16578), (28, 16605), (35, 16677), (47, 16740), (51, 16776), (53, 16809), (54, 16815),

Gene: Jace_59 Start: 37205, Stop: 37537, Start Num: 18
Candidate Starts for Jace_59:
(1, 36791), (Start: 18 @37205 has 6 MA's), (25, 37259), (28, 37301), (34, 37364), (37, 37379), (50, 37457),

Gene: JellyBelly_72 Start: 55658, Stop: 55347, Start Num: 19
Candidate Starts for JellyBelly_72:
(Start: 19 @55658 has 17 MA's), (27, 55592), (28, 55565), (30, 55538), (36, 55490), (44, 55439), (51, 55397),

Gene: Jollymon_37 Start: 17007, Stop: 17324, Start Num: 20
Candidate Starts for Jollymon_37:
(4, 16872), (9, 16923), (15, 16953), (Start: 20 @17007 has 6 MA's), (22, 17031), (27, 17070), (28, 17097), (35, 17169), (47, 17232), (51, 17268), (53, 17301), (54, 17307),

Gene: KingstonB_35 Start: 16515, Stop: 16832, Start Num: 20
Candidate Starts for KingstonB_35:
(4, 16380), (9, 16431), (15, 16461), (Start: 20 @16515 has 6 MA's), (22, 16539), (27, 16578), (28, 16605), (35, 16677), (47, 16740), (51, 16776), (53, 16809), (54, 16815),

Gene: Ligma_75 Start: 56453, Stop: 56142, Start Num: 19
Candidate Starts for Ligma_75:
(10, 56528), (16, 56492), (Start: 19 @56453 has 17 MA's), (28, 56360), (30, 56333), (51, 56192),

Gene: Lilbeanie_9 Start: 3959, Stop: 4267, Start Num: 19
Candidate Starts for Lilbeanie_9:
(7, 3884), (Start: 19 @3959 has 17 MA's), (28, 4052), (48, 4190),

Gene: LittleMunchkin_75 Start: 58648, Stop: 58328, Start Num: 19
Candidate Starts for LittleMunchkin_75:
(9, 58723), (16, 58687), (Start: 19 @58648 has 17 MA's), (27, 58582), (28, 58555), (38, 58480), (51, 58396),

Gene: Makar_38 Start: 16967, Stop: 17281, Start Num: 20
Candidate Starts for Makar_38:
(6, 16877), (9, 16883), (15, 16913), (Start: 20 @16967 has 6 MA's), (22, 16991), (28, 17057), (51, 17225), (53, 17258), (54, 17264),

Gene: MakoManhole_72 Start: 56105, Stop: 55809, Start Num: 19
Candidate Starts for MakoManhole_72:
(3, 56309), (11, 56180), (Start: 19 @56105 has 17 MA's), (27, 56039), (28, 56012), (44, 55898), (51, 55859),

Gene: Mariokart_73 Start: 55938, Stop: 55627, Start Num: 19
Candidate Starts for Mariokart_73:
(Start: 19 @55938 has 17 MA's), (27, 55872), (28, 55845), (30, 55818), (36, 55770), (44, 55719), (51, 55677),

Gene: MossRose_75 Start: 57016, Stop: 56720, Start Num: 19

Candidate Starts for MossRose_75:
(3, 57220), (Start: 19 @57016 has 17 MA's), (27, 56950), (28, 56923), (44, 56809), (51, 56770),

Gene: NHagos_72 Start: 55303, Stop: 54998, Start Num: 19
Candidate Starts for NHagos_72:
(Start: 19 @55303 has 17 MA's), (27, 55234), (28, 55207), (39, 55129), (43, 55093), (44, 55090), (47, 55081), (51, 55051), (52, 55039),

Gene: Pumpernickel_11 Start: 4414, Stop: 4737, Start Num: 17
Candidate Starts for Pumpernickel_11:
(Start: 17 @4414 has 2 MA's), (Start: 21 @4456 has 1 MA's), (24, 4483), (26, 4495), (27, 4507), (28, 4534), (29, 4552), (46, 4645), (48, 4657), (51, 4687), (54, 4726),

Gene: Pumpernickel_312 Start: 170546, Stop: 170869, Start Num: 17
Candidate Starts for Pumpernickel_312:
(Start: 17 @170546 has 2 MA's), (Start: 21 @170588 has 1 MA's), (24, 170615), (26, 170627), (27, 170639), (28, 170666), (29, 170684), (46, 170777), (48, 170789), (51, 170819), (54, 170858),

Gene: Purplicious_35 Start: 16257, Stop: 16574, Start Num: 20
Candidate Starts for Purplicious_35:
(2, 16044), (Start: 20 @16257 has 6 MA's), (22, 16281), (23, 16293), (27, 16320), (28, 16347), (43, 16470), (47, 16482), (51, 16518), (53, 16551), (54, 16557),

Gene: Shatter_75 Start: 56453, Stop: 56142, Start Num: 19
Candidate Starts for Shatter_75:
(10, 56528), (16, 56492), (Start: 19 @56453 has 17 MA's), (28, 56360), (30, 56333), (51, 56192),

Gene: Sisko_75 Start: 57312, Stop: 56989, Start Num: 18
Candidate Starts for Sisko_75:
(Start: 18 @57312 has 6 MA's), (28, 57210), (51, 57051), (54, 57012),

Gene: Stillion_36 Start: 16829, Stop: 17146, Start Num: 20
Candidate Starts for Stillion_36:
(9, 16745), (15, 16775), (Start: 20 @16829 has 6 MA's), (22, 16853), (27, 16892), (28, 16919), (35, 16991), (47, 17054), (51, 17090), (53, 17123), (54, 17129),

Gene: Sting_36 Start: 16683, Stop: 17000, Start Num: 20
Candidate Starts for Sting_36:
(9, 16599), (15, 16629), (Start: 20 @16683 has 6 MA's), (22, 16707), (27, 16746), (28, 16773), (35, 16845), (47, 16908), (51, 16944), (53, 16977), (54, 16983),

Gene: TraderJ_76 Start: 57145, Stop: 56849, Start Num: 19
Candidate Starts for TraderJ_76:
(Start: 19 @57145 has 17 MA's), (27, 57079), (28, 57052), (44, 56938), (51, 56899),

Gene: Wooper_77 Start: 57096, Stop: 56800, Start Num: 19
Candidate Starts for Wooper_77:
(5, 57207), (8, 57180), (14, 57153), (Start: 19 @57096 has 17 MA's), (27, 57030), (28, 57003), (44, 56889), (51, 56850),

Gene: Yago84_74 Start: 57023, Stop: 56703, Start Num: 18
Candidate Starts for Yago84_74:
(Start: 18 @57023 has 6 MA's), (28, 56921), (51, 56762), (54, 56723),

Gene: Yappy_123 Start: 60207, Stop: 59914, Start Num: 21
Candidate Starts for Yappy_123:
(Start: 21 @60207 has 1 MA's), (24, 60177), (28, 60123), (30, 60096), (33, 60075), (46, 60009), (49, 59994), (51, 59967),

Gene: Yeshua_76 Start: 57073, Stop: 56777, Start Num: 19
Candidate Starts for Yeshua_76:
(5, 57184), (8, 57157), (14, 57130), (Start: 19 @57073 has 17 MA's), (27, 57007), (28, 56980), (44, 56866), (51, 56827),