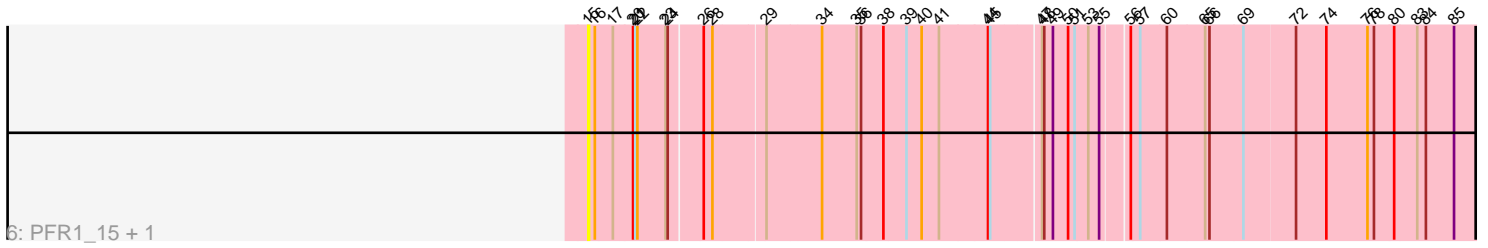
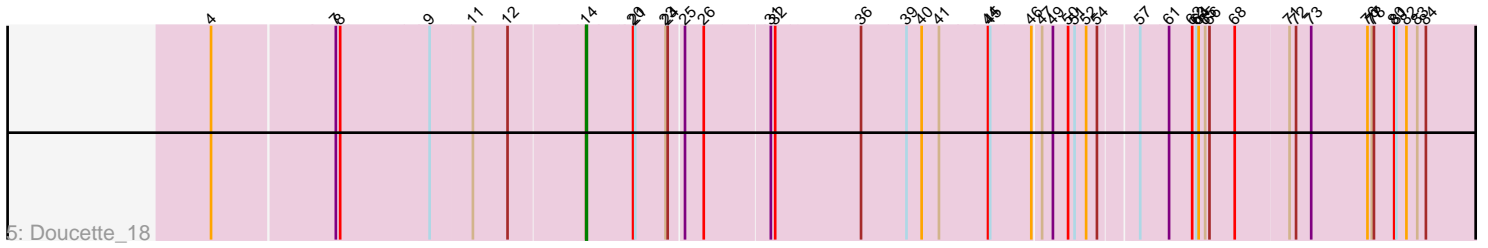
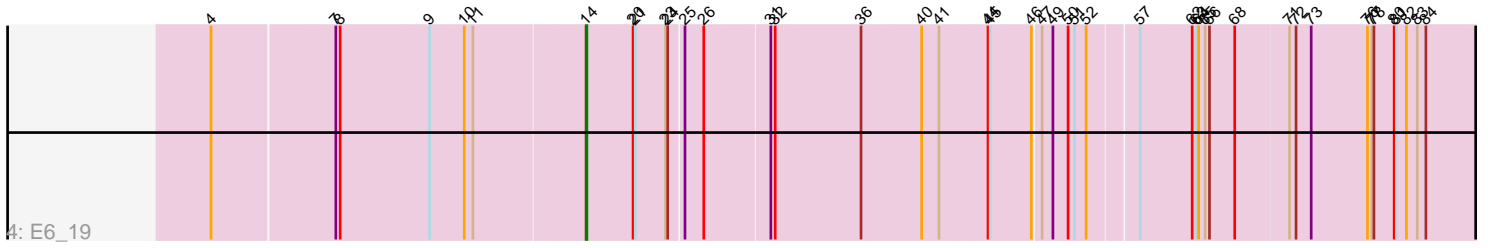
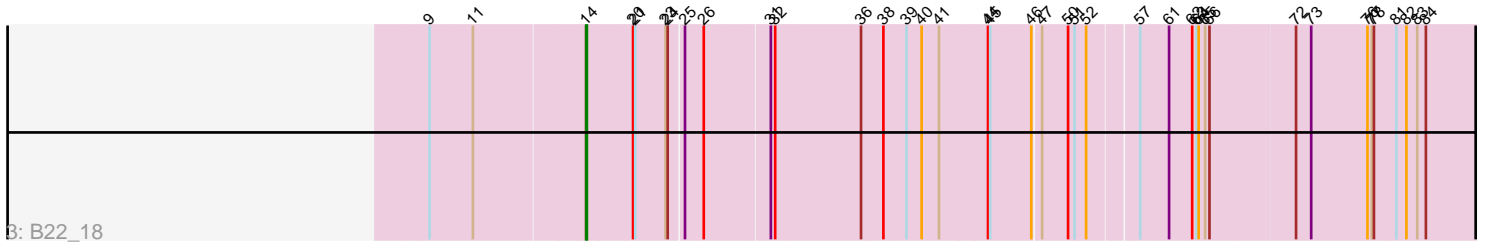
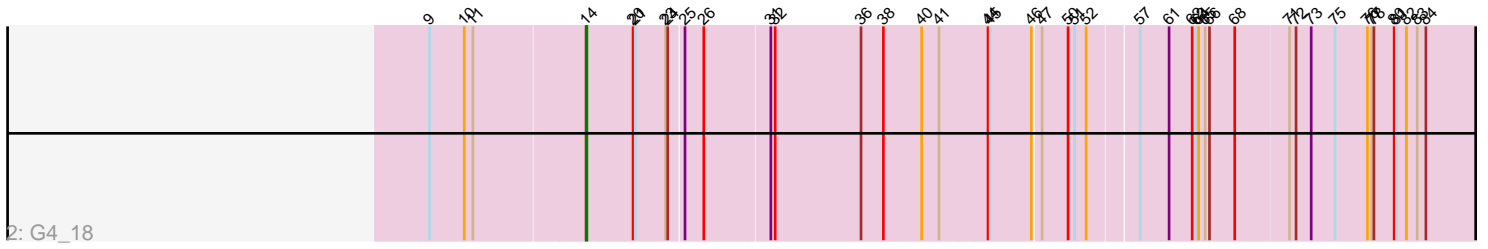
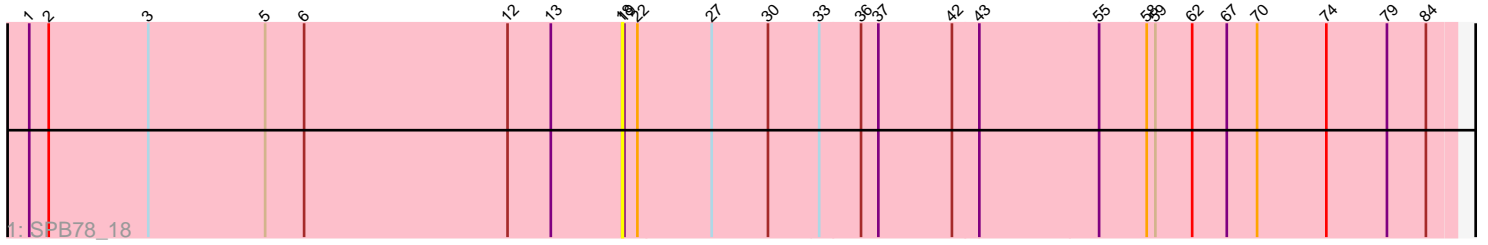


# Pham 223718



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 223718 Report

This analysis was run 03/28/25 on database version 593.

Pham number 223718 has 7 members, 3 are drafts.

Phages represented in each track:

- Track 1 : SPB78\_18
- Track 2 : G4\_18
- Track 3 : B22\_18
- Track 4 : E6\_19
- Track 5 : Doucette\_18
- Track 6 : PFR1\_15, PFR2\_17

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

The start number called the most often in the published annotations is 14, it was called in 4 of the 4 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- B22\_18, Doucette\_18, E6\_19, G4\_18,

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

- 

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

- PFR1\_15, PFR2\_17, SPB78\_18,

### **Summary by start number:**

Start 14:

- Found in 4 of 7 ( 57.1% ) of genes in pham
- Manual Annotations of this start: 4 of 4
- Called 100.0% of time when present
- Phage (with cluster) where this start called: B22\_18 (BW), Doucette\_18 (BW), E6\_19 (BW), G4\_18 (BW),

Start 15:

- Found in 2 of 7 ( 28.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present

- Phage (with cluster) where this start called: PFR1\_15 (BX), PFR2\_17 (BX),

Start 18:

- Found in 1 of 7 ( 14.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: SPB78\_18 (BA),

### Summary by clusters:

There are 3 clusters represented in this pham: BW, BX, BA,

Info for manual annotations of cluster BW:

- Start number 14 was manually annotated 4 times for cluster BW.

### Gene Information:

Gene: B22\_18 Start: 14570, Stop: 15742, Start Num: 14

Candidate Starts for B22\_18:

(9, 14363), (11, 14420), (Start: 14 @14570 has 4 MA's), (20, 14627), (21, 14630), (23, 14672), (24, 14675), (25, 14693), (26, 14717), (31, 14798), (32, 14804), (36, 14918), (38, 14948), (39, 14978), (40, 14999), (41, 15023), (44, 15089), (45, 15092), (46, 15146), (47, 15155), (50, 15191), (51, 15200), (52, 15215), (57, 15278), (61, 15317), (62, 15347), (63, 15353), (64, 15356), (65, 15365), (66, 15371), (72, 15485), (73, 15506), (76, 15584), (77, 15590), (78, 15593), (81, 15623), (82, 15635), (83, 15650), (84, 15662),

Gene: Doucette\_18 Start: 14743, Stop: 15915, Start Num: 14

Candidate Starts for Doucette\_18:

(4, 14245), (7, 14410), (8, 14416), (9, 14536), (11, 14593), (12, 14641), (Start: 14 @14743 has 4 MA's), (20, 14800), (21, 14803), (23, 14845), (24, 14848), (25, 14866), (26, 14890), (31, 14971), (32, 14977), (36, 15091), (39, 15151), (40, 15172), (41, 15196), (44, 15262), (45, 15265), (46, 15319), (47, 15328), (49, 15343), (50, 15364), (51, 15373), (52, 15388), (54, 15403), (57, 15451), (61, 15490), (62, 15520), (63, 15526), (64, 15529), (65, 15538), (66, 15544), (68, 15577), (71, 15649), (72, 15658), (73, 15679), (76, 15757), (77, 15763), (78, 15766), (80, 15793), (81, 15796), (82, 15808), (83, 15823), (84, 15835),

Gene: E6\_19 Start: 14791, Stop: 15963, Start Num: 14

Candidate Starts for E6\_19:

(4, 14293), (7, 14458), (8, 14464), (9, 14584), (10, 14629), (11, 14641), (Start: 14 @14791 has 4 MA's), (20, 14848), (21, 14851), (23, 14893), (24, 14896), (25, 14914), (26, 14938), (31, 15019), (32, 15025), (36, 15139), (40, 15220), (41, 15244), (44, 15310), (45, 15313), (46, 15367), (47, 15376), (49, 15391), (50, 15412), (51, 15421), (52, 15436), (57, 15499), (62, 15568), (63, 15574), (64, 15577), (65, 15586), (66, 15592), (68, 15625), (71, 15697), (72, 15706), (73, 15727), (76, 15805), (77, 15811), (78, 15814), (80, 15841), (81, 15844), (82, 15856), (83, 15871), (84, 15883),

Gene: G4\_18 Start: 14733, Stop: 15905, Start Num: 14

Candidate Starts for G4\_18:

(9, 14526), (10, 14571), (11, 14583), (Start: 14 @14733 has 4 MA's), (20, 14790), (21, 14793), (23, 14835), (24, 14838), (25, 14856), (26, 14880), (31, 14961), (32, 14967), (36, 15081), (38, 15111), (40, 15162), (41, 15186), (44, 15252), (45, 15255), (46, 15309), (47, 15318), (50, 15354), (51, 15363), (52,

15378), (57, 15441), (61, 15480), (62, 15510), (63, 15516), (64, 15519), (65, 15528), (66, 15534), (68, 15567), (71, 15639), (72, 15648), (73, 15669), (75, 15702), (76, 15747), (77, 15753), (78, 15756), (80, 15783), (81, 15786), (82, 15798), (83, 15813), (84, 15825),

Gene: PFR1\_15 Start: 13778, Stop: 14950, Start Num: 15

Candidate Starts for PFR1\_15:

(15, 13778), (16, 13787), (17, 13811), (20, 13835), (21, 13838), (22, 13841), (23, 13880), (24, 13883), (26, 13925), (28, 13937), (29, 14000), (34, 14072), (35, 14120), (36, 14126), (38, 14156), (39, 14186), (40, 14207), (41, 14231), (44, 14297), (45, 14300), (47, 14360), (48, 14363), (49, 14375), (50, 14396), (51, 14405), (53, 14423), (55, 14438), (56, 14471), (57, 14483), (60, 14519), (65, 14570), (66, 14576), (69, 14621), (72, 14690), (74, 14732), (76, 14789), (78, 14798), (80, 14825), (83, 14855), (84, 14867), (85, 14906),

Gene: PFR2\_17 Start: 15347, Stop: 16519, Start Num: 15

Candidate Starts for PFR2\_17:

(15, 15347), (16, 15356), (17, 15380), (20, 15404), (21, 15407), (22, 15410), (23, 15449), (24, 15452), (26, 15494), (28, 15506), (29, 15569), (34, 15641), (35, 15689), (36, 15695), (38, 15725), (39, 15755), (40, 15776), (41, 15800), (44, 15866), (45, 15869), (47, 15929), (48, 15932), (49, 15944), (50, 15965), (51, 15974), (53, 15992), (55, 16007), (56, 16040), (57, 16052), (60, 16088), (65, 16139), (66, 16145), (69, 16190), (72, 16259), (74, 16301), (76, 16358), (78, 16367), (80, 16394), (83, 16424), (84, 16436), (85, 16475),

Gene: SPB78\_18 Start: 14539, Stop: 15684, Start Num: 18

Candidate Starts for SPB78\_18:

(1, 13717), (2, 13744), (3, 13882), (5, 14044), (6, 14098), (12, 14380), (13, 14440), (18, 14539), (19, 14542), (22, 14560), (27, 14662), (30, 14740), (33, 14809), (36, 14866), (37, 14890), (42, 14992), (43, 15028), (55, 15193), (58, 15259), (59, 15271), (62, 15322), (67, 15370), (70, 15412), (74, 15508), (79, 15592), (84, 15646),