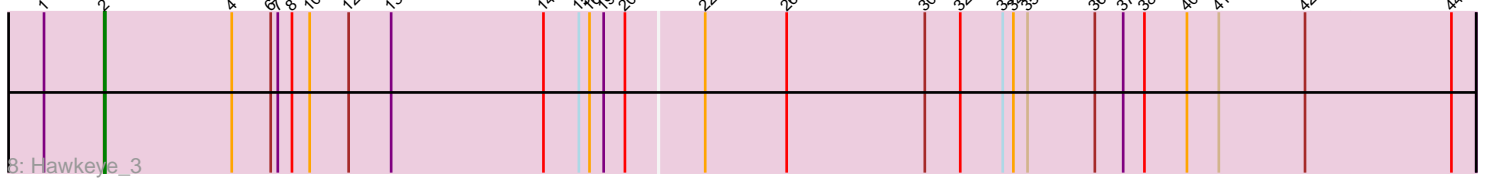
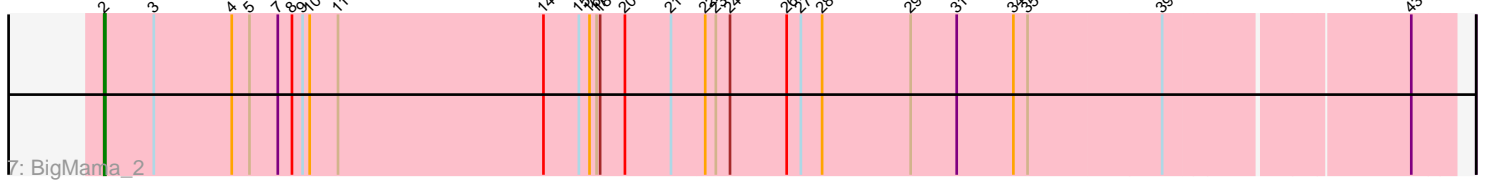
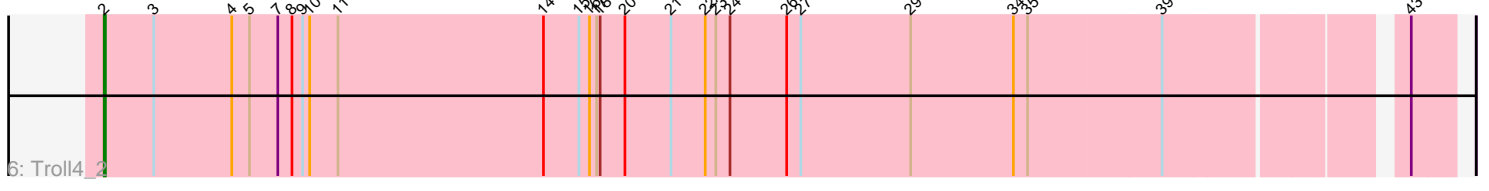
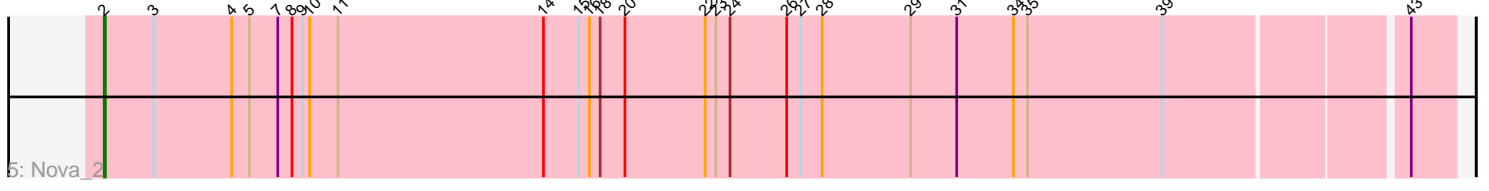
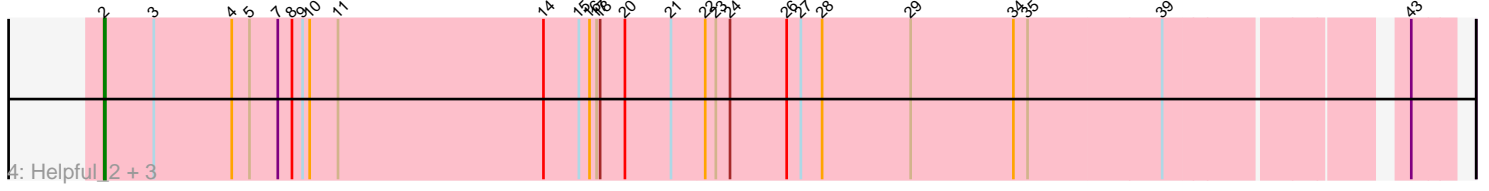
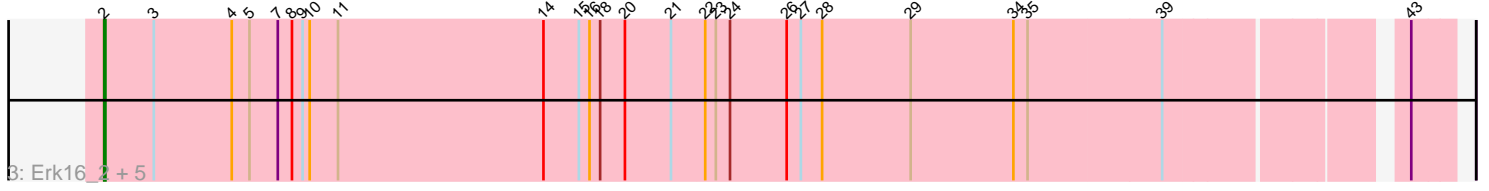
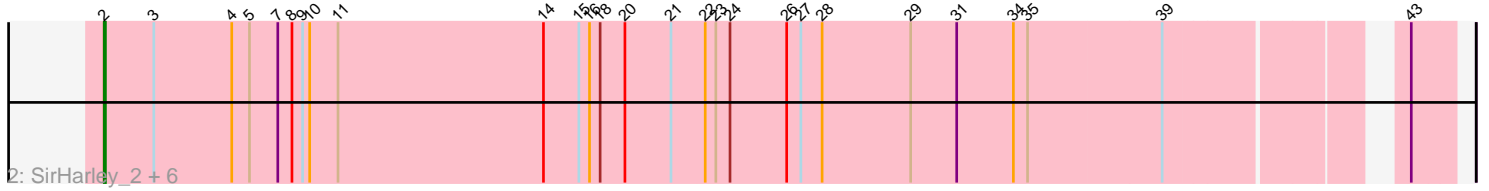
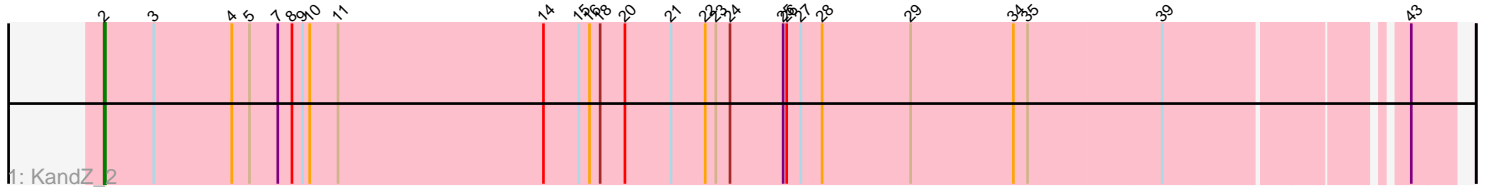


# Pham 168518



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 168518 Report

This analysis was run 07/09/24 on database version 566.

Pham number 168518 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : KandZ\_2
- Track 2 : SirHarley\_2, PBI1\_2, Butterscotch\_2, Visconti\_2, Adjuator\_2, Gumball\_2, Giuseppe\_2
- Track 3 : Erk16\_2, PLOT\_2, Thoth\_2, Chill\_2, WaldoWhy\_2, Mopey\_2
- Track 4 : Helpful\_2, Penelope2018\_2, Delton\_2, Prager\_2
- Track 5 : Nova\_2
- Track 6 : Troll4\_2
- Track 7 : BigMama\_2
- Track 8 : Hawkeye\_3

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

The start number called the most often in the published annotations is 2, it was called in 21 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adjuator\_2, BigMama\_2, Butterscotch\_2, Chill\_2, Delton\_2, Erk16\_2, Giuseppe\_2, Gumball\_2, Hawkeye\_3, Helpful\_2, KandZ\_2, Mopey\_2, Nova\_2, PBI1\_2, PLOT\_2, Penelope2018\_2, Prager\_2, SirHarley\_2, Thoth\_2, Troll4\_2, Visconti\_2, WaldoWhy\_2,

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

- 

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

- 

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

Start 2:

- Found in 22 of 22 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 21 of 21
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Adjutor\_2 (D1), BigMama\_2 (D1), Butterscotch\_2 (D1), Chill\_2 (D1), Delton\_2 (D1), Erk16\_2 (D1), Giuseppe\_2 (D1), Gumball\_2 (D1), Hawkeye\_3 (D2), Helpful\_2 (D1), KandZ\_2 (D1), Mopey\_2 (D1), Nova\_2 (D1), PBI1\_2 (D1), PLOT\_2 (D1), Penelope2018\_2 (D1), Prager\_2 (D1), SirHarley\_2 (D1), Thoth\_2 (D1), Troll4\_2 (D1), Visconti\_2 (D1), WaldoWhy\_2 (D1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: D2, D1,

Info for manual annotations of cluster D1:

•Start number 2 was manually annotated 20 times for cluster D1.

Info for manual annotations of cluster D2:

•Start number 2 was manually annotated 1 time for cluster D2.

### **Gene Information:**

Gene: Adjutor\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Adjutor\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: BigMama\_2 Start: 421, Stop: 1542, Start Num: 2

Candidate Starts for BigMama\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (17, 838), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1507),

Gene: Butterscotch\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Butterscotch\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Chill\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for Chill\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1498),

Gene: Delton\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for Delton\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (17, 838), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1498),

Gene: Erk16\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Erk16\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Giuseppe\_2 Start: 421, Stop: 1515, Start Num: 2

Candidate Starts for Giuseppe\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1480),

Gene: Gumball\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for Gumball\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1498),

Gene: Hawkeye\_3 Start: 790, Stop: 1944, Start Num: 2

Candidate Starts for Hawkeye\_3:

(1, 739), (Start: 2 @790 has 21 MA's), (4, 898), (6, 931), (7, 937), (8, 949), (10, 964), (12, 997), (13, 1033), (14, 1162), (15, 1192), (16, 1201), (19, 1213), (20, 1231), (22, 1294), (26, 1363), (30, 1480), (32, 1510), (33, 1546), (34, 1555), (35, 1567), (36, 1624), (37, 1648), (38, 1666), (40, 1702), (41, 1729), (42, 1801), (44, 1924),

Gene: Helpful\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Helpful\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (17, 838), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: KandZ\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for KandZ\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (25, 994), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Mopey\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Mopey\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Nova\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for Nova\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1498),

Gene: PBI1\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for PBI1\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: PLOT\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for PLOT\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Penelope2018\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Penelope2018\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (17, 838), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Prager\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for Prager\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (17, 838), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1498),

Gene: SirHarley\_2 Start: 421, Stop: 1515, Start Num: 2

Candidate Starts for SirHarley\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1480),

Gene: Thoth\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Thoth\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Troll4\_2 Start: 421, Stop: 1524, Start Num: 2

Candidate Starts for Troll4\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (17, 838), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1489),

Gene: Visconti\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for Visconti\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (31, 1141), (34, 1189), (35, 1201), (39, 1312), (43, 1498),

Gene: WaldoWhy\_2 Start: 421, Stop: 1533, Start Num: 2

Candidate Starts for WaldoWhy\_2:

(Start: 2 @421 has 21 MA's), (3, 463), (4, 529), (5, 544), (7, 568), (8, 580), (9, 589), (10, 595), (11, 619), (14, 793), (15, 823), (16, 832), (18, 841), (20, 862), (21, 901), (22, 928), (23, 937), (24, 949), (26, 997), (27, 1009), (28, 1027), (29, 1102), (34, 1189), (35, 1201), (39, 1312), (43, 1498),