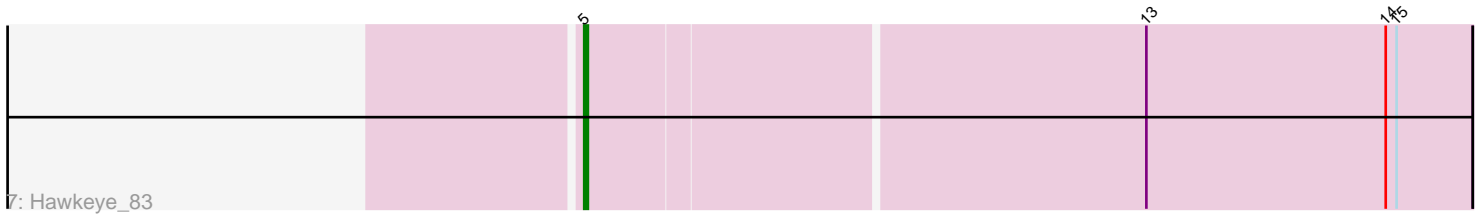
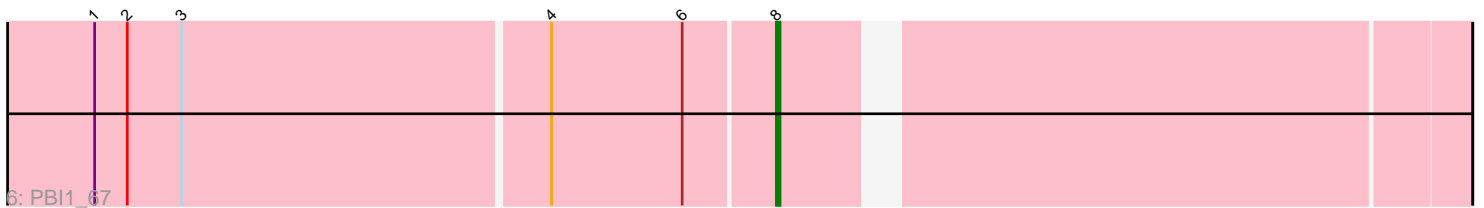
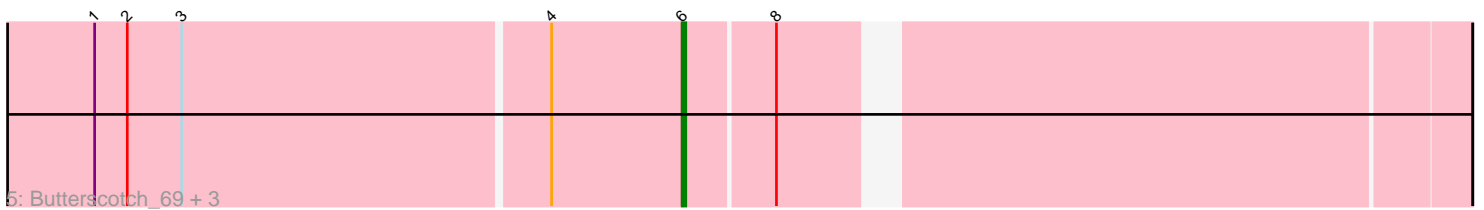
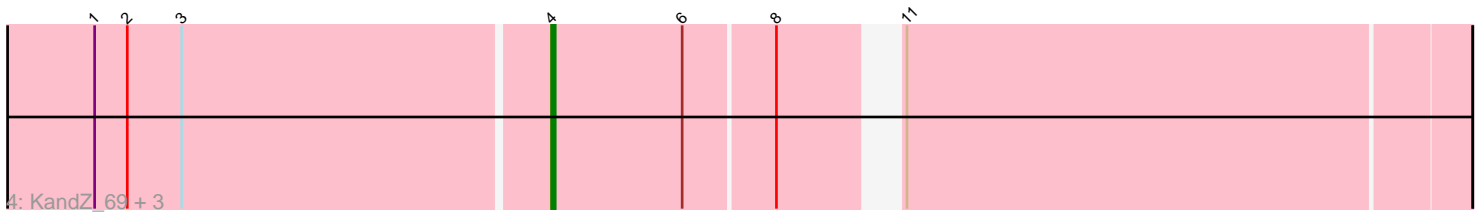
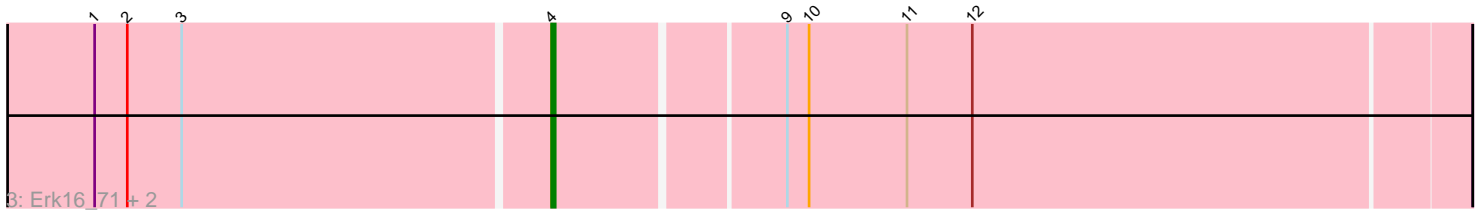
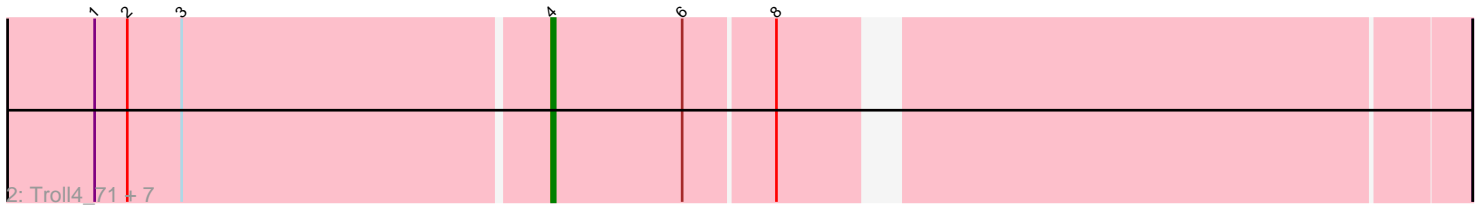
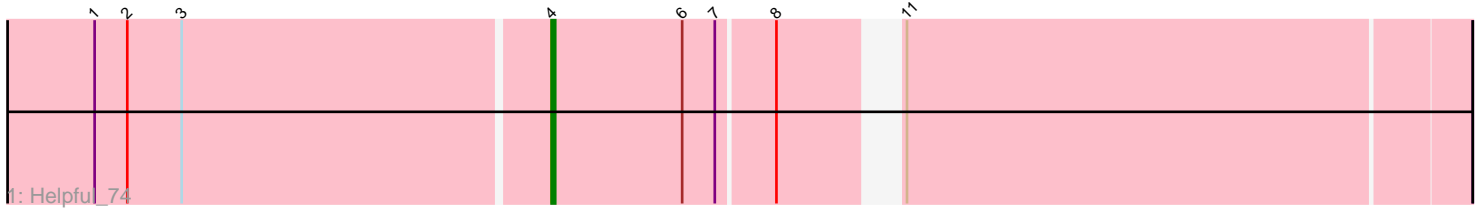


Pham 194319



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 194319 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194319 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Helpful_74
- Track 2 : Troll4_71, Giuseppe_73, Mopey_73, Thoth_71, Prager_71, Delton_71, Visconti_72, Penelope2018_71
- Track 3 : Erk16_71, WaldoWhy_73, Chill_73
- Track 4 : KandZ_69, SirHarley_73, Gumball_71, Nova_71
- Track 5 : Butterscotch_69, BigMama_69, PLOT_71, Adjutor_69
- Track 6 : PBI1_67
- Track 7 : Hawkeye_83

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

The start number called the most often in the published annotations is 4, it was called in 15 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chill_73, Delton_71, Erk16_71, Giuseppe_73, Gumball_71, Helpful_74, KandZ_69, Mopey_73, Nova_71, Penelope2018_71, Prager_71, SirHarley_73, Thoth_71, Troll4_71, Visconti_72, WaldoWhy_73,

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

- Adjutor_69, BigMama_69, Butterscotch_69, PBI1_67, PLOT_71,

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

- Hawkeye_83,

Summary by start number:

Start 4:

- Found in 21 of 22 (95.5%) of genes in pham
- Manual Annotations of this start: 15 of 21
- Called 76.2% of time when present
- Phage (with cluster) where this start called: Chill_73 (D1), Delton_71 (D1), Erk16_71 (D1), Giuseppe_73 (D1), Gumball_71 (D1), Helpful_74 (D1), KandZ_69 (D1), Mopey_73 (D1), Nova_71 (D1), Penelope2018_71 (D1), Prager_71 (D1),

SirHarley_73 (D1), Thoth_71 (D1), Troll4_71 (D1), Visconti_72 (D1), WaldoWhy_73 (D1),

Start 5:

- Found in 1 of 22 (4.5%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Hawkeye_83 (D2),

Start 6:

- Found in 18 of 22 (81.8%) of genes in pham
- Manual Annotations of this start: 4 of 21
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Adjutor_69 (D1), BigMama_69 (D1), Butterscotch_69 (D1), PLOT_71 (D1),

Start 8:

- Found in 18 of 22 (81.8%) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 5.6% of time when present
- Phage (with cluster) where this start called: PB11_67 (D1),

Summary by clusters:

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

Info for manual annotations of cluster D1:

- Start number 4 was manually annotated 15 times for cluster D1.
- Start number 6 was manually annotated 4 times for cluster D1.
- Start number 8 was manually annotated 1 time for cluster D1.

Info for manual annotations of cluster D2:

- Start number 5 was manually annotated 1 time for cluster D2.

Gene Information:

Gene: Adjutor_69 Start: 55479, Stop: 55679, Start Num: 6

Candidate Starts for Adjutor_69:

(1, 55320), (2, 55329), (3, 55344), (Start: 4 @55443 has 15 MA's), (Start: 6 @55479 has 4 MA's), (Start: 8 @55503 has 1 MA's),

Gene: BigMama_69 Start: 55552, Stop: 55752, Start Num: 6

Candidate Starts for BigMama_69:

(1, 55393), (2, 55402), (3, 55417), (Start: 4 @55516 has 15 MA's), (Start: 6 @55552 has 4 MA's), (Start: 8 @55576 has 1 MA's),

Gene: Butterscotch_69 Start: 55530, Stop: 55730, Start Num: 6

Candidate Starts for Butterscotch_69:

(1, 55371), (2, 55380), (3, 55395), (Start: 4 @55494 has 15 MA's), (Start: 6 @55530 has 4 MA's), (Start: 8 @55554 has 1 MA's),

Gene: Chill_73 Start: 55531, Stop: 55776, Start Num: 4

Candidate Starts for Chill_73:

(1, 55408), (2, 55417), (3, 55432), (Start: 4 @55531 has 15 MA's), (9, 55591), (10, 55597), (11, 55624), (12, 55642),

Gene: Delton_71 Start: 55892, Stop: 56128, Start Num: 4

Candidate Starts for Delton_71:

(1, 55769), (2, 55778), (3, 55793), (Start: 4 @55892 has 15 MA's), (Start: 6 @55928 has 4 MA's), (Start: 8 @55952 has 1 MA's),

Gene: Erk16_71 Start: 55609, Stop: 55854, Start Num: 4

Candidate Starts for Erk16_71:

(1, 55486), (2, 55495), (3, 55510), (Start: 4 @55609 has 15 MA's), (9, 55669), (10, 55675), (11, 55702), (12, 55720),

Gene: Giuseppe_73 Start: 55421, Stop: 55657, Start Num: 4

Candidate Starts for Giuseppe_73:

(1, 55298), (2, 55307), (3, 55322), (Start: 4 @55421 has 15 MA's), (Start: 6 @55457 has 4 MA's), (Start: 8 @55481 has 1 MA's),

Gene: Gumball_71 Start: 55963, Stop: 56199, Start Num: 4

Candidate Starts for Gumball_71:

(1, 55840), (2, 55849), (3, 55864), (Start: 4 @55963 has 15 MA's), (Start: 6 @55999 has 4 MA's), (Start: 8 @56023 has 1 MA's), (11, 56047),

Gene: Hawkeye_83 Start: 57317, Stop: 57556, Start Num: 5

Candidate Starts for Hawkeye_83:

(Start: 5 @57317 has 1 MA's), (13, 57467), (14, 57533), (15, 57536),

Gene: Helpful_74 Start: 55809, Stop: 56045, Start Num: 4

Candidate Starts for Helpful_74:

(1, 55686), (2, 55695), (3, 55710), (Start: 4 @55809 has 15 MA's), (Start: 6 @55845 has 4 MA's), (7, 55854), (Start: 8 @55869 has 1 MA's), (11, 55893),

Gene: KandZ_69 Start: 55638, Stop: 55874, Start Num: 4

Candidate Starts for KandZ_69:

(1, 55515), (2, 55524), (3, 55539), (Start: 4 @55638 has 15 MA's), (Start: 6 @55674 has 4 MA's), (Start: 8 @55698 has 1 MA's), (11, 55722),

Gene: Mopey_73 Start: 55447, Stop: 55683, Start Num: 4

Candidate Starts for Mopey_73:

(1, 55324), (2, 55333), (3, 55348), (Start: 4 @55447 has 15 MA's), (Start: 6 @55483 has 4 MA's), (Start: 8 @55507 has 1 MA's),

Gene: Nova_71 Start: 55986, Stop: 56222, Start Num: 4

Candidate Starts for Nova_71:

(1, 55863), (2, 55872), (3, 55887), (Start: 4 @55986 has 15 MA's), (Start: 6 @56022 has 4 MA's), (Start: 8 @56046 has 1 MA's), (11, 56070),

Gene: PBI1_67 Start: 55485, Stop: 55661, Start Num: 8

Candidate Starts for PBI1_67:

(1, 55302), (2, 55311), (3, 55326), (Start: 4 @55425 has 15 MA's), (Start: 6 @55461 has 4 MA's), (Start: 8 @55485 has 1 MA's),

Gene: PLOT_71 Start: 55483, Stop: 55683, Start Num: 6

Candidate Starts for PLOT_71:

(1, 55324), (2, 55333), (3, 55348), (Start: 4 @55447 has 15 MA's), (Start: 6 @55483 has 4 MA's),
(Start: 8 @55507 has 1 MA's),

Gene: Penelope2018_71 Start: 55481, Stop: 55717, Start Num: 4

Candidate Starts for Penelope2018_71:

(1, 55358), (2, 55367), (3, 55382), (Start: 4 @55481 has 15 MA's), (Start: 6 @55517 has 4 MA's),
(Start: 8 @55541 has 1 MA's),

Gene: Prager_71 Start: 55541, Stop: 55777, Start Num: 4

Candidate Starts for Prager_71:

(1, 55418), (2, 55427), (3, 55442), (Start: 4 @55541 has 15 MA's), (Start: 6 @55577 has 4 MA's),
(Start: 8 @55601 has 1 MA's),

Gene: SirHarley_73 Start: 55946, Stop: 56182, Start Num: 4

Candidate Starts for SirHarley_73:

(1, 55823), (2, 55832), (3, 55847), (Start: 4 @55946 has 15 MA's), (Start: 6 @55982 has 4 MA's),
(Start: 8 @56006 has 1 MA's), (11, 56030),

Gene: Thoth_71 Start: 55535, Stop: 55771, Start Num: 4

Candidate Starts for Thoth_71:

(1, 55412), (2, 55421), (3, 55436), (Start: 4 @55535 has 15 MA's), (Start: 6 @55571 has 4 MA's),
(Start: 8 @55595 has 1 MA's),

Gene: Troll4_71 Start: 55603, Stop: 55839, Start Num: 4

Candidate Starts for Troll4_71:

(1, 55480), (2, 55489), (3, 55504), (Start: 4 @55603 has 15 MA's), (Start: 6 @55639 has 4 MA's),
(Start: 8 @55663 has 1 MA's),

Gene: Visconti_72 Start: 55511, Stop: 55747, Start Num: 4

Candidate Starts for Visconti_72:

(1, 55388), (2, 55397), (3, 55412), (Start: 4 @55511 has 15 MA's), (Start: 6 @55547 has 4 MA's),
(Start: 8 @55571 has 1 MA's),

Gene: WaldoWhy_73 Start: 55531, Stop: 55776, Start Num: 4

Candidate Starts for WaldoWhy_73:

(1, 55408), (2, 55417), (3, 55432), (Start: 4 @55531 has 15 MA's), (9, 55591), (10, 55597), (11,
55624), (12, 55642),