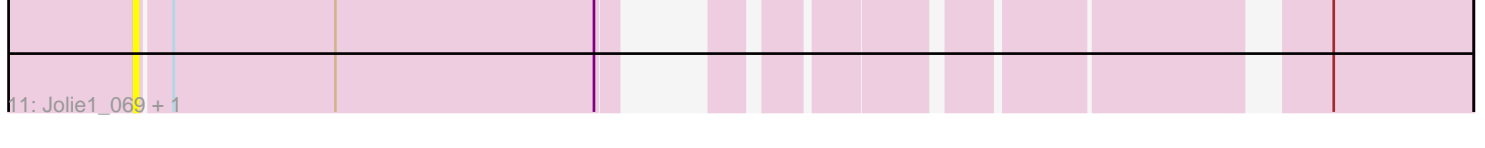
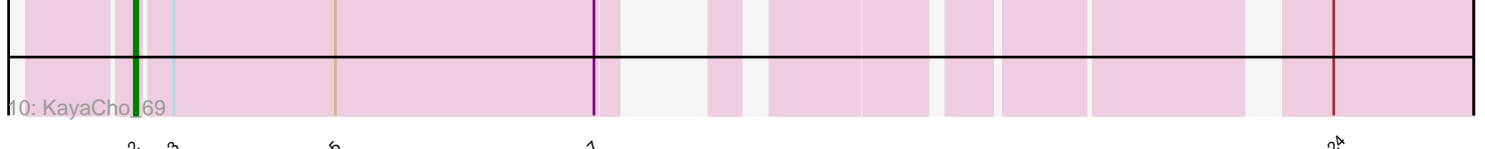
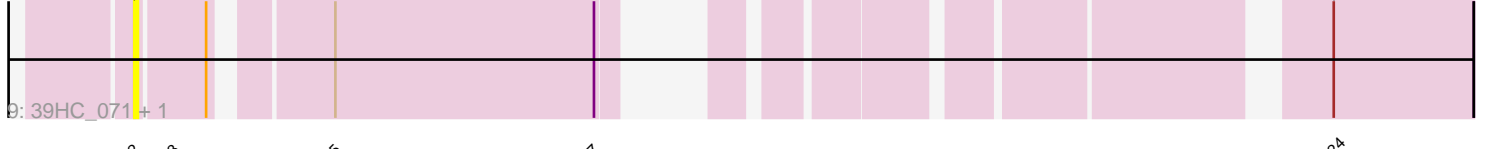
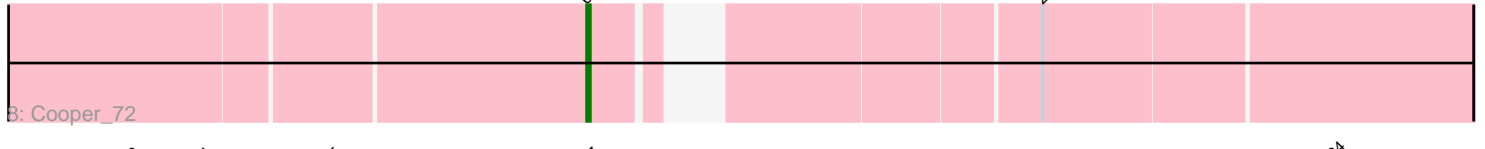
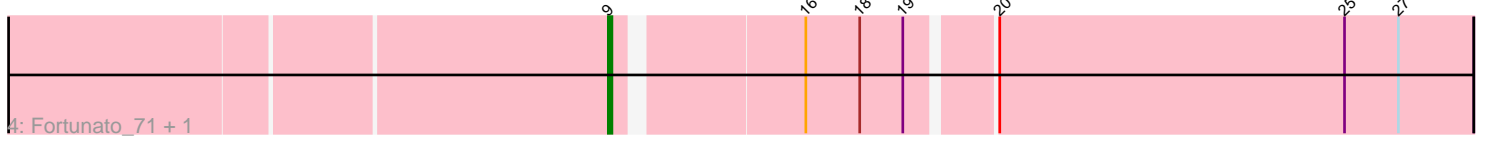
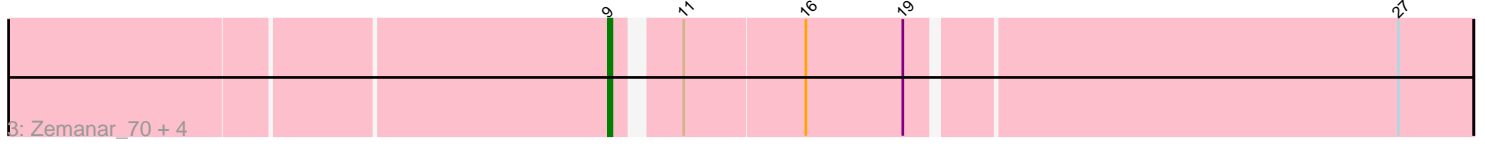
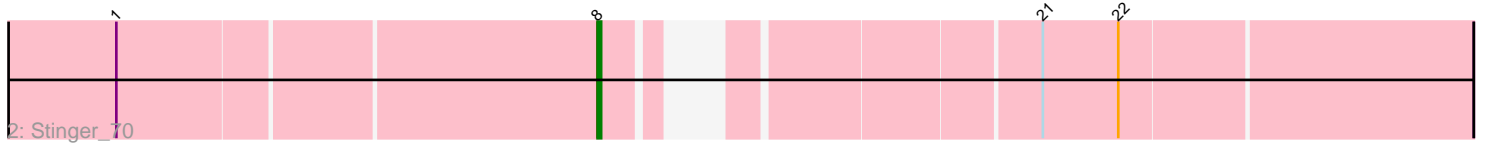
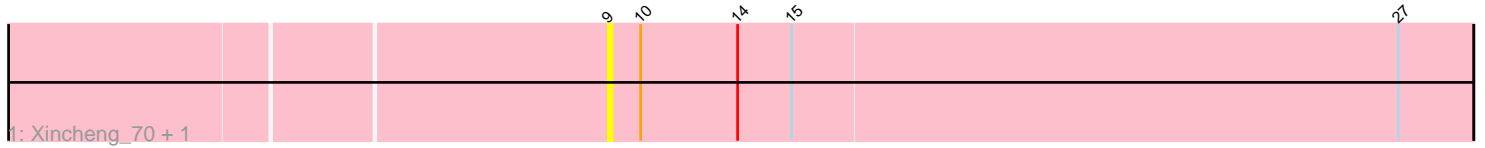


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 192861 Report

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

Pham number 192861 has 23 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Xincheng\_70, JaguarMi\_71
- Track 2 : Stinger\_70
- Track 3 : Zemanar\_70, Hangman\_71, Heath\_70, Frederick\_72, Hydro\_71
- Track 4 : Fortunato\_71, RawrgerThat\_71
- Track 5 : AlanGrant\_74, Vincenzo\_73
- Track 6 : Waleliano\_70, Mithril\_70, Lolalove\_72, BrownCNA\_72
- Track 7 : Fanaw\_67
- Track 8 : Cooper\_72
- Track 9 : 39HC\_071, 40BC\_071
- Track 10 : KayaCho\_69
- Track 11 : Jolie1\_069, Hosp\_067

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

The start number called the most often in the published annotations is 9, it was called in 11 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BrownCNA\_72, Fanaw\_67, Fortunato\_71, Frederick\_72, Hangman\_71, Heath\_70, Hydro\_71, JaguarMi\_71, Lolalove\_72, Mithril\_70, RawrgerThat\_71, Waleliano\_70, Xincheng\_70, Zemanar\_70,

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

- 

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

- 39HC\_071, 40BC\_071, AlanGrant\_74, Cooper\_72, Hosp\_067, Jolie1\_069, KayaCho\_69, Stinger\_70, Vincenzo\_73,

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

Start 2:

- Found in 5 of 23 ( 21.7% ) of genes in pham
- Manual Annotations of this start: 1 of 16

- Called 100.0% of time when present
- Phage (with cluster) where this start called: 39HC\_071 (B6), 40BC\_071 (B6), Hosp\_067 (B6), Jolie1\_069 (B6), KayaCho\_69 (B6),

Start 6:

- Found in 3 of 23 ( 13.0% ) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AlanGrant\_74 (B4), Cooper\_72 (B4), Vincenzo\_73 (B4),

Start 8:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Stinger\_70 (B4),

Start 9:

- Found in 14 of 23 ( 60.9% ) of genes in pham
- Manual Annotations of this start: 11 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BrownCNA\_72 (B4), Fanaw\_67 (B4), Fortunato\_71 (B4), Frederick\_72 (B4), Hangman\_71 (B4), Heath\_70 (B4), Hydro\_71 (B4), JaguarMi\_71 (B4), Lolalove\_72 (B4), Mithril\_70 (B4), RawrgerThat\_71 (B4), Waleliano\_70 (B4), Xincheng\_70 (B4), Zemanar\_70 (B4),

### **Summary by clusters:**

There are 2 clusters represented in this pham: B4, B6,

Info for manual annotations of cluster B4:

- Start number 6 was manually annotated 3 times for cluster B4.
- Start number 8 was manually annotated 1 time for cluster B4.
- Start number 9 was manually annotated 11 times for cluster B4.

Info for manual annotations of cluster B6:

- Start number 2 was manually annotated 1 time for cluster B6.

### **Gene Information:**

Gene: 39HC\_071 Start: 59687, Stop: 59992, Start Num: 2

Candidate Starts for 39HC\_071:

(Start: 2 @59687 has 1 MA's), (4, 59705), (5, 59732), (7, 59804), (24, 59954),

Gene: 40BC\_071 Start: 59687, Stop: 59992, Start Num: 2

Candidate Starts for 40BC\_071:

(Start: 2 @59687 has 1 MA's), (4, 59705), (5, 59732), (7, 59804), (24, 59954),

Gene: AlanGrant\_74 Start: 62174, Stop: 62413, Start Num: 6

Candidate Starts for AlanGrant\_74:

(Start: 6 @62174 has 3 MA's), (12, 62201), (17, 62243), (21, 62294), (23, 62354), (26, 62381), (27, 62393),

Gene: BrownCNA\_72 Start: 61132, Stop: 61356, Start Num: 9

Candidate Starts for BrownCNA\_72:

(Start: 9 @61132 has 11 MA's), (13, 61156), (16, 61177), (19, 61204), (20, 61225), (26, 61324), (27, 61336),

Gene: Cooper\_72 Start: 60528, Stop: 60746, Start Num: 6

Candidate Starts for Cooper\_72:

(Start: 6 @60528 has 3 MA's), (21, 60630),

Gene: Fanaw\_67 Start: 60911, Stop: 61138, Start Num: 9

Candidate Starts for Fanaw\_67:

(Start: 9 @60911 has 11 MA's), (11, 60926), (16, 60959), (19, 60986), (20, 61007), (26, 61106), (27, 61118),

Gene: Fortunato\_71 Start: 60910, Stop: 61137, Start Num: 9

Candidate Starts for Fortunato\_71:

(Start: 9 @60910 has 11 MA's), (16, 60958), (18, 60973), (19, 60985), (20, 61006), (25, 61102), (27, 61117),

Gene: Frederick\_72 Start: 60934, Stop: 61161, Start Num: 9

Candidate Starts for Frederick\_72:

(Start: 9 @60934 has 11 MA's), (11, 60949), (16, 60982), (19, 61009), (27, 61141),

Gene: Hangman\_71 Start: 61133, Stop: 61360, Start Num: 9

Candidate Starts for Hangman\_71:

(Start: 9 @61133 has 11 MA's), (11, 61148), (16, 61181), (19, 61208), (27, 61340),

Gene: Heath\_70 Start: 60760, Stop: 60987, Start Num: 9

Candidate Starts for Heath\_70:

(Start: 9 @60760 has 11 MA's), (11, 60775), (16, 60808), (19, 60835), (27, 60967),

Gene: Hosp\_067 Start: 57475, Stop: 57783, Start Num: 2

Candidate Starts for Hosp\_067:

(Start: 2 @57475 has 1 MA's), (3, 57484), (5, 57529), (7, 57601), (24, 57745),

Gene: Hydro\_71 Start: 61071, Stop: 61298, Start Num: 9

Candidate Starts for Hydro\_71:

(Start: 9 @61071 has 11 MA's), (11, 61086), (16, 61119), (19, 61146), (27, 61278),

Gene: JaguarMi\_71 Start: 62147, Stop: 62386, Start Num: 9

Candidate Starts for JaguarMi\_71:

(Start: 9 @62147 has 11 MA's), (10, 62156), (14, 62183), (15, 62198), (27, 62366),

Gene: Jolie1\_069 Start: 59603, Stop: 59917, Start Num: 2

Candidate Starts for Jolie1\_069:

(Start: 2 @59603 has 1 MA's), (3, 59612), (5, 59657), (7, 59729), (24, 59879),

Gene: KayaCho\_69 Start: 59595, Stop: 59909, Start Num: 2

Candidate Starts for KayaCho\_69:

(Start: 2 @59595 has 1 MA's), (3, 59604), (5, 59649), (7, 59721), (24, 59871),

Gene: Lolalove\_72 Start: 61063, Stop: 61287, Start Num: 9

Candidate Starts for Lolalove\_72:

(Start: 9 @61063 has 11 MA's), (13, 61087), (16, 61108), (19, 61135), (20, 61156), (26, 61255), (27, 61267),

Gene: Mithril\_70 Start: 61062, Stop: 61286, Start Num: 9

Candidate Starts for Mithril\_70:

(Start: 9 @61062 has 11 MA's), (13, 61086), (16, 61107), (19, 61134), (20, 61155), (26, 61254), (27, 61266),

Gene: RawrgerThat\_71 Start: 60888, Stop: 61115, Start Num: 9

Candidate Starts for RawrgerThat\_71:

(Start: 9 @60888 has 11 MA's), (16, 60936), (18, 60951), (19, 60963), (20, 60984), (25, 61080), (27, 61095),

Gene: Stinger\_70 Start: 59828, Stop: 60040, Start Num: 8

Candidate Starts for Stinger\_70:

(1, 59699), (Start: 8 @59828 has 1 MA's), (21, 59924), (22, 59945),

Gene: Vincenzo\_73 Start: 62204, Stop: 62443, Start Num: 6

Candidate Starts for Vincenzo\_73:

(Start: 6 @62204 has 3 MA's), (12, 62231), (17, 62273), (21, 62324), (23, 62384), (26, 62411), (27, 62423),

Gene: Waleliano\_70 Start: 60885, Stop: 61109, Start Num: 9

Candidate Starts for Waleliano\_70:

(Start: 9 @60885 has 11 MA's), (13, 60909), (16, 60930), (19, 60957), (20, 60978), (26, 61077), (27, 61089),

Gene: Xincheng\_70 Start: 62098, Stop: 62337, Start Num: 9

Candidate Starts for Xincheng\_70:

(Start: 9 @62098 has 11 MA's), (10, 62107), (14, 62134), (15, 62149), (27, 62317),

Gene: Zemanar\_70 Start: 60862, Stop: 61089, Start Num: 9

Candidate Starts for Zemanar\_70:

(Start: 9 @60862 has 11 MA's), (11, 60877), (16, 60910), (19, 60937), (27, 61069),