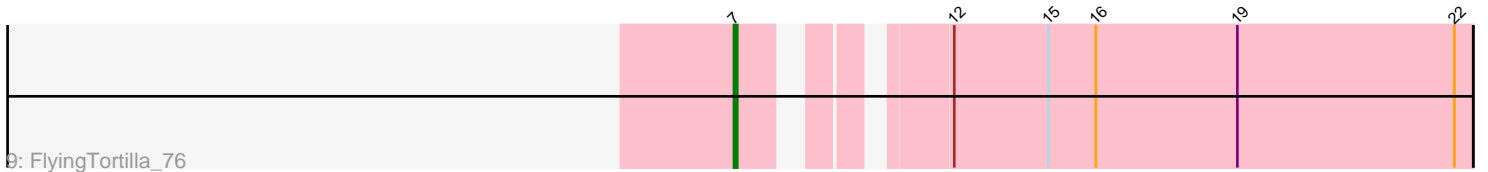
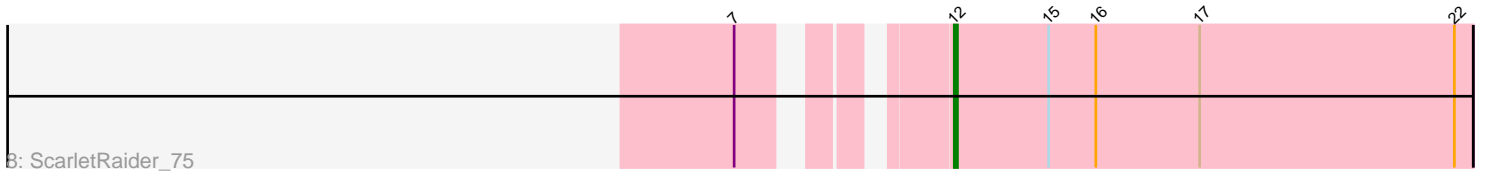
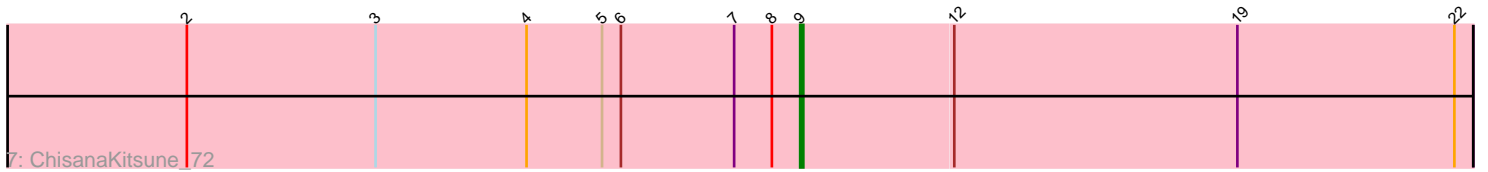
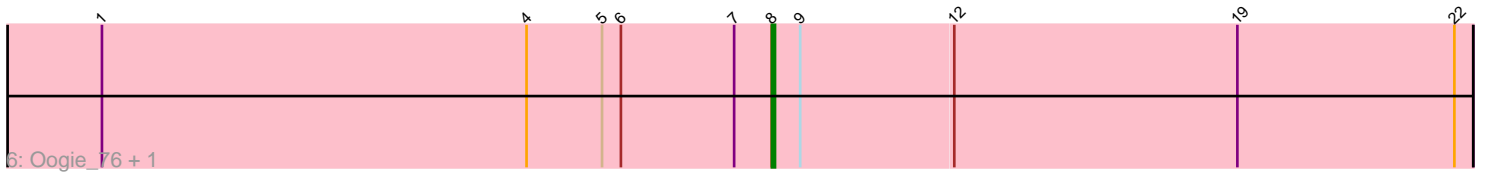
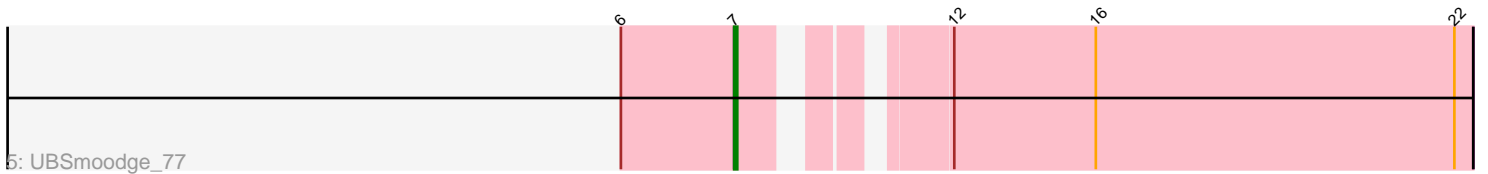
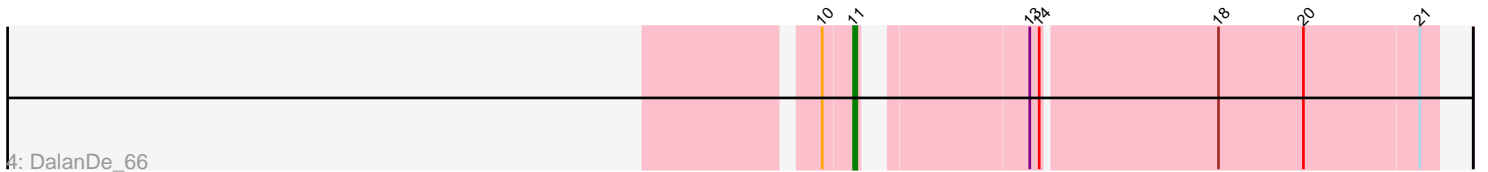
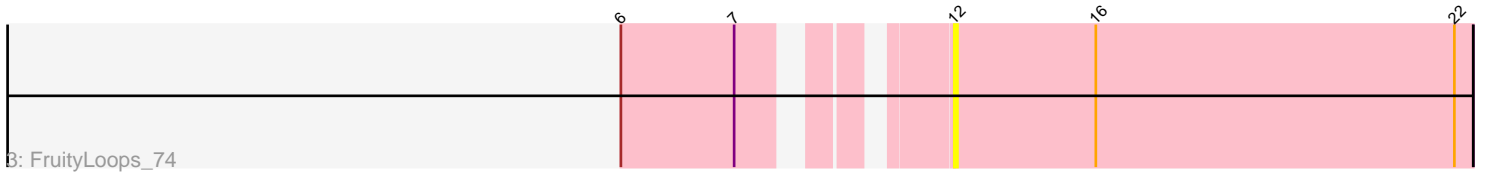
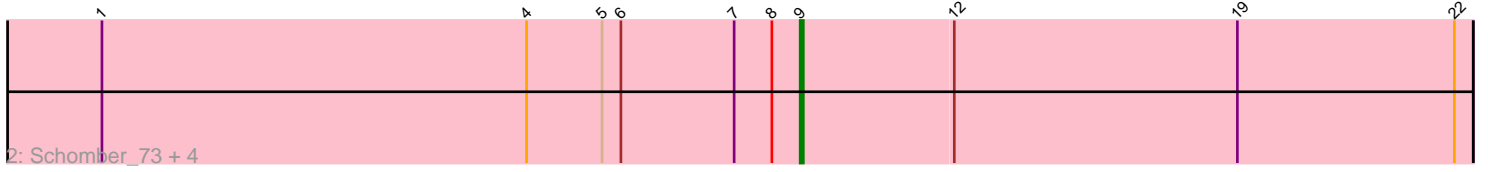
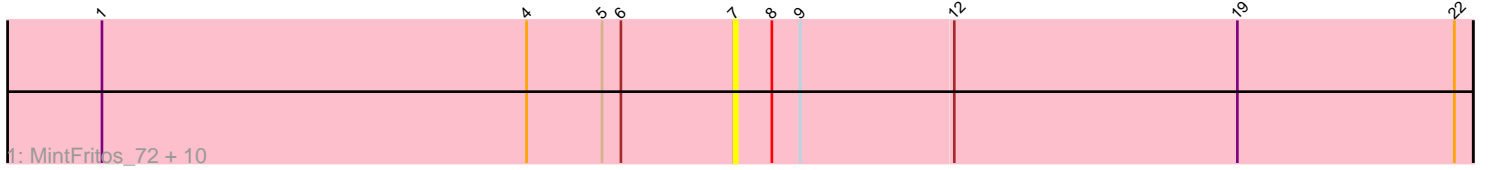


# Pham 309200



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 309200 Report

This analysis was run 06/27/26 on database version 652.

Pham number 309200 has 24 members, 12 are drafts.

Phages represented in each track:

- Track 1 : MintFritos\_72, Amoonguss\_73, Pakusa\_72, Lenoshki\_75, Twin\_71, Farrylious\_73, Argena\_73, Toneprano\_73, Beted\_75, EmoNemo\_71, Mikronejon\_72
- Track 2 : Schomber\_73, Hanem\_74, Kabocha\_76, Gray\_75, Chidiebere\_75
- Track 3 : FruityLoops\_74
- Track 4 : DalanDe\_66
- Track 5 : UBSmoodge\_77
- Track 6 : Oogie\_76, Alok\_74
- Track 7 : ChisanaKitsune\_72
- Track 8 : ScarletRaider\_75
- Track 9 : FlyingTortilla\_76

### ***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 6 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Chidiebere\_75, ChisanaKitsune\_72, Gray\_75, Hanem\_74, Kabocha\_76, Schomber\_73,

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

- Alok\_74, Amoonguss\_73, Argena\_73, Beted\_75, EmoNemo\_71, Farrylious\_73, Lenoshki\_75, Mikronejon\_72, MintFritos\_72, Oogie\_76, Pakusa\_72, Toneprano\_73, Twin\_71,

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

- DalanDe\_66, FlyingTortilla\_76, FruityLoops\_74, ScarletRaider\_75, UBSmoodge\_77,

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

Start 7:

- Found in 23 of 24 ( 95.8% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 56.5% of time when present

- Phage (with cluster) where this start called: Amoonguss\_73 (DQ), Argena\_73 (DQ), Beted\_75 (DQ), EmoNemo\_71 (DQ), Farrylious\_73 (DQ), FlyingTortilla\_76 (DQ), Lenoshki\_75 (DQ), Mikronejon\_72 (DQ), MintFritos\_72 (DQ), Pakusa\_72 (DQ), Toneprano\_73 (DQ), Twin\_71 (DQ), UBSmoodge\_77 (DQ),

#### Start 8:

- Found in 19 of 24 ( 79.2% ) of genes in pham
- Manual Annotations of this start: 2 of 12
- Called 10.5% of time when present
- Phage (with cluster) where this start called: Aloki\_74 (DQ), Oogie\_76 (DQ),

#### Start 9:

- Found in 19 of 24 ( 79.2% ) of genes in pham
- Manual Annotations of this start: 6 of 12
- Called 31.6% of time when present
- Phage (with cluster) where this start called: Chidiebere\_75 (DQ), ChisanaKitsune\_72 (DQ), Gray\_75 (DQ), Hanem\_74 (DQ), Kabocha\_76 (DQ), Schomber\_73 (DQ),

#### Start 11:

- Found in 1 of 24 ( 4.2% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DalanDe\_66 (DQ),

#### Start 12:

- Found in 23 of 24 ( 95.8% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 8.7% of time when present
- Phage (with cluster) where this start called: FruityLoops\_74 (DQ), ScarletRaider\_75 (DQ),

### **Summary by clusters:**

There is one cluster represented in this pham: DQ

Info for manual annotations of cluster DQ:

- Start number 7 was manually annotated 2 times for cluster DQ.
- Start number 8 was manually annotated 2 times for cluster DQ.
- Start number 9 was manually annotated 6 times for cluster DQ.
- Start number 11 was manually annotated 1 time for cluster DQ.
- Start number 12 was manually annotated 1 time for cluster DQ.

### **Gene Information:**

Gene: Aloki\_74 Start: 60540, Stop: 60761, Start Num: 8

Candidate Starts for Aloki\_74:

(1, 60327), (4, 60462), (5, 60486), (6, 60492), (Start: 7 @60528 has 2 MA's), (Start: 8 @60540 has 2 MA's), (Start: 9 @60549 has 6 MA's), (Start: 12 @60597 has 1 MA's), (19, 60687), (22, 60756),

Gene: Amoonguss\_73 Start: 60513, Stop: 60746, Start Num: 7

Candidate Starts for Amoonguss\_73:

(1, 60312), (4, 60447), (5, 60471), (6, 60477), (Start: 7 @60513 has 2 MA's), (Start: 8 @60525 has 2 MA's), (Start: 9 @60534 has 6 MA's), (Start: 12 @60582 has 1 MA's), (19, 60672), (22, 60741),

Gene: Argena\_73 Start: 60525, Stop: 60758, Start Num: 7

Candidate Starts for Argena\_73:

(1, 60324), (4, 60459), (5, 60483), (6, 60489), (Start: 7 @60525 has 2 MA's), (Start: 8 @60537 has 2 MA's), (Start: 9 @60546 has 6 MA's), (Start: 12 @60594 has 1 MA's), (19, 60684), (22, 60753),

Gene: Beted\_75 Start: 62654, Stop: 62887, Start Num: 7

Candidate Starts for Beted\_75:

(1, 62453), (4, 62588), (5, 62612), (6, 62618), (Start: 7 @62654 has 2 MA's), (Start: 8 @62666 has 2 MA's), (Start: 9 @62675 has 6 MA's), (Start: 12 @62723 has 1 MA's), (19, 62813), (22, 62882),

Gene: Chidiebere\_75 Start: 61082, Stop: 61294, Start Num: 9

Candidate Starts for Chidiebere\_75:

(1, 60860), (4, 60995), (5, 61019), (6, 61025), (Start: 7 @61061 has 2 MA's), (Start: 8 @61073 has 2 MA's), (Start: 9 @61082 has 6 MA's), (Start: 12 @61130 has 1 MA's), (19, 61220), (22, 61289),

Gene: ChisanaKitsune\_72 Start: 60219, Stop: 60431, Start Num: 9

Candidate Starts for ChisanaKitsune\_72:

(2, 60024), (3, 60084), (4, 60132), (5, 60156), (6, 60162), (Start: 7 @60198 has 2 MA's), (Start: 8 @60210 has 2 MA's), (Start: 9 @60219 has 6 MA's), (Start: 12 @60267 has 1 MA's), (19, 60357), (22, 60426),

Gene: DalanDe\_66 Start: 59636, Stop: 59806, Start Num: 11

Candidate Starts for DalanDe\_66:

(10, 59627), (Start: 11 @59636 has 1 MA's), (13, 59681), (14, 59684), (18, 59738), (20, 59765), (21, 59801),

Gene: EmoNemo\_71 Start: 60528, Stop: 60761, Start Num: 7

Candidate Starts for EmoNemo\_71:

(1, 60327), (4, 60462), (5, 60486), (6, 60492), (Start: 7 @60528 has 2 MA's), (Start: 8 @60540 has 2 MA's), (Start: 9 @60549 has 6 MA's), (Start: 12 @60597 has 1 MA's), (19, 60687), (22, 60756),

Gene: Farrylious\_73 Start: 60289, Stop: 60522, Start Num: 7

Candidate Starts for Farrylious\_73:

(1, 60088), (4, 60223), (5, 60247), (6, 60253), (Start: 7 @60289 has 2 MA's), (Start: 8 @60301 has 2 MA's), (Start: 9 @60310 has 6 MA's), (Start: 12 @60358 has 1 MA's), (19, 60448), (22, 60517),

Gene: FlyingTortilla\_76 Start: 64781, Stop: 64993, Start Num: 7

Candidate Starts for FlyingTortilla\_76:

(Start: 7 @64781 has 2 MA's), (Start: 12 @64829 has 1 MA's), (15, 64859), (16, 64874), (19, 64919), (22, 64988),

Gene: FruityLoops\_74 Start: 64115, Stop: 64279, Start Num: 12

Candidate Starts for FruityLoops\_74:

(6, 64031), (Start: 7 @64067 has 2 MA's), (Start: 12 @64115 has 1 MA's), (16, 64160), (22, 64274),

Gene: Gray\_75 Start: 61064, Stop: 61276, Start Num: 9

Candidate Starts for Gray\_75:

(1, 60842), (4, 60977), (5, 61001), (6, 61007), (Start: 7 @61043 has 2 MA's), (Start: 8 @61055 has 2 MA's), (Start: 9 @61064 has 6 MA's), (Start: 12 @61112 has 1 MA's), (19, 61202), (22, 61271),

Gene: Hanem\_74 Start: 60549, Stop: 60761, Start Num: 9

Candidate Starts for Hanem\_74:

(1, 60327), (4, 60462), (5, 60486), (6, 60492), (Start: 7 @60528 has 2 MA's), (Start: 8 @60540 has 2 MA's), (Start: 9 @60549 has 6 MA's), (Start: 12 @60597 has 1 MA's), (19, 60687), (22, 60756),

Gene: Kabocha\_76 Start: 61892, Stop: 62104, Start Num: 9

Candidate Starts for Kabocha\_76:

(1, 61670), (4, 61805), (5, 61829), (6, 61835), (Start: 7 @61871 has 2 MA's), (Start: 8 @61883 has 2 MA's), (Start: 9 @61892 has 6 MA's), (Start: 12 @61940 has 1 MA's), (19, 62030), (22, 62099),

Gene: Lenoshki\_75 Start: 62654, Stop: 62887, Start Num: 7

Candidate Starts for Lenoshki\_75:

(1, 62453), (4, 62588), (5, 62612), (6, 62618), (Start: 7 @62654 has 2 MA's), (Start: 8 @62666 has 2 MA's), (Start: 9 @62675 has 6 MA's), (Start: 12 @62723 has 1 MA's), (19, 62813), (22, 62882),

Gene: Mikronejon\_72 Start: 60528, Stop: 60761, Start Num: 7

Candidate Starts for Mikronejon\_72:

(1, 60327), (4, 60462), (5, 60486), (6, 60492), (Start: 7 @60528 has 2 MA's), (Start: 8 @60540 has 2 MA's), (Start: 9 @60549 has 6 MA's), (Start: 12 @60597 has 1 MA's), (19, 60687), (22, 60756),

Gene: MintFritos\_72 Start: 60529, Stop: 60762, Start Num: 7

Candidate Starts for MintFritos\_72:

(1, 60328), (4, 60463), (5, 60487), (6, 60493), (Start: 7 @60529 has 2 MA's), (Start: 8 @60541 has 2 MA's), (Start: 9 @60550 has 6 MA's), (Start: 12 @60598 has 1 MA's), (19, 60688), (22, 60757),

Gene: Oogie\_76 Start: 62716, Stop: 62937, Start Num: 8

Candidate Starts for Oogie\_76:

(1, 62503), (4, 62638), (5, 62662), (6, 62668), (Start: 7 @62704 has 2 MA's), (Start: 8 @62716 has 2 MA's), (Start: 9 @62725 has 6 MA's), (Start: 12 @62773 has 1 MA's), (19, 62863), (22, 62932),

Gene: Pakusa\_72 Start: 60254, Stop: 60487, Start Num: 7

Candidate Starts for Pakusa\_72:

(1, 60053), (4, 60188), (5, 60212), (6, 60218), (Start: 7 @60254 has 2 MA's), (Start: 8 @60266 has 2 MA's), (Start: 9 @60275 has 6 MA's), (Start: 12 @60323 has 1 MA's), (19, 60413), (22, 60482),

Gene: ScarletRaider\_75 Start: 64108, Stop: 64272, Start Num: 12

Candidate Starts for ScarletRaider\_75:

(Start: 7 @64060 has 2 MA's), (Start: 12 @64108 has 1 MA's), (15, 64138), (16, 64153), (17, 64186), (22, 64267),

Gene: Schomber\_73 Start: 60283, Stop: 60495, Start Num: 9

Candidate Starts for Schomber\_73:

(1, 60061), (4, 60196), (5, 60220), (6, 60226), (Start: 7 @60262 has 2 MA's), (Start: 8 @60274 has 2 MA's), (Start: 9 @60283 has 6 MA's), (Start: 12 @60331 has 1 MA's), (19, 60421), (22, 60490),

Gene: Toneprano\_73 Start: 60527, Stop: 60760, Start Num: 7

Candidate Starts for Toneprano\_73:

(1, 60326), (4, 60461), (5, 60485), (6, 60491), (Start: 7 @60527 has 2 MA's), (Start: 8 @60539 has 2 MA's), (Start: 9 @60548 has 6 MA's), (Start: 12 @60596 has 1 MA's), (19, 60686), (22, 60755),

Gene: Twin\_71 Start: 60527, Stop: 60760, Start Num: 7

Candidate Starts for Twin\_71:

(1, 60326), (4, 60461), (5, 60485), (6, 60491), (Start: 7 @60527 has 2 MA's), (Start: 8 @60539 has 2 MA's), (Start: 9 @60548 has 6 MA's), (Start: 12 @60596 has 1 MA's), (19, 60686), (22, 60755),

Gene: UBSmoodge\_77 Start: 64510, Stop: 64722, Start Num: 7

Candidate Starts for UBSmoodge\_77:

(6, 64474), (Start: 7 @64510 has 2 MA's), (Start: 12 @64558 has 1 MA's), (16, 64603), (22, 64717),