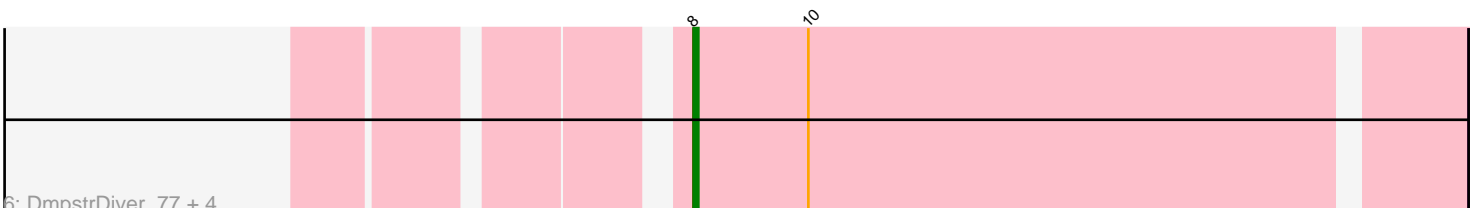
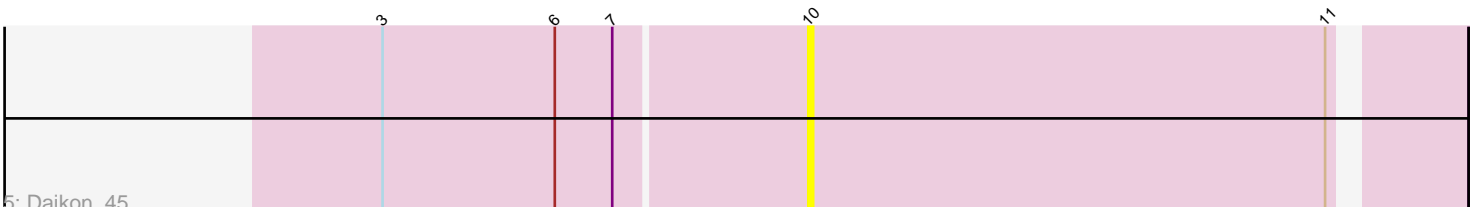
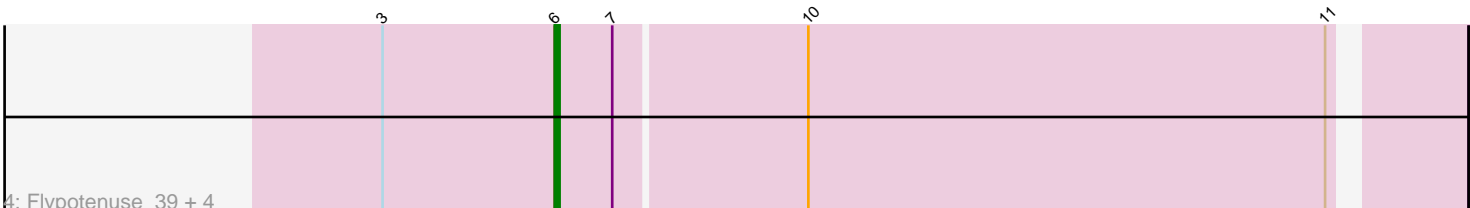
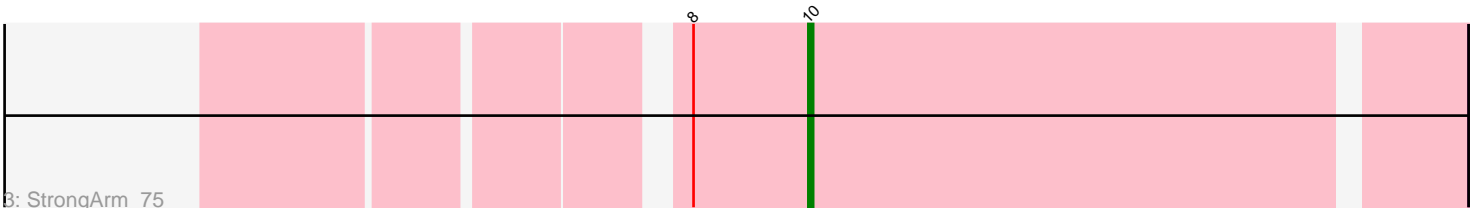
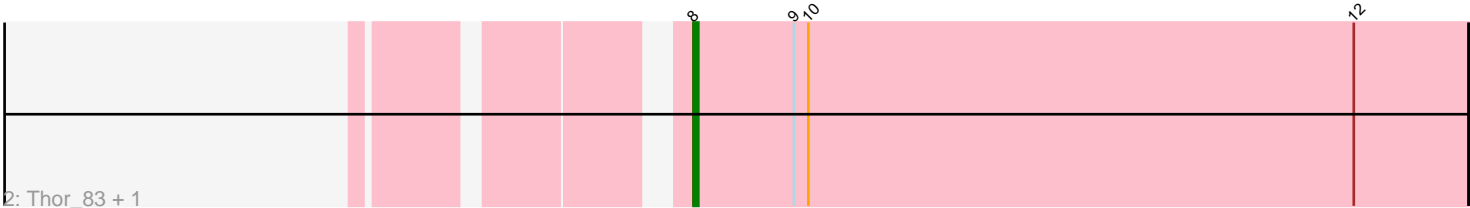
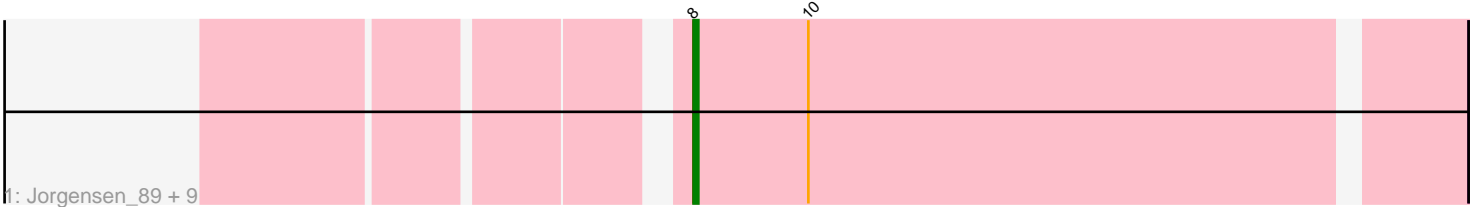


Pham 3431



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 3431 Report

This analysis was run 04/28/24 on database version 559.

Pham number 3431 has 25 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Jorgensen\_89, Sabbb\_81, Beatrix\_76, Whouxphf\_76, Sparkdehlily\_85, MadMen\_77, Karhdo\_78, Kersh\_81, TDanisky\_86, Bexan\_74
- Track 2 : Thor\_83, SarFire\_83
- Track 3 : StrongArm\_75
- Track 4 : Flypotenuse\_39, Balomoji\_43, Gator\_42, Glexan\_42, Harella\_44
- Track 5 : Daikon\_45
- Track 6 : DmpstrDiver\_77, Bagrid\_77, EricMillard\_76, Schatzie\_72, Hughesyang\_76
- Track 7 : EniyanLRS\_8

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

The start number called the most often in the published annotations is 8, it was called in 16 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bagrid\_77, Beatrix\_76, Bexan\_74, DmpstrDiver\_77, EricMillard\_76, Hughesyang\_76, Jorgensen\_89, Karhdo\_78, Kersh\_81, MadMen\_77, Sabbb\_81, SarFire\_83, Schatzie\_72, Sparkdehlily\_85, TDanisky\_86, Thor\_83, Whouxphf\_76,

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

- StrongArm\_75,

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

- Balomoji\_43, Daikon\_45, EniyanLRS\_8, Flypotenuse\_39, Gator\_42, Glexan\_42, Harella\_44,

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

Start 5:

- Found in 1 of 25 ( 4.0% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EniyanLRS\_8 (V),

Start 6:

- Found in 6 of 25 ( 24.0% ) of genes in pham
- Manual Annotations of this start: 4 of 22
- Called 83.3% of time when present
- Phage (with cluster) where this start called: Balomoji\_43 (E), Flypotenuse\_39 (E), Gator\_42 (E), Glexan\_42 (E), Harella\_44 (E),

Start 8:

- Found in 18 of 25 ( 72.0% ) of genes in pham
- Manual Annotations of this start: 16 of 22
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Bagrid\_77 (J), Beatrix\_76 (A1), Bexan\_74 (A1), DmpstrDiver\_77 (J), EricMillard\_76 (J), Hughesyang\_76 (J), Jorgensen\_89 (A1), Karhdo\_78 (F1), Kersh\_81 (F1), MadMen\_77 (F1), Sabbbb\_81 (F1), SarFire\_83 (A1), Schatzie\_72 (J), Sparkdehlily\_85 (F1), TDanisky\_86 (F1), Thor\_83 (A1), Whouxphf\_76 (F1),

Start 10:

- Found in 25 of 25 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 8.0% of time when present
- Phage (with cluster) where this start called: Daikon\_45 (E), StrongArm\_75 (A1),

### **Summary by clusters:**

There are 5 clusters represented in this pham: A1, F1, J, E, V,

Info for manual annotations of cluster A1:

- Start number 8 was manually annotated 5 times for cluster A1.
- Start number 10 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster E:

- Start number 6 was manually annotated 4 times for cluster E.

Info for manual annotations of cluster F1:

- Start number 8 was manually annotated 7 times for cluster F1.

Info for manual annotations of cluster J:

- Start number 8 was manually annotated 4 times for cluster J.

Info for manual annotations of cluster V:

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

### **Gene Information:**

Gene: Bagrid\_77 Start: 51259, Stop: 51104, Start Num: 8

Candidate Starts for Bagrid\_77:

(Start: 8 @51259 has 16 MA's), (Start: 10 @51235 has 1 MA's),

Gene: Balomoji\_43 Start: 35882, Stop: 35700, Start Num: 6

Candidate Starts for Balomoji\_43:

(3, 35918), (Start: 6 @35882 has 4 MA's), (7, 35870), (Start: 10 @35831 has 1 MA's), (11, 35723),

Gene: Beatrix\_76 Start: 47452, Stop: 47297, Start Num: 8

Candidate Starts for Beatrix\_76:

(Start: 8 @47452 has 16 MA's), (Start: 10 @47428 has 1 MA's),

Gene: Bexan\_74 Start: 47226, Stop: 47071, Start Num: 8

Candidate Starts for Bexan\_74:

(Start: 8 @47226 has 16 MA's), (Start: 10 @47202 has 1 MA's),

Gene: Daikon\_45 Start: 35852, Stop: 35721, Start Num: 10

Candidate Starts for Daikon\_45:

(3, 35939), (Start: 6 @35903 has 4 MA's), (7, 35891), (Start: 10 @35852 has 1 MA's), (11, 35744),

Gene: DmpstrDiver\_77 Start: 51467, Stop: 51312, Start Num: 8

Candidate Starts for DmpstrDiver\_77:

(Start: 8 @51467 has 16 MA's), (Start: 10 @51443 has 1 MA's),

Gene: EniyanLRS\_8 Start: 3851, Stop: 3660, Start Num: 5

Candidate Starts for EniyanLRS\_8:

(1, 3956), (2, 3953), (4, 3863), (Start: 5 @3851 has 1 MA's), (Start: 10 @3791 has 1 MA's),

Gene: EricMillard\_76 Start: 52112, Stop: 51957, Start Num: 8

Candidate Starts for EricMillard\_76:

(Start: 8 @52112 has 16 MA's), (Start: 10 @52088 has 1 MA's),

Gene: Flypotenuse\_39 Start: 34634, Stop: 34452, Start Num: 6

Candidate Starts for Flypotenuse\_39:

(3, 34670), (Start: 6 @34634 has 4 MA's), (7, 34622), (Start: 10 @34583 has 1 MA's), (11, 34475),

Gene: Gator\_42 Start: 35773, Stop: 35591, Start Num: 6

Candidate Starts for Gator\_42:

(3, 35809), (Start: 6 @35773 has 4 MA's), (7, 35761), (Start: 10 @35722 has 1 MA's), (11, 35614),

Gene: Glexan\_42 Start: 35761, Stop: 35579, Start Num: 6

Candidate Starts for Glexan\_42:

(3, 35797), (Start: 6 @35761 has 4 MA's), (7, 35749), (Start: 10 @35710 has 1 MA's), (11, 35602),

Gene: Harella\_44 Start: 36277, Stop: 36095, Start Num: 6

Candidate Starts for Harella\_44:

(3, 36313), (Start: 6 @36277 has 4 MA's), (7, 36265), (Start: 10 @36226 has 1 MA's), (11, 36118),

Gene: Hughesyang\_76 Start: 52078, Stop: 51923, Start Num: 8

Candidate Starts for Hughesyang\_76:

(Start: 8 @52078 has 16 MA's), (Start: 10 @52054 has 1 MA's),

Gene: Jorgensen\_89 Start: 49650, Stop: 49495, Start Num: 8

Candidate Starts for Jorgensen\_89:

(Start: 8 @49650 has 16 MA's), (Start: 10 @49626 has 1 MA's),

Gene: Karhdo\_78 Start: 47243, Stop: 47398, Start Num: 8

Candidate Starts for Karhdo\_78:

(Start: 8 @47243 has 16 MA's), (Start: 10 @47267 has 1 MA's),

Gene: Kersh\_81 Start: 50429, Stop: 50584, Start Num: 8  
Candidate Starts for Kersh\_81:  
(Start: 8 @50429 has 16 MA's), (Start: 10 @50453 has 1 MA's),

Gene: MadMen\_77 Start: 47087, Stop: 47242, Start Num: 8  
Candidate Starts for MadMen\_77:  
(Start: 8 @47087 has 16 MA's), (Start: 10 @47111 has 1 MA's),

Gene: Sabbb\_81 Start: 46404, Stop: 46559, Start Num: 8  
Candidate Starts for Sabbb\_81:  
(Start: 8 @46404 has 16 MA's), (Start: 10 @46428 has 1 MA's),

Gene: SarFire\_83 Start: 49520, Stop: 49359, Start Num: 8  
Candidate Starts for SarFire\_83:  
(Start: 8 @49520 has 16 MA's), (9, 49499), (Start: 10 @49496 has 1 MA's), (12, 49382),

Gene: Schatzie\_72 Start: 50996, Stop: 50841, Start Num: 8  
Candidate Starts for Schatzie\_72:  
(Start: 8 @50996 has 16 MA's), (Start: 10 @50972 has 1 MA's),

Gene: Sparkdehlily\_85 Start: 47407, Stop: 47562, Start Num: 8  
Candidate Starts for Sparkdehlily\_85:  
(Start: 8 @47407 has 16 MA's), (Start: 10 @47431 has 1 MA's),

Gene: StrongArm\_75 Start: 47330, Stop: 47199, Start Num: 10  
Candidate Starts for StrongArm\_75:  
(Start: 8 @47354 has 16 MA's), (Start: 10 @47330 has 1 MA's),

Gene: TDanisky\_86 Start: 47407, Stop: 47562, Start Num: 8  
Candidate Starts for TDanisky\_86:  
(Start: 8 @47407 has 16 MA's), (Start: 10 @47431 has 1 MA's),

Gene: Thor\_83 Start: 48878, Stop: 48717, Start Num: 8  
Candidate Starts for Thor\_83:  
(Start: 8 @48878 has 16 MA's), (9, 48857), (Start: 10 @48854 has 1 MA's), (12, 48740),

Gene: Whouxphf\_76 Start: 48342, Stop: 48497, Start Num: 8  
Candidate Starts for Whouxphf\_76:  
(Start: 8 @48342 has 16 MA's), (Start: 10 @48366 has 1 MA's),