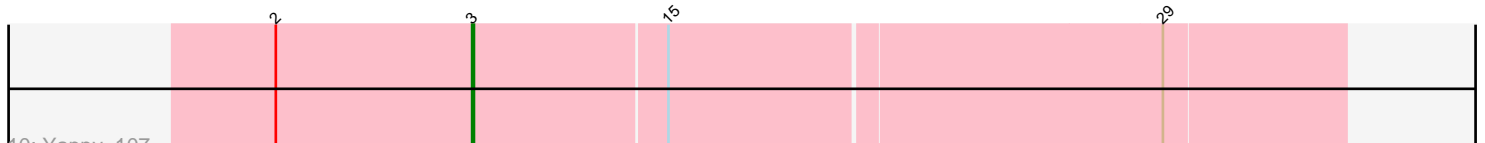
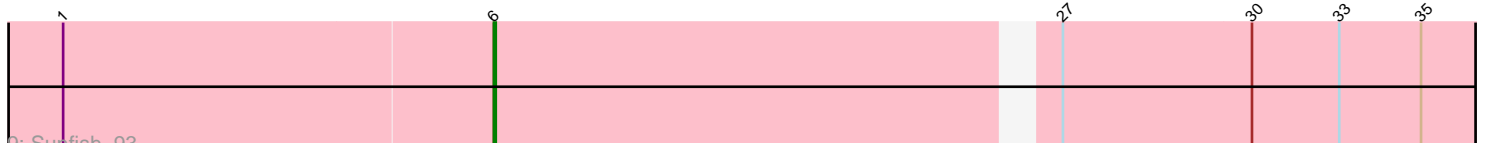
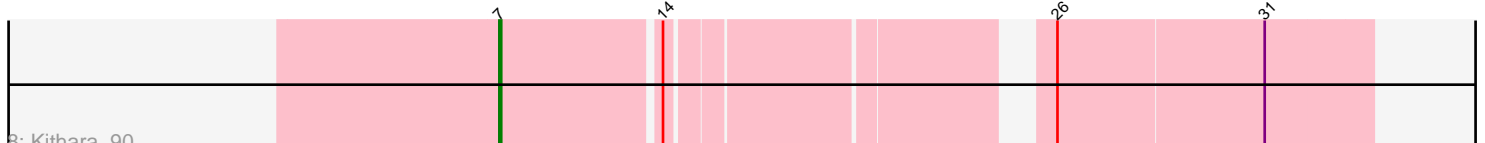
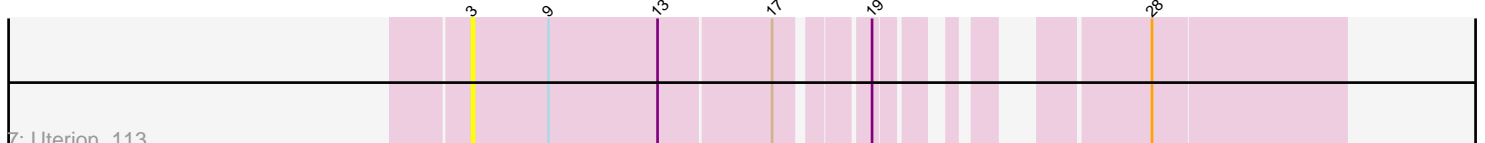
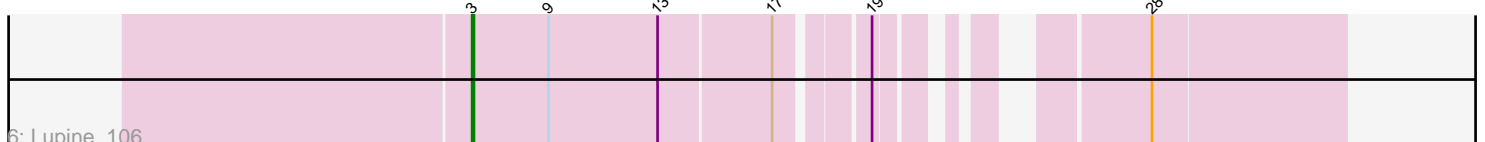
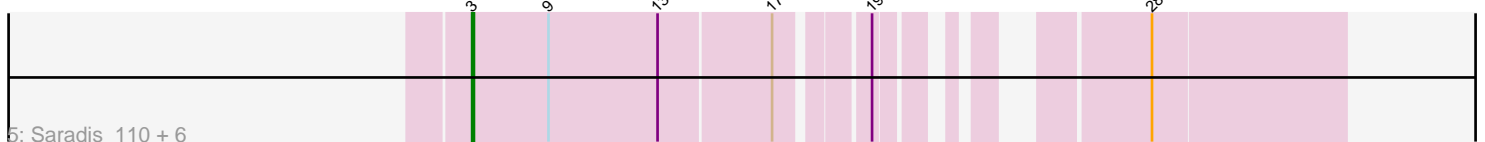
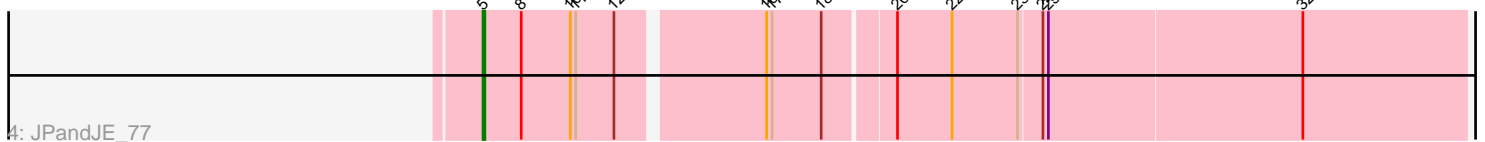
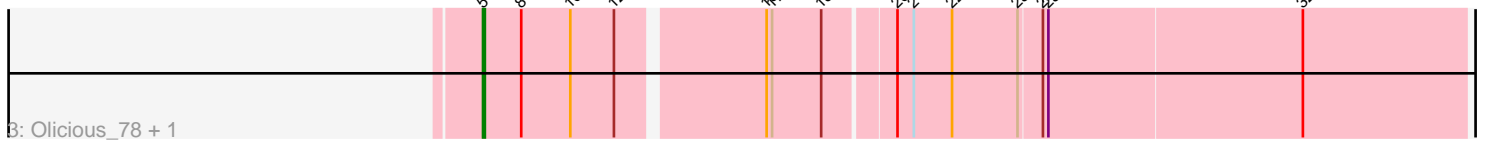
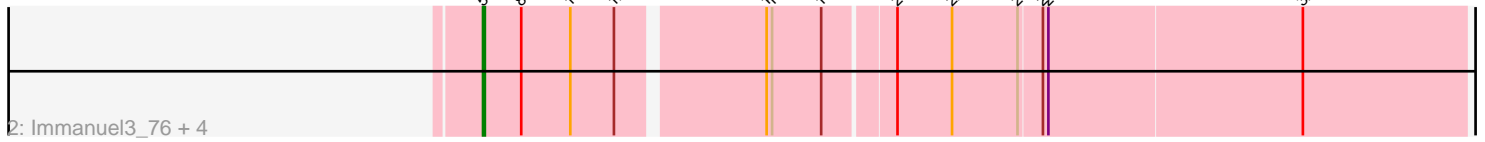
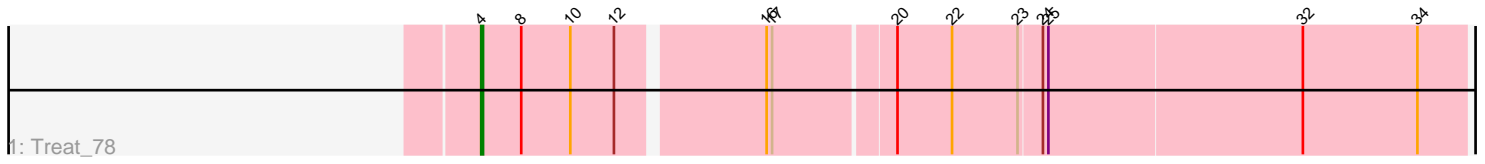


# Pham 312026



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 312026 Report

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

Pham number 312026 has 21 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Treat\_78
- Track 2 : Immanuel3\_76, ToriToki\_78, Percastrophe\_78, HaugeAnator\_78, ZooBear\_78
- Track 3 : Olicious\_78, Romero\_78
- Track 4 : JPandJE\_77
- Track 5 : Saradis\_110, Pavlo\_109, Solimine\_110, PhillyPhilly\_106, Hubbs\_108, Roman\_110, DejaVu\_109
- Track 6 : Lupine\_106
- Track 7 : Uterion\_113
- Track 8 : Kithara\_90
- Track 9 : Sunfish\_93
- Track 10 : Yappy\_107

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

The start number called the most often in the published annotations is 5, it was called in 8 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- HaugeAnator\_78, Immanuel3\_76, JPandJE\_77, Olicious\_78, Percastrophe\_78, Romero\_78, ToriToki\_78, ZooBear\_78,

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

- 

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

- DejaVu\_109, Hubbs\_108, Kithara\_90, Lupine\_106, Pavlo\_109, PhillyPhilly\_106, Roman\_110, Saradis\_110, Solimine\_110, Sunfish\_93, Treat\_78, Uterion\_113, Yappy\_107,

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

Start 3:

- Found in 10 of 21 ( 47.6% ) of genes in pham

- Manual Annotations of this start: 7 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DejaVu\_109 (ED1), Hubbs\_108 (ED1), Lupine\_106 (ED1), Pavlo\_109 (ED1), PhillyPhilly\_106 (ED1), Roman\_110 (ED1), Saradis\_110 (ED1), Solimine\_110 (ED1), Uterion\_113 (ED1), Yappy\_107 (singleton),

#### Start 4:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Treat\_78 (BF),

#### Start 5:

- Found in 8 of 21 ( 38.1% ) of genes in pham
- Manual Annotations of this start: 8 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HaugeAnator\_78 (BF), Immanuel3\_76 (BF), JPandJE\_77 (BF), Olicious\_78 (BF), Percastrophe\_78 (BF), Romero\_78 (BF), ToriToki\_78 (BF), ZooBear\_78 (BF),

#### Start 6:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sunfish\_93 (singleton),

#### Start 7:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kithara\_90 (singleton),

### **Summary by clusters:**

There are 3 clusters represented in this pham: BF, ED1, singleton,

#### Info for manual annotations of cluster BF:

- Start number 4 was manually annotated 1 time for cluster BF.
- Start number 5 was manually annotated 8 times for cluster BF.

#### Info for manual annotations of cluster ED1:

- Start number 3 was manually annotated 6 times for cluster ED1.

### **Gene Information:**

Gene: DejaVu\_109 Start: 57612, Stop: 57202, Start Num: 3

Candidate Starts for DejaVu\_109:

(Start: 3 @57612 has 7 MA's), (9, 57570), (13, 57510), (17, 57450), (19, 57408), (28, 57306),

Gene: HaugeAnator\_78 Start: 40177, Stop: 39656, Start Num: 5

Candidate Starts for HaugeAnator\_78:

(Start: 5 @40177 has 8 MA's), (8, 40156), (10, 40129), (12, 40105), (16, 40030), (17, 40027), (18, 40000), (20, 39964), (22, 39934), (23, 39898), (24, 39886), (25, 39883), (32, 39745),

Gene: Hubbs\_108 Start: 57876, Stop: 57466, Start Num: 3

Candidate Starts for Hubbs\_108:

(Start: 3 @57876 has 7 MA's), (9, 57834), (13, 57774), (17, 57714), (19, 57672), (28, 57570),

Gene: Immanuel3\_76 Start: 40182, Stop: 39661, Start Num: 5

Candidate Starts for Immanuel3\_76:

(Start: 5 @40182 has 8 MA's), (8, 40161), (10, 40134), (12, 40110), (16, 40035), (17, 40032), (18, 40005), (20, 39969), (22, 39939), (23, 39903), (24, 39891), (25, 39888), (32, 39750),

Gene: JPandJE\_77 Start: 40528, Stop: 40007, Start Num: 5

Candidate Starts for JPandJE\_77:

(Start: 5 @40528 has 8 MA's), (8, 40507), (10, 40480), (11, 40477), (12, 40456), (16, 40381), (17, 40378), (18, 40351), (20, 40315), (22, 40285), (23, 40249), (24, 40237), (25, 40234), (32, 40096),

Gene: Kithara\_90 Start: 59830, Stop: 59399, Start Num: 7

Candidate Starts for Kithara\_90:

(Start: 7 @59830 has 1 MA's), (14, 59746), (26, 59566), (31, 59455),

Gene: Lupine\_106 Start: 57058, Stop: 56648, Start Num: 3

Candidate Starts for Lupine\_106:

(Start: 3 @57058 has 7 MA's), (9, 57016), (13, 56956), (17, 56896), (19, 56854), (28, 56752),

Gene: Olicious\_78 Start: 40180, Stop: 39659, Start Num: 5

Candidate Starts for Olicious\_78:

(Start: 5 @40180 has 8 MA's), (8, 40159), (10, 40132), (12, 40108), (16, 40033), (17, 40030), (18, 40003), (20, 39967), (21, 39958), (22, 39937), (23, 39901), (24, 39889), (25, 39886), (32, 39748),

Gene: Pavlo\_109 Start: 58271, Stop: 57861, Start Num: 3

Candidate Starts for Pavlo\_109:

(Start: 3 @58271 has 7 MA's), (9, 58229), (13, 58169), (17, 58109), (19, 58067), (28, 57965),

Gene: Percastrophe\_78 Start: 40112, Stop: 39591, Start Num: 5

Candidate Starts for Percastrophe\_78:

(Start: 5 @40112 has 8 MA's), (8, 40091), (10, 40064), (12, 40040), (16, 39965), (17, 39962), (18, 39935), (20, 39899), (22, 39869), (23, 39833), (24, 39821), (25, 39818), (32, 39680),

Gene: PhillyPhilly\_106 Start: 57260, Stop: 56850, Start Num: 3

Candidate Starts for PhillyPhilly\_106:

(Start: 3 @57260 has 7 MA's), (9, 57218), (13, 57158), (17, 57098), (19, 57056), (28, 56954),

Gene: Roman\_110 Start: 58320, Stop: 57910, Start Num: 3

Candidate Starts for Roman\_110:

(Start: 3 @58320 has 7 MA's), (9, 58278), (13, 58218), (17, 58158), (19, 58116), (28, 58014),

Gene: Romero\_78 Start: 40173, Stop: 39652, Start Num: 5

Candidate Starts for Romero\_78:

(Start: 5 @40173 has 8 MA's), (8, 40152), (10, 40125), (12, 40101), (16, 40026), (17, 40023), (18, 39996), (20, 39960), (21, 39951), (22, 39930), (23, 39894), (24, 39882), (25, 39879), (32, 39741),

Gene: Saradis\_110 Start: 57287, Stop: 56877, Start Num: 3

Candidate Starts for Saradis\_110:

(Start: 3 @57287 has 7 MA's), (9, 57245), (13, 57185), (17, 57125), (19, 57083), (28, 56981),

Gene: Solimine\_110 Start: 58195, Stop: 57785, Start Num: 3

Candidate Starts for Solimine\_110:

(Start: 3 @58195 has 7 MA's), (9, 58153), (13, 58093), (17, 58033), (19, 57991), (28, 57889),

Gene: Sunfish\_93 Start: 53322, Stop: 52789, Start Num: 6

Candidate Starts for Sunfish\_93:

(1, 53556), (Start: 6 @53322 has 1 MA's), (27, 53031), (30, 52929), (33, 52881), (35, 52836),

Gene: ToriToki\_78 Start: 40176, Stop: 39655, Start Num: 5

Candidate Starts for ToriToki\_78:

(Start: 5 @40176 has 8 MA's), (8, 40155), (10, 40128), (12, 40104), (16, 40029), (17, 40026), (18, 39999), (20, 39963), (22, 39933), (23, 39897), (24, 39885), (25, 39882), (32, 39744),

Gene: Treat\_78 Start: 40051, Stop: 39530, Start Num: 4

Candidate Starts for Treat\_78:

(Start: 4 @40051 has 1 MA's), (8, 40030), (10, 40003), (12, 39979), (16, 39904), (17, 39901), (20, 39838), (22, 39808), (23, 39772), (24, 39760), (25, 39757), (32, 39619), (34, 39556),

Gene: Uterion\_113 Start: 57717, Stop: 57307, Start Num: 3

Candidate Starts for Uterion\_113:

(Start: 3 @57717 has 7 MA's), (9, 57675), (13, 57615), (17, 57555), (19, 57513), (28, 57411),

Gene: Yappy\_107 Start: 55269, Stop: 54802, Start Num: 3

Candidate Starts for Yappy\_107:

(2, 55377), (Start: 3 @55269 has 7 MA's), (15, 55164), (29, 54900),

Gene: ZooBear\_78 Start: 40177, Stop: 39656, Start Num: 5

Candidate Starts for ZooBear\_78:

(Start: 5 @40177 has 8 MA's), (8, 40156), (10, 40129), (12, 40105), (16, 40030), (17, 40027), (18, 40000), (20, 39964), (22, 39934), (23, 39898), (24, 39886), (25, 39883), (32, 39745),