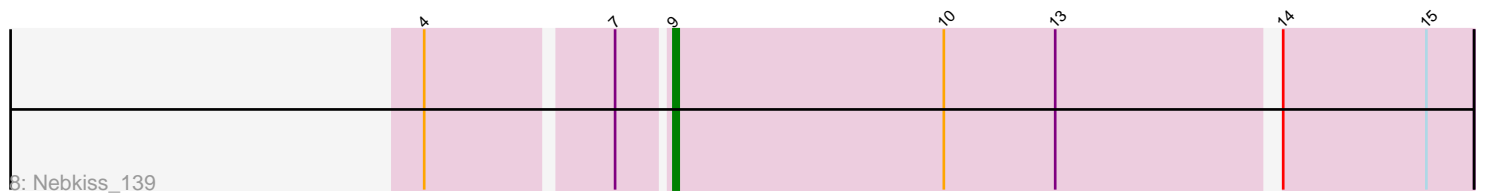
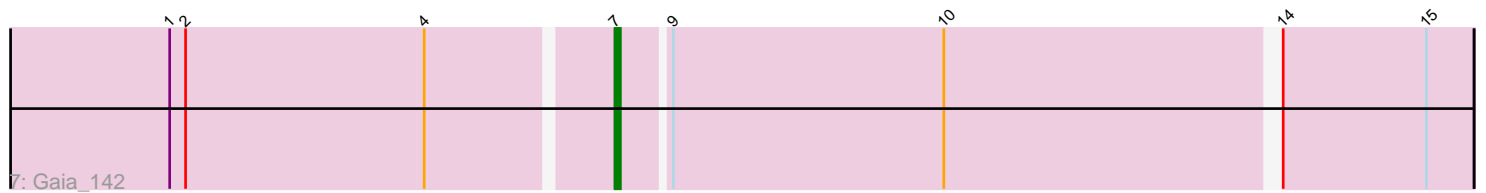
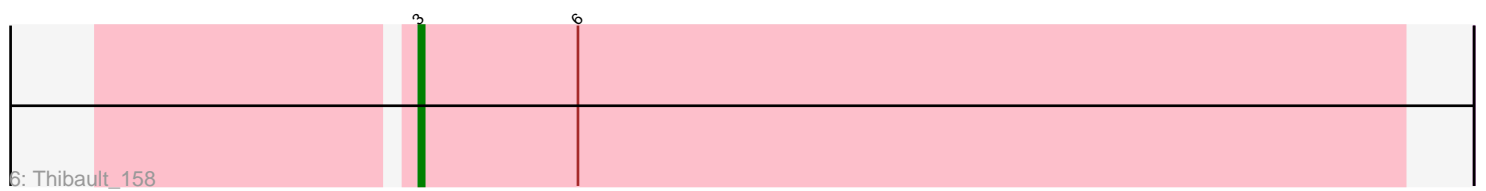
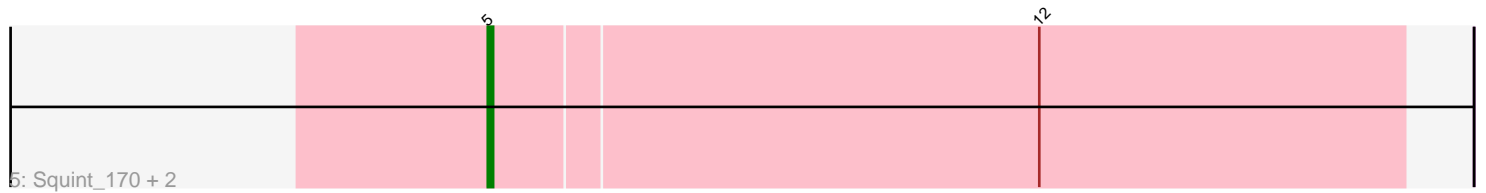
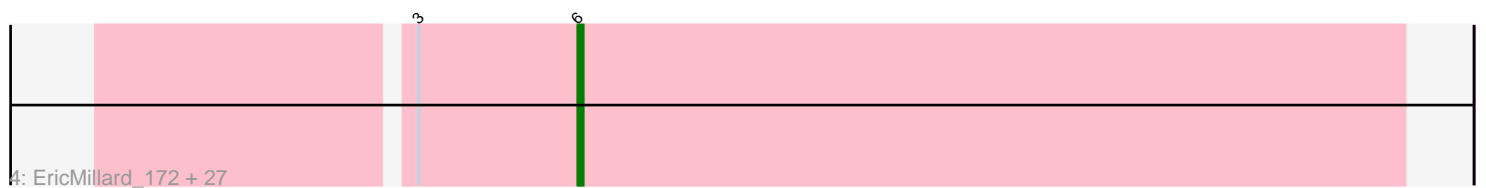
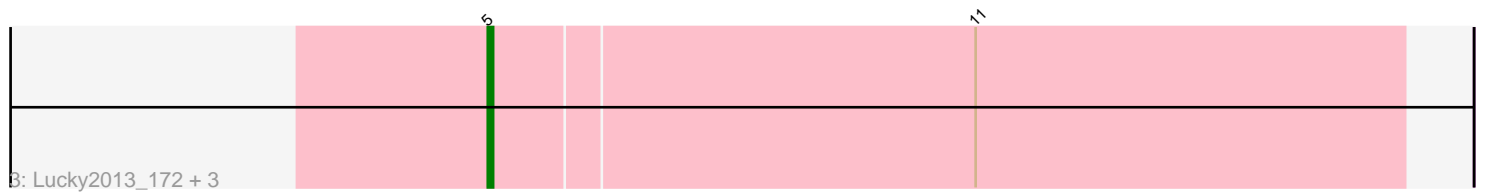
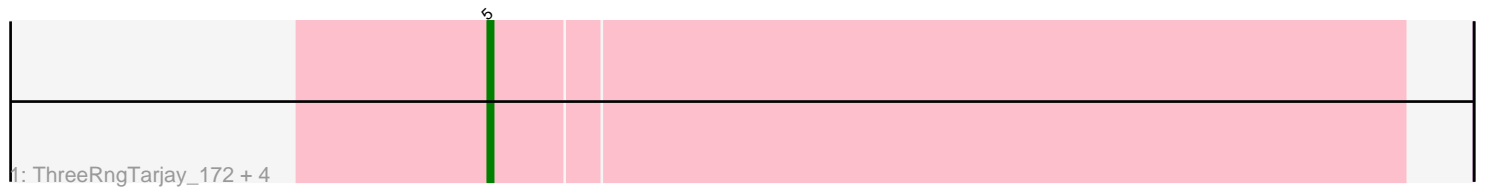


# Pham 2192



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 2192 Report

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

Pham number 2192 has 44 members, 4 are drafts.

Phages represented in each track:

- Track 1 : ThreeRngTarjay\_172, Courthouse\_173, Superphikiman\_174, MiaZeal\_179, Ariel\_177
- Track 2 : Bobby\_167
- Track 3 : Lucky2013\_172, Omega\_184a, Porcelain\_176, Gonephishing\_170
- Track 4 : EricMillard\_172, Optimus\_173, HokkenD\_169, Kalah2\_171, Schatzie\_169, DmpstrDiver\_175, JuicyJay\_169, Duke13\_177, Ejimix\_165, Dove\_169, Pound\_168, Bombitas\_161, Dallas\_174, Halley\_175, NihilNomen\_176, Bagrid\_183, Phoebus\_175, BAKA\_180, Redno2\_168, Yeet\_166, Beem\_175, Odette\_178, Minerva\_174, Wanda\_172, Constella\_170, Hughesyang\_173, Zelink\_167, Klein\_178
- Track 5 : Squint\_170, Hannaconda\_168, KashFlow\_173
- Track 6 : Thibault\_158
- Track 7 : Gaia\_142
- Track 8 : Nebkiss\_139

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

The start number called the most often in the published annotations is 6, it was called in 25 of the 40 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- BAKA\_180, Bagrid\_183, Beem\_175, Bombitas\_161, Constella\_170, Dallas\_174, DmpstrDiver\_175, Dove\_169, Duke13\_177, Ejimix\_165, EricMillard\_172, Halley\_175, HokkenD\_169, Hughesyang\_173, JuicyJay\_169, Kalah2\_171, Klein\_178, Minerva\_174, NihilNomen\_176, Odette\_178, Optimus\_173, Phoebus\_175, Pound\_168, Redno2\_168, Schatzie\_169, Wanda\_172, Yeet\_166, Zelink\_167,

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

- Thibault\_158,

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

- Ariel\_177, Bobby\_167, Courthouse\_173, Gaia\_142, Gonephishing\_170, Hannaconda\_168, KashFlow\_173, Lucky2013\_172, MiaZeal\_179, Nebkiss\_139, Omega\_184a, Porcelain\_176, Squint\_170, Superphikiman\_174, ThreeRngTarjay\_172,

## Summary by start number:

### Start 3:

- Found in 29 of 44 ( 65.9% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 3.4% of time when present
- Phage (with cluster) where this start called: Thibault\_158 (J),

### Start 5:

- Found in 12 of 44 ( 27.3% ) of genes in pham
- Manual Annotations of this start: 11 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_177 (J), Courthouse\_173 (J), Gonephishing\_170 (J), Hannaconda\_168 (J), KashFlow\_173 (J), Lucky2013\_172 (J), MiaZeal\_179 (J), Omega\_184a (J), Porcelain\_176 (J), Squint\_170 (J), Superphikiman\_174 (J), ThreeRngTarjay\_172 (J),

### Start 6:

- Found in 29 of 44 ( 65.9% ) of genes in pham
- Manual Annotations of this start: 25 of 40
- Called 96.6% of time when present
- Phage (with cluster) where this start called: BAKA\_180 (J), Bagrid\_183 (J), Beem\_175 (J), Bombitas\_161 (J), Constella\_170 (J), Dallas\_174 (J), DmpstrDiver\_175 (J), Dove\_169 (J), Duke13\_177 (J), Ejimix\_165 (J), EricMillard\_172 (J), Halley\_175 (J), HokkenD\_169 (J), Hughesyang\_173 (J), JuicyJay\_169 (J), Kalah2\_171 (J), Klein\_178 (J), Minerva\_174 (J), NihilNomen\_176 (J), Odette\_178 (J), Optimus\_173 (J), Phoebus\_175 (J), Pound\_168 (J), Redno2\_168 (J), Schatzie\_169 (J), Wanda\_172 (J), Yeet\_166 (J), Zelink\_167 (J),

### Start 7:

- Found in 2 of 44 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Gaia\_142 (X),

### Start 8:

- Found in 1 of 44 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bobby\_167 (J),

### Start 9:

- Found in 2 of 44 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 40
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Nebkiss\_139 (X),

## Summary by clusters:

There are 2 clusters represented in this pham: X, J,

Info for manual annotations of cluster J:

- Start number 3 was manually annotated 1 time for cluster J.
- Start number 5 was manually annotated 11 times for cluster J.
- Start number 6 was manually annotated 25 times for cluster J.
- Start number 8 was manually annotated 1 time for cluster J.

Info for manual annotations of cluster X:

- Start number 7 was manually annotated 1 time for cluster X.
- Start number 9 was manually annotated 1 time for cluster X.

### ***Gene Information:***

Gene: Ariel\_177 Start: 88559, Stop: 88729, Start Num: 5

Candidate Starts for Ariel\_177:

(Start: 5 @88559 has 11 MA's),

Gene: BAKA\_180 Start: 93070, Stop: 93225, Start Num: 6

Candidate Starts for BAKA\_180:

(Start: 3 @93040 has 1 MA's), (Start: 6 @93070 has 25 MA's),

Gene: Bagrid\_183 Start: 93536, Stop: 93691, Start Num: 6

Candidate Starts for Bagrid\_183:

(Start: 3 @93506 has 1 MA's), (Start: 6 @93536 has 25 MA's),

Gene: Beem\_175 Start: 92225, Stop: 92380, Start Num: 6

Candidate Starts for Beem\_175:

(Start: 3 @92195 has 1 MA's), (Start: 6 @92225 has 25 MA's),

Gene: Bobby\_167 Start: 93337, Stop: 93477, Start Num: 8

Candidate Starts for Bobby\_167:

(Start: 8 @93337 has 1 MA's), (10, 93391),

Gene: Bombitas\_161 Start: 88455, Stop: 88610, Start Num: 6

Candidate Starts for Bombitas\_161:

(Start: 3 @88425 has 1 MA's), (Start: 6 @88455 has 25 MA's),

Gene: Constella\_170 Start: 90959, Stop: 91114, Start Num: 6

Candidate Starts for Constella\_170:

(Start: 3 @90929 has 1 MA's), (Start: 6 @90959 has 25 MA's),

Gene: Courthouse\_173 Start: 89003, Stop: 89173, Start Num: 5

Candidate Starts for Courthouse\_173:

(Start: 5 @89003 has 11 MA's),

Gene: Dallas\_174 Start: 91448, Stop: 91603, Start Num: 6

Candidate Starts for Dallas\_174:

(Start: 3 @91418 has 1 MA's), (Start: 6 @91448 has 25 MA's),

Gene: DmpstrDiver\_175 Start: 90892, Stop: 91047, Start Num: 6

Candidate Starts for DmpstrDiver\_175:

(Start: 3 @90862 has 1 MA's), (Start: 6 @90892 has 25 MA's),

Gene: Dove\_169 Start: 86811, Stop: 86966, Start Num: 6  
Candidate Starts for Dove\_169:  
(Start: 3 @86781 has 1 MA's), (Start: 6 @86811 has 25 MA's),

Gene: Duke13\_177 Start: 91566, Stop: 91721, Start Num: 6  
Candidate Starts for Duke13\_177:  
(Start: 3 @91536 has 1 MA's), (Start: 6 @91566 has 25 MA's),

Gene: Ejimix\_165 Start: 90436, Stop: 90591, Start Num: 6  
Candidate Starts for Ejimix\_165:  
(Start: 3 @90406 has 1 MA's), (Start: 6 @90436 has 25 MA's),

Gene: EricMillard\_172 Start: 92146, Stop: 92301, Start Num: 6  
Candidate Starts for EricMillard\_172:  
(Start: 3 @92116 has 1 MA's), (Start: 6 @92146 has 25 MA's),

Gene: Gaia\_142 Start: 76473, Stop: 76628, Start Num: 7  
Candidate Starts for Gaia\_142:  
(1, 76392), (2, 76395), (4, 76440), (Start: 7 @76473 has 1 MA's), (Start: 9 @76482 has 1 MA's), (10, 76533), (14, 76593), (15, 76620),

Gene: Gonephishing\_170 Start: 89820, Stop: 89990, Start Num: 5  
Candidate Starts for Gonephishing\_170:  
(Start: 5 @89820 has 11 MA's), (11, 89910),

Gene: Halley\_175 Start: 90752, Stop: 90907, Start Num: 6  
Candidate Starts for Halley\_175:  
(Start: 3 @90722 has 1 MA's), (Start: 6 @90752 has 25 MA's),

Gene: Hannaconda\_168 Start: 91494, Stop: 91664, Start Num: 5  
Candidate Starts for Hannaconda\_168:  
(Start: 5 @91494 has 11 MA's), (12, 91596),

Gene: HokkenD\_169 Start: 92533, Stop: 92688, Start Num: 6  
Candidate Starts for HokkenD\_169:  
(Start: 3 @92503 has 1 MA's), (Start: 6 @92533 has 25 MA's),

Gene: Hughesyang\_173 Start: 91234, Stop: 91389, Start Num: 6  
Candidate Starts for Hughesyang\_173:  
(Start: 3 @91204 has 1 MA's), (Start: 6 @91234 has 25 MA's),

Gene: JuicyJay\_169 Start: 92180, Stop: 92335, Start Num: 6  
Candidate Starts for JuicyJay\_169:  
(Start: 3 @92150 has 1 MA's), (Start: 6 @92180 has 25 MA's),

Gene: Kalah2\_171 Start: 92518, Stop: 92673, Start Num: 6  
Candidate Starts for Kalah2\_171:  
(Start: 3 @92488 has 1 MA's), (Start: 6 @92518 has 25 MA's),

Gene: KashFlow\_173 Start: 91307, Stop: 91477, Start Num: 5  
Candidate Starts for KashFlow\_173:  
(Start: 5 @91307 has 11 MA's), (12, 91409),

Gene: Klein\_178 Start: 90961, Stop: 91116, Start Num: 6  
Candidate Starts for Klein\_178:  
(Start: 3 @90931 has 1 MA's), (Start: 6 @90961 has 25 MA's),

Gene: Lucky2013\_172 Start: 88074, Stop: 88244, Start Num: 5  
Candidate Starts for Lucky2013\_172:  
(Start: 5 @88074 has 11 MA's), (11, 88164),

Gene: MiaZeal\_179 Start: 89221, Stop: 89391, Start Num: 5  
Candidate Starts for MiaZeal\_179:  
(Start: 5 @89221 has 11 MA's),

Gene: Minerva\_174 Start: 90598, Stop: 90753, Start Num: 6  
Candidate Starts for Minerva\_174:  
(Start: 3 @90568 has 1 MA's), (Start: 6 @90598 has 25 MA's),

Gene: Nebkiss\_139 Start: 72094, Stop: 72240, Start Num: 9  
Candidate Starts for Nebkiss\_139:  
(4, 72052), (Start: 7 @72085 has 1 MA's), (Start: 9 @72094 has 1 MA's), (10, 72145), (13, 72166),  
(14, 72205), (15, 72232),

Gene: NihilNomen\_176 Start: 90306, Stop: 90461, Start Num: 6  
Candidate Starts for NihilNomen\_176:  
(Start: 3 @90276 has 1 MA's), (Start: 6 @90306 has 25 MA's),

Gene: Odette\_178 Start: 92987, Stop: 93142, Start Num: 6  
Candidate Starts for Odette\_178:  
(Start: 3 @92957 has 1 MA's), (Start: 6 @92987 has 25 MA's),

Gene: Omega\_184a Start: 93688, Stop: 93858, Start Num: 5  
Candidate Starts for Omega\_184a:  
(Start: 5 @93688 has 11 MA's), (11, 93778),

Gene: Optimus\_173 Start: 91513, Stop: 91668, Start Num: 6  
Candidate Starts for Optimus\_173:  
(Start: 3 @91483 has 1 MA's), (Start: 6 @91513 has 25 MA's),

Gene: Phoebus\_175 Start: 93993, Stop: 94148, Start Num: 6  
Candidate Starts for Phoebus\_175:  
(Start: 3 @93963 has 1 MA's), (Start: 6 @93993 has 25 MA's),

Gene: Porcelain\_176 Start: 89020, Stop: 89190, Start Num: 5  
Candidate Starts for Porcelain\_176:  
(Start: 5 @89020 has 11 MA's), (11, 89110),

Gene: Pound\_168 Start: 90042, Stop: 90197, Start Num: 6  
Candidate Starts for Pound\_168:  
(Start: 3 @90012 has 1 MA's), (Start: 6 @90042 has 25 MA's),

Gene: Redno2\_168 Start: 88106, Stop: 88261, Start Num: 6  
Candidate Starts for Redno2\_168:  
(Start: 3 @88076 has 1 MA's), (Start: 6 @88106 has 25 MA's),

Gene: Schatzie\_169 Start: 91041, Stop: 91196, Start Num: 6  
Candidate Starts for Schatzie\_169:  
(Start: 3 @91011 has 1 MA's), (Start: 6 @91041 has 25 MA's),

Gene: Squint\_170 Start: 89283, Stop: 89453, Start Num: 5  
Candidate Starts for Squint\_170:  
(Start: 5 @89283 has 11 MA's), (12, 89385),

Gene: Superphikiman\_174 Start: 88699, Stop: 88869, Start Num: 5  
Candidate Starts for Superphikiman\_174:  
(Start: 5 @88699 has 11 MA's),

Gene: Thibault\_158 Start: 87891, Stop: 88076, Start Num: 3  
Candidate Starts for Thibault\_158:  
(Start: 3 @87891 has 1 MA's), (Start: 6 @87921 has 25 MA's),

Gene: ThreeRngTarjay\_172 Start: 92322, Stop: 92492, Start Num: 5  
Candidate Starts for ThreeRngTarjay\_172:  
(Start: 5 @92322 has 11 MA's),

Gene: Wanda\_172 Start: 88610, Stop: 88765, Start Num: 6  
Candidate Starts for Wanda\_172:  
(Start: 3 @88580 has 1 MA's), (Start: 6 @88610 has 25 MA's),

Gene: Yeet\_166 Start: 89894, Stop: 90049, Start Num: 6  
Candidate Starts for Yeet\_166:  
(Start: 3 @89864 has 1 MA's), (Start: 6 @89894 has 25 MA's),

Gene: Zelink\_167 Start: 90229, Stop: 90384, Start Num: 6  
Candidate Starts for Zelink\_167:  
(Start: 3 @90199 has 1 MA's), (Start: 6 @90229 has 25 MA's),