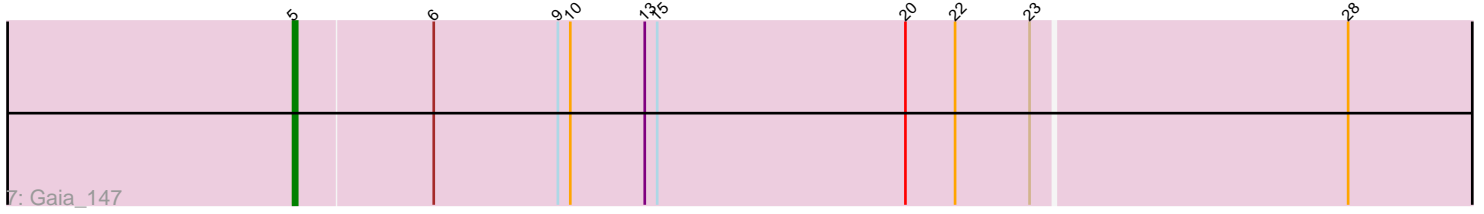
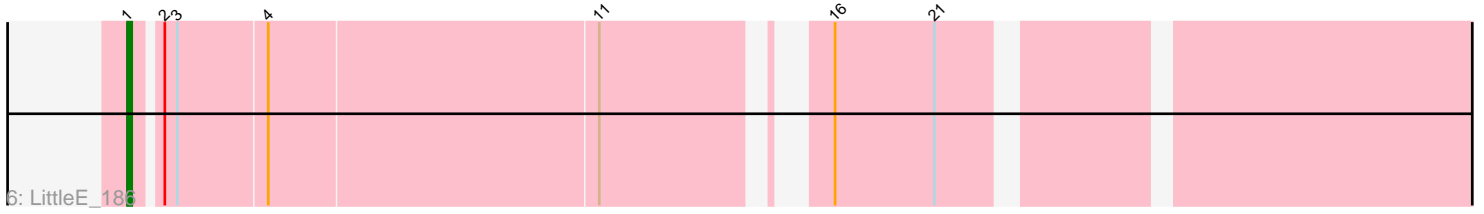
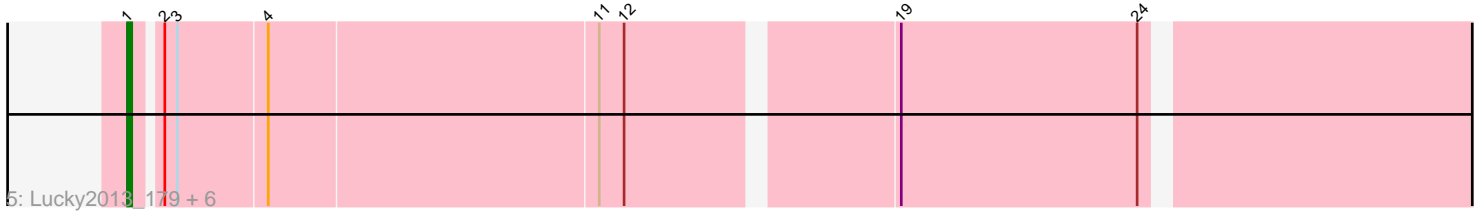
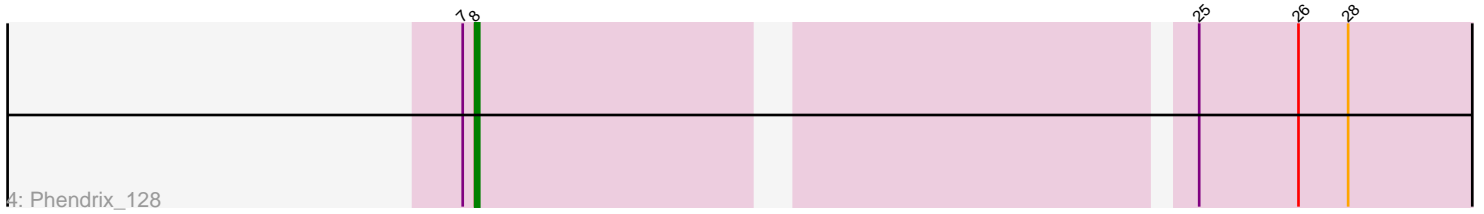
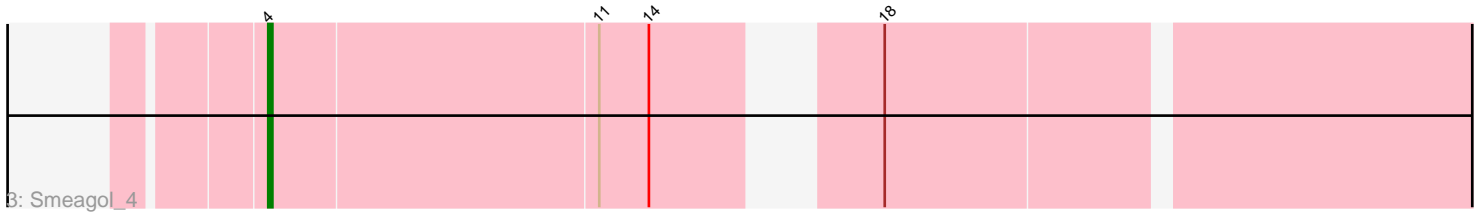
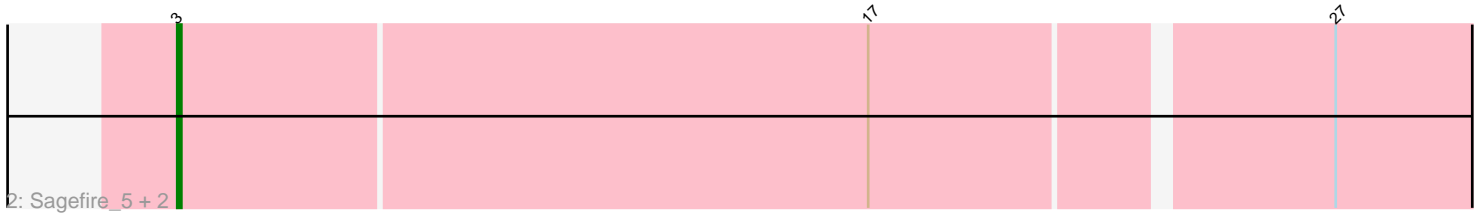
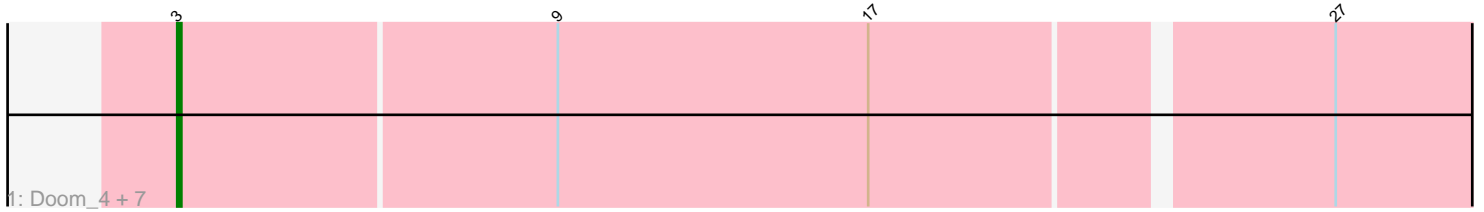


Pham 162165



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 162165 Report

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

Pham number 162165 has 22 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Doom\_4, ILeeKay\_5, Ajay\_4, KBG\_4, Smairt\_4, BigPaolini\_5, Adahisdi\_4, Oogway\_3
- Track 2 : Sagefire\_5, Rutherford\_4, Peterson\_5
- Track 3 : Smeagol\_4
- Track 4 : Phendrix\_128
- Track 5 : Lucky2013\_179, Ariel\_184, Porcelain\_183, MiaZeal\_186, Gonephishing\_177, Courthouse\_180, Superphikiman\_181
- Track 6 : LittleE\_186
- Track 7 : Gaia\_147

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

The start number called the most often in the published annotations is 3, it was called in 11 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Adahisdi\_4, Ajay\_4, BigPaolini\_5, Doom\_4, ILeeKay\_5, KBG\_4, Oogway\_3, Peterson\_5, Rutherford\_4, Sagefire\_5, Smairt\_4,

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

- Ariel\_184, Courthouse\_180, Gonephishing\_177, LittleE\_186, Lucky2013\_179, MiaZeal\_186, Porcelain\_183, Superphikiman\_181,

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

- Gaia\_147, Phendrix\_128, Smeagol\_4,

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

Start 1:

- Found in 8 of 22 ( 36.4% ) of genes in pham
- Manual Annotations of this start: 7 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ariel\_184 (J), Courthouse\_180 (J), Gonephishing\_177 (J), LittleE\_186 (J), Lucky2013\_179 (J), MiaZeal\_186 (J),

Porcelain\_183 (J), Superphikiman\_181 (J),

Start 3:

- Found in 19 of 22 ( 86.4% ) of genes in pham
- Manual Annotations of this start: 11 of 21
- Called 57.9% of time when present
- Phage (with cluster) where this start called: Adahisdi\_4 (A1), Ajay\_4 (A1), BigPaolini\_5 (A1), Doom\_4 (A1), ILeeKay\_5 (A1), KBG\_4 (A1), Oogway\_3 (A1), Peterson\_5 (A1), Rutherford\_4 (A1), Sagefire\_5 (A1), Smairt\_4 (A1),

Start 4:

- Found in 9 of 22 ( 40.9% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 11.1% of time when present
- Phage (with cluster) where this start called: Smeagol\_4 (A1),

Start 5:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gaia\_147 (X),

Start 8:

- Found in 1 of 22 ( 4.5% ) of genes in pham
- Manual Annotations of this start: 1 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Phendrix\_128 (DK),

### **Summary by clusters:**

There are 4 clusters represented in this pham: A1, X, J, DK,

Info for manual annotations of cluster A1:

- Start number 3 was manually annotated 11 times for cluster A1.
- Start number 4 was manually annotated 1 time for cluster A1.

Info for manual annotations of cluster DK:

- Start number 8 was manually annotated 1 time for cluster DK.

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 7 times for cluster J.

Info for manual annotations of cluster X:

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

### **Gene Information:**

Gene: Adahisdi\_4 Start: 1698, Stop: 2012, Start Num: 3

Candidate Starts for Adahisdi\_4:

(Start: 3 @1698 has 11 MA's), (9, 1788), (17, 1863), (27, 1968),

Gene: Ajay\_4 Start: 1694, Stop: 2008, Start Num: 3  
Candidate Starts for Ajay\_4:  
(Start: 3 @1694 has 11 MA's), (9, 1784), (17, 1859), (27, 1964),

Gene: Ariel\_184 Start: 90388, Stop: 90705, Start Num: 1  
Candidate Starts for Ariel\_184:  
(Start: 1 @90388 has 7 MA's), (2, 90394), (Start: 3 @90397 has 11 MA's), (Start: 4 @90418 has 1 MA's), (11, 90496), (12, 90502), (19, 90562), (24, 90619),

Gene: BigPaolini\_5 Start: 2209, Stop: 2523, Start Num: 3  
Candidate Starts for BigPaolini\_5:  
(Start: 3 @2209 has 11 MA's), (9, 2299), (17, 2374), (27, 2479),

Gene: Courthouse\_180 Start: 90832, Stop: 91149, Start Num: 1  
Candidate Starts for Courthouse\_180:  
(Start: 1 @90832 has 7 MA's), (2, 90838), (Start: 3 @90841 has 11 MA's), (Start: 4 @90862 has 1 MA's), (11, 90940), (12, 90946), (19, 91006), (24, 91063),

Gene: Doom\_4 Start: 1700, Stop: 2014, Start Num: 3  
Candidate Starts for Doom\_4:  
(Start: 3 @1700 has 11 MA's), (9, 1790), (17, 1865), (27, 1970),

Gene: Gaia\_147 Start: 77990, Stop: 78283, Start Num: 5  
Candidate Starts for Gaia\_147:  
(Start: 5 @77990 has 1 MA's), (6, 78023), (9, 78053), (10, 78056), (13, 78074), (15, 78077), (20, 78137), (22, 78149), (23, 78167), (28, 78242),

Gene: Gonephishing\_177 Start: 91649, Stop: 91966, Start Num: 1  
Candidate Starts for Gonephishing\_177:  
(Start: 1 @91649 has 7 MA's), (2, 91655), (Start: 3 @91658 has 11 MA's), (Start: 4 @91679 has 1 MA's), (11, 91757), (12, 91763), (19, 91823), (24, 91880),

Gene: ILeeKay\_5 Start: 1874, Stop: 2188, Start Num: 3  
Candidate Starts for ILeeKay\_5:  
(Start: 3 @1874 has 11 MA's), (9, 1964), (17, 2039), (27, 2144),

Gene: KBG\_4 Start: 1933, Stop: 2247, Start Num: 3  
Candidate Starts for KBG\_4:  
(Start: 3 @1933 has 11 MA's), (9, 2023), (17, 2098), (27, 2203),

Gene: LittleE\_186 Start: 93578, Stop: 93880, Start Num: 1  
Candidate Starts for LittleE\_186:  
(Start: 1 @93578 has 7 MA's), (2, 93584), (Start: 3 @93587 has 11 MA's), (Start: 4 @93608 has 1 MA's), (11, 93686), (16, 93728), (21, 93752),

Gene: Lucky2013\_179 Start: 89904, Stop: 90221, Start Num: 1  
Candidate Starts for Lucky2013\_179:  
(Start: 1 @89904 has 7 MA's), (2, 89910), (Start: 3 @89913 has 11 MA's), (Start: 4 @89934 has 1 MA's), (11, 90012), (12, 90018), (19, 90078), (24, 90135),

Gene: MiaZeal\_186 Start: 91050, Stop: 91367, Start Num: 1  
Candidate Starts for MiaZeal\_186:

(Start: 1 @91050 has 7 MA's), (2, 91056), (Start: 3 @91059 has 11 MA's), (Start: 4 @91080 has 1 MA's), (11, 91158), (12, 91164), (19, 91224), (24, 91281),

Gene: Oogway\_3 Start: 1553, Stop: 1867, Start Num: 3  
Candidate Starts for Oogway\_3:  
(Start: 3 @1553 has 11 MA's), (9, 1643), (17, 1718), (27, 1823),

Gene: Peterson\_5 Start: 2390, Stop: 2704, Start Num: 3  
Candidate Starts for Peterson\_5:  
(Start: 3 @2390 has 11 MA's), (17, 2555), (27, 2660),

Gene: Phendrix\_128 Start: 77796, Stop: 77560, Start Num: 8  
Candidate Starts for Phendrix\_128:  
(7, 77799), (Start: 8 @77796 has 1 MA's), (25, 77637), (26, 77613), (28, 77601),

Gene: Porcelain\_183 Start: 90850, Stop: 91167, Start Num: 1  
Candidate Starts for Porcelain\_183:  
(Start: 1 @90850 has 7 MA's), (2, 90856), (Start: 3 @90859 has 11 MA's), (Start: 4 @90880 has 1 MA's), (11, 90958), (12, 90964), (19, 91024), (24, 91081),

Gene: Rutherferd\_4 Start: 1660, Stop: 1974, Start Num: 3  
Candidate Starts for Rutherferd\_4:  
(Start: 3 @1660 has 11 MA's), (17, 1825), (27, 1930),

Gene: Sagefire\_5 Start: 1861, Stop: 2175, Start Num: 3  
Candidate Starts for Sagefire\_5:  
(Start: 3 @1861 has 11 MA's), (17, 2026), (27, 2131),

Gene: Smairt\_4 Start: 2007, Stop: 2321, Start Num: 3  
Candidate Starts for Smairt\_4:  
(Start: 3 @2007 has 11 MA's), (9, 2097), (17, 2172), (27, 2277),

Gene: Smeagol\_4 Start: 2209, Stop: 2484, Start Num: 4  
Candidate Starts for Smeagol\_4:  
(Start: 4 @2209 has 1 MA's), (11, 2287), (14, 2299), (18, 2338),

Gene: Superphikiman\_181 Start: 90528, Stop: 90845, Start Num: 1  
Candidate Starts for Superphikiman\_181:  
(Start: 1 @90528 has 7 MA's), (2, 90534), (Start: 3 @90537 has 11 MA's), (Start: 4 @90558 has 1 MA's), (11, 90636), (12, 90642), (19, 90702), (24, 90759),