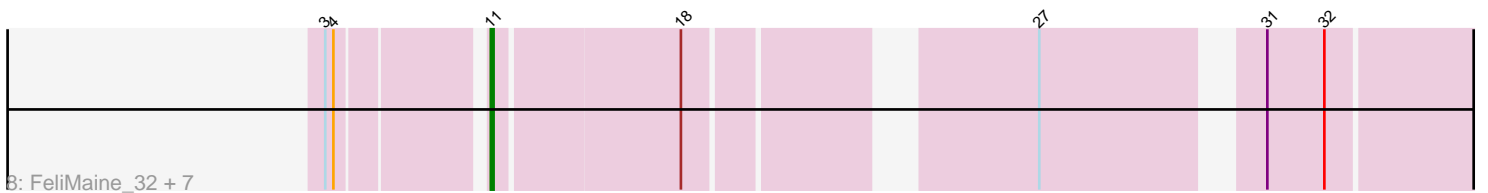
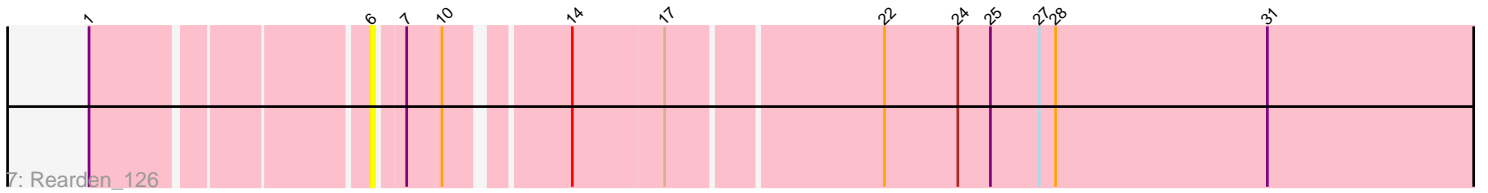
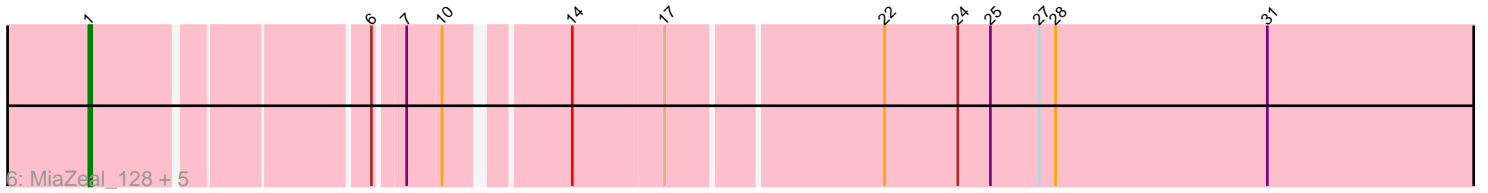
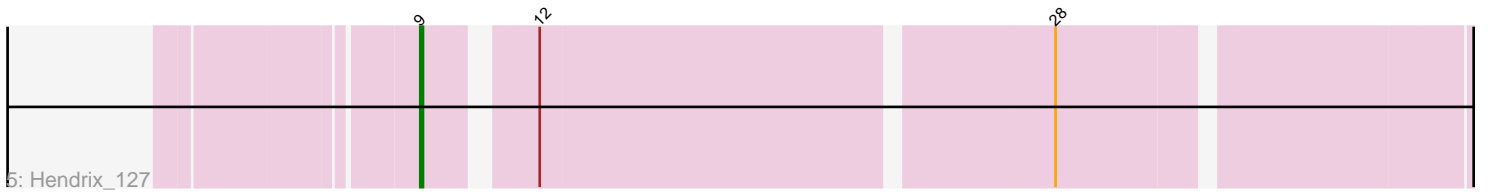
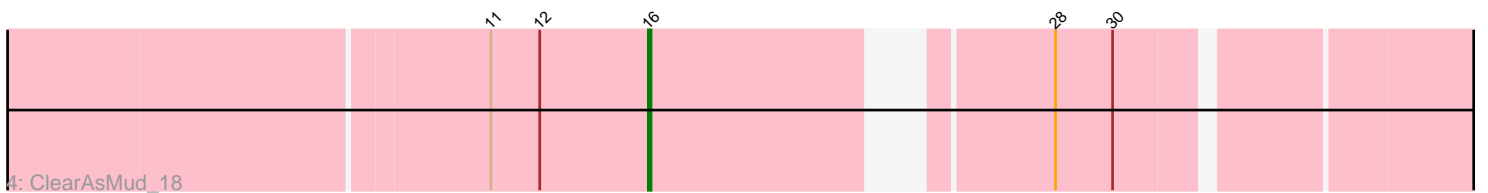
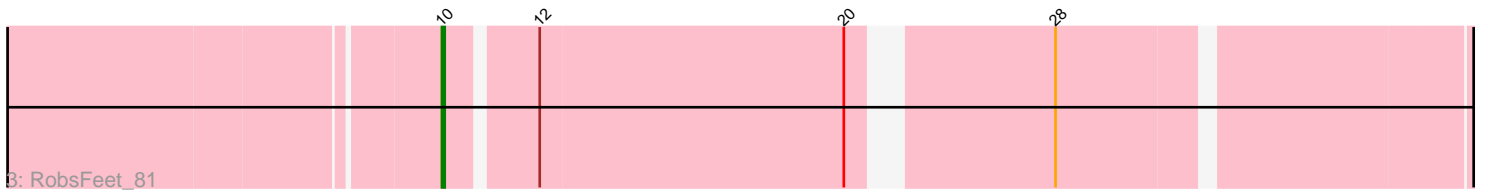
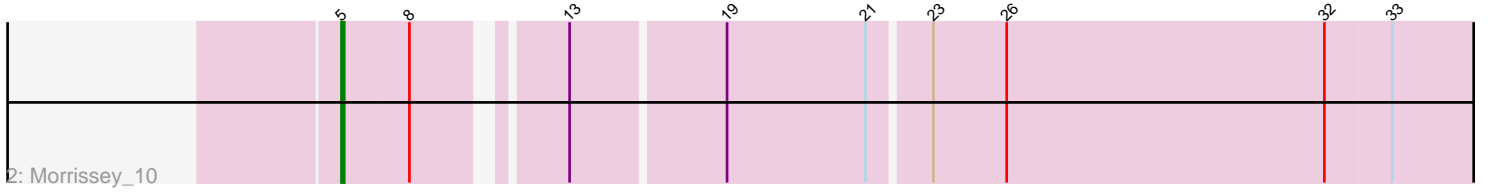
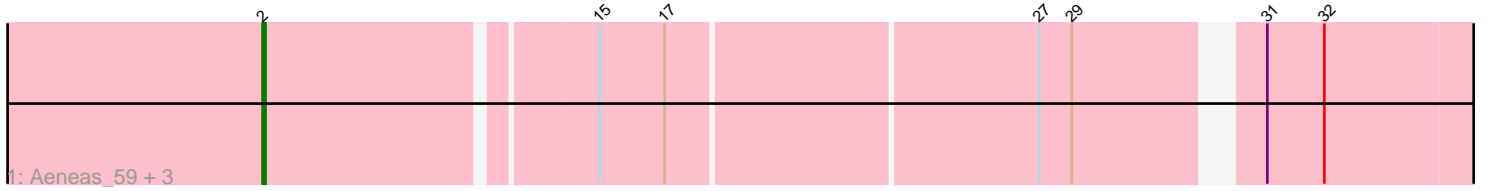


Pham 295066



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 295066 Report

This analysis was run 04/18/26 on database version 643.

Pham number 295066 has 23 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Aeneas\_59, Mule\_54, Smairt\_59, PhrostyMug\_55
- Track 2 : Morrissey\_10
- Track 3 : RobsFeet\_81
- Track 4 : ClearAsMud\_18
- Track 5 : Hendrix\_127
- Track 6 : MiaZeal\_128, Nibley\_125, Gonephishing\_122, Nekros\_131, Shaboozey\_129, Squint\_126
- Track 7 : Rearden\_126
- Track 8 : FeliMaine\_32, JoieB\_32, Beelzebub\_35, Clarkson\_32, Pringar\_31, VasuNzinga\_31, Huphlebuff\_33, LittleLaf\_31

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

The start number called the most often in the published annotations is 11, it was called in 8 of the 18 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub\_35, Clarkson\_32, FeliMaine\_32, Huphlebuff\_33, JoieB\_32, LittleLaf\_31, Pringar\_31, VasuNzinga\_31,

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

- ClearAsMud\_18,

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

- Aeneas\_59, Gonephishing\_122, Hendrix\_127, MiaZeal\_128, Morrissey\_10, Mule\_54, Nekros\_131, Nibley\_125, PhrostyMug\_55, Rearden\_126, RobsFeet\_81, Shaboozey\_129, Smairt\_59, Squint\_126,

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

Start 1:

- Found in 7 of 23 ( 30.4% ) of genes in pham
- Manual Annotations of this start: 2 of 18
- Called 85.7% of time when present

- Phage (with cluster) where this start called: Gonephishing\_122 (J), MiaZeal\_128 (J), Nekros\_131 (J), Nibley\_125 (J), Shaboozey\_129 (J), Squint\_126 (J),

Start 2:

- Found in 4 of 23 ( 17.4% ) of genes in pham
- Manual Annotations of this start: 4 of 18
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aeneas\_59 (A1), Mule\_54 (A1), PhrostyMug\_55 (A1), Smairt\_59 (A1),

Start 5:

- Found in 1 of 23 ( 4.3% ) 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: Morrissey\_10 (CD),

Start 6:

- Found in 7 of 23 ( 30.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 14.3% of time when present
- Phage (with cluster) where this start called: Rearden\_126 (J),

Start 9:

- Found in 1 of 23 ( 4.3% ) 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: Hendrix\_127 (GC),

Start 10:

- Found in 8 of 23 ( 34.8% ) of genes in pham
- Manual Annotations of this start: 1 of 18
- Called 12.5% of time when present
- Phage (with cluster) where this start called: RobsFeet\_81 (EC),

Start 11:

- Found in 9 of 23 ( 39.1% ) of genes in pham
- Manual Annotations of this start: 8 of 18
- Called 88.9% of time when present
- Phage (with cluster) where this start called: Beelzebub\_35 (S), Clarkson\_32 (S), FeliMaine\_32 (S), Huphlepuuff\_33 (S), JoieB\_32 (S), LittleLaf\_31 (S), Pringar\_31 (S), VasuNzinga\_31 (S),

Start 16:

- Found in 1 of 23 ( 4.3% ) 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: ClearAsMud\_18 (EC),

**Summary by clusters:**

There are 6 clusters represented in this pham: J, EC, CD, A1, S, GC,

Info for manual annotations of cluster A1:

- Start number 2 was manually annotated 4 times for cluster A1.

Info for manual annotations of cluster CD:

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

Info for manual annotations of cluster EC:

- Start number 10 was manually annotated 1 time for cluster EC.
- Start number 16 was manually annotated 1 time for cluster EC.

Info for manual annotations of cluster GC:

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

Info for manual annotations of cluster J:

- Start number 1 was manually annotated 2 times for cluster J.

Info for manual annotations of cluster S:

- Start number 11 was manually annotated 8 times for cluster S.

### **Gene Information:**

Gene: Aeneas\_59 Start: 40763, Stop: 40299, Start Num: 2

Candidate Starts for Aeneas\_59:

(Start: 2 @40763 has 4 MA's), (15, 40649), (17, 40625), (27, 40493), (29, 40481), (31, 40424), (32, 40403),

Gene: Beelzebub\_35 Start: 9572, Stop: 9919, Start Num: 11

Candidate Starts for Beelzebub\_35:

(3, 9521), (4, 9524), (Start: 11 @9572 has 8 MA's), (18, 9638), (27, 9746), (31, 9815), (32, 9836),

Gene: Clarkson\_32 Start: 9273, Stop: 9620, Start Num: 11

Candidate Starts for Clarkson\_32:

(3, 9222), (4, 9225), (Start: 11 @9273 has 8 MA's), (18, 9339), (27, 9447), (31, 9516), (32, 9537),

Gene: ClearAsMud\_18 Start: 7804, Stop: 8094, Start Num: 16

Candidate Starts for ClearAsMud\_18:

(Start: 11 @7747 has 8 MA's), (12, 7765), (Start: 16 @7804 has 1 MA's), (28, 7927), (30, 7948),

Gene: FeliMaine\_32 Start: 9274, Stop: 9621, Start Num: 11

Candidate Starts for FeliMaine\_32:

(3, 9223), (4, 9226), (Start: 11 @9274 has 8 MA's), (18, 9340), (27, 9448), (31, 9517), (32, 9538),

Gene: Gonephishing\_122 Start: 66828, Stop: 67358, Start Num: 1

Candidate Starts for Gonephishing\_122:

(Start: 1 @66828 has 2 MA's), (6, 66921), (7, 66930), (Start: 10 @66942 has 1 MA's), (14, 66981), (17, 67014), (22, 67089), (24, 67116), (25, 67128), (27, 67146), (28, 67152), (31, 67230),

Gene: Hendrix\_127 Start: 81520, Stop: 81882, Start Num: 9

Candidate Starts for Hendrix\_127:

(Start: 9 @81520 has 1 MA's), (12, 81553), (28, 81733),

Gene: Huphlebuff\_33 Start: 9078, Stop: 9425, Start Num: 11

Candidate Starts for Huphlepuuff\_33:

(3, 9027), (4, 9030), (Start: 11 @9078 has 8 MA's), (18, 9144), (27, 9252), (31, 9321), (32, 9342),

Gene: JoieB\_32 Start: 9297, Stop: 9644, Start Num: 11

Candidate Starts for JoieB\_32:

(3, 9246), (4, 9249), (Start: 11 @9297 has 8 MA's), (18, 9363), (27, 9471), (31, 9540), (32, 9561),

Gene: LittleLaf\_31 Start: 9003, Stop: 9350, Start Num: 11

Candidate Starts for LittleLaf\_31:

(3, 8952), (4, 8955), (Start: 11 @9003 has 8 MA's), (18, 9069), (27, 9177), (31, 9246), (32, 9267),

Gene: MiaZeal\_128 Start: 68487, Stop: 69017, Start Num: 1

Candidate Starts for MiaZeal\_128:

(Start: 1 @68487 has 2 MA's), (6, 68580), (7, 68589), (Start: 10 @68601 has 1 MA's), (14, 68640), (17, 68673), (22, 68748), (24, 68775), (25, 68787), (27, 68805), (28, 68811), (31, 68889),

Gene: Morrissey\_10 Start: 7151, Stop: 7570, Start Num: 5

Candidate Starts for Morrissey\_10:

(Start: 5 @7151 has 1 MA's), (8, 7175), (13, 7220), (19, 7274), (21, 7325), (23, 7346), (26, 7373), (32, 7490), (33, 7514),

Gene: Mule\_54 Start: 38049, Stop: 37585, Start Num: 2

Candidate Starts for Mule\_54:

(Start: 2 @38049 has 4 MA's), (15, 37935), (17, 37911), (27, 37779), (29, 37767), (31, 37710), (32, 37689),

Gene: Nekros\_131 Start: 71983, Stop: 72513, Start Num: 1

Candidate Starts for Nekros\_131:

(Start: 1 @71983 has 2 MA's), (6, 72076), (7, 72085), (Start: 10 @72097 has 1 MA's), (14, 72136), (17, 72169), (22, 72244), (24, 72271), (25, 72283), (27, 72301), (28, 72307), (31, 72385),

Gene: Nibley\_125 Start: 68366, Stop: 68896, Start Num: 1

Candidate Starts for Nibley\_125:

(Start: 1 @68366 has 2 MA's), (6, 68459), (7, 68468), (Start: 10 @68480 has 1 MA's), (14, 68519), (17, 68552), (22, 68627), (24, 68654), (25, 68666), (27, 68684), (28, 68690), (31, 68768),

Gene: PhrostyMug\_55 Start: 40223, Stop: 39759, Start Num: 2

Candidate Starts for PhrostyMug\_55:

(Start: 2 @40223 has 4 MA's), (15, 40109), (17, 40085), (27, 39953), (29, 39941), (31, 39884), (32, 39863),

Gene: Pringar\_31 Start: 8903, Stop: 9250, Start Num: 11

Candidate Starts for Pringar\_31:

(3, 8852), (4, 8855), (Start: 11 @8903 has 8 MA's), (18, 8969), (27, 9077), (31, 9146), (32, 9167),

Gene: Rearden\_126 Start: 68479, Stop: 68916, Start Num: 6

Candidate Starts for Rearden\_126:

(Start: 1 @68386 has 2 MA's), (6, 68479), (7, 68488), (Start: 10 @68500 has 1 MA's), (14, 68539), (17, 68572), (22, 68647), (24, 68674), (25, 68686), (27, 68704), (28, 68710), (31, 68788),

Gene: RobsFeet\_81 Start: 46826, Stop: 47179, Start Num: 10

Candidate Starts for RobsFeet\_81:

(Start: 10 @46826 has 1 MA's), (12, 46856), (20, 46967), (28, 47030),

Gene: Shaboozey\_129 Start: 68810, Stop: 69340, Start Num: 1

Candidate Starts for Shaboozey\_129:

(Start: 1 @68810 has 2 MA's), (6, 68903), (7, 68912), (Start: 10 @68924 has 1 MA's), (14, 68963), (17, 68996), (22, 69071), (24, 69098), (25, 69110), (27, 69128), (28, 69134), (31, 69212),

Gene: Smairt\_59 Start: 41216, Stop: 40752, Start Num: 2

Candidate Starts for Smairt\_59:

(Start: 2 @41216 has 4 MA's), (15, 41102), (17, 41078), (27, 40946), (29, 40934), (31, 40877), (32, 40856),

Gene: Squint\_126 Start: 68600, Stop: 69130, Start Num: 1

Candidate Starts for Squint\_126:

(Start: 1 @68600 has 2 MA's), (6, 68693), (7, 68702), (Start: 10 @68714 has 1 MA's), (14, 68753), (17, 68786), (22, 68861), (24, 68888), (25, 68900), (27, 68918), (28, 68924), (31, 69002),

Gene: VasuNzinga\_31 Start: 8480, Stop: 8827, Start Num: 11

Candidate Starts for VasuNzinga\_31:

(3, 8429), (4, 8432), (Start: 11 @8480 has 8 MA's), (18, 8546), (27, 8654), (31, 8723), (32, 8744),