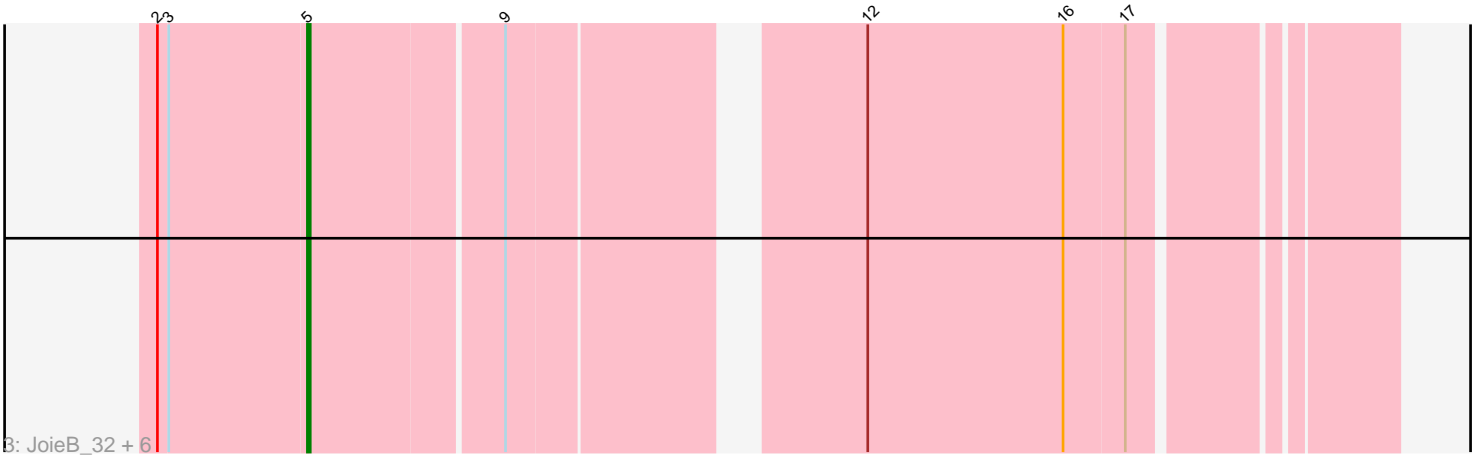
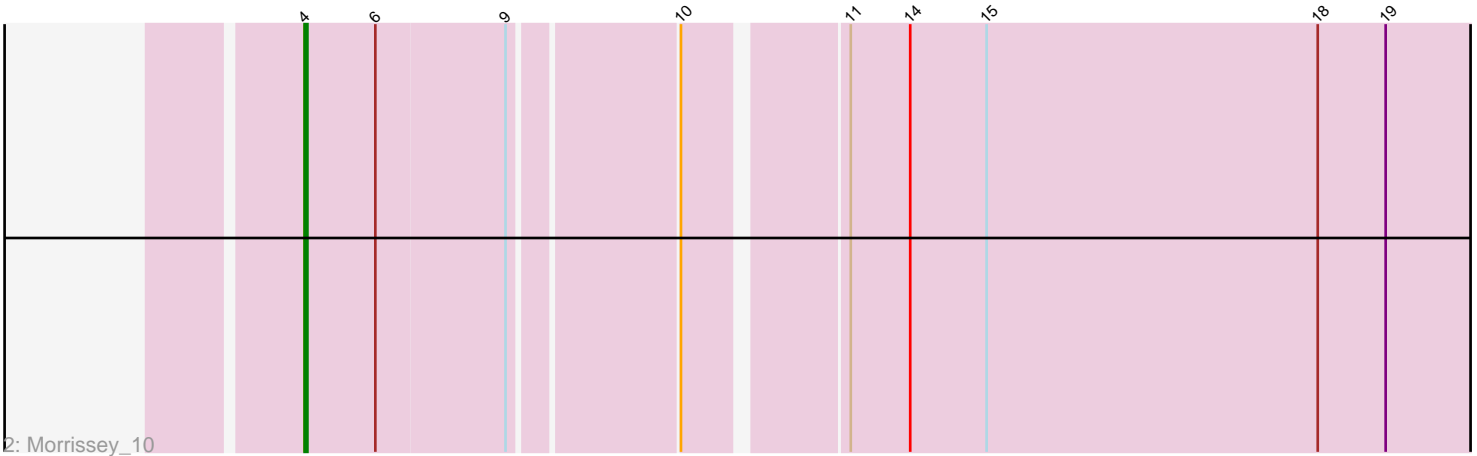
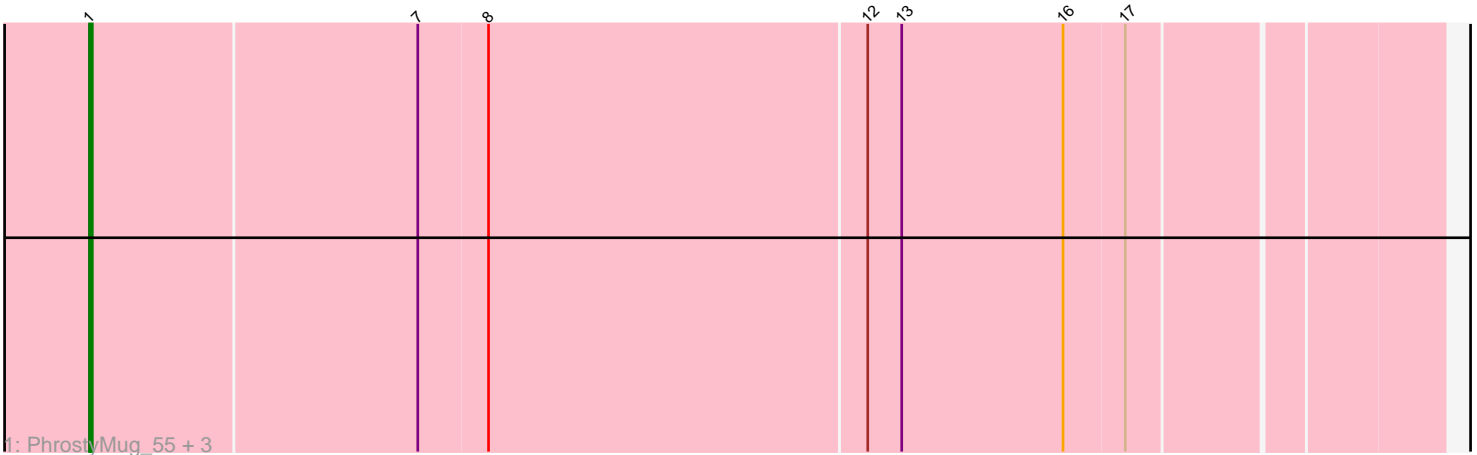


Pham 87215



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 87215 Report

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

Pham number 87215 has 12 members, 0 are drafts.

Phages represented in each track:

- Track 1 : PhrostyMug\_55, Aeneas\_59, Mule\_54, Smairt\_59
- Track 2 : Morrissey\_10
- Track 3 : JoieB\_32, Beelzebub\_35, Clarkson\_32, VasuNzinga\_31, Huphlepuuff\_33, Pringar\_31, 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 5, it was called in 7 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

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

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

- 

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

- Aeneas\_59, Morrissey\_10, Mule\_54, PhrostyMug\_55, Smairt\_59,

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

Start 1:

- Found in 4 of 12 ( 33.3% ) of genes in pham
- Manual Annotations of this start: 4 of 12
- 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 4:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey\_10 (CD),

Start 5:

- Found in 7 of 12 ( 58.3% ) of genes in pham
- Manual Annotations of this start: 7 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beelzebub\_35 (S), Clarkson\_32 (S), Huphlepuuff\_33 (S), JoieB\_32 (S), LittleLaf\_31 (S), Pringar\_31 (S), VasuNzinga\_31 (S),

### **Summary by clusters:**

There are 3 clusters represented in this pham: A1, S, CD,

Info for manual annotations of cluster A1:

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

Info for manual annotations of cluster CD:

- Start number 4 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster S:

- Start number 5 was manually annotated 7 times for cluster S.

### **Gene Information:**

Gene: Aeneas\_59 Start: 40763, Stop: 40299, Start Num: 1

Candidate Starts for Aeneas\_59:

(Start: 1 @40763 has 4 MA's), (7, 40649), (8, 40625), (12, 40493), (13, 40481), (16, 40424), (17, 40403),

Gene: Beelzebub\_35 Start: 9572, Stop: 9919, Start Num: 5

Candidate Starts for Beelzebub\_35:

(2, 9521), (3, 9524), (Start: 5 @9572 has 7 MA's), (9, 9638), (12, 9746), (16, 9815), (17, 9836),

Gene: Clarkson\_32 Start: 9273, Stop: 9620, Start Num: 5

Candidate Starts for Clarkson\_32:

(2, 9222), (3, 9225), (Start: 5 @9273 has 7 MA's), (9, 9339), (12, 9447), (16, 9516), (17, 9537),

Gene: Huphlepuuff\_33 Start: 9078, Stop: 9425, Start Num: 5

Candidate Starts for Huphlepuuff\_33:

(2, 9027), (3, 9030), (Start: 5 @9078 has 7 MA's), (9, 9144), (12, 9252), (16, 9321), (17, 9342),

Gene: JoieB\_32 Start: 9297, Stop: 9644, Start Num: 5

Candidate Starts for JoieB\_32:

(2, 9246), (3, 9249), (Start: 5 @9297 has 7 MA's), (9, 9363), (12, 9471), (16, 9540), (17, 9561),

Gene: LittleLaf\_31 Start: 9003, Stop: 9350, Start Num: 5

Candidate Starts for LittleLaf\_31:

(2, 8952), (3, 8955), (Start: 5 @9003 has 7 MA's), (9, 9069), (12, 9177), (16, 9246), (17, 9267),

Gene: Morrissey\_10 Start: 7151, Stop: 7570, Start Num: 4

Candidate Starts for Morrissey\_10:

(Start: 4 @7151 has 1 MA's), (6, 7175), (9, 7220), (10, 7274), (11, 7325), (14, 7346), (15, 7373), (18, 7490), (19, 7514),

Gene: Mule\_54 Start: 38049, Stop: 37585, Start Num: 1

Candidate Starts for Mule\_54:

(Start: 1 @38049 has 4 MA's), (7, 37935), (8, 37911), (12, 37779), (13, 37767), (16, 37710), (17, 37689),

Gene: PhrostyMug\_55 Start: 40223, Stop: 39759, Start Num: 1

Candidate Starts for PhrostyMug\_55:

(Start: 1 @40223 has 4 MA's), (7, 40109), (8, 40085), (12, 39953), (13, 39941), (16, 39884), (17, 39863),

Gene: Pringar\_31 Start: 8903, Stop: 9250, Start Num: 5

Candidate Starts for Pringar\_31:

(2, 8852), (3, 8855), (Start: 5 @8903 has 7 MA's), (9, 8969), (12, 9077), (16, 9146), (17, 9167),

Gene: Smairt\_59 Start: 41216, Stop: 40752, Start Num: 1

Candidate Starts for Smairt\_59:

(Start: 1 @41216 has 4 MA's), (7, 41102), (8, 41078), (12, 40946), (13, 40934), (16, 40877), (17, 40856),

Gene: VasuNzinga\_31 Start: 8480, Stop: 8827, Start Num: 5

Candidate Starts for VasuNzinga\_31:

(2, 8429), (3, 8432), (Start: 5 @8480 has 7 MA's), (9, 8546), (12, 8654), (16, 8723), (17, 8744),