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 04/05/24 on database version 557.
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, Huphlepuff_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, Huphlepuff_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),

Huphlepuff_33 (S), JoieB_32 (S), LittleLaf_31 (S), Pringār_31 (S), VasuNz̄inga_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: Huphlepuff_33 Start: 9078, Stop: 9425, Start Num: 5
Candidate Starts for Huphlepuff_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),

