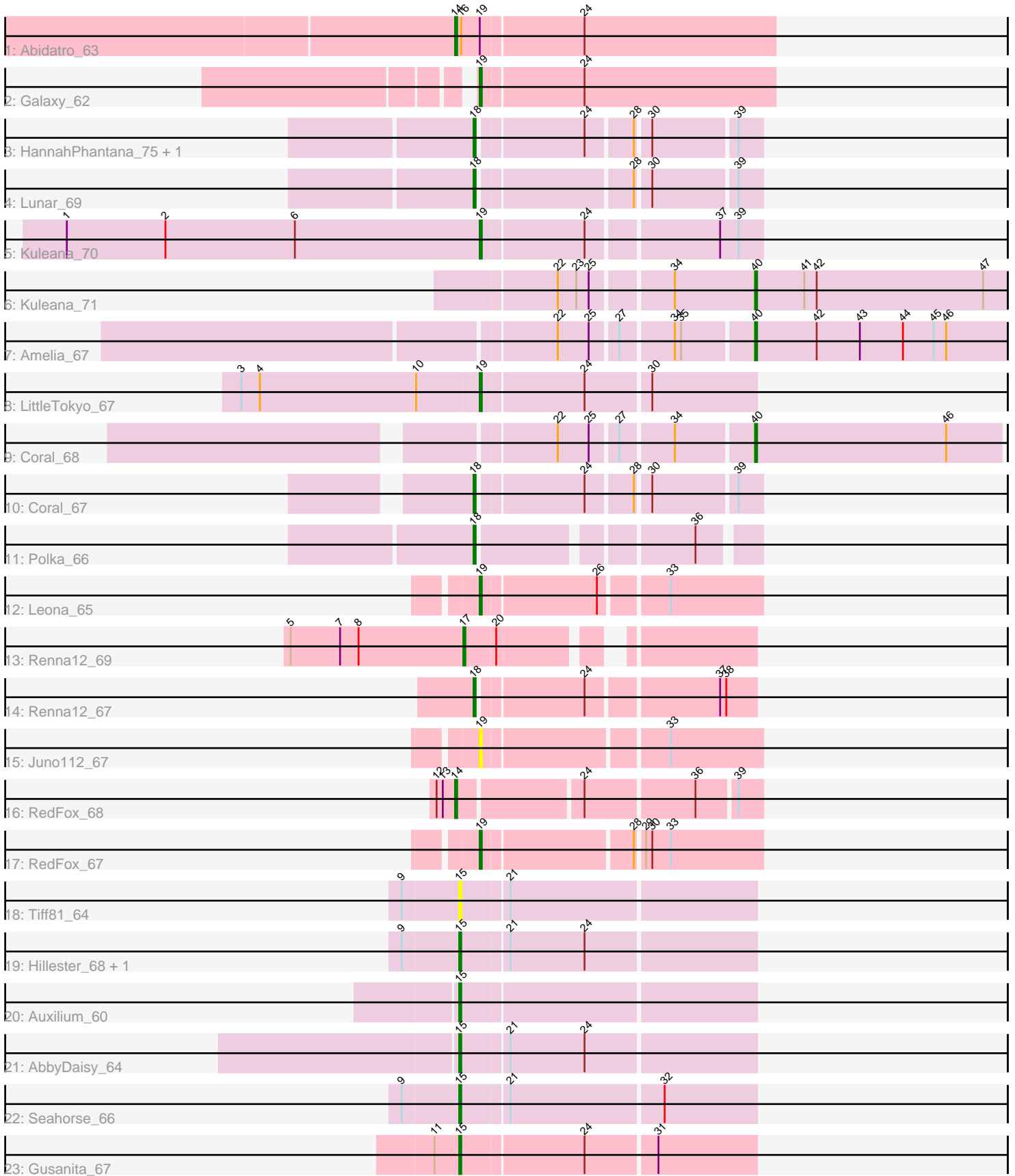


Pham 158140



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 158140 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158140 has 25 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Abidatro\_63
- Track 2 : Galaxy\_62
- Track 3 : HannahPhantana\_75, Amelia\_66
- Track 4 : Lunar\_69
- Track 5 : Kuleana\_70
- Track 6 : Kuleana\_71
- Track 7 : Amelia\_67
- Track 8 : LittleTokyo\_67
- Track 9 : Coral\_68
- Track 10 : Coral\_67
- Track 11 : Polka\_66
- Track 12 : Leona\_65
- Track 13 : Renna12\_69
- Track 14 : Renna12\_67
- Track 15 : Juno112\_67
- Track 16 : RedFox\_68
- Track 17 : RedFox\_67
- Track 18 : Tiff81\_64
- Track 19 : Hillester\_68, RadFad\_68
- Track 20 : Auxilium\_60
- Track 21 : AbbyDaisy\_64
- Track 22 : Seahorse\_66
- Track 23 : Gusanita\_67

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

The start number called the most often in the published annotations is 15, it was called in 5 of the 21 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- AbbyDaisy\_64, Auxilium\_60, Gusanita\_67, Hillester\_68, RadFad\_68, Seahorse\_66, Tiff81\_64,

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

- 

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

- Abidatro\_63, Amelia\_66, Amelia\_67, Coral\_67, Coral\_68, Galaxy\_62, HannahPhantana\_75, Juno112\_67, Kuleana\_70, Kuleana\_71, Leona\_65, LittleTokyo\_67, Lunar\_69, Polka\_66, RedFox\_67, RedFox\_68, Renna12\_67, Renna12\_69,

### Summary by start number:

Start 14:

- Found in 2 of 25 ( 8.0% ) of genes in pham
- Manual Annotations of this start: 2 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abidatro\_63 (AS1), RedFox\_68 (AS3),

Start 15:

- Found in 7 of 25 ( 28.0% ) of genes in pham
- Manual Annotations of this start: 5 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AbbyDaisy\_64 (AY), Auxilium\_60 (AY), Gusanita\_67 (FF), Hillester\_68 (AY), RadFad\_68 (AY), Seahorse\_66 (AY), Tiff81\_64 (AY),

Start 17:

- Found in 1 of 25 ( 4.0% ) 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: Renna12\_69 (AS3),

Start 18:

- Found in 6 of 25 ( 24.0% ) of genes in pham
- Manual Annotations of this start: 5 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia\_66 (AS2), Coral\_67 (AS2), HannahPhantana\_75 (AS2), Lunar\_69 (AS2), Polka\_66 (AS2), Renna12\_67 (AS3),

Start 19:

- Found in 7 of 25 ( 28.0% ) of genes in pham
- Manual Annotations of this start: 5 of 21
- Called 85.7% of time when present
- Phage (with cluster) where this start called: Galaxy\_62 (AS1), Juno112\_67 (AS3), Kuleana\_70 (AS2), Leona\_65 (AS3), LittleTokyo\_67 (AS2), RedFox\_67 (AS3),

Start 40:

- Found in 3 of 25 ( 12.0% ) of genes in pham
- Manual Annotations of this start: 3 of 21
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Amelia\_67 (AS2), Coral\_68 (AS2), Kuleana\_71 (AS2),

### Summary by clusters:

There are 5 clusters represented in this pham: AY, AS2, AS1, FF, AS3,

Info for manual annotations of cluster AS1:

- Start number 14 was manually annotated 1 time for cluster AS1.
- Start number 19 was manually annotated 1 time for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 18 was manually annotated 4 times for cluster AS2.
- Start number 19 was manually annotated 2 times for cluster AS2.
- Start number 40 was manually annotated 3 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 14 was manually annotated 1 time for cluster AS3.
- Start number 17 was manually annotated 1 time for cluster AS3.
- Start number 18 was manually annotated 1 time for cluster AS3.
- Start number 19 was manually annotated 2 times for cluster AS3.

Info for manual annotations of cluster AY:

- Start number 15 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster FF:

- Start number 15 was manually annotated 1 time for cluster FF.

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

Gene: AbbyDaisy\_64 Start: 35318, Stop: 35455, Start Num: 15

Candidate Starts for AbbyDaisy\_64:

(Start: 15 @35318 has 5 MA's), (21, 35339), (24, 35375),

Gene: Abidatro\_63 Start: 37722, Stop: 37874, Start Num: 14

Candidate Starts for Abidatro\_63:

(Start: 14 @37722 has 2 MA's), (16, 37725), (Start: 19 @37734 has 5 MA's), (24, 37782),

Gene: Amelia\_66 Start: 36727, Stop: 36852, Start Num: 18

Candidate Starts for Amelia\_66:

(Start: 18 @36727 has 5 MA's), (24, 36775), (28, 36796), (30, 36802), (39, 36841),

Gene: Amelia\_67 Start: 36849, Stop: 36971, Start Num: 40

Candidate Starts for Amelia\_67:

(22, 36762), (25, 36777), (27, 36789), (34, 36813), (35, 36816), (Start: 40 @36849 has 3 MA's), (42, 36879), (43, 36900), (44, 36921), (45, 36936), (46, 36942),

Gene: Auxilium\_60 Start: 32290, Stop: 32427, Start Num: 15

Candidate Starts for Auxilium\_60:

(Start: 15 @32290 has 5 MA's),

Gene: Coral\_68 Start: 37035, Stop: 37154, Start Num: 40

Candidate Starts for Coral\_68:

(22, 36948), (25, 36963), (27, 36975), (34, 36999), (Start: 40 @37035 has 3 MA's), (46, 37128),

Gene: Coral\_67 Start: 36913, Stop: 37038, Start Num: 18

Candidate Starts for Coral\_67:

(Start: 18 @36913 has 5 MA's), (24, 36961), (28, 36982), (30, 36988), (39, 37027),

Gene: Galaxy\_62 Start: 36560, Stop: 36700, Start Num: 19

Candidate Starts for Galaxy\_62:

(Start: 19 @36560 has 5 MA's), (24, 36608),

Gene: Gusanita\_67 Start: 41673, Stop: 41810, Start Num: 15

Candidate Starts for Gusanita\_67:

(11, 41661), (Start: 15 @41673 has 5 MA's), (24, 41730), (31, 41763),

Gene: HannahPhantana\_75 Start: 36722, Stop: 36847, Start Num: 18

Candidate Starts for HannahPhantana\_75:

(Start: 18 @36722 has 5 MA's), (24, 36770), (28, 36791), (30, 36797), (39, 36836),

Gene: Hillester\_68 Start: 35895, Stop: 36032, Start Num: 15

Candidate Starts for Hillester\_68:

(9, 35868), (Start: 15 @35895 has 5 MA's), (21, 35916), (24, 35952),

Gene: Juno112\_67 Start: 37424, Stop: 37552, Start Num: 19

Candidate Starts for Juno112\_67:

(Start: 19 @37424 has 5 MA's), (33, 37508),

Gene: Kuleana\_70 Start: 37424, Stop: 37552, Start Num: 19

Candidate Starts for Kuleana\_70:

(1, 37223), (2, 37271), (6, 37334), (Start: 19 @37424 has 5 MA's), (24, 37472), (37, 37532), (39, 37541),

Gene: Kuleana\_71 Start: 37549, Stop: 37671, Start Num: 40

Candidate Starts for Kuleana\_71:

(22, 37459), (23, 37468), (25, 37474), (34, 37510), (Start: 40 @37549 has 3 MA's), (41, 37573), (42, 37579), (47, 37660),

Gene: Leona\_65 Start: 37507, Stop: 37635, Start Num: 19

Candidate Starts for Leona\_65:

(Start: 19 @37507 has 5 MA's), (26, 37561), (33, 37591),

Gene: LittleTokyo\_67 Start: 36418, Stop: 36546, Start Num: 19

Candidate Starts for LittleTokyo\_67:

(3, 36304), (4, 36313), (10, 36388), (Start: 19 @36418 has 5 MA's), (24, 36466), (30, 36496),

Gene: Lunar\_69 Start: 37045, Stop: 37170, Start Num: 18

Candidate Starts for Lunar\_69:

(Start: 18 @37045 has 5 MA's), (28, 37114), (30, 37120), (39, 37159),

Gene: Polka\_66 Start: 36577, Stop: 36696, Start Num: 18

Candidate Starts for Polka\_66:

(Start: 18 @36577 has 5 MA's), (36, 36670),

Gene: RadFad\_68 Start: 35895, Stop: 36032, Start Num: 15

Candidate Starts for RadFad\_68:

(9, 35868), (Start: 15 @35895 has 5 MA's), (21, 35916), (24, 35952),

Gene: RedFox\_68 Start: 37646, Stop: 37783, Start Num: 14  
Candidate Starts for RedFox\_68:  
(12, 37637), (13, 37640), (Start: 14 @37646 has 2 MA's), (24, 37703), (36, 37754), (39, 37772),

Gene: RedFox\_67 Start: 37521, Stop: 37649, Start Num: 19  
Candidate Starts for RedFox\_67:  
(Start: 19 @37521 has 5 MA's), (28, 37590), (29, 37593), (30, 37596), (33, 37605),

Gene: Renna12\_69 Start: 38028, Stop: 38147, Start Num: 17  
Candidate Starts for Renna12\_69:  
(5, 37944), (7, 37968), (8, 37977), (Start: 17 @38028 has 1 MA's), (20, 38043),

Gene: Renna12\_67 Start: 37634, Stop: 37759, Start Num: 18  
Candidate Starts for Renna12\_67:  
(Start: 18 @37634 has 5 MA's), (24, 37682), (37, 37742), (38, 37745),

Gene: Seahorse\_66 Start: 36402, Stop: 36539, Start Num: 15  
Candidate Starts for Seahorse\_66:  
(9, 36375), (Start: 15 @36402 has 5 MA's), (21, 36423), (32, 36495),

Gene: Tiff81\_64 Start: 32815, Stop: 32952, Start Num: 15  
Candidate Starts for Tiff81\_64:  
(9, 32788), (Start: 15 @32815 has 5 MA's), (21, 32836),