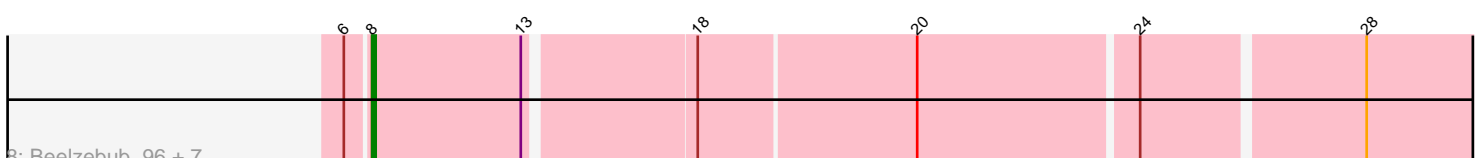
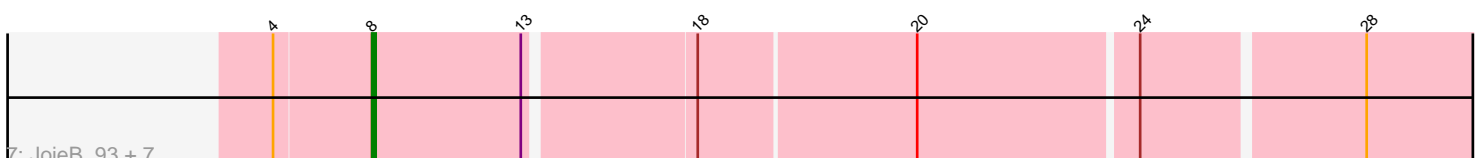
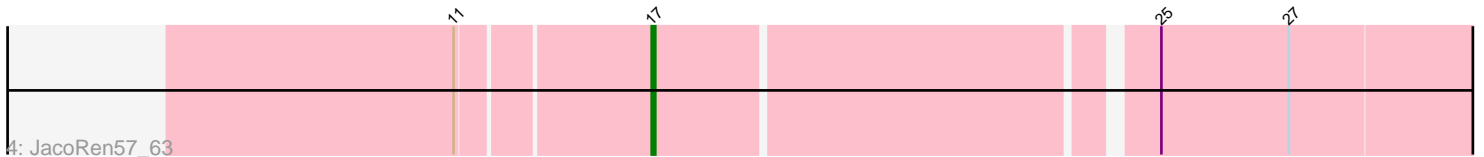
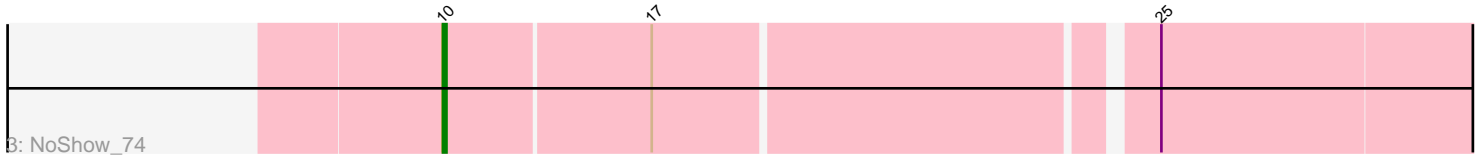
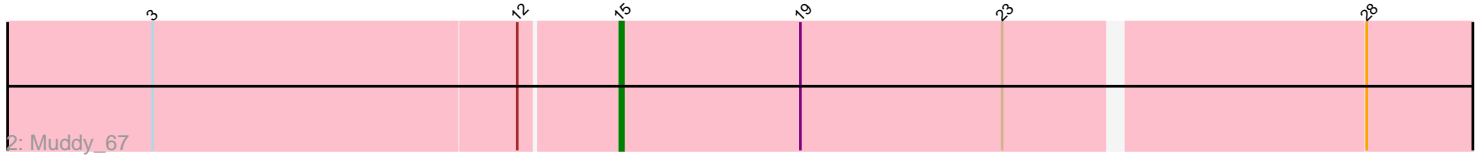
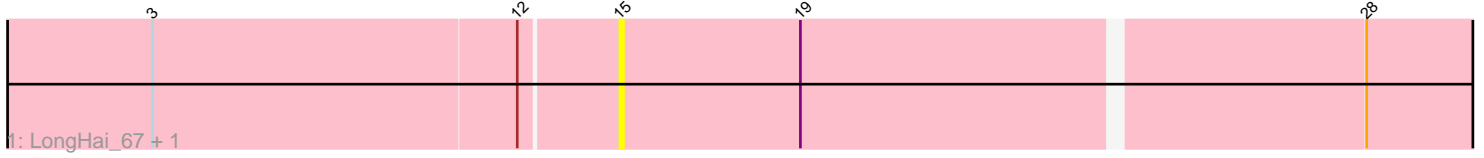


Pham 311924



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 311924 Report

This analysis was run 06/27/26 on database version 652.

Pham number 311924 has 27 members, 3 are drafts.

Phages represented in each track:

- Track 1 : LongHai\_67, Salvus\_67
- Track 2 : Muddy\_67
- Track 3 : NoShow\_74
- Track 4 : JacoRen57\_63
- Track 5 : MalagasyRose\_85
- Track 6 : Nergal\_81
- Track 7 : JoieB\_93, Poise\_93, Raela\_94, Caprice\_85, Blackbeetle\_93, VasuNzinga\_90, RedRaider77\_92, Tesla\_88
- Track 8 : Beelzebub\_96, Corazon\_87, Marvin\_86, Clarkson\_93, Lilbit\_88, Huphlepuuff\_94, Pringar\_88, FeliMaine\_92
- Track 9 : Gattaca\_91, MosMoris\_88, GoongGoong\_93
- Track 10 : LittleLaf\_90

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

The start number called the most often in the published annotations is 8, it was called in 15 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Beelzebub\_96, Blackbeetle\_93, Caprice\_85, Clarkson\_93, Corazon\_87, FeliMaine\_92, Huphlepuuff\_94, JoieB\_93, Lilbit\_88, Marvin\_86, Poise\_93, Pringar\_88, Raela\_94, RedRaider77\_92, Tesla\_88, VasuNzinga\_90,

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

- LittleLaf\_90,

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

- Gattaca\_91, GoongGoong\_93, JacoRen57\_63, LongHai\_67, MalagasyRose\_85, MosMoris\_88, Muddy\_67, Nergal\_81, NoShow\_74, Salvus\_67,

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

Start 7:

- Found in 3 of 27 ( 11.1% ) of genes in pham

- Manual Annotations of this start: 3 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gattaca\_91 (S), GoongGoong\_93 (S), MosMoris\_88 (S),

Start 8:

- Found in 17 of 27 ( 63.0% ) of genes in pham
- Manual Annotations of this start: 15 of 24
- Called 94.1% of time when present
- Phage (with cluster) where this start called: Beelzebub\_96 (S), Blackbeetle\_93 (S), Caprice\_85 (S), Clarkson\_93 (S), Corazon\_87 (S), FeliMaine\_92 (S), Huphlepuuff\_94 (S), JoieB\_93 (S), Lilbit\_88 (S), Marvin\_86 (S), Poise\_93 (S), Pringar\_88 (S), Raela\_94 (S), RedRaider77\_92 (S), Tesla\_88 (S), VasuNzinga\_90 (S),

Start 10:

- Found in 1 of 27 ( 3.7% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: NoShow\_74 (AB),

Start 13:

- Found in 20 of 27 ( 74.1% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 5.0% of time when present
- Phage (with cluster) where this start called: LittleLaf\_90 (S),

Start 15:

- Found in 3 of 27 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LongHai\_67 (AB), Muddy\_67 (AB), Salvus\_67 (AB),

Start 16:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MalagasyRose\_85 (AG), Nergal\_81 (AG),

Start 17:

- Found in 2 of 27 ( 7.4% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 50.0% of time when present
- Phage (with cluster) where this start called: JacoRen57\_63 (AB),

### Summary by clusters:

There are 3 clusters represented in this pham: S, AB, AG,

Info for manual annotations of cluster AB:

- Start number 10 was manually annotated 1 time for cluster AB.
- Start number 15 was manually annotated 1 time for cluster AB.

- Start number 17 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster AG:

- Start number 16 was manually annotated 2 times for cluster AG.

Info for manual annotations of cluster S:

- Start number 7 was manually annotated 3 times for cluster S.
- Start number 8 was manually annotated 15 times for cluster S.
- Start number 13 was manually annotated 1 time for cluster S.

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

Gene: Beelzebub\_96 Start: 49193, Stop: 49519, Start Num: 8

Candidate Starts for Beelzebub\_96:

(6, 49187), (Start: 8 @49193 has 15 MA's), (Start: 13 @49235 has 1 MA's), (18, 49280), (20, 49340), (24, 49400), (28, 49460),

Gene: Blackbeetle\_93 Start: 48691, Stop: 49017, Start Num: 8

Candidate Starts for Blackbeetle\_93:

(4, 48664), (Start: 8 @48691 has 15 MA's), (Start: 13 @48733 has 1 MA's), (18, 48778), (20, 48838), (24, 48898), (28, 48958),

Gene: Caprice\_85 Start: 48629, Stop: 48955, Start Num: 8

Candidate Starts for Caprice\_85:

(4, 48602), (Start: 8 @48629 has 15 MA's), (Start: 13 @48671 has 1 MA's), (18, 48716), (20, 48776), (24, 48836), (28, 48896),

Gene: Clarkson\_93 Start: 48873, Stop: 49199, Start Num: 8

Candidate Starts for Clarkson\_93:

(6, 48867), (Start: 8 @48873 has 15 MA's), (Start: 13 @48915 has 1 MA's), (18, 48960), (20, 49020), (24, 49080), (28, 49140),

Gene: Corazon\_87 Start: 49067, Stop: 49393, Start Num: 8

Candidate Starts for Corazon\_87:

(6, 49061), (Start: 8 @49067 has 15 MA's), (Start: 13 @49109 has 1 MA's), (18, 49154), (20, 49214), (24, 49274), (28, 49334),

Gene: FeliMaine\_92 Start: 49115, Stop: 49441, Start Num: 8

Candidate Starts for FeliMaine\_92:

(6, 49109), (Start: 8 @49115 has 15 MA's), (Start: 13 @49157 has 1 MA's), (18, 49202), (20, 49262), (24, 49322), (28, 49382),

Gene: Gattaca\_91 Start: 49103, Stop: 49429, Start Num: 7

Candidate Starts for Gattaca\_91:

(Start: 7 @49103 has 3 MA's), (Start: 13 @49145 has 1 MA's), (18, 49190), (20, 49250), (24, 49310), (28, 49370),

Gene: GoongGoong\_93 Start: 48909, Stop: 49235, Start Num: 7

Candidate Starts for GoongGoong\_93:

(Start: 7 @48909 has 3 MA's), (Start: 13 @48951 has 1 MA's), (18, 48996), (20, 49056), (24, 49116), (28, 49176),

Gene: Huphlepuuff\_94 Start: 48678, Stop: 49004, Start Num: 8

Candidate Starts for Huphlepuuff\_94:

(6, 48672), (Start: 8 @48678 has 15 MA's), (Start: 13 @48720 has 1 MA's), (18, 48765), (20, 48825), (24, 48885), (28, 48945),

Gene: JacoRen57\_63 Start: 47251, Stop: 47520, Start Num: 17

Candidate Starts for JacoRen57\_63:

(11, 47200), (Start: 17 @47251 has 1 MA's), (25, 47383), (27, 47419),

Gene: JoieB\_93 Start: 49278, Stop: 49604, Start Num: 8

Candidate Starts for JoieB\_93:

(4, 49251), (Start: 8 @49278 has 15 MA's), (Start: 13 @49320 has 1 MA's), (18, 49365), (20, 49425), (24, 49485), (28, 49545),

Gene: Lilbit\_88 Start: 49238, Stop: 49564, Start Num: 8

Candidate Starts for Lilbit\_88:

(6, 49232), (Start: 8 @49238 has 15 MA's), (Start: 13 @49280 has 1 MA's), (18, 49325), (20, 49385), (24, 49445), (28, 49505),

Gene: LittleLaf\_90 Start: 49009, Stop: 49293, Start Num: 13

Candidate Starts for LittleLaf\_90:

(6, 48961), (Start: 8 @48967 has 15 MA's), (Start: 13 @49009 has 1 MA's), (18, 49054), (20, 49114), (24, 49174), (28, 49234),

Gene: LongHai\_67 Start: 46426, Stop: 46698, Start Num: 15

Candidate Starts for LongHai\_67:

(3, 46297), (12, 46399), (Start: 15 @46426 has 1 MA's), (19, 46477), (28, 46630),

Gene: MalagasyRose\_85 Start: 53161, Stop: 53499, Start Num: 16

Candidate Starts for MalagasyRose\_85:

(1, 53017), (2, 53020), (5, 53065), (9, 53101), (14, 53140), (Start: 16 @53161 has 2 MA's), (22, 53260), (26, 53341),

Gene: Marvin\_86 Start: 48763, Stop: 49089, Start Num: 8

Candidate Starts for Marvin\_86:

(6, 48757), (Start: 8 @48763 has 15 MA's), (Start: 13 @48805 has 1 MA's), (18, 48850), (20, 48910), (24, 48970), (28, 49030),

Gene: MosMoris\_88 Start: 49109, Stop: 49435, Start Num: 7

Candidate Starts for MosMoris\_88:

(Start: 7 @49109 has 3 MA's), (Start: 13 @49151 has 1 MA's), (18, 49196), (20, 49256), (24, 49316), (28, 49376),

Gene: Muddy\_67 Start: 46594, Stop: 46866, Start Num: 15

Candidate Starts for Muddy\_67:

(3, 46465), (12, 46567), (Start: 15 @46594 has 1 MA's), (19, 46645), (23, 46702), (28, 46798),

Gene: Nergal\_81 Start: 54725, Stop: 55063, Start Num: 16

Candidate Starts for Nergal\_81:

(Start: 16 @54725 has 2 MA's), (21, 54815), (22, 54824), (26, 54905),

Gene: NoShow\_74 Start: 49650, Stop: 49970, Start Num: 10

Candidate Starts for NoShow\_74:

(Start: 10 @49650 has 1 MA's), (Start: 17 @49707 has 1 MA's), (25, 49839),

Gene: Poise\_93 Start: 48691, Stop: 49017, Start Num: 8

Candidate Starts for Poise\_93:

(4, 48664), (Start: 8 @48691 has 15 MA's), (Start: 13 @48733 has 1 MA's), (18, 48778), (20, 48838), (24, 48898), (28, 48958),

Gene: Pringar\_88 Start: 48479, Stop: 48805, Start Num: 8

Candidate Starts for Pringar\_88:

(6, 48473), (Start: 8 @48479 has 15 MA's), (Start: 13 @48521 has 1 MA's), (18, 48566), (20, 48626), (24, 48686), (28, 48746),

Gene: Raela\_94 Start: 49242, Stop: 49568, Start Num: 8

Candidate Starts for Raela\_94:

(4, 49215), (Start: 8 @49242 has 15 MA's), (Start: 13 @49284 has 1 MA's), (18, 49329), (20, 49389), (24, 49449), (28, 49509),

Gene: RedRaider77\_92 Start: 48636, Stop: 48962, Start Num: 8

Candidate Starts for RedRaider77\_92:

(4, 48609), (Start: 8 @48636 has 15 MA's), (Start: 13 @48678 has 1 MA's), (18, 48723), (20, 48783), (24, 48843), (28, 48903),

Gene: Salvus\_67 Start: 46426, Stop: 46698, Start Num: 15

Candidate Starts for Salvus\_67:

(3, 46297), (12, 46399), (Start: 15 @46426 has 1 MA's), (19, 46477), (28, 46630),

Gene: Tesla\_88 Start: 48485, Stop: 48811, Start Num: 8

Candidate Starts for Tesla\_88:

(4, 48458), (Start: 8 @48485 has 15 MA's), (Start: 13 @48527 has 1 MA's), (18, 48572), (20, 48632), (24, 48692), (28, 48752),

Gene: VasuNzinga\_90 Start: 48574, Stop: 48900, Start Num: 8

Candidate Starts for VasuNzinga\_90:

(4, 48547), (Start: 8 @48574 has 15 MA's), (Start: 13 @48616 has 1 MA's), (18, 48661), (20, 48721), (24, 48781), (28, 48841),