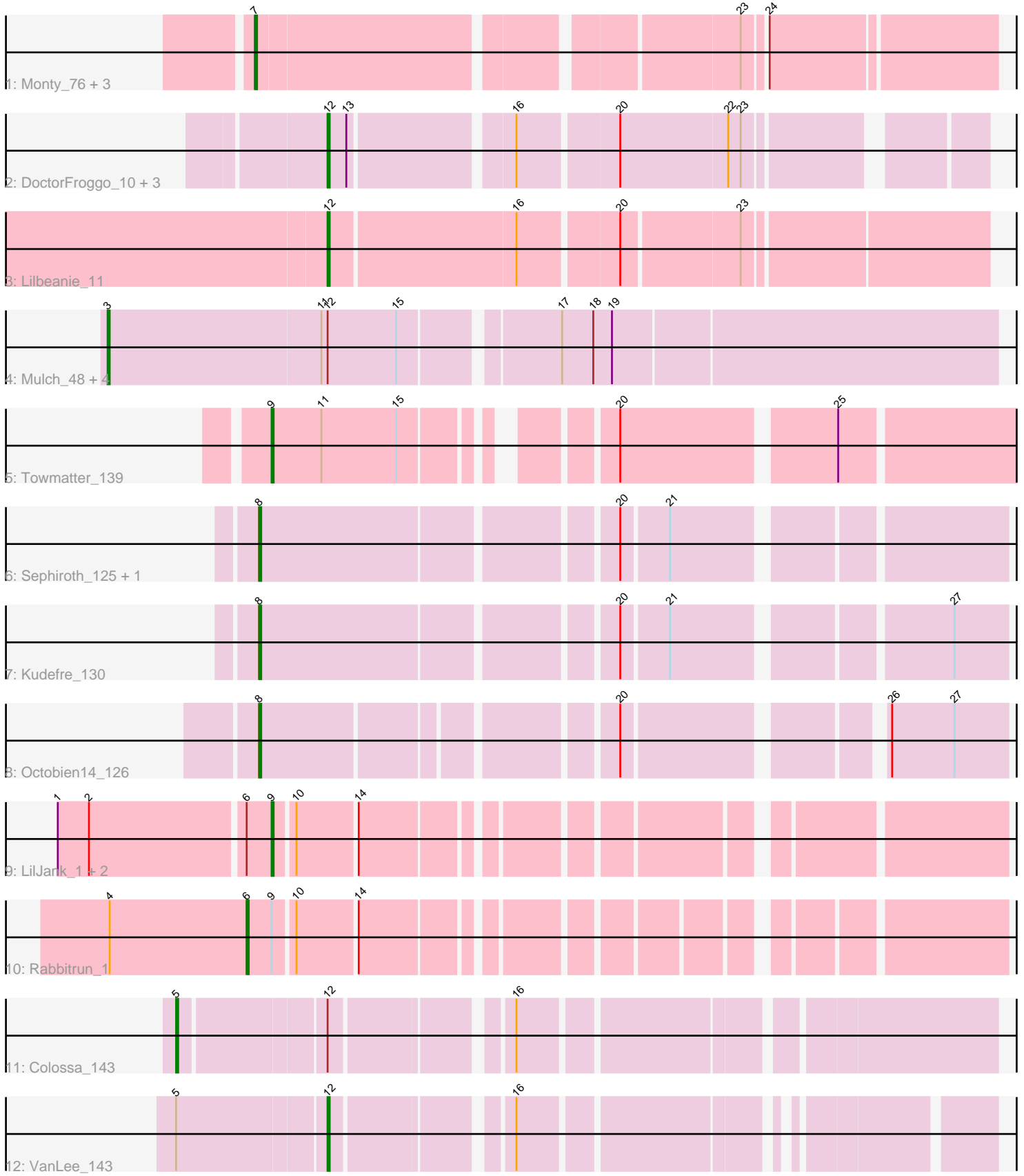


Pham 311960



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 311960 Report

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

Pham number 311960 has 25 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Monty\_76, CathyBurgh\_77, Flakey\_76, Lizzo\_77
- Track 2 : DoctorFroggo\_10, Zipp\_10, Delrey21\_10, Verity\_10
- Track 3 : Lilbeanie\_11
- Track 4 : Mulch\_48, Pimento\_49, BetterKatz\_48, Brylie\_48, Bock\_48
- Track 5 : Towmatter\_139
- Track 6 : Sephiroth\_125, Syleon\_130
- Track 7 : Kudrefre\_130
- Track 8 : Octobien14\_126
- Track 9 : LilJank\_1, Neville\_1, Trax\_1
- Track 10 : Rabbitrun\_1
- Track 11 : Colossa\_143
- Track 12 : VanLee\_143

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

The start number called the most often in the published annotations is 12, it was called in 6 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Delrey21\_10, DoctorFroggo\_10, Lilbeanie\_11, VanLee\_143, Verity\_10, Zipp\_10,

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

- BetterKatz\_48, Bock\_48, Brylie\_48, Colossa\_143, Mulch\_48, Pimento\_49,

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

- CathyBurgh\_77, Flakey\_76, Kudrefre\_130, LilJank\_1, Lizzo\_77, Monty\_76, Neville\_1, Octobien14\_126, Rabbitrun\_1, Sephiroth\_125, Syleon\_130, Towmatter\_139, Trax\_1,

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

Start 3:

- Found in 5 of 25 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 5 of 24

- Called 100.0% of time when present
- Phage (with cluster) where this start called: BetterKatz\_48 (DI), Bock\_48 (DI), Brylie\_48 (DI), Mulch\_48 (DI), Pimento\_49 (DI),

Start 5:

- Found in 2 of 25 ( 8.0% ) 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: Colossa\_143 (KA),

Start 6:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 1 of 24
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Rabbitrun\_1 (DU2),

Start 7:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CathyBurgh\_77 (CS2), Flakey\_76 (CS2), Lizzo\_77 (CS2), Monty\_76 (CS2),

Start 8:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Kudrefre\_130 (DU1), Octobien14\_126 (DU1), Sephiroth\_125 (DU1), Syleon\_130 (DU1),

Start 9:

- Found in 5 of 25 ( 20.0% ) of genes in pham
- Manual Annotations of this start: 3 of 24
- Called 80.0% of time when present
- Phage (with cluster) where this start called: LilJank\_1 (DU2), Neville\_1 (DU2), Towmatter\_139 (DL), Trax\_1 (DU2),

Start 12:

- Found in 12 of 25 ( 48.0% ) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Delrey21\_10 (DE4), DoctorFroggo\_10 (DE4), Lilbeanie\_11 (DE5), VanLee\_143 (KA), Verity\_10 (DE4), Zipp\_10 (DE4),

### **Summary by clusters:**

There are 8 clusters represented in this pham: KA, DI, DE4, DE5, DU1, DU2, DL, CS2,

Info for manual annotations of cluster CS2:

- Start number 7 was manually annotated 4 times for cluster CS2.

Info for manual annotations of cluster DE4:

- Start number 12 was manually annotated 4 times for cluster DE4.

Info for manual annotations of cluster DE5:

- Start number 12 was manually annotated 1 time for cluster DE5.

Info for manual annotations of cluster DI:

- Start number 3 was manually annotated 5 times for cluster DI.

Info for manual annotations of cluster DL:

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

Info for manual annotations of cluster DU1:

- Start number 8 was manually annotated 4 times for cluster DU1.

Info for manual annotations of cluster DU2:

- Start number 6 was manually annotated 1 time for cluster DU2.
- Start number 9 was manually annotated 2 times for cluster DU2.

Info for manual annotations of cluster KA:

- Start number 5 was manually annotated 1 time for cluster KA.
- Start number 12 was manually annotated 1 time for cluster KA.

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

Gene: BetterKatz\_48 Start: 35022, Stop: 35471, Start Num: 3

Candidate Starts for BetterKatz\_48:

(Start: 3 @35022 has 5 MA's), (11, 35124), (Start: 12 @35127 has 6 MA's), (15, 35160), (17, 35229), (18, 35244), (19, 35253),

Gene: Bock\_48 Start: 34771, Stop: 35208, Start Num: 3

Candidate Starts for Bock\_48:

(Start: 3 @34771 has 5 MA's), (11, 34873), (Start: 12 @34876 has 6 MA's), (15, 34909), (17, 34978), (18, 34993), (19, 35002),

Gene: Brylie\_48 Start: 34818, Stop: 35255, Start Num: 3

Candidate Starts for Brylie\_48:

(Start: 3 @34818 has 5 MA's), (11, 34920), (Start: 12 @34923 has 6 MA's), (15, 34956), (17, 35025), (18, 35040), (19, 35049),

Gene: CathyBurgh\_77 Start: 60701, Stop: 60336, Start Num: 7

Candidate Starts for CathyBurgh\_77:

(Start: 7 @60701 has 4 MA's), (23, 60488), (24, 60479),

Gene: Colossa\_143 Start: 76130, Stop: 75759, Start Num: 5

Candidate Starts for Colossa\_143:

(Start: 5 @76130 has 1 MA's), (Start: 12 @76064 has 6 MA's), (16, 75989),

Gene: Delrey21\_10 Start: 5803, Stop: 6096, Start Num: 12

Candidate Starts for Delrey21\_10:

(Start: 12 @5803 has 6 MA's), (13, 5812), (16, 5884), (20, 5929), (22, 5980), (23, 5986),

Gene: DoctorFroggo\_10 Start: 5803, Stop: 6096, Start Num: 12  
Candidate Starts for DoctorFroggo\_10:  
(Start: 12 @5803 has 6 MA's), (13, 5812), (16, 5884), (20, 5929), (22, 5980), (23, 5986),

Gene: Flakey\_76 Start: 60687, Stop: 60322, Start Num: 7  
Candidate Starts for Flakey\_76:  
(Start: 7 @60687 has 4 MA's), (23, 60474), (24, 60465),

Gene: Kudrefre\_130 Start: 70230, Stop: 69889, Start Num: 8  
Candidate Starts for Kudrefre\_130:  
(Start: 8 @70230 has 4 MA's), (20, 70071), (21, 70050), (27, 69930),

Gene: LilJank\_1 Start: 535, Stop: 197, Start Num: 9  
Candidate Starts for LilJank\_1:  
(1, 634), (2, 619), (Start: 6 @547 has 1 MA's), (Start: 9 @535 has 3 MA's), (10, 526), (14, 499),

Gene: Lilbeanie\_11 Start: 4525, Stop: 4851, Start Num: 12  
Candidate Starts for Lilbeanie\_11:  
(Start: 12 @4525 has 6 MA's), (16, 4612), (20, 4657), (23, 4711),

Gene: Lizzo\_77 Start: 60701, Stop: 60336, Start Num: 7  
Candidate Starts for Lizzo\_77:  
(Start: 7 @60701 has 4 MA's), (23, 60488), (24, 60479),

Gene: Monty\_76 Start: 59914, Stop: 59549, Start Num: 7  
Candidate Starts for Monty\_76:  
(Start: 7 @59914 has 4 MA's), (23, 59701), (24, 59692),

Gene: Mulch\_48 Start: 34818, Stop: 35255, Start Num: 3  
Candidate Starts for Mulch\_48:  
(Start: 3 @34818 has 5 MA's), (11, 34920), (Start: 12 @34923 has 6 MA's), (15, 34956), (17, 35025),  
(18, 35040), (19, 35049),

Gene: Neville\_1 Start: 485, Stop: 147, Start Num: 9  
Candidate Starts for Neville\_1:  
(1, 584), (2, 569), (Start: 6 @497 has 1 MA's), (Start: 9 @485 has 3 MA's), (10, 476), (14, 449),

Gene: Octobien14\_126 Start: 68767, Stop: 68426, Start Num: 8  
Candidate Starts for Octobien14\_126:  
(Start: 8 @68767 has 4 MA's), (20, 68614), (26, 68506), (27, 68476),

Gene: Pimento\_49 Start: 34409, Stop: 34852, Start Num: 3  
Candidate Starts for Pimento\_49:  
(Start: 3 @34409 has 5 MA's), (11, 34511), (Start: 12 @34514 has 6 MA's), (15, 34547), (17, 34616),  
(18, 34631), (19, 34640),

Gene: Rabbitrun\_1 Start: 477, Stop: 136, Start Num: 6  
Candidate Starts for Rabbitrun\_1:  
(4, 543), (Start: 6 @477 has 1 MA's), (Start: 9 @465 has 3 MA's), (10, 456), (14, 429),

Gene: Sephiroth\_125 Start: 70000, Stop: 69659, Start Num: 8  
Candidate Starts for Sephiroth\_125:  
(Start: 8 @70000 has 4 MA's), (20, 69841), (21, 69820),

Gene: Syleon\_130 Start: 70751, Stop: 70410, Start Num: 8

Candidate Starts for Syleon\_130:

(Start: 8 @70751 has 4 MA's), (20, 70592), (21, 70571),

Gene: Towmatter\_139 Start: 81023, Stop: 80664, Start Num: 9

Candidate Starts for Towmatter\_139:

(Start: 9 @81023 has 3 MA's), (11, 80999), (15, 80963), (20, 80885), (25, 80789),

Gene: Trax\_1 Start: 485, Stop: 147, Start Num: 9

Candidate Starts for Trax\_1:

(1, 584), (2, 569), (Start: 6 @497 has 1 MA's), (Start: 9 @485 has 3 MA's), (10, 476), (14, 449),

Gene: VanLee\_143 Start: 75581, Stop: 75288, Start Num: 12

Candidate Starts for VanLee\_143:

(Start: 5 @75650 has 1 MA's), (Start: 12 @75581 has 6 MA's), (16, 75506),

Gene: Verity\_10 Start: 5803, Stop: 6096, Start Num: 12

Candidate Starts for Verity\_10:

(Start: 12 @5803 has 6 MA's), (13, 5812), (16, 5884), (20, 5929), (22, 5980), (23, 5986),

Gene: Zipp\_10 Start: 5948, Stop: 6241, Start Num: 12

Candidate Starts for Zipp\_10:

(Start: 12 @5948 has 6 MA's), (13, 5957), (16, 6029), (20, 6074), (22, 6125), (23, 6131),