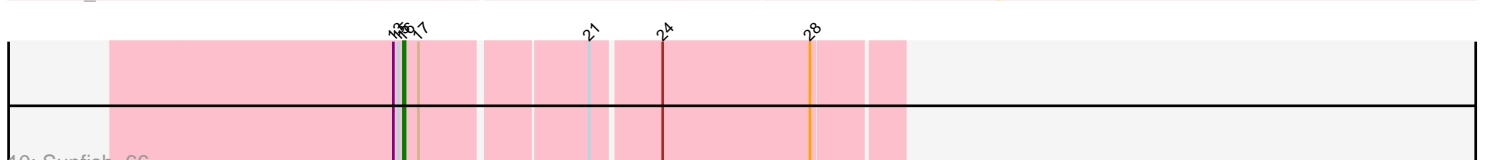
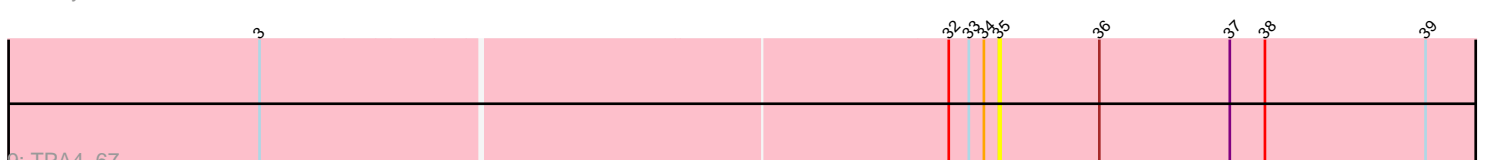
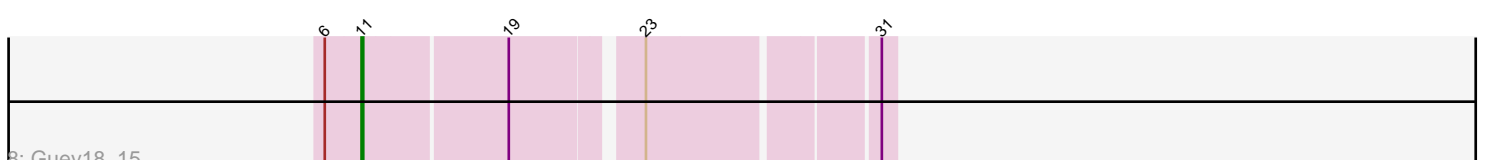
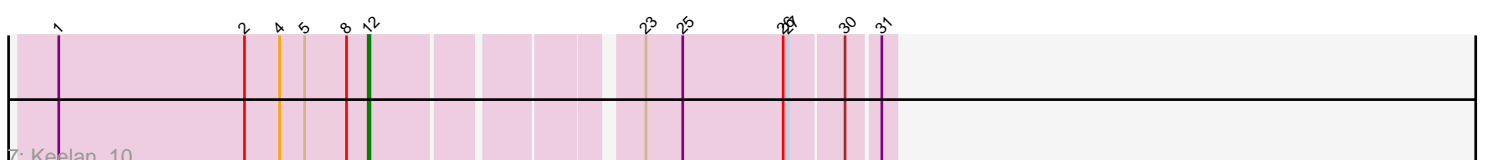
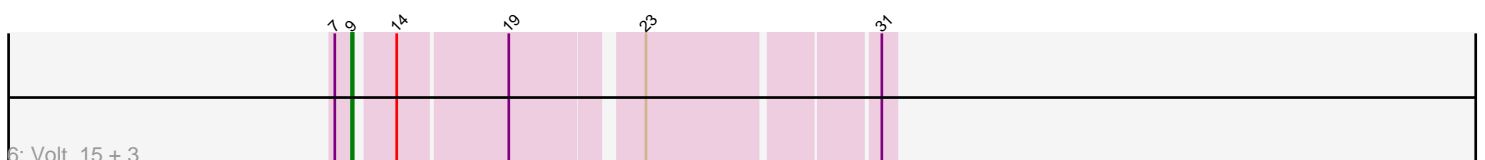
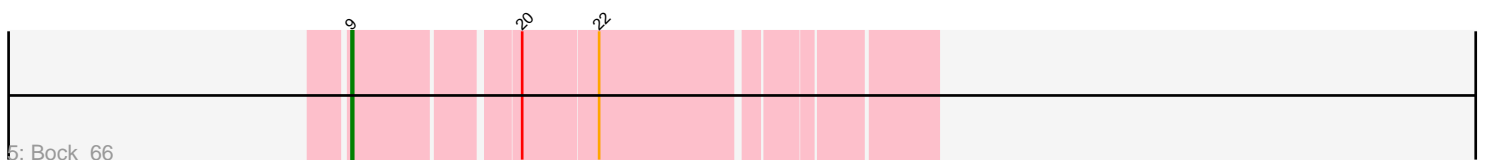
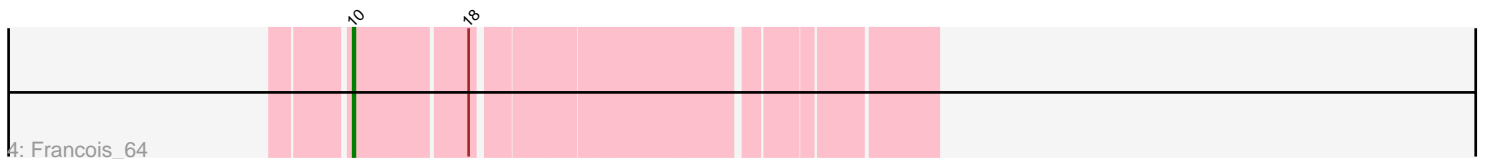
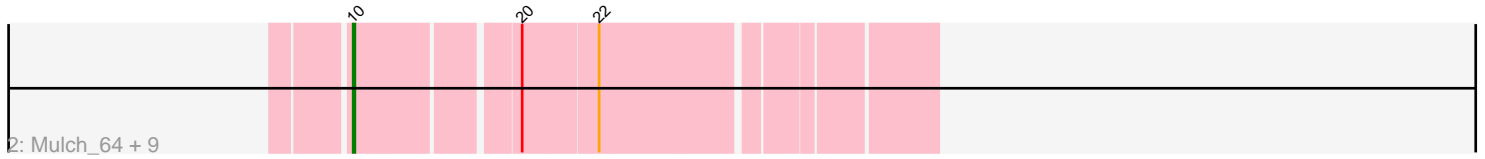
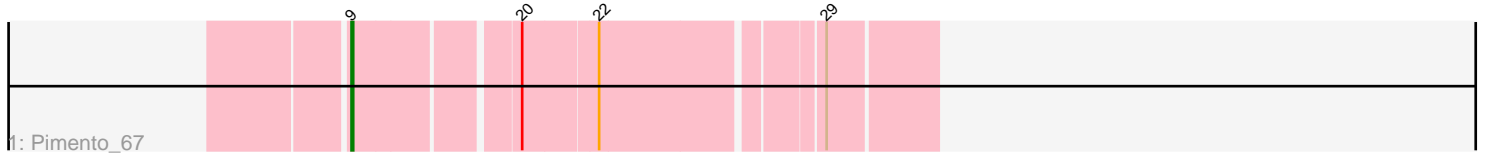


Pham 309220



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 309220 Report

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

Pham number 309220 has 23 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Pimento\_67
- Track 2 : Mulch\_64, Ayotoya\_65, BetterKatz\_64, Nadeem\_64, Brylie\_64, Chop\_66, WheatThin\_63, GrandSlam\_66, Parada\_64, Hamood\_66
- Track 3 : DelRio\_65, NancyRae\_63
- Track 4 : Francois\_64
- Track 5 : Bock\_66
- Track 6 : Volt\_15, Ronaldo\_15, Ziko\_16, Fryberger\_12
- Track 7 : Keelan\_10
- Track 8 : Guey18\_15
- Track 9 : TPA4\_67
- Track 10 : Sunfish\_66

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

The start number called the most often in the published annotations is 10, it was called in 13 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Ayotoya\_65, BetterKatz\_64, Brylie\_64, Chop\_66, DelRio\_65, Francois\_64, GrandSlam\_66, Hamood\_66, Mulch\_64, Nadeem\_64, NancyRae\_63, Parada\_64, WheatThin\_63,

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

- 

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

- Bock\_66, Fryberger\_12, Guey18\_15, Keelan\_10, Pimento\_67, Ronaldo\_15, Sunfish\_66, TPA4\_67, Volt\_15, Ziko\_16,

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

Start 9:

- Found in 6 of 23 ( 26.1% ) of genes in pham
- Manual Annotations of this start: 6 of 22

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bock\_66 (DI), Fryberger\_12 (DP), Pimento\_67 (DI), Ronaldo\_15 (DP), Volt\_15 (DP), Ziko\_16 (DP),

Start 10:

- Found in 13 of 23 ( 56.5% ) of genes in pham
- Manual Annotations of this start: 13 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Ayotoya\_65 (DI), BetterKatz\_64 (DI), Brylie\_64 (DI), Chop\_66 (DI), DelRio\_65 (DI), Francois\_64 (DI), GrandSlam\_66 (DI), Hamood\_66 (DI), Mulch\_64 (DI), Nadeem\_64 (DI), NancyRae\_63 (DI), Parada\_64 (DI), WheatThin\_63 (DI),

Start 11:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Guey18\_15 (DP),

Start 12:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Keelan\_10 (DP),

Start 16:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sunfish\_66 (singleton),

Start 35:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: TPA4\_67 (singleton),

### **Summary by clusters:**

There are 3 clusters represented in this pham: singleton, DP, DI,

Info for manual annotations of cluster DI:

- Start number 9 was manually annotated 2 times for cluster DI.
- Start number 10 was manually annotated 13 times for cluster DI.

Info for manual annotations of cluster DP:

- Start number 9 was manually annotated 4 times for cluster DP.
- Start number 11 was manually annotated 1 time for cluster DP.
- Start number 12 was manually annotated 1 time for cluster DP.

### **Gene Information:**

Gene: Ayotoya\_65 Start: 42875, Stop: 43186, Start Num: 10  
Candidate Starts for Ayotoya\_65:  
(Start: 10 @42875 has 13 MA's), (20, 42962), (22, 43004),

Gene: BetterKatz\_64 Start: 42074, Stop: 42385, Start Num: 10  
Candidate Starts for BetterKatz\_64:  
(Start: 10 @42074 has 13 MA's), (20, 42161), (22, 42203),

Gene: Bock\_66 Start: 42318, Stop: 42629, Start Num: 9  
Candidate Starts for Bock\_66:  
(Start: 9 @42318 has 6 MA's), (20, 42405), (22, 42447),

Gene: Brylie\_64 Start: 41897, Stop: 42208, Start Num: 10  
Candidate Starts for Brylie\_64:  
(Start: 10 @41897 has 13 MA's), (20, 41984), (22, 42026),

Gene: Chop\_66 Start: 43063, Stop: 43374, Start Num: 10  
Candidate Starts for Chop\_66:  
(Start: 10 @43063 has 13 MA's), (20, 43150), (22, 43192),

Gene: DelRio\_65 Start: 43084, Stop: 43395, Start Num: 10  
Candidate Starts for DelRio\_65:  
(Start: 10 @43084 has 13 MA's), (18, 43147), (20, 43171), (22, 43213), (29, 43333),

Gene: Francois\_64 Start: 42083, Stop: 42394, Start Num: 10  
Candidate Starts for Francois\_64:  
(Start: 10 @42083 has 13 MA's), (18, 42146),

Gene: Fryberger\_12 Start: 2985, Stop: 2701, Start Num: 9  
Candidate Starts for Fryberger\_12:  
(7, 2994), (Start: 9 @2985 has 6 MA's), (14, 2967), (19, 2904), (23, 2835), (31, 2709),

Gene: GrandSlam\_66 Start: 43063, Stop: 43374, Start Num: 10  
Candidate Starts for GrandSlam\_66:  
(Start: 10 @43063 has 13 MA's), (20, 43150), (22, 43192),

Gene: Guey18\_15 Start: 3679, Stop: 3395, Start Num: 11  
Candidate Starts for Guey18\_15:  
(6, 3700), (Start: 11 @3679 has 1 MA's), (19, 3598), (23, 3529), (31, 3403),

Gene: Hamood\_66 Start: 43063, Stop: 43374, Start Num: 10  
Candidate Starts for Hamood\_66:  
(Start: 10 @43063 has 13 MA's), (20, 43150), (22, 43192),

Gene: Keelan\_10 Start: 2614, Stop: 2336, Start Num: 12  
Candidate Starts for Keelan\_10:  
(1, 2797), (2, 2686), (4, 2665), (5, 2650), (8, 2626), (Start: 12 @2614 has 1 MA's), (23, 2476), (25, 2455), (26, 2395), (27, 2392), (30, 2362), (31, 2344),

Gene: Mulch\_64 Start: 41897, Stop: 42208, Start Num: 10  
Candidate Starts for Mulch\_64:  
(Start: 10 @41897 has 13 MA's), (20, 41984), (22, 42026),

Gene: Nadeem\_64 Start: 41885, Stop: 42196, Start Num: 10

Candidate Starts for Nadeem\_64:

(Start: 10 @41885 has 13 MA's), (20, 41972), (22, 42014),

Gene: NancyRae\_63 Start: 41835, Stop: 42146, Start Num: 10

Candidate Starts for NancyRae\_63:

(Start: 10 @41835 has 13 MA's), (18, 41898), (20, 41922), (22, 41964), (29, 42084),

Gene: Parada\_64 Start: 41897, Stop: 42208, Start Num: 10

Candidate Starts for Parada\_64:

(Start: 10 @41897 has 13 MA's), (20, 41984), (22, 42026),

Gene: Pimento\_67 Start: 42016, Stop: 42327, Start Num: 9

Candidate Starts for Pimento\_67:

(Start: 9 @42016 has 6 MA's), (20, 42103), (22, 42145), (29, 42265),

Gene: Ronaldo\_15 Start: 3912, Stop: 3628, Start Num: 9

Candidate Starts for Ronaldo\_15:

(7, 3921), (Start: 9 @3912 has 6 MA's), (14, 3894), (19, 3831), (23, 3762), (31, 3636),

Gene: Sunfish\_66 Start: 43379, Stop: 43101, Start Num: 16

Candidate Starts for Sunfish\_66:

(13, 43385), (15, 43382), (Start: 16 @43379 has 1 MA's), (17, 43370), (21, 43277), (24, 43238), (28, 43151),

Gene: TPA4\_67 Start: 44981, Stop: 45280, Start Num: 35

Candidate Starts for TPA4\_67:

(3, 44555), (32, 44951), (33, 44963), (34, 44972), (35, 44981), (36, 45041), (37, 45119), (38, 45140), (39, 45236),

Gene: Volt\_15 Start: 3912, Stop: 3628, Start Num: 9

Candidate Starts for Volt\_15:

(7, 3921), (Start: 9 @3912 has 6 MA's), (14, 3894), (19, 3831), (23, 3762), (31, 3636),

Gene: WheatThin\_63 Start: 41885, Stop: 42196, Start Num: 10

Candidate Starts for WheatThin\_63:

(Start: 10 @41885 has 13 MA's), (20, 41972), (22, 42014),

Gene: Ziko\_16 Start: 3926, Stop: 3642, Start Num: 9

Candidate Starts for Ziko\_16:

(7, 3935), (Start: 9 @3926 has 6 MA's), (14, 3908), (19, 3845), (23, 3776), (31, 3650),