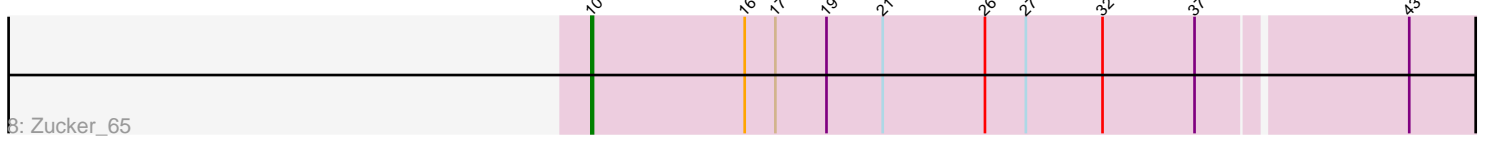
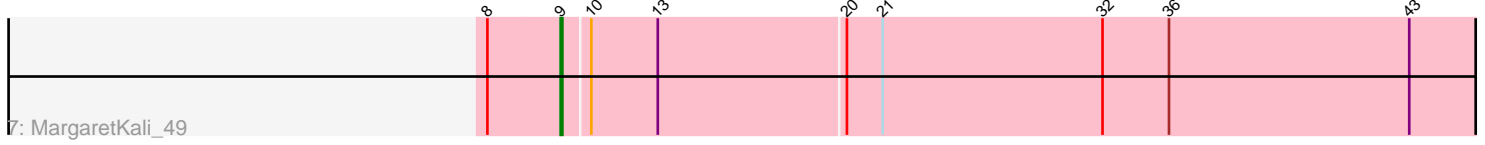
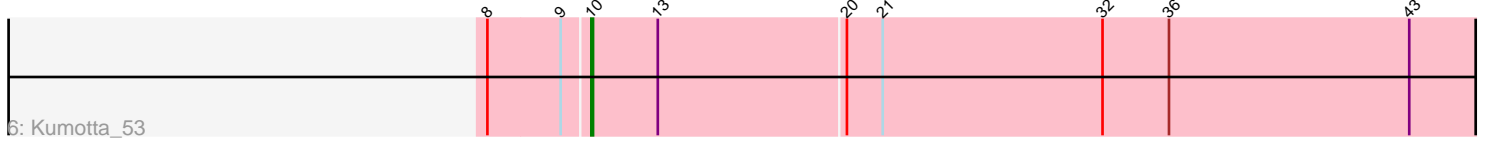
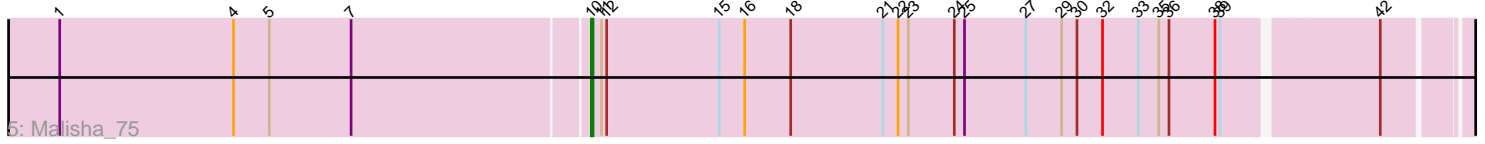
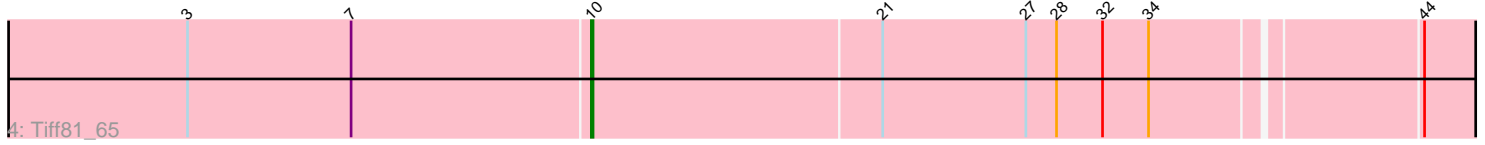
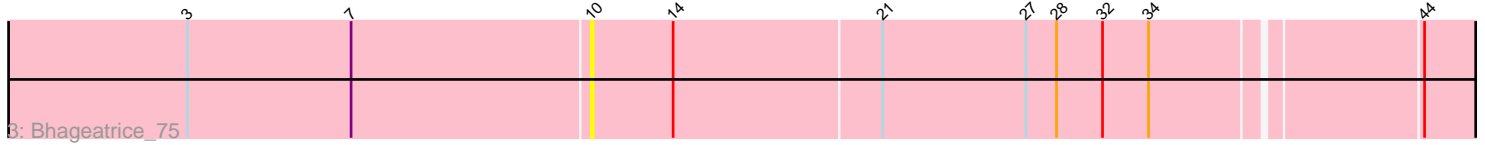
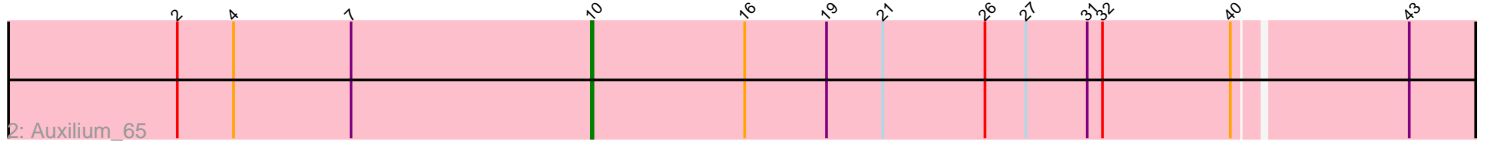
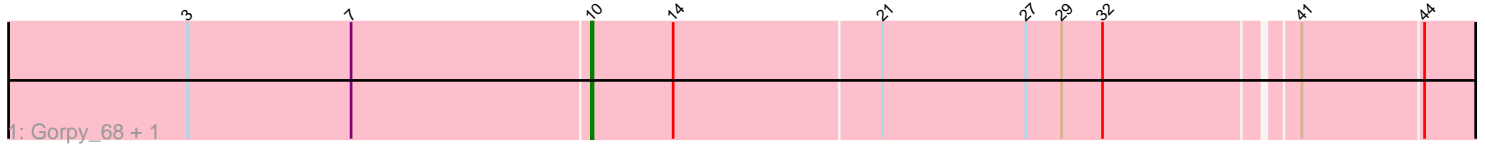


Pham 211514



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 211514 Report

This analysis was run 02/22/25 on database version 588.

Pham number 211514 has 12 members, 3 are drafts.

Phages represented in each track:

- Track 1 : Gorpy\_68, Sakai\_67
- Track 2 : Auxilium\_65
- Track 3 : Bhageatrice\_75
- Track 4 : Tiff81\_65
- Track 5 : Malisha\_75
- Track 6 : Kumotta\_53
- Track 7 : MargaretKali\_49
- Track 8 : Zucker\_65
- Track 9 : Bauer\_63
- Track 10 : BlackSpider\_59
- Track 11 : REQ2\_58

### ***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 8 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Auxilium\_65, Bauer\_63, Bhageatrice\_75, BlackSpider\_59, Gorpy\_68, Kumotta\_53, Malisha\_75, REQ2\_58, Sakai\_67, Tiff81\_65, Zucker\_65,

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

- MargaretKali\_49,

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

- 

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

Start 9:

- Found in 2 of 12 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 1 of 9
- Called 50.0% of time when present
- Phage (with cluster) where this start called: MargaretKali\_49 (FB),

Start 10:

- Found in 12 of 12 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 9
- Called 91.7% of time when present
- Phage (with cluster) where this start called: Auxilium\_65 (AY), Bauer\_63 (FN), Bhageatrice\_75 (AY), BlackSpider\_59 (FN), Gorpy\_68 (AY), Kumotta\_53 (FB), Malisha\_75 (DN), REQ2\_58 (singleton), Sakai\_67 (AY), Tiff81\_65 (AY), Zucker\_65 (FN),

### **Summary by clusters:**

There are 5 clusters represented in this pham: AY, DN, FB, singleton, FN,

Info for manual annotations of cluster AY:

- Start number 10 was manually annotated 4 times for cluster AY.

Info for manual annotations of cluster DN:

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

Info for manual annotations of cluster FB:

- Start number 9 was manually annotated 1 time for cluster FB.
- Start number 10 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster FN:

- Start number 10 was manually annotated 2 times for cluster FN.

### **Gene Information:**

Gene: Auxilium\_65 Start: 34126, Stop: 34722, Start Num: 10

Candidate Starts for Auxilium\_65:

(2, 33883), (4, 33916), (7, 33985), (Start: 10 @34126 has 8 MA's), (16, 34216), (19, 34264), (21, 34297), (26, 34357), (27, 34381), (31, 34417), (32, 34426), (40, 34501), (43, 34597),

Gene: Bauer\_63 Start: 34908, Stop: 35459, Start Num: 10

Candidate Starts for Bauer\_63:

(7, 34770), (Start: 10 @34908 has 8 MA's), (21, 35076), (25, 35124), (27, 35160), (28, 35178), (32, 35205), (39, 35274),

Gene: Bhageatrice\_75 Start: 39430, Stop: 39975, Start Num: 10

Candidate Starts for Bhageatrice\_75:

(3, 39196), (7, 39292), (Start: 10 @39430 has 8 MA's), (14, 39478), (21, 39598), (27, 39682), (28, 39700), (32, 39727), (34, 39754), (44, 39901),

Gene: BlackSpider\_59 Start: 33768, Stop: 34319, Start Num: 10

Candidate Starts for BlackSpider\_59:

(7, 33630), (Start: 10 @33768 has 8 MA's), (21, 33936), (27, 34020), (28, 34038), (32, 34065), (34, 34092),

Gene: Gorpy\_68 Start: 37238, Stop: 37783, Start Num: 10

Candidate Starts for Gorpy\_68:

(3, 37004), (7, 37100), (Start: 10 @37238 has 8 MA's), (14, 37286), (21, 37406), (27, 37490), (29, 37511), (32, 37535), (41, 37640), (44, 37709),

Gene: Kumotta\_53 Start: 31213, Stop: 31815, Start Num: 10

Candidate Starts for Kumotta\_53:

(8, 31156), (Start: 9 @31198 has 1 MA's), (Start: 10 @31213 has 8 MA's), (13, 31252), (20, 31360), (21, 31381), (32, 31510), (36, 31549), (43, 31690),

Gene: Malisha\_75 Start: 46665, Stop: 47252, Start Num: 10

Candidate Starts for Malisha\_75:

(1, 46359), (4, 46461), (5, 46482), (7, 46530), (Start: 10 @46665 has 8 MA's), (11, 46671), (12, 46674), (15, 46740), (16, 46755), (18, 46782), (21, 46836), (22, 46845), (23, 46851), (24, 46878), (25, 46884), (27, 46920), (29, 46941), (30, 46950), (32, 46965), (33, 46986), (35, 46998), (36, 47004), (38, 47031), (39, 47034), (42, 47118),

Gene: MargaretKali\_49 Start: 29816, Stop: 30433, Start Num: 9

Candidate Starts for MargaretKali\_49:

(8, 29774), (Start: 9 @29816 has 1 MA's), (Start: 10 @29831 has 8 MA's), (13, 29870), (20, 29978), (21, 29999), (32, 30128), (36, 30167), (43, 30308),

Gene: REQ2\_58 Start: 39206, Stop: 39829, Start Num: 10

Candidate Starts for REQ2\_58:

(3, 38975), (4, 39002), (6, 39041), (7, 39071), (Start: 10 @39206 has 8 MA's), (18, 39323), (21, 39377), (26, 39437), (34, 39533), (39, 39575),

Gene: Sakai\_67 Start: 35949, Stop: 36494, Start Num: 10

Candidate Starts for Sakai\_67:

(3, 35715), (7, 35811), (Start: 10 @35949 has 8 MA's), (14, 35997), (21, 36117), (27, 36201), (29, 36222), (32, 36246), (41, 36351), (44, 36420),

Gene: Tiff81\_65 Start: 34896, Stop: 35441, Start Num: 10

Candidate Starts for Tiff81\_65:

(3, 34662), (7, 34758), (Start: 10 @34896 has 8 MA's), (21, 35064), (27, 35148), (28, 35166), (32, 35193), (34, 35220), (44, 35367),

Gene: Zucker\_65 Start: 37002, Stop: 37598, Start Num: 10

Candidate Starts for Zucker\_65:

(Start: 10 @37002 has 8 MA's), (16, 37092), (17, 37110), (19, 37140), (21, 37173), (26, 37233), (27, 37257), (32, 37302), (37, 37356), (43, 37473),