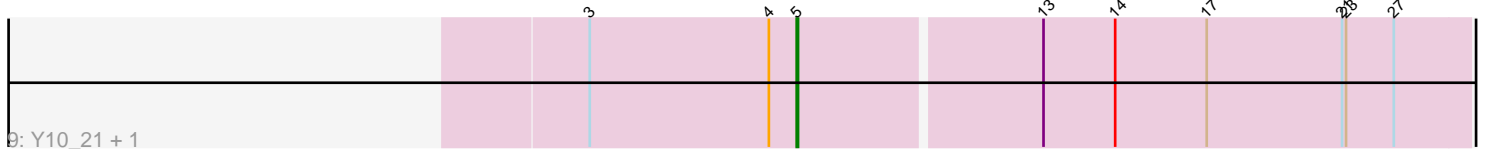
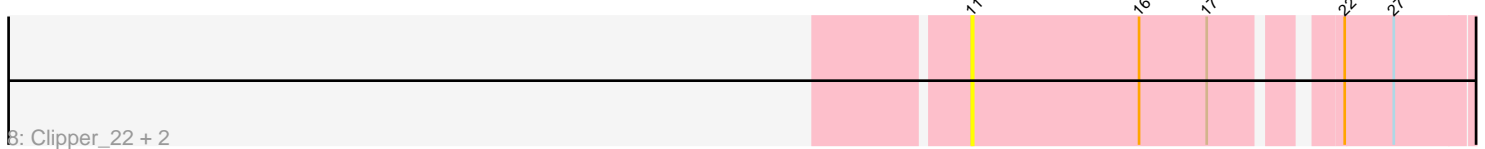
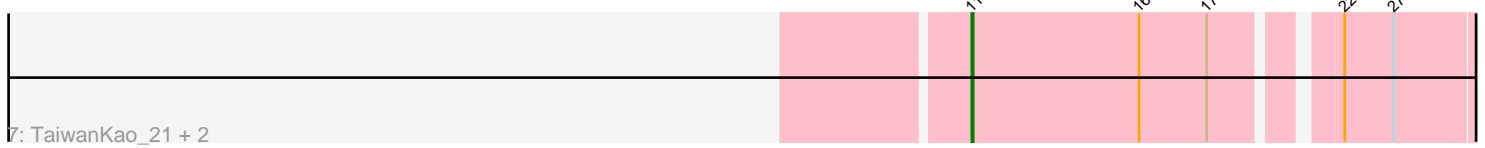
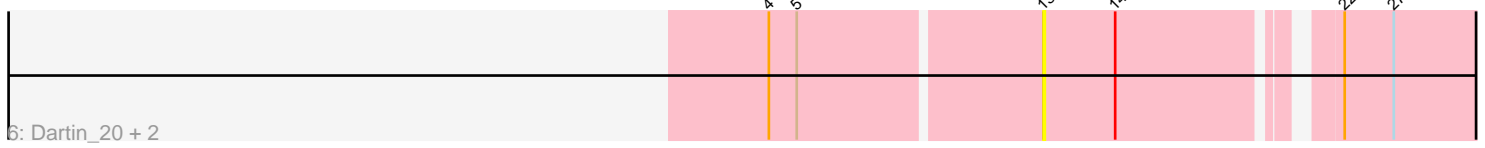
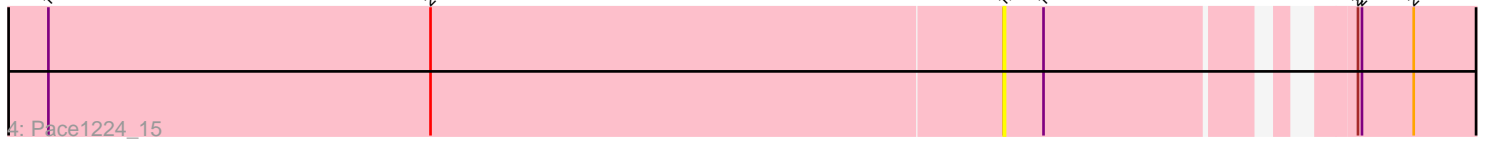
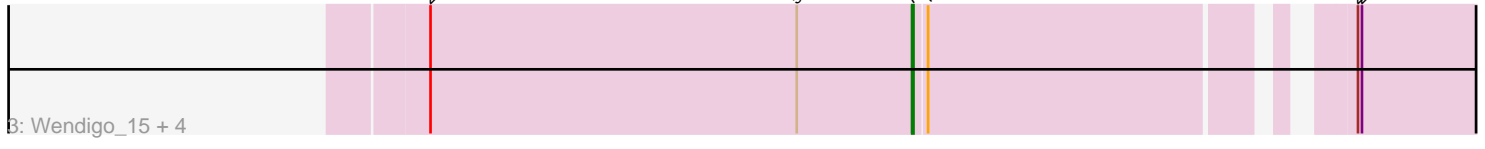
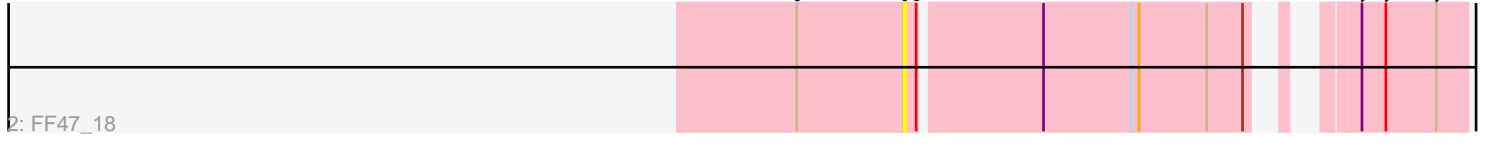
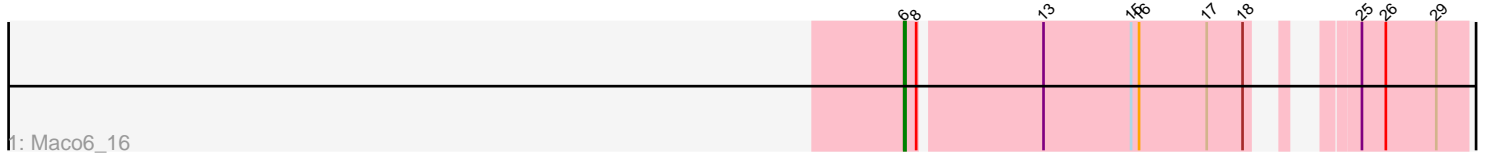


Pham 198427



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 198427 Report

This analysis was run 01/18/25 on database version 583.

Pham number 198427 has 21 members, 15 are drafts.

Phages represented in each track:

- Track 1 : Maco6\_16
- Track 2 : FF47\_18
- Track 3 : Wendigo\_15, TinaBug\_15, DNAllI\_0015, Maliketh\_15, AzulaCat\_15
- Track 4 : Pace1224\_15
- Track 5 : Stargaze\_15
- Track 6 : Dartin\_20, Richo\_20, McMater\_20
- Track 7 : TaiwanKao\_21, Llorens\_20, CallaLilly\_21
- Track 8 : Clipper\_22, Torres\_16, MacKat\_21
- Track 9 : Y10\_21, Y2\_21
- Track 10 : Rando14\_18

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

The start number called the most often in the published annotations is 5, it was called in 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Rando14\_18, Y10\_21, Y2\_21,

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

- AzulaCat\_15, DNAllI\_0015, Dartin\_20, FF47\_18, Maliketh\_15, McMater\_20, Richo\_20, TinaBug\_15, Wendigo\_15,

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

- CallaLilly\_21, Clipper\_22, Llorens\_20, MacKat\_21, Maco6\_16, Pace1224\_15, Stargaze\_15, TaiwanKao\_21, Torres\_16,

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

Start 5:

- Found in 12 of 21 ( 57.1% ) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 25.0% of time when present

- Phage (with cluster) where this start called: Rando14\_18 (K5), Y10\_21 (K4), Y2\_21 (K4),

Start 6:

- Found in 2 of 21 ( 9.5% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: FF47\_18 (AB), Maco6\_16 (AB),

Start 7:

- Found in 5 of 21 ( 23.8% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AzulaCat\_15 (G1), DNAllI\_0015 (G1), Maliketh\_15 (G1), TinaBug\_15 (G1), Wendigo\_15 (G1),

Start 9:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Stargaze\_15 (G5),

Start 11:

- Found in 6 of 21 ( 28.6% ) of genes in pham
- Manual Annotations of this start: 1 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CallaLilly\_21 (K1), Clipper\_22 (K1), Llorens\_20 (K1), MacKat\_21 (K1), TaiwanKao\_21 (K1), Torres\_16 (K1),

Start 12:

- Found in 1 of 21 ( 4.8% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Pace1224\_15 (G2),

Start 13:

- Found in 9 of 21 ( 42.9% ) of genes in pham
- No Manual Annotations of this start.
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Dartin\_20 (K1), McMater\_20 (K1), Richo\_20 (K1),

**Summary by clusters:**

There are 7 clusters represented in this pham: G5, AB, G2, G1, K1, K5, K4,

Info for manual annotations of cluster AB:

- Start number 6 was manually annotated 1 time for cluster AB.

Info for manual annotations of cluster G1:

- Start number 7 was manually annotated 1 time for cluster G1.

Info for manual annotations of cluster K1:

- Start number 11 was manually annotated 1 time for cluster K1.

Info for manual annotations of cluster K4:

- Start number 5 was manually annotated 2 times for cluster K4.

Info for manual annotations of cluster K5:

- Start number 5 was manually annotated 1 time for cluster K5.

### **Gene Information:**

Gene: AzulaCat\_15 Start: 11087, Stop: 11464, Start Num: 7

Candidate Starts for AzulaCat\_15:

(2, 10724), (Start: 5 @11000 has 3 MA's), (Start: 7 @11087 has 1 MA's), (10, 11096), (24, 11375), (25, 11378),

Gene: CallaLilly\_21 Start: 11686, Stop: 12039, Start Num: 11

Candidate Starts for CallaLilly\_21:

(Start: 11 @11686 has 1 MA's), (16, 11812), (17, 11863), (22, 11941), (27, 11977),

Gene: Clipper\_22 Start: 11740, Stop: 12093, Start Num: 11

Candidate Starts for Clipper\_22:

(Start: 11 @11740 has 1 MA's), (16, 11866), (17, 11917), (22, 11995), (27, 12031),

Gene: DNAIII\_0015 Start: 11096, Stop: 11473, Start Num: 7

Candidate Starts for DNAIII\_0015:

(2, 10733), (Start: 5 @11009 has 3 MA's), (Start: 7 @11096 has 1 MA's), (10, 11105), (24, 11384), (25, 11387),

Gene: Dartin\_20 Start: 10832, Stop: 11128, Start Num: 13

Candidate Starts for Dartin\_20:

(4, 10634), (Start: 5 @10655 has 3 MA's), (13, 10832), (14, 10886), (22, 11027), (27, 11063),

Gene: FF47\_18 Start: 11043, Stop: 11405, Start Num: 6

Candidate Starts for FF47\_18:

(Start: 5 @10962 has 3 MA's), (Start: 6 @11043 has 1 MA's), (8, 11052), (13, 11139), (15, 11205), (16, 11211), (17, 11262), (18, 11289), (25, 11328), (26, 11346), (29, 11382),

Gene: Llorens\_20 Start: 11763, Stop: 12116, Start Num: 11

Candidate Starts for Llorens\_20:

(Start: 11 @11763 has 1 MA's), (16, 11889), (17, 11940), (22, 12018), (27, 12054),

Gene: MacKat\_21 Start: 11740, Stop: 12093, Start Num: 11

Candidate Starts for MacKat\_21:

(Start: 11 @11740 has 1 MA's), (16, 11866), (17, 11917), (22, 11995), (27, 12031),

Gene: Maco6\_16 Start: 10335, Stop: 10697, Start Num: 6

Candidate Starts for Maco6\_16:

(Start: 6 @10335 has 1 MA's), (8, 10344), (13, 10431), (15, 10497), (16, 10503), (17, 10554), (18, 10581), (25, 10620), (26, 10638), (29, 10674),

Gene: Maliketh\_15 Start: 11087, Stop: 11464, Start Num: 7

Candidate Starts for Maliketh\_15:

(2, 10724), (Start: 5 @11000 has 3 MA's), (Start: 7 @11087 has 1 MA's), (10, 11096), (24, 11375), (25, 11378),

Gene: McMater\_20 Start: 10832, Stop: 11128, Start Num: 13

Candidate Starts for McMater\_20:

(4, 10634), (Start: 5 @10655 has 3 MA's), (13, 10832), (14, 10886), (22, 11027), (27, 11063),

Gene: Pace1224\_15 Start: 11290, Stop: 11628, Start Num: 12

Candidate Starts for Pace1224\_15:

(1, 10573), (2, 10861), (12, 11290), (13, 11320), (24, 11512), (25, 11515), (28, 11554),

Gene: Rando14\_18 Start: 10595, Stop: 11053, Start Num: 5

Candidate Starts for Rando14\_18:

(Start: 5 @10595 has 3 MA's), (13, 10772), (19, 10952), (20, 10964), (27, 11006),

Gene: Richo\_20 Start: 10832, Stop: 11128, Start Num: 13

Candidate Starts for Richo\_20:

(4, 10634), (Start: 5 @10655 has 3 MA's), (13, 10832), (14, 10886), (22, 11027), (27, 11063),

Gene: Stargaze\_15 Start: 11389, Stop: 11766, Start Num: 9

Candidate Starts for Stargaze\_15:

(9, 11389), (24, 11668), (25, 11671), (28, 11710),

Gene: TaiwanKao\_21 Start: 11699, Stop: 12052, Start Num: 11

Candidate Starts for TaiwanKao\_21:

(Start: 11 @11699 has 1 MA's), (16, 11825), (17, 11876), (22, 11954), (27, 11990),

Gene: TinaBug\_15 Start: 11082, Stop: 11459, Start Num: 7

Candidate Starts for TinaBug\_15:

(2, 10719), (Start: 5 @10995 has 3 MA's), (Start: 7 @11082 has 1 MA's), (10, 11091), (24, 11370), (25, 11373),

Gene: Torres\_16 Start: 10977, Stop: 11327, Start Num: 11

Candidate Starts for Torres\_16:

(Start: 11 @10977 has 1 MA's), (16, 11103), (17, 11154), (22, 11229), (27, 11265),

Gene: Wendigo\_15 Start: 11087, Stop: 11464, Start Num: 7

Candidate Starts for Wendigo\_15:

(2, 10724), (Start: 5 @11000 has 3 MA's), (Start: 7 @11087 has 1 MA's), (10, 11096), (24, 11375), (25, 11378),

Gene: Y10\_21 Start: 12813, Stop: 13310, Start Num: 5

Candidate Starts for Y10\_21:

(3, 12657), (4, 12792), (Start: 5 @12813 has 3 MA's), (13, 12990), (14, 13044), (17, 13113), (21, 13215), (23, 13218), (27, 13254),

Gene: Y2\_21 Start: 12813, Stop: 13310, Start Num: 5

Candidate Starts for Y2\_21:

(3, 12657), (4, 12792), (Start: 5 @12813 has 3 MA's), (13, 12990), (14, 13044), (17, 13113), (21, 13215), (23, 13218), (27, 13254),

