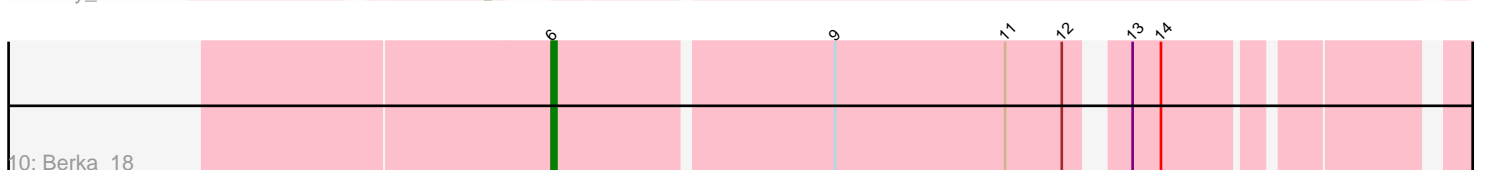
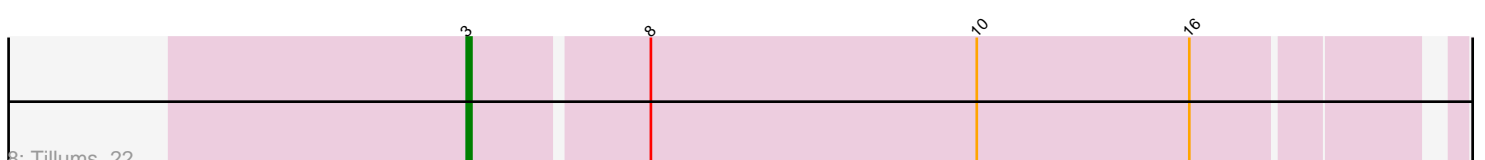
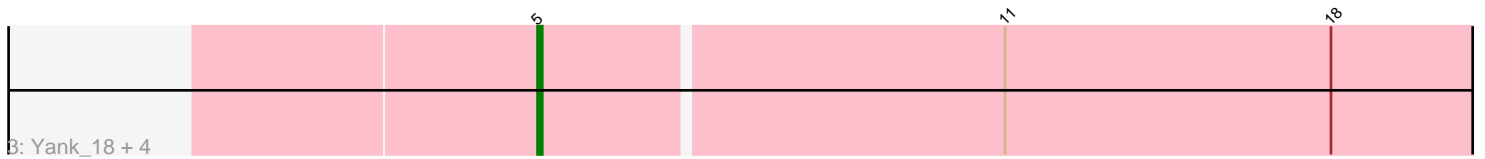
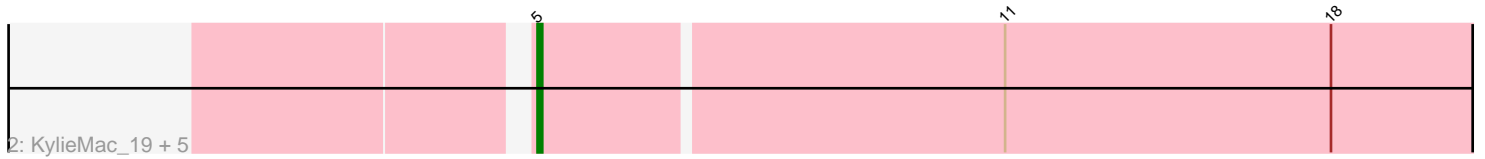
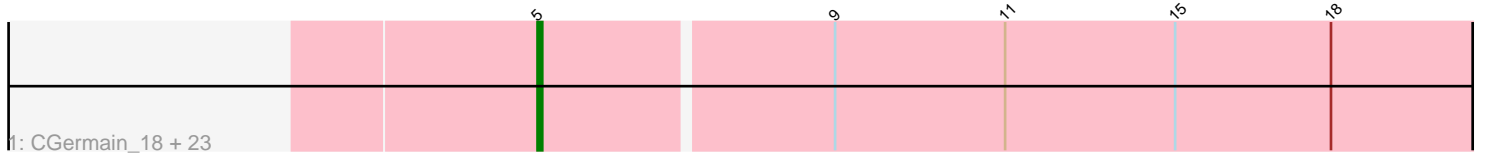


Pham 194114



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 194114 Report

This analysis was run 11/02/24 on database version 579.

Pham number 194114 has 45 members, 1 are drafts.

Phages represented in each track:

- Track 1 : CGermain\_18, Prospero\_18, TinoCrisci\_18, Dewayne\_18, Stratus\_18, Mariposa\_18, Maggie\_18, Massimo\_18, Jessica\_19, TymAbreu\_18, Copper\_18, Courtney3\_18, Guntur\_18, Sandman\_18, Chestnut\_18, Toulouse\_17, Hunnie\_18, Seume\_18, Ronnie\_18, LouisXIV\_18, Inspire2\_18, Azathoth\_18, Moloch\_18, Arby\_18
- Track 2 : KylieMac\_19, Lore\_18, Elkhorn\_18, Blair\_18, StewieGriff\_18, Laila\_20
- Track 3 : Yank\_18, Decurro\_18, Sourignavong\_19, Link\_18, Muttie\_18
- Track 4 : Swenson\_18
- Track 5 : Saphira\_19, Taj14\_18
- Track 6 : Anjali\_17
- Track 7 : Mendel\_19, Dunamis\_21, Swim\_22
- Track 8 : Tillums\_22
- Track 9 : Noely\_15
- Track 10 : Berka\_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 38 of the 44 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby\_18, Azathoth\_18, Blair\_18, CGermain\_18, Chestnut\_18, Copper\_18, Courtney3\_18, Decurro\_18, Dewayne\_18, Elkhorn\_18, Guntur\_18, Hunnie\_18, Inspire2\_18, Jessica\_19, KylieMac\_19, Laila\_20, Link\_18, Lore\_18, LouisXIV\_18, Maggie\_18, Mariposa\_18, Massimo\_18, Moloch\_18, Muttie\_18, Prospero\_18, Ronnie\_18, Sandman\_18, Saphira\_19, Seume\_18, Sourignavong\_19, StewieGriff\_18, Stratus\_18, Swenson\_18, Taj14\_18, TinoCrisci\_18, Toulouse\_17, TymAbreu\_18, Yank\_18,

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

- 

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

- Anjali\_17, Berka\_18, Dunamis\_21, Mendel\_19, Noely\_15, Swim\_22, Tillums\_22,

## Summary by start number:

### Start 2:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Anjali\_17 (FD),

### Start 3:

- Found in 4 of 45 ( 8.9% ) of genes in pham
- Manual Annotations of this start: 3 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dunamis\_21 (FD), Mendel\_19 (FD), Swim\_22 (FD), Tillums\_22 (FD),

### Start 4:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Noely\_15 (FE),

### Start 5:

- Found in 38 of 45 ( 84.4% ) of genes in pham
- Manual Annotations of this start: 38 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arby\_18 (AN), Azathoth\_18 (AN), Blair\_18 (AN), CGermain\_18 (AN), Chestnut\_18 (AN), Copper\_18 (AN), Courtney3\_18 (AN), Decurro\_18 (AN), Dewayne\_18 (AN), Elkhorn\_18 (AN), Guntur\_18 (AN), Hunnie\_18 (AN), Inspire2\_18 (AN), Jessica\_19 (AN), KylieMac\_19 (AN), Laila\_20 (AN), Link\_18 (AN), Lore\_18 (AN), LouisXIV\_18 (AN), Maggie\_18 (AN), Mariposa\_18 (AN), Massimo\_18 (AN), Moloch\_18 (AN), Muttie\_18 (AN), Prospero\_18 (AN), Ronnie\_18 (AN), Sandman\_18 (AN), Saphira\_19 (AN), Seume\_18 (AN), Sourignavong\_19 (AN), StewieGriff\_18 (AN), Stratus\_18 (AN), Swenson\_18 (AN), Taj14\_18 (AN), TinoCrisci\_18 (AN), Toulouse\_17 (AN), TymAbreu\_18 (AN), Yank\_18 (AN),

### Start 6:

- Found in 1 of 45 ( 2.2% ) of genes in pham
- Manual Annotations of this start: 1 of 44
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Berka\_18 (FE),

## Summary by clusters:

There are 3 clusters represented in this pham: FD, FE, AN,

Info for manual annotations of cluster AN:

- Start number 5 was manually annotated 38 times for cluster AN.

Info for manual annotations of cluster FD:

- Start number 2 was manually annotated 1 time for cluster FD.
- Start number 3 was manually annotated 3 times for cluster FD.

Info for manual annotations of cluster FE:

- Start number 4 was manually annotated 1 time for cluster FE.
- Start number 6 was manually annotated 1 time for cluster FE.

**Gene Information:**

Gene: Anjali\_17 Start: 14710, Stop: 14916, Start Num: 2

Candidate Starts for Anjali\_17:

(1, 14644), (Start: 2 @14710 has 1 MA's), (7, 14737), (8, 14746), (16, 14860),

Gene: Arby\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Arby\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Azathoth\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Azathoth\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Berka\_18 Start: 11873, Stop: 12058, Start Num: 6

Candidate Starts for Berka\_18:

(Start: 6 @11873 has 1 MA's), (9, 11930), (11, 11966), (12, 11978), (13, 11987), (14, 11993),

Gene: Blair\_18 Start: 12694, Stop: 12903, Start Num: 5

Candidate Starts for Blair\_18:

(Start: 5 @12694 has 38 MA's), (11, 12790), (18, 12859),

Gene: CGermain\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for CGermain\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Chestnut\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Chestnut\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Copper\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Copper\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Courtney3\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Courtney3\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Decurro\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Decurro\_18:

(Start: 5 @12697 has 38 MA's), (11, 12793), (18, 12862),

Gene: Dewayne\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Dewayne\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Dunamis\_21 Start: 14864, Stop: 15073, Start Num: 3  
Candidate Starts for Dunamis\_21:  
(Start: 3 @14864 has 3 MA's), (10, 14972), (16, 15017),

Gene: Elkhorn\_18 Start: 12694, Stop: 12903, Start Num: 5  
Candidate Starts for Elkhorn\_18:  
(Start: 5 @12694 has 38 MA's), (11, 12790), (18, 12859),

Gene: Guntur\_18 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for Guntur\_18:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Hunnie\_18 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for Hunnie\_18:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Inspire2\_18 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for Inspire2\_18:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Jessica\_19 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for Jessica\_19:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: KylieMac\_19 Start: 12681, Stop: 12890, Start Num: 5  
Candidate Starts for KylieMac\_19:  
(Start: 5 @12681 has 38 MA's), (11, 12777), (18, 12846),

Gene: Laila\_20 Start: 12694, Stop: 12903, Start Num: 5  
Candidate Starts for Laila\_20:  
(Start: 5 @12694 has 38 MA's), (11, 12790), (18, 12859),

Gene: Link\_18 Start: 12694, Stop: 12903, Start Num: 5  
Candidate Starts for Link\_18:  
(Start: 5 @12694 has 38 MA's), (11, 12790), (18, 12859),

Gene: Lore\_18 Start: 12694, Stop: 12903, Start Num: 5  
Candidate Starts for Lore\_18:  
(Start: 5 @12694 has 38 MA's), (11, 12790), (18, 12859),

Gene: LouisXIV\_18 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for LouisXIV\_18:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Maggie\_18 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for Maggie\_18:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Mariposa\_18 Start: 12697, Stop: 12906, Start Num: 5  
Candidate Starts for Mariposa\_18:  
(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Massimo\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Massimo\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Mendel\_19 Start: 14622, Stop: 14831, Start Num: 3

Candidate Starts for Mendel\_19:

(Start: 3 @14622 has 3 MA's), (10, 14730), (16, 14775),

Gene: Moloch\_18 Start: 12771, Stop: 12980, Start Num: 5

Candidate Starts for Moloch\_18:

(Start: 5 @12771 has 38 MA's), (9, 12831), (11, 12867), (15, 12903), (18, 12936),

Gene: Muttlie\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Muttlie\_18:

(Start: 5 @12697 has 38 MA's), (11, 12793), (18, 12862),

Gene: Noely\_15 Start: 11887, Stop: 12084, Start Num: 4

Candidate Starts for Noely\_15:

(Start: 4 @11887 has 1 MA's), (8, 11911), (12, 11995), (14, 12016), (17, 12028),

Gene: Prospero\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Prospero\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Ronnie\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Ronnie\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Sandman\_18 Start: 12771, Stop: 12980, Start Num: 5

Candidate Starts for Sandman\_18:

(Start: 5 @12771 has 38 MA's), (9, 12831), (11, 12867), (15, 12903), (18, 12936),

Gene: Saphira\_19 Start: 12696, Stop: 12905, Start Num: 5

Candidate Starts for Saphira\_19:

(Start: 5 @12696 has 38 MA's), (11, 12792), (18, 12861),

Gene: Seume\_18 Start: 12492, Stop: 12701, Start Num: 5

Candidate Starts for Seume\_18:

(Start: 5 @12492 has 38 MA's), (9, 12552), (11, 12588), (15, 12624), (18, 12657),

Gene: Sourignavong\_19 Start: 12798, Stop: 13007, Start Num: 5

Candidate Starts for Sourignavong\_19:

(Start: 5 @12798 has 38 MA's), (11, 12894), (18, 12963),

Gene: StewieGriff\_18 Start: 12694, Stop: 12903, Start Num: 5

Candidate Starts for StewieGriff\_18:

(Start: 5 @12694 has 38 MA's), (11, 12790), (18, 12859),

Gene: Stratus\_18 Start: 12771, Stop: 12980, Start Num: 5

Candidate Starts for Stratus\_18:

(Start: 5 @12771 has 38 MA's), (9, 12831), (11, 12867), (15, 12903), (18, 12936),

Gene: Swenson\_18 Start: 12818, Stop: 13027, Start Num: 5

Candidate Starts for Swenson\_18:

(Start: 5 @12818 has 38 MA's), (11, 12914), (18, 12983),

Gene: Swim\_22 Start: 15121, Stop: 15330, Start Num: 3

Candidate Starts for Swim\_22:

(Start: 3 @15121 has 3 MA's), (10, 15229), (16, 15274),

Gene: Taj14\_18 Start: 12693, Stop: 12902, Start Num: 5

Candidate Starts for Taj14\_18:

(Start: 5 @12693 has 38 MA's), (11, 12789), (18, 12858),

Gene: Tillums\_22 Start: 15257, Stop: 15463, Start Num: 3

Candidate Starts for Tillums\_22:

(Start: 3 @15257 has 3 MA's), (8, 15293), (10, 15362), (16, 15407),

Gene: TinoCrisci\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for TinoCrisci\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Toulouse\_17 Start: 12492, Stop: 12701, Start Num: 5

Candidate Starts for Toulouse\_17:

(Start: 5 @12492 has 38 MA's), (9, 12552), (11, 12588), (15, 12624), (18, 12657),

Gene: TymAbreu\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for TymAbreu\_18:

(Start: 5 @12697 has 38 MA's), (9, 12757), (11, 12793), (15, 12829), (18, 12862),

Gene: Yank\_18 Start: 12697, Stop: 12906, Start Num: 5

Candidate Starts for Yank\_18:

(Start: 5 @12697 has 38 MA's), (11, 12793), (18, 12862),