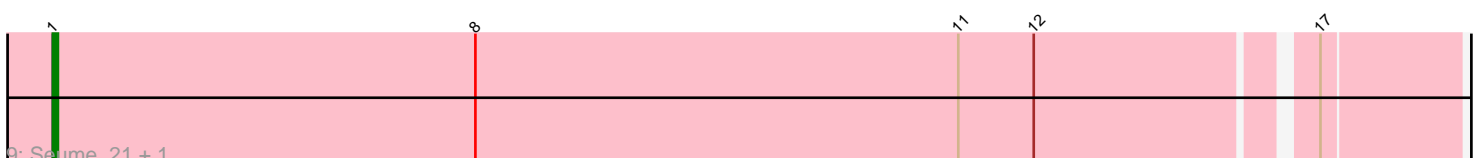
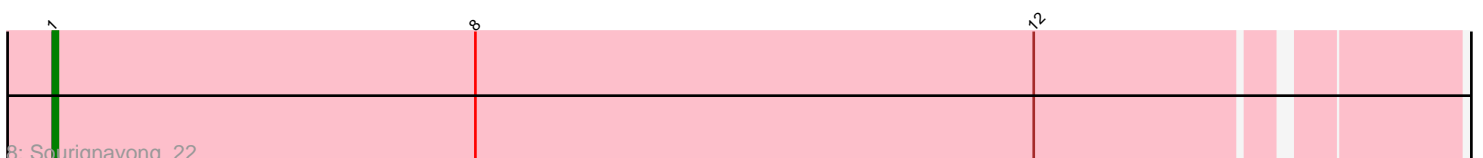
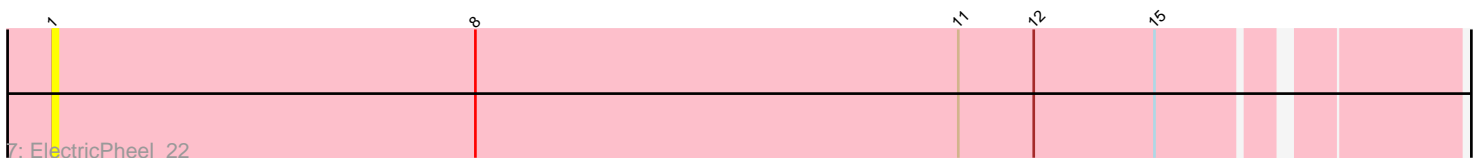
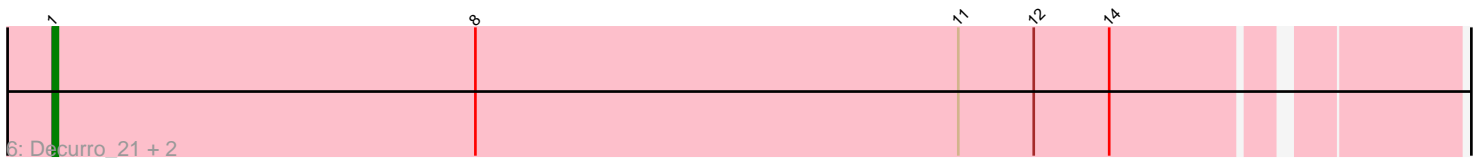
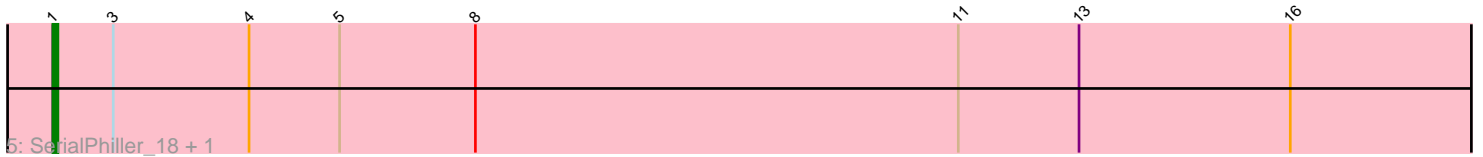
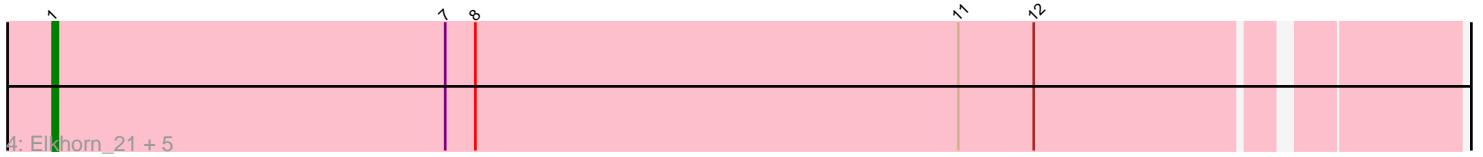
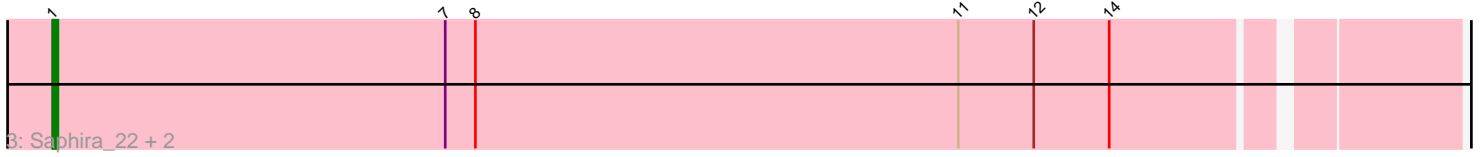
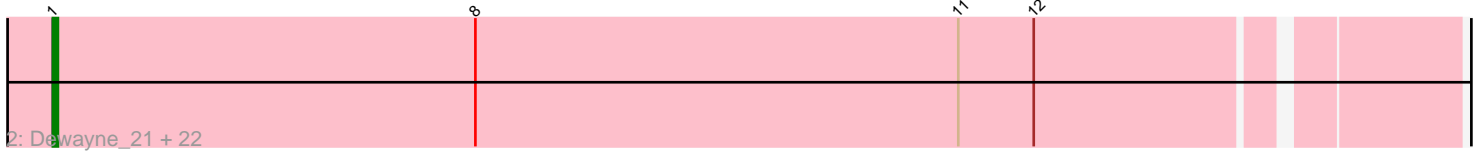
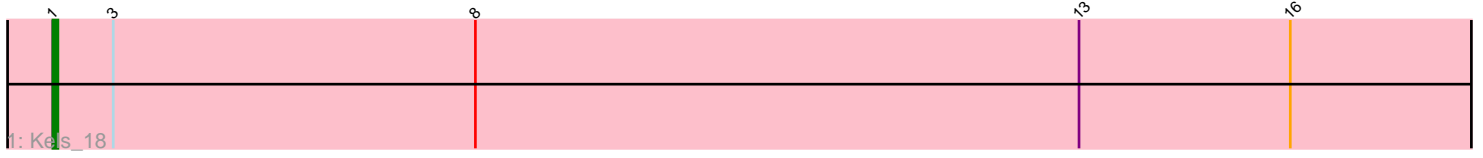


Pham 216304



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 216304 Report

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

Pham number 216304 has 43 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Kels\_18
- Track 2 : Dewayne\_21, Sandman\_27, CGermain\_21, Inspire2\_21, LouisXIV\_21, Copper\_21, Prospero\_21, Courtney3\_21, Azathoth\_21, Muttlie\_21, Moloch\_21, Arby\_21, TinoCrisci\_21, Stratus\_21, Massimo\_21, Ronnie\_21, Jessica\_22, Mariposa\_21, Maggie\_21, Chestnut\_26, Hunnie\_21, TymAbreu\_21, Guntur\_21
- Track 3 : Saphira\_22, Taj14\_21, Swenson\_21
- Track 4 : Elkhorn\_21, Lore\_21, Blair\_21, StewieGriff\_21, KylieMac\_22, Laila\_23
- Track 5 : SerialPhiller\_18, Arielagos\_18
- Track 6 : Decurro\_21, Yank\_21, Link\_21
- Track 7 : ElectricPheel\_22
- Track 8 : Sourignavong\_22
- Track 9 : Seume\_21, Toulouse\_20
- Track 10 : PhrostedPhlake\_45

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

The start number called the most often in the published annotations is 1, it was called in 41 of the 42 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Arby\_21, Arielagos\_18, Azathoth\_21, Blair\_21, CGermain\_21, Chestnut\_26, Copper\_21, Courtney3\_21, Decurro\_21, Dewayne\_21, ElectricPheel\_22, Elkhorn\_21, Guntur\_21, Hunnie\_21, Inspire2\_21, Jessica\_22, Kels\_18, KylieMac\_22, Laila\_23, Link\_21, Lore\_21, LouisXIV\_21, Maggie\_21, Mariposa\_21, Massimo\_21, Moloch\_21, Muttlie\_21, Prospero\_21, Ronnie\_21, Sandman\_27, Saphira\_22, SerialPhiller\_18, Seume\_21, Sourignavong\_22, StewieGriff\_21, Stratus\_21, Swenson\_21, Taj14\_21, TinoCrisci\_21, Toulouse\_20, TymAbreu\_21, Yank\_21,

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

- 

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

- PhrostedPhlake\_45,

## Summary by start number:

### Start 1:

- Found in 42 of 43 ( 97.7% ) of genes in pham
- Manual Annotations of this start: 41 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Arby\_21 (AN), Arielagos\_18 (AN), Azathoth\_21 (AN), Blair\_21 (AN), CGermain\_21 (AN), Chestnut\_26 (AN), Copper\_21 (AN), Courtney3\_21 (AN), Decurro\_21 (AN), Dewayne\_21 (AN), ElectricPheel\_22 (AN), Elkhorn\_21 (AN), Guntur\_21 (AN), Hunnie\_21 (AN), Inspire2\_21 (AN), Jessica\_22 (AN), Kels\_18 (AN), KylieMac\_22 (AN), Laila\_23 (AN), Link\_21 (AN), Lore\_21 (AN), LouisXIV\_21 (AN), Maggie\_21 (AN), Mariposa\_21 (AN), Massimo\_21 (AN), Moloch\_21 (AN), Muttie\_21 (AN), Prospero\_21 (AN), Ronnie\_21 (AN), Sandman\_27 (AN), Saphira\_22 (AN), SerialPhiller\_18 (AN), Seume\_21 (AN), Sourignavong\_22 (AN), StewieGriff\_21 (AN), Stratus\_21 (AN), Swenson\_21 (AN), Taj14\_21 (AN), TinoCrisci\_21 (AN), Toulouse\_20 (AN), TymAbreu\_21 (AN), Yank\_21 (AN),

### Start 2:

- Found in 1 of 43 ( 2.3% ) of genes in pham
- Manual Annotations of this start: 1 of 42
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PhrostedPhlake\_45 (CV),

## Summary by clusters:

There are 2 clusters represented in this pham: CV, AN,

Info for manual annotations of cluster AN:

- Start number 1 was manually annotated 41 times for cluster AN.

Info for manual annotations of cluster CV:

- Start number 2 was manually annotated 1 time for cluster CV.

## Gene Information:

Gene: Arby\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Arby\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Arielagos\_18 Start: 12965, Stop: 12678, Start Num: 1

Candidate Starts for Arielagos\_18:

(Start: 1 @12965 has 41 MA's), (3, 12953), (4, 12926), (5, 12908), (8, 12881), (11, 12785), (13, 12761), (16, 12719),

Gene: Azathoth\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Azathoth\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Blair\_21 Start: 13773, Stop: 13501, Start Num: 1

Candidate Starts for Blair\_21:

(Start: 1 @13773 has 41 MA's), (7, 13695), (8, 13689), (11, 13593), (12, 13578),

Gene: CGermain\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for CGermain\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Chestnut\_26 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Chestnut\_26:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Copper\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Copper\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Courtney3\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Courtney3\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Decurro\_21 Start: 13744, Stop: 13472, Start Num: 1

Candidate Starts for Decurro\_21:

(Start: 1 @13744 has 41 MA's), (8, 13660), (11, 13564), (12, 13549), (14, 13534),

Gene: Dewayne\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Dewayne\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: ElectricPheel\_22 Start: 13817, Stop: 13545, Start Num: 1

Candidate Starts for ElectricPheel\_22:

(Start: 1 @13817 has 41 MA's), (8, 13733), (11, 13637), (12, 13622), (15, 13598),

Gene: Elkhorn\_21 Start: 13773, Stop: 13501, Start Num: 1

Candidate Starts for Elkhorn\_21:

(Start: 1 @13773 has 41 MA's), (7, 13695), (8, 13689), (11, 13593), (12, 13578),

Gene: Guntur\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Guntur\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Hunnie\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Hunnie\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Inspire2\_21 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Inspire2\_21:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Jessica\_22 Start: 13776, Stop: 13504, Start Num: 1

Candidate Starts for Jessica\_22:

(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Kels\_18 Start: 12902, Stop: 12615, Start Num: 1

Candidate Starts for Kels\_18:

(Start: 1 @12902 has 41 MA's), (3, 12890), (8, 12818), (13, 12698), (16, 12656),

Gene: KylieMac\_22 Start: 13760, Stop: 13488, Start Num: 1  
Candidate Starts for KylieMac\_22:  
(Start: 1 @13760 has 41 MA's), (7, 13682), (8, 13676), (11, 13580), (12, 13565),

Gene: Laila\_23 Start: 13773, Stop: 13501, Start Num: 1  
Candidate Starts for Laila\_23:  
(Start: 1 @13773 has 41 MA's), (7, 13695), (8, 13689), (11, 13593), (12, 13578),

Gene: Link\_21 Start: 13741, Stop: 13469, Start Num: 1  
Candidate Starts for Link\_21:  
(Start: 1 @13741 has 41 MA's), (8, 13657), (11, 13561), (12, 13546), (14, 13531),

Gene: Lore\_21 Start: 13773, Stop: 13501, Start Num: 1  
Candidate Starts for Lore\_21:  
(Start: 1 @13773 has 41 MA's), (7, 13695), (8, 13689), (11, 13593), (12, 13578),

Gene: LouisXIV\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for LouisXIV\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Maggie\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for Maggie\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Mariposa\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for Mariposa\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Massimo\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for Massimo\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Moloch\_21 Start: 13850, Stop: 13578, Start Num: 1  
Candidate Starts for Moloch\_21:  
(Start: 1 @13850 has 41 MA's), (8, 13766), (11, 13670), (12, 13655),

Gene: Muttie\_21 Start: 13744, Stop: 13472, Start Num: 1  
Candidate Starts for Muttie\_21:  
(Start: 1 @13744 has 41 MA's), (8, 13660), (11, 13564), (12, 13549),

Gene: PhrostedPhlake\_45 Start: 32973, Stop: 33212, Start Num: 2  
Candidate Starts for PhrostedPhlake\_45:  
(Start: 2 @32973 has 1 MA's), (6, 33024), (9, 33066), (10, 33111), (16, 33195), (17, 33201),

Gene: Prospero\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for Prospero\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Ronnie\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for Ronnie\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Sandman\_27 Start: 13850, Stop: 13578, Start Num: 1  
Candidate Starts for Sandman\_27:  
(Start: 1 @13850 has 41 MA's), (8, 13766), (11, 13670), (12, 13655),

Gene: Saphira\_22 Start: 13775, Stop: 13503, Start Num: 1  
Candidate Starts for Saphira\_22:  
(Start: 1 @13775 has 41 MA's), (7, 13697), (8, 13691), (11, 13595), (12, 13580), (14, 13565),

Gene: SerialPhiller\_18 Start: 12965, Stop: 12678, Start Num: 1  
Candidate Starts for SerialPhiller\_18:  
(Start: 1 @12965 has 41 MA's), (3, 12953), (4, 12926), (5, 12908), (8, 12881), (11, 12785), (13, 12761),  
(16, 12719),

Gene: Seume\_21 Start: 13539, Stop: 13267, Start Num: 1  
Candidate Starts for Seume\_21:  
(Start: 1 @13539 has 41 MA's), (8, 13455), (11, 13359), (12, 13344), (17, 13293),

Gene: Sourignavong\_22 Start: 13845, Stop: 13573, Start Num: 1  
Candidate Starts for Sourignavong\_22:  
(Start: 1 @13845 has 41 MA's), (8, 13761), (12, 13650),

Gene: StewieGriff\_21 Start: 13773, Stop: 13501, Start Num: 1  
Candidate Starts for StewieGriff\_21:  
(Start: 1 @13773 has 41 MA's), (7, 13695), (8, 13689), (11, 13593), (12, 13578),

Gene: Stratus\_21 Start: 13850, Stop: 13578, Start Num: 1  
Candidate Starts for Stratus\_21:  
(Start: 1 @13850 has 41 MA's), (8, 13766), (11, 13670), (12, 13655),

Gene: Swenson\_21 Start: 13897, Stop: 13625, Start Num: 1  
Candidate Starts for Swenson\_21:  
(Start: 1 @13897 has 41 MA's), (7, 13819), (8, 13813), (11, 13717), (12, 13702), (14, 13687),

Gene: Taj14\_21 Start: 13772, Stop: 13500, Start Num: 1  
Candidate Starts for Taj14\_21:  
(Start: 1 @13772 has 41 MA's), (7, 13694), (8, 13688), (11, 13592), (12, 13577), (14, 13562),

Gene: TinoCrisci\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for TinoCrisci\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Toulouse\_20 Start: 13539, Stop: 13267, Start Num: 1  
Candidate Starts for Toulouse\_20:  
(Start: 1 @13539 has 41 MA's), (8, 13455), (11, 13359), (12, 13344), (17, 13293),

Gene: TymAbreu\_21 Start: 13776, Stop: 13504, Start Num: 1  
Candidate Starts for TymAbreu\_21:  
(Start: 1 @13776 has 41 MA's), (8, 13692), (11, 13596), (12, 13581),

Gene: Yank\_21 Start: 13744, Stop: 13472, Start Num: 1  
Candidate Starts for Yank\_21:  
(Start: 1 @13744 has 41 MA's), (8, 13660), (11, 13564), (12, 13549), (14, 13534),