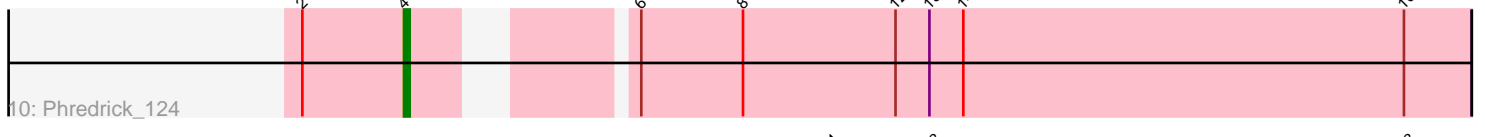
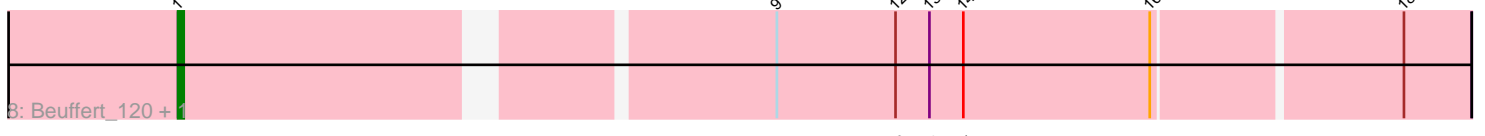
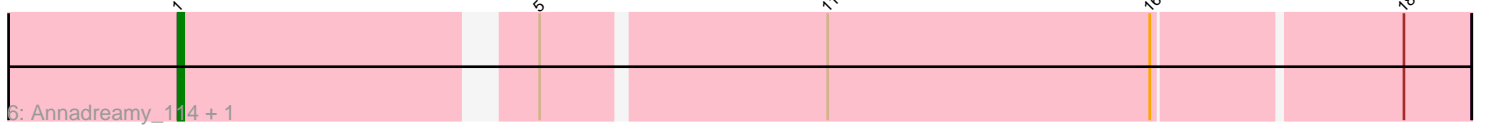
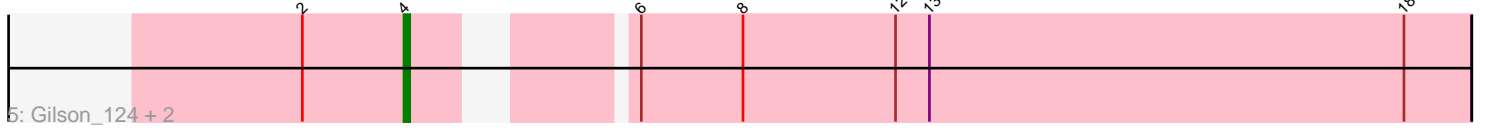
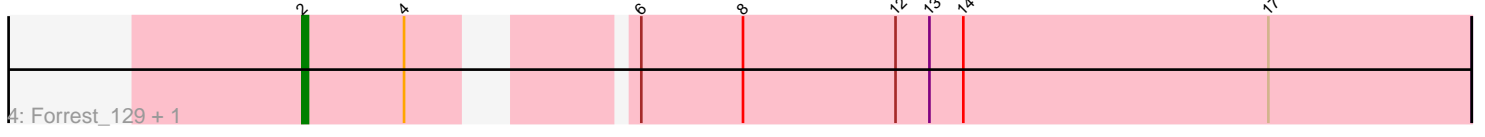
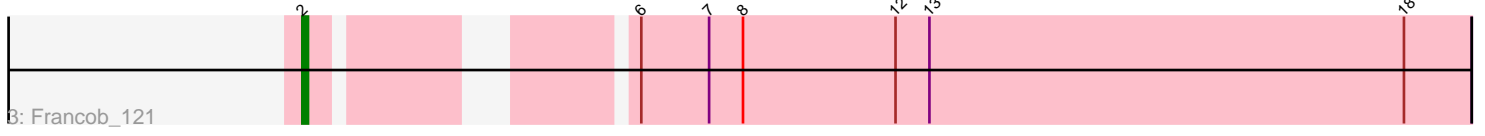
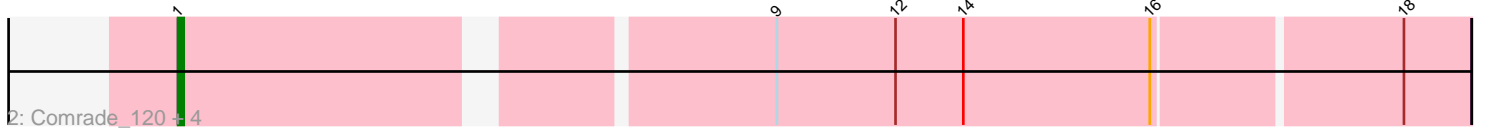
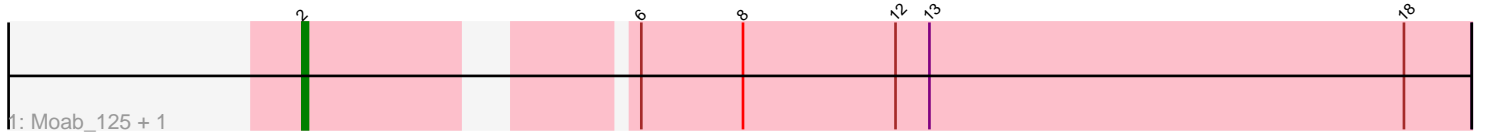


Pham 156616



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 156616 Report

This analysis was run 04/12/24 on database version 558.

Pham number 156616 has 25 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Moab\_125, Patelgo\_127
- Track 2 : Comrade\_120, SparkleGoddess\_122, Karp\_120, Stigma\_122, Belfort\_124
- Track 3 : Francob\_121
- Track 4 : Forrest\_129, Jada\_125
- Track 5 : Gilson\_124, Emma1919\_124, MeganTheeKilla\_123
- Track 6 : Annadreamy\_114, Limpid\_122
- Track 7 : SeresaTree\_122, Faust\_122
- Track 8 : Beuffert\_120, Blueeyedbeauty\_121
- Track 9 : Kenrey\_126
- Track 10 : Phredrick\_124
- Track 11 : Circinus\_111, BillNye\_110
- Track 12 : Muntaha\_117, Wakanda\_115

### ***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 10 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Annadreamy\_114, Belfort\_124, Beuffert\_120, Blueeyedbeauty\_121, Comrade\_120, Faust\_122, Karp\_120, Limpid\_122, SeresaTree\_122, SparkleGoddess\_122, Stigma\_122,

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

- 

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

- BillNye\_110, Circinus\_111, Emma1919\_124, Forrest\_129, Francob\_121, Gilson\_124, Jada\_125, Kenrey\_126, MeganTheeKilla\_123, Moab\_125, Muntaha\_117, Patelgo\_127, Phredrick\_124, Wakanda\_115,

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

Start 1:

- Found in 11 of 25 ( 44.0% ) of genes in pham
- Manual Annotations of this start: 10 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Annadreamy\_114 (BK1), Belfort\_124 (BK1), Beuffert\_120 (BK1), Blueeyedbeauty\_121 (BK1), Comrade\_120 (BK1), Faust\_122 (BK1), Karp\_120 (BK1), Limpid\_122 (BK1), SeresaTree\_122 (BK1), SparkleGoddess\_122 (BK1), Stigma\_122 (BK1),

#### Start 2:

- Found in 10 of 25 ( 40.0% ) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Forrest\_129 (BK1), Francob\_121 (BK1), Jada\_125 (BK1), Kenrey\_126 (BK1), Moab\_125 (BK1), Patelgo\_127 (BK1),

#### Start 3:

- Found in 4 of 25 ( 16.0% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BillNye\_110 (BK2), Circinus\_111 (BK2), Muntaha\_117 (BK2), Wakanda\_115 (BK2),

#### Start 4:

- Found in 7 of 25 ( 28.0% ) of genes in pham
- Manual Annotations of this start: 4 of 24
- Called 57.1% of time when present
- Phage (with cluster) where this start called: Emma1919\_124 (BK1), Gilson\_124 (BK1), MeganTheeKilla\_123 (BK1), Phredrick\_124 (BK1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BK1, BK2,

#### Info for manual annotations of cluster BK1:

- Start number 1 was manually annotated 10 times for cluster BK1.
- Start number 2 was manually annotated 6 times for cluster BK1.
- Start number 4 was manually annotated 4 times for cluster BK1.

#### Info for manual annotations of cluster BK2:

- Start number 3 was manually annotated 4 times for cluster BK2.

### **Gene Information:**

Gene: Annadreamy\_114 Start: 71054, Stop: 71269, Start Num: 1

Candidate Starts for Annadreamy\_114:

(Start: 1 @71054 has 10 MA's), (5, 71111), (11, 71159), (16, 71216), (18, 71258),

Gene: Belfort\_124 Start: 76440, Stop: 76655, Start Num: 1

Candidate Starts for Belfort\_124:

(Start: 1 @76440 has 10 MA's), (9, 76536), (12, 76557), (14, 76569), (16, 76602), (18, 76644),

Gene: Beuffert\_120 Start: 75552, Stop: 75767, Start Num: 1  
Candidate Starts for Beuffert\_120:  
(Start: 1 @75552 has 10 MA's), (9, 75648), (12, 75669), (13, 75675), (14, 75681), (16, 75714), (18, 75756),

Gene: BillNye\_110 Start: 73768, Stop: 73953, Start Num: 3  
Candidate Starts for BillNye\_110:  
(Start: 3 @73768 has 4 MA's), (11, 73852), (13, 73870), (18, 73942),

Gene: Blueeyedbeauty\_121 Start: 73777, Stop: 73992, Start Num: 1  
Candidate Starts for Blueeyedbeauty\_121:  
(Start: 1 @73777 has 10 MA's), (9, 73873), (12, 73894), (13, 73900), (14, 73906), (16, 73939), (18, 73981),

Gene: Circinus\_111 Start: 73758, Stop: 73943, Start Num: 3  
Candidate Starts for Circinus\_111:  
(Start: 3 @73758 has 4 MA's), (11, 73842), (13, 73860), (18, 73932),

Gene: Comrade\_120 Start: 75758, Stop: 75973, Start Num: 1  
Candidate Starts for Comrade\_120:  
(Start: 1 @75758 has 10 MA's), (9, 75854), (12, 75875), (14, 75887), (16, 75920), (18, 75962),

Gene: Emma1919\_124 Start: 75111, Stop: 75287, Start Num: 4  
Candidate Starts for Emma1919\_124:  
(Start: 2 @75093 has 6 MA's), (Start: 4 @75111 has 4 MA's), (6, 75141), (8, 75159), (12, 75186), (13, 75192), (18, 75276),

Gene: Faust\_122 Start: 76380, Stop: 76604, Start Num: 1  
Candidate Starts for Faust\_122:  
(Start: 1 @76380 has 10 MA's), (8, 76479), (10, 76488), (14, 76518), (15, 76527), (16, 76551), (18, 76593),

Gene: Forrest\_129 Start: 77900, Stop: 78094, Start Num: 2  
Candidate Starts for Forrest\_129:  
(Start: 2 @77900 has 6 MA's), (Start: 4 @77918 has 4 MA's), (6, 77948), (8, 77966), (12, 77993), (13, 77999), (14, 78005), (17, 78059),

Gene: Francob\_121 Start: 75354, Stop: 75545, Start Num: 2  
Candidate Starts for Francob\_121:  
(Start: 2 @75354 has 6 MA's), (6, 75399), (7, 75411), (8, 75417), (12, 75444), (13, 75450), (18, 75534),

Gene: Gilson\_124 Start: 75073, Stop: 75249, Start Num: 4  
Candidate Starts for Gilson\_124:  
(Start: 2 @75055 has 6 MA's), (Start: 4 @75073 has 4 MA's), (6, 75103), (8, 75121), (12, 75148), (13, 75154), (18, 75238),

Gene: Jada\_125 Start: 76830, Stop: 77024, Start Num: 2  
Candidate Starts for Jada\_125:  
(Start: 2 @76830 has 6 MA's), (Start: 4 @76848 has 4 MA's), (6, 76878), (8, 76896), (12, 76923), (13, 76929), (14, 76935), (17, 76989),

Gene: Karp\_120 Start: 75729, Stop: 75944, Start Num: 1

Candidate Starts for Karp\_120:

(Start: 1 @75729 has 10 MA's), (9, 75825), (12, 75846), (14, 75858), (16, 75891), (18, 75933),

Gene: Kenrey\_126 Start: 76223, Stop: 76417, Start Num: 2

Candidate Starts for Kenrey\_126:

(Start: 2 @76223 has 6 MA's), (Start: 4 @76241 has 4 MA's), (6, 76271), (8, 76289), (12, 76316), (13, 76322), (14, 76328),

Gene: Limpid\_122 Start: 76297, Stop: 76512, Start Num: 1

Candidate Starts for Limpid\_122:

(Start: 1 @76297 has 10 MA's), (5, 76354), (11, 76402), (16, 76459), (18, 76501),

Gene: MeganTheeKilla\_123 Start: 75278, Stop: 75454, Start Num: 4

Candidate Starts for MeganTheeKilla\_123:

(Start: 2 @75260 has 6 MA's), (Start: 4 @75278 has 4 MA's), (6, 75308), (8, 75326), (12, 75353), (13, 75359), (18, 75443),

Gene: Moab\_125 Start: 77767, Stop: 77961, Start Num: 2

Candidate Starts for Moab\_125:

(Start: 2 @77767 has 6 MA's), (6, 77815), (8, 77833), (12, 77860), (13, 77866), (18, 77950),

Gene: Muntaha\_117 Start: 72382, Stop: 72567, Start Num: 3

Candidate Starts for Muntaha\_117:

(Start: 3 @72382 has 4 MA's), (11, 72466), (13, 72484), (18, 72556),

Gene: Patelgo\_127 Start: 77997, Stop: 78191, Start Num: 2

Candidate Starts for Patelgo\_127:

(Start: 2 @77997 has 6 MA's), (6, 78045), (8, 78063), (12, 78090), (13, 78096), (18, 78180),

Gene: Phredrick\_124 Start: 74874, Stop: 75050, Start Num: 4

Candidate Starts for Phredrick\_124:

(Start: 2 @74856 has 6 MA's), (Start: 4 @74874 has 4 MA's), (6, 74904), (8, 74922), (12, 74949), (13, 74955), (14, 74961), (18, 75039),

Gene: SeresaTree\_122 Start: 75762, Stop: 75986, Start Num: 1

Candidate Starts for SeresaTree\_122:

(Start: 1 @75762 has 10 MA's), (8, 75861), (10, 75870), (14, 75900), (15, 75909), (16, 75933), (18, 75975),

Gene: SparkleGoddess\_122 Start: 76058, Stop: 76273, Start Num: 1

Candidate Starts for SparkleGoddess\_122:

(Start: 1 @76058 has 10 MA's), (9, 76154), (12, 76175), (14, 76187), (16, 76220), (18, 76262),

Gene: Stigma\_122 Start: 76066, Stop: 76281, Start Num: 1

Candidate Starts for Stigma\_122:

(Start: 1 @76066 has 10 MA's), (9, 76162), (12, 76183), (14, 76195), (16, 76228), (18, 76270),

Gene: Wakanda\_115 Start: 72224, Stop: 72409, Start Num: 3

Candidate Starts for Wakanda\_115:

(Start: 3 @72224 has 4 MA's), (11, 72308), (13, 72326), (18, 72398),