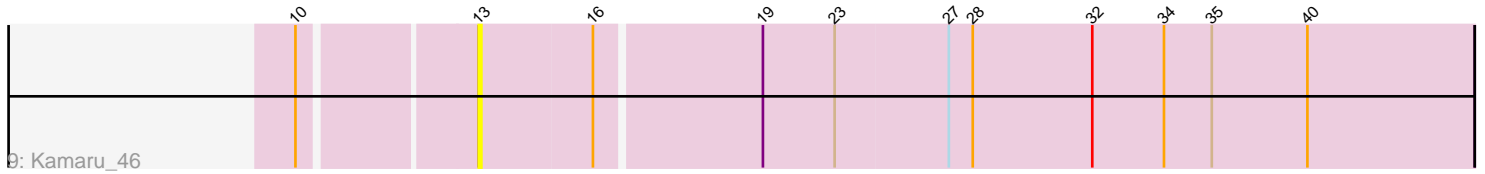
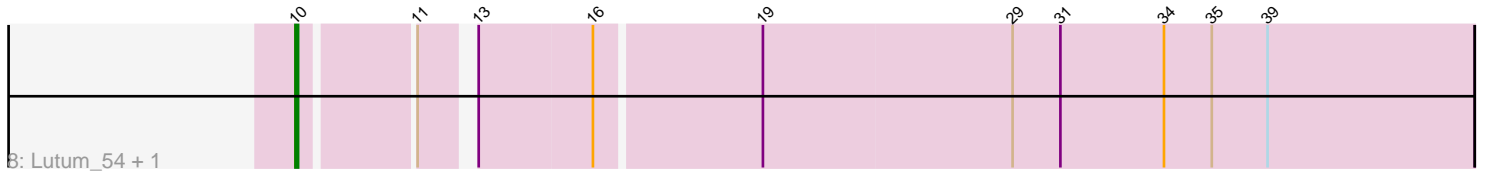
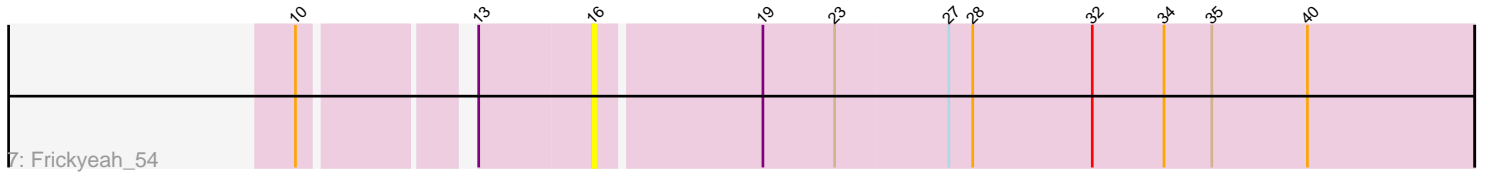
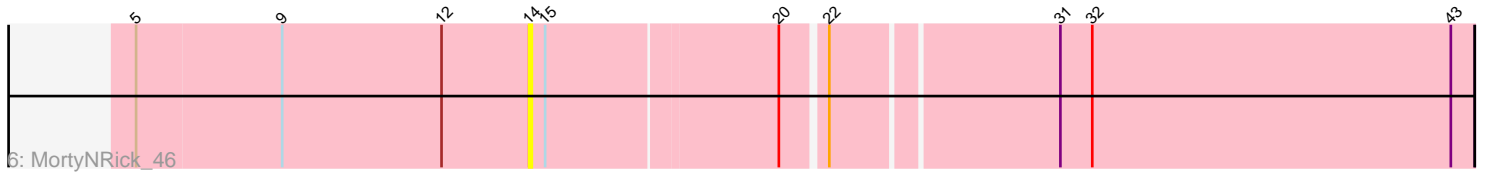
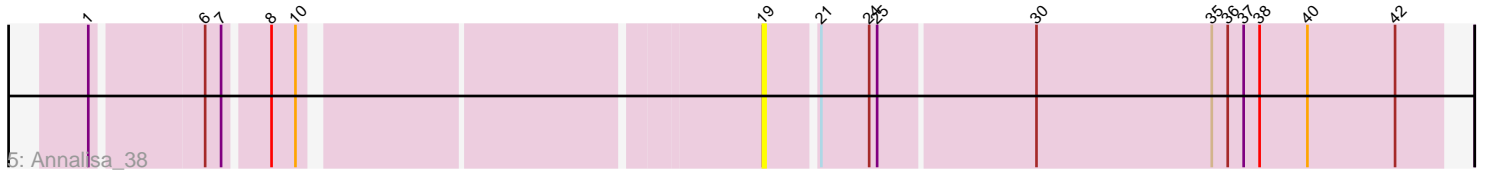
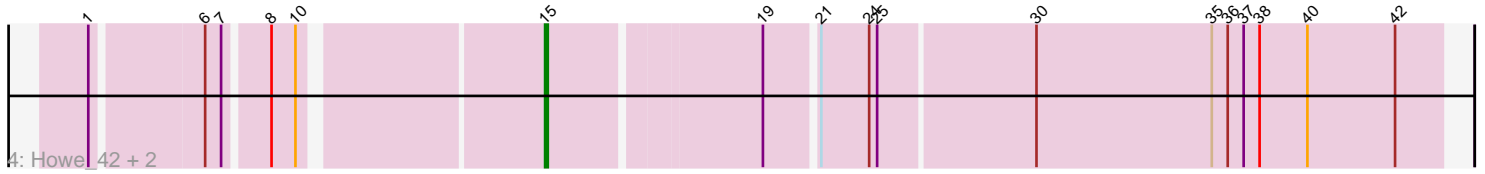
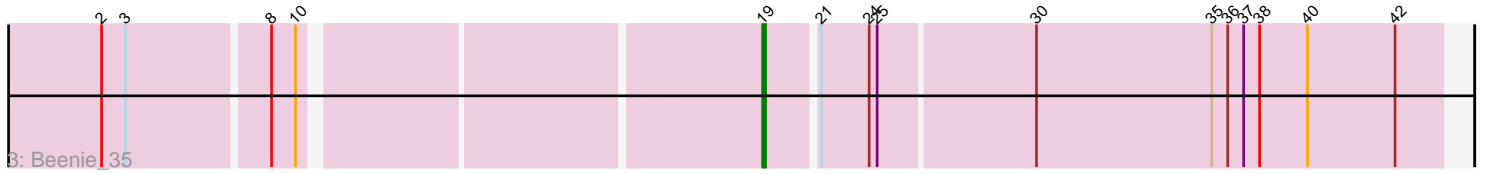
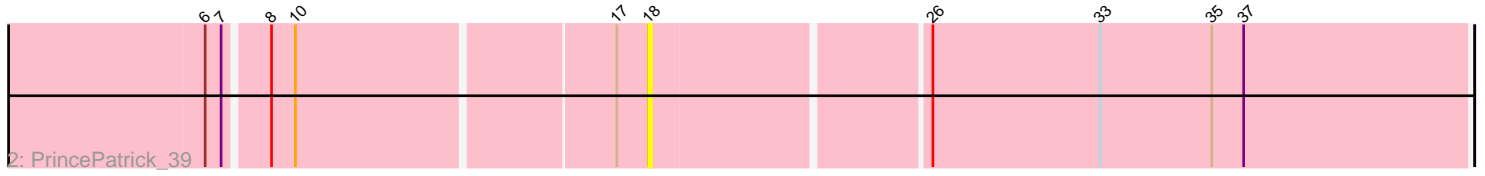
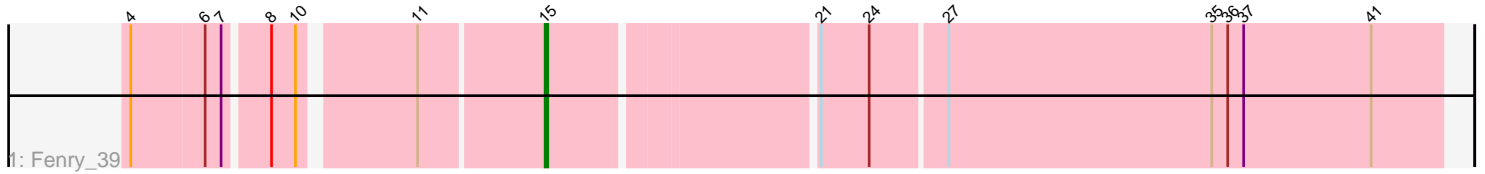


# Pham 155179



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 155179 Report

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

Pham number 155179 has 12 members, 5 are drafts.

Phages represented in each track:

- Track 1 : Fenry\_39
- Track 2 : PrincePatrick\_39
- Track 3 : Beenie\_35
- Track 4 : Howe\_42, Hortense\_42, Twinkle\_41
- Track 5 : Annalisa\_38
- Track 6 : MortyNRick\_46
- Track 7 : Frickyeah\_54
- Track 8 : Lutum\_54, Kenna\_53
- Track 9 : Kamaru\_46

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

The start number called the most often in the published annotations is 15, it was called in 4 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Fenry\_39, Hortense\_42, Howe\_42, Twinkle\_41,

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

- MortyNRick\_46,

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

- Annalisa\_38, Beenie\_35, Frickyeah\_54, Kamaru\_46, Kenna\_53, Lutum\_54, PrincePatrick\_39,

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

Start 10:

- Found in 11 of 12 ( 91.7% ) of genes in pham
- Manual Annotations of this start: 2 of 7
- Called 18.2% of time when present
- Phage (with cluster) where this start called: Kenna\_53 (DN1), Lutum\_54 (DN1),

Start 13:

- Found in 4 of 12 ( 33.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Kamaru\_46 (DN1),

Start 14:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MortyNRick\_46 (DN),

Start 15:

- Found in 5 of 12 ( 41.7% ) of genes in pham
- Manual Annotations of this start: 4 of 7
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Fenry\_39 (CV), Hortense\_42 (CZ4), Howe\_42 (CZ4), Twinkle\_41 (CZ4),

Start 16:

- Found in 4 of 12 ( 33.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 25.0% of time when present
- Phage (with cluster) where this start called: Frickyeah\_54 (DN1),

Start 18:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: PrincePatrick\_39 (CV),

Start 19:

- Found in 9 of 12 ( 75.0% ) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 22.2% of time when present
- Phage (with cluster) where this start called: Annalisa\_38 (CZ4), Beenie\_35 (CZ4),

### **Summary by clusters:**

There are 4 clusters represented in this pham: DN, DN1, CV, CZ4,

Info for manual annotations of cluster CV:

- Start number 15 was manually annotated 1 time for cluster CV.

Info for manual annotations of cluster CZ4:

- Start number 15 was manually annotated 3 times for cluster CZ4.
- Start number 19 was manually annotated 1 time for cluster CZ4.

Info for manual annotations of cluster DN1:

- Start number 10 was manually annotated 2 times for cluster DN1.

### **Gene Information:**

Gene: Annalisa\_38 Start: 30127, Stop: 29879, Start Num: 19

Candidate Starts for Annalisa\_38:

(1, 30355), (6, 30316), (7, 30310), (8, 30295), (Start: 10 @30286 has 2 MA's), (Start: 19 @30127 has 1 MA's), (21, 30109), (24, 30091), (25, 30088), (30, 30031), (35, 29965), (36, 29959), (37, 29953), (38, 29947), (40, 29929), (42, 29896),

Gene: Beenie\_35 Start: 30755, Stop: 30507, Start Num: 19

Candidate Starts for Beenie\_35:

(2, 30983), (3, 30974), (8, 30923), (Start: 10 @30914 has 2 MA's), (Start: 19 @30755 has 1 MA's), (21, 30737), (24, 30719), (25, 30716), (30, 30659), (35, 30593), (36, 30587), (37, 30581), (38, 30575), (40, 30557), (42, 30524),

Gene: Fenry\_39 Start: 32680, Stop: 32357, Start Num: 15

Candidate Starts for Fenry\_39:

(4, 32821), (6, 32794), (7, 32788), (8, 32773), (Start: 10 @32764 has 2 MA's), (11, 32725), (Start: 15 @32680 has 4 MA's), (21, 32587), (24, 32569), (27, 32542), (35, 32443), (36, 32437), (37, 32431), (41, 32383),

Gene: Frickyeah\_54 Start: 33610, Stop: 33284, Start Num: 16

Candidate Starts for Frickyeah\_54:

(Start: 10 @33706 has 2 MA's), (13, 33652), (16, 33610), (Start: 19 @33550 has 1 MA's), (23, 33523), (27, 33481), (28, 33472), (32, 33427), (34, 33400), (35, 33382), (40, 33346),

Gene: Hortense\_42 Start: 34200, Stop: 33877, Start Num: 15

Candidate Starts for Hortense\_42:

(1, 34353), (6, 34314), (7, 34308), (8, 34293), (Start: 10 @34284 has 2 MA's), (Start: 15 @34200 has 4 MA's), (Start: 19 @34125 has 1 MA's), (21, 34107), (24, 34089), (25, 34086), (30, 34029), (35, 33963), (36, 33957), (37, 33951), (38, 33945), (40, 33927), (42, 33894),

Gene: Howe\_42 Start: 34200, Stop: 33877, Start Num: 15

Candidate Starts for Howe\_42:

(1, 34353), (6, 34314), (7, 34308), (8, 34293), (Start: 10 @34284 has 2 MA's), (Start: 15 @34200 has 4 MA's), (Start: 19 @34125 has 1 MA's), (21, 34107), (24, 34089), (25, 34086), (30, 34029), (35, 33963), (36, 33957), (37, 33951), (38, 33945), (40, 33927), (42, 33894),

Gene: Kamaru\_46 Start: 33198, Stop: 32830, Start Num: 13

Candidate Starts for Kamaru\_46:

(Start: 10 @33252 has 2 MA's), (13, 33198), (16, 33156), (Start: 19 @33096 has 1 MA's), (23, 33069), (27, 33027), (28, 33018), (32, 32973), (34, 32946), (35, 32928), (40, 32892),

Gene: Kenna\_53 Start: 35132, Stop: 34710, Start Num: 10

Candidate Starts for Kenna\_53:

(Start: 10 @35132 has 2 MA's), (11, 35093), (13, 35078), (16, 35036), (Start: 19 @34976 has 1 MA's), (29, 34883), (31, 34865), (34, 34826), (35, 34808), (39, 34787),

Gene: Lutum\_54 Start: 35132, Stop: 34710, Start Num: 10

Candidate Starts for Lutum\_54:

(Start: 10 @35132 has 2 MA's), (11, 35093), (13, 35078), (16, 35036), (Start: 19 @34976 has 1 MA's), (29, 34883), (31, 34865), (34, 34826), (35, 34808), (39, 34787),

Gene: MortyNRick\_46 Start: 35061, Stop: 34720, Start Num: 14

Candidate Starts for MortyNRick\_46:

(5, 35208), (9, 35154), (12, 35094), (14, 35061), (Start: 15 @35055 has 4 MA's), (20, 34971), (22, 34956), (31, 34875), (32, 34863), (43, 34728),

Gene: PrincePatrick\_39 Start: 31293, Stop: 30994, Start Num: 18

Candidate Starts for PrincePatrick\_39:

(6, 31449), (7, 31443), (8, 31428), (Start: 10 @31419 has 2 MA's), (17, 31305), (18, 31293), (26, 31194), (33, 31131), (35, 31089), (37, 31077),

Gene: Twinkle\_41 Start: 35259, Stop: 34936, Start Num: 15

Candidate Starts for Twinkle\_41:

(1, 35412), (6, 35373), (7, 35367), (8, 35352), (Start: 10 @35343 has 2 MA's), (Start: 15 @35259 has 4 MA's), (Start: 19 @35184 has 1 MA's), (21, 35166), (24, 35148), (25, 35145), (30, 35088), (35, 35022), (36, 35016), (37, 35010), (38, 35004), (40, 34986), (42, 34953),