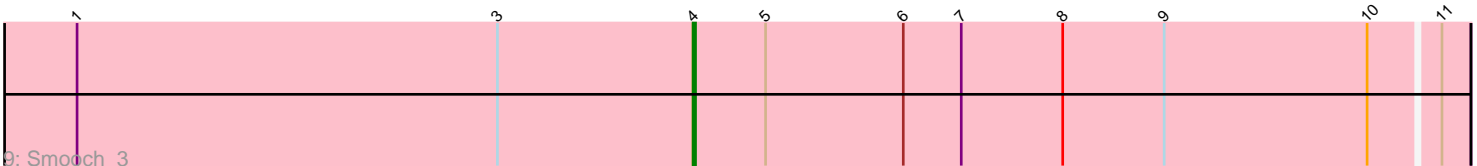
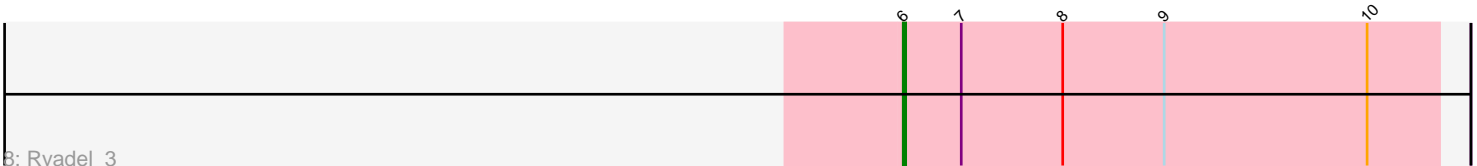
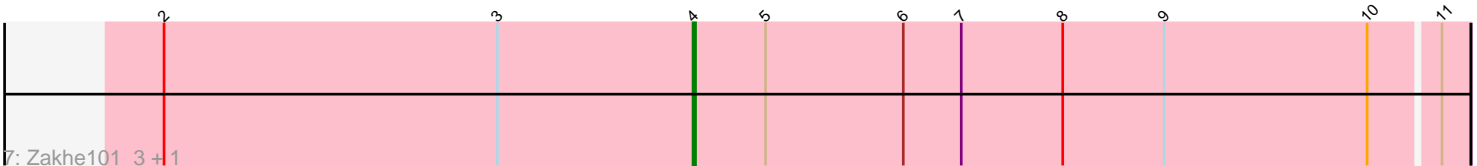
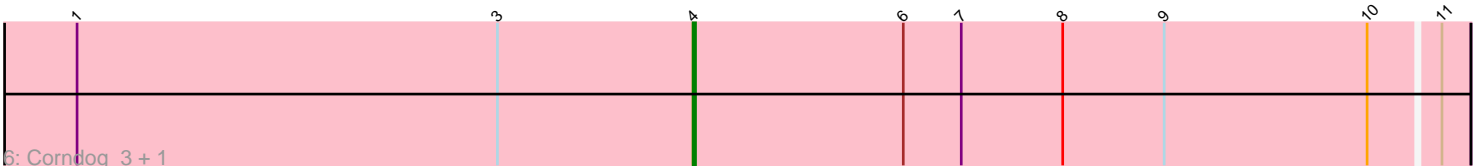
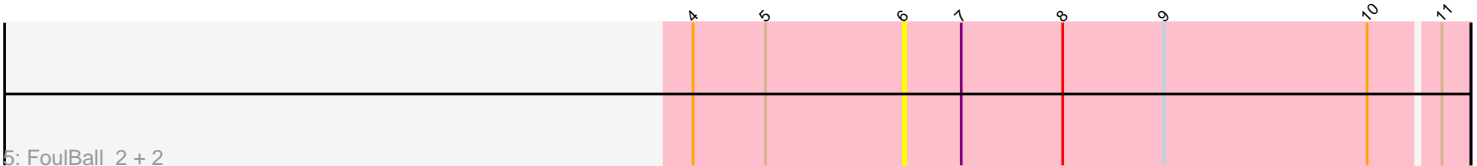
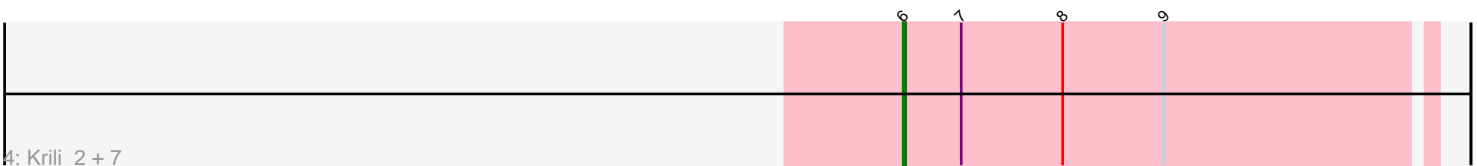
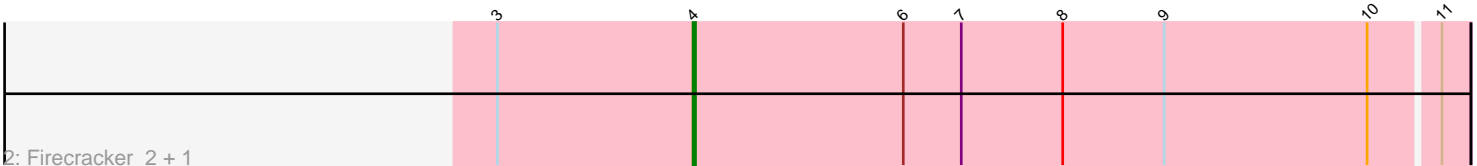
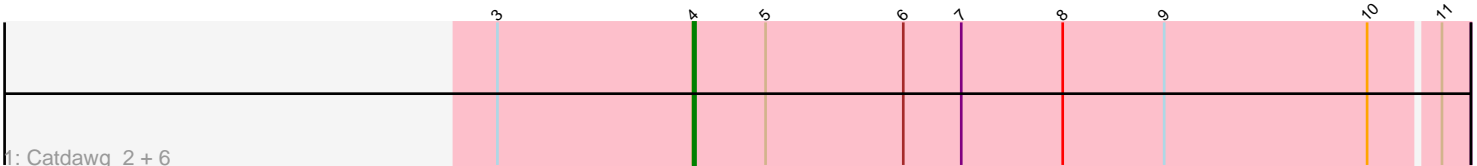


Pham 99734



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 99734 Report

This analysis was run 04/28/24 on database version 559.

Pham number 99734 has 28 members, 6 are drafts.

Phages represented in each track:

- Track 1 : Catdawg\_2, JangDynasty\_2, Familton\_3, SchoolBus\_2, TelAviv\_2, Shida\_2, Idergollasper\_2
- Track 2 : Firecracker\_2, Winget\_2
- Track 3 : Wildflower\_2, Ashwin\_3
- Track 4 : Krili\_2, Mori\_2, Vorrrps\_2, Schuy\_2, MadKillah\_2, NiebruSaylor\_2, Blessica\_2, Murai\_2
- Track 5 : FoulBall\_2, Bora\_2, Alkhayr\_2
- Track 6 : Corndog\_3, YungJamal\_3
- Track 7 : Zakhe101\_3, Dylan\_3
- Track 8 : Ryadel\_3
- Track 9 : Smooch\_3

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

The start number called the most often in the published annotations is 4, it was called in 14 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Catdawg\_2, Corndog\_3, Dylan\_3, Familton\_3, Firecracker\_2, Idergollasper\_2, JangDynasty\_2, SchoolBus\_2, Shida\_2, Smooch\_3, TelAviv\_2, Winget\_2, YungJamal\_3, Zakhe101\_3,

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

- Alkhayr\_2, Ashwin\_3, Bora\_2, FoulBall\_2, Wildflower\_2,

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

- Blessica\_2, Krili\_2, MadKillah\_2, Mori\_2, Murai\_2, NiebruSaylor\_2, Ryadel\_3, Schuy\_2, Vorrrps\_2,

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

Start 4:

- Found in 19 of 28 ( 67.9% ) of genes in pham
- Manual Annotations of this start: 14 of 22

- Called 73.7% of time when present
- Phage (with cluster) where this start called: Catdawg\_2 (O), Corndog\_3 (O), Dylan\_3 (O), Familton\_3 (O), Firecracker\_2 (O), Idergollasper\_2 (O), JangDynasty\_2 (O), SchoolBus\_2 (O), Shida\_2 (O), Smooch\_3 (O), TelAviv\_2 (O), Winget\_2 (O), YungJamal\_3 (O), Zakhe101\_3 (O),

Start 6:

- Found in 28 of 28 ( 100.0% ) of genes in pham
- Manual Annotations of this start: 8 of 22
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Alkhayr\_2 (O), Ashwin\_3 (O), Blessica\_2 (O), Bora\_2 (O), FoulBall\_2 (O), Krili\_2 (O), MadKillah\_2 (O), Mori\_2 (O), Murai\_2 (O), NiebruSaylor\_2 (O), Ryadel\_3 (O), Schuy\_2 (O), Vorrrps\_2 (O), Wildflower\_2 (O),

### Summary by clusters:

There is one cluster represented in this pham: O

Info for manual annotations of cluster O:

- Start number 4 was manually annotated 14 times for cluster O.
- Start number 6 was manually annotated 8 times for cluster O.

### Gene Information:

Gene: Alkhayr\_2 Start: 589, Stop: 359, Start Num: 6

Candidate Starts for Alkhayr\_2:

(Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481), (10, 397), (11, 370),

Gene: Ashwin\_3 Start: 983, Stop: 753, Start Num: 6

Candidate Starts for Ashwin\_3:

(2, 1289), (3, 1151), (Start: 4 @1070 has 14 MA's), (Start: 6 @983 has 8 MA's), (7, 959), (8, 917), (9, 875), (10, 791), (11, 764),

Gene: Blessica\_2 Start: 626, Stop: 411, Start Num: 6

Candidate Starts for Blessica\_2:

(Start: 6 @626 has 8 MA's), (7, 602), (8, 560), (9, 518),

Gene: Bora\_2 Start: 589, Stop: 359, Start Num: 6

Candidate Starts for Bora\_2:

(Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481), (10, 397), (11, 370),

Gene: Catdawg\_2 Start: 675, Stop: 358, Start Num: 4

Candidate Starts for Catdawg\_2:

(3, 756), (Start: 4 @675 has 14 MA's), (5, 645), (Start: 6 @588 has 8 MA's), (7, 564), (8, 522), (9, 480), (10, 396), (11, 369),

Gene: Corndog\_3 Start: 968, Stop: 651, Start Num: 4

Candidate Starts for Corndog\_3:

(1, 1223), (3, 1049), (Start: 4 @968 has 14 MA's), (Start: 6 @881 has 8 MA's), (7, 857), (8, 815), (9, 773), (10, 689), (11, 662),

Gene: Dylan\_3 Start: 1074, Stop: 757, Start Num: 4

Candidate Starts for Dylan\_3:

(2, 1293), (3, 1155), (Start: 4 @1074 has 14 MA's), (5, 1044), (Start: 6 @987 has 8 MA's), (7, 963), (8, 921), (9, 879), (10, 795), (11, 768),

Gene: Familton\_3 Start: 676, Stop: 359, Start Num: 4

Candidate Starts for Familton\_3:

(3, 757), (Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481), (10, 397), (11, 370),

Gene: Firecracker\_2 Start: 677, Stop: 360, Start Num: 4

Candidate Starts for Firecracker\_2:

(3, 758), (Start: 4 @677 has 14 MA's), (Start: 6 @590 has 8 MA's), (7, 566), (8, 524), (9, 482), (10, 398), (11, 371),

Gene: FoulBall\_2 Start: 589, Stop: 359, Start Num: 6

Candidate Starts for FoulBall\_2:

(Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481), (10, 397), (11, 370),

Gene: Idergollasper\_2 Start: 676, Stop: 359, Start Num: 4

Candidate Starts for Idergollasper\_2:

(3, 757), (Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481), (10, 397), (11, 370),

Gene: JangDynasty\_2 Start: 681, Stop: 364, Start Num: 4

Candidate Starts for JangDynasty\_2:

(3, 762), (Start: 4 @681 has 14 MA's), (5, 651), (Start: 6 @594 has 8 MA's), (7, 570), (8, 528), (9, 486), (10, 402), (11, 375),

Gene: Krili\_2 Start: 628, Stop: 413, Start Num: 6

Candidate Starts for Krili\_2:

(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: MadKillah\_2 Start: 628, Stop: 413, Start Num: 6

Candidate Starts for MadKillah\_2:

(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: Mori\_2 Start: 628, Stop: 413, Start Num: 6

Candidate Starts for Mori\_2:

(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: Murai\_2 Start: 628, Stop: 413, Start Num: 6

Candidate Starts for Murai\_2:

(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: NiebruSaylor\_2 Start: 628, Stop: 413, Start Num: 6

Candidate Starts for NiebruSaylor\_2:

(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: Ryadel\_3 Start: 740, Stop: 519, Start Num: 6  
Candidate Starts for Ryadel\_3:  
(Start: 6 @740 has 8 MA's), (7, 716), (8, 674), (9, 632), (10, 548),

Gene: SchoolBus\_2 Start: 676, Stop: 359, Start Num: 4  
Candidate Starts for SchoolBus\_2:  
(3, 757), (Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481),  
(10, 397), (11, 370),

Gene: Schuy\_2 Start: 628, Stop: 413, Start Num: 6  
Candidate Starts for Schuy\_2:  
(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: Shida\_2 Start: 676, Stop: 359, Start Num: 4  
Candidate Starts for Shida\_2:  
(3, 757), (Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481),  
(10, 397), (11, 370),

Gene: Smooch\_3 Start: 966, Stop: 649, Start Num: 4  
Candidate Starts for Smooch\_3:  
(1, 1221), (3, 1047), (Start: 4 @966 has 14 MA's), (5, 936), (Start: 6 @879 has 8 MA's), (7, 855), (8, 813), (9, 771), (10, 687), (11, 660),

Gene: TelAviv\_2 Start: 676, Stop: 359, Start Num: 4  
Candidate Starts for TelAviv\_2:  
(3, 757), (Start: 4 @676 has 14 MA's), (5, 646), (Start: 6 @589 has 8 MA's), (7, 565), (8, 523), (9, 481),  
(10, 397), (11, 370),

Gene: Vorrrps\_2 Start: 628, Stop: 413, Start Num: 6  
Candidate Starts for Vorrrps\_2:  
(Start: 6 @628 has 8 MA's), (7, 604), (8, 562), (9, 520),

Gene: Wildflower\_2 Start: 635, Stop: 405, Start Num: 6  
Candidate Starts for Wildflower\_2:  
(2, 941), (3, 803), (Start: 4 @722 has 14 MA's), (Start: 6 @635 has 8 MA's), (7, 611), (8, 569), (9, 527),  
(10, 443), (11, 416),

Gene: Winget\_2 Start: 677, Stop: 360, Start Num: 4  
Candidate Starts for Winget\_2:  
(3, 758), (Start: 4 @677 has 14 MA's), (Start: 6 @590 has 8 MA's), (7, 566), (8, 524), (9, 482), (10, 398), (11, 371),

Gene: YungJamal\_3 Start: 966, Stop: 649, Start Num: 4  
Candidate Starts for YungJamal\_3:  
(1, 1221), (3, 1047), (Start: 4 @966 has 14 MA's), (Start: 6 @879 has 8 MA's), (7, 855), (8, 813), (9, 771), (10, 687), (11, 660),

Gene: Zakhe101\_3 Start: 1074, Stop: 757, Start Num: 4  
Candidate Starts for Zakhe101\_3:  
(2, 1293), (3, 1155), (Start: 4 @1074 has 14 MA's), (5, 1044), (Start: 6 @987 has 8 MA's), (7, 963), (8, 921), (9, 879), (10, 795), (11, 768),