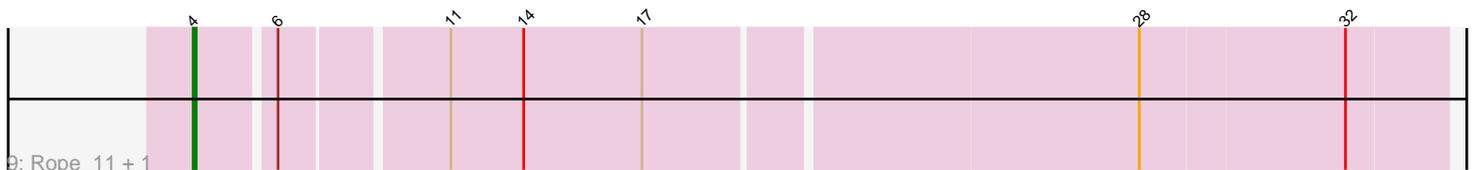
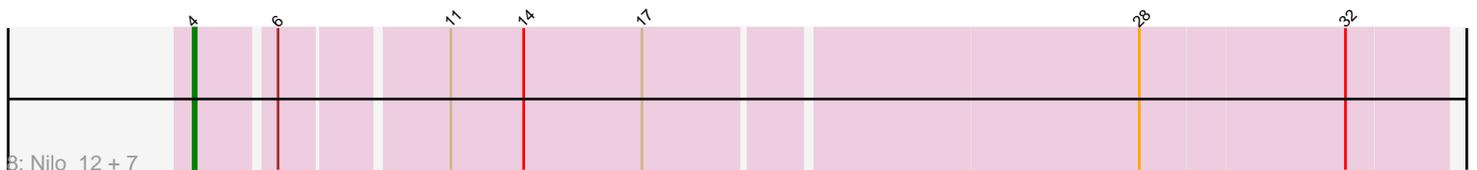
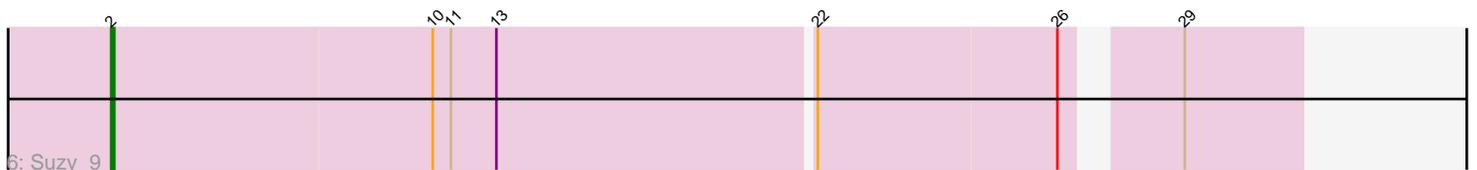
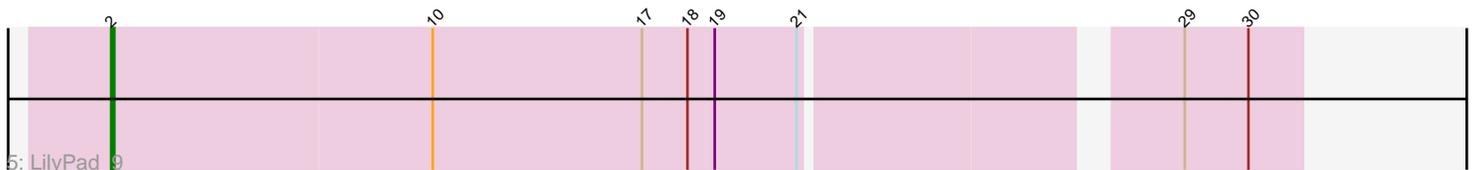
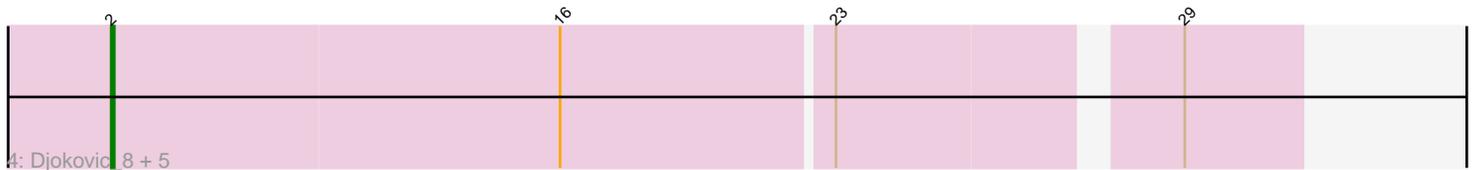
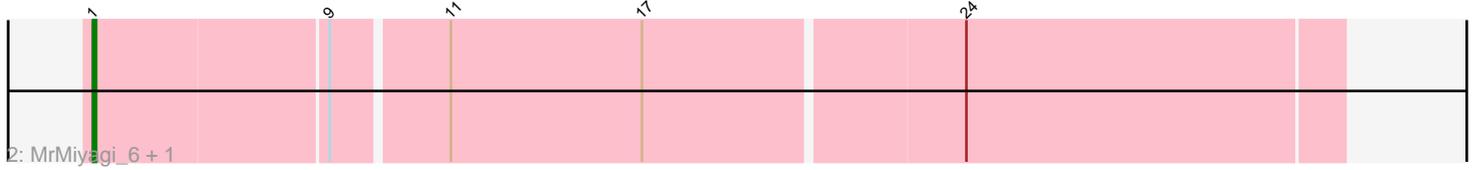
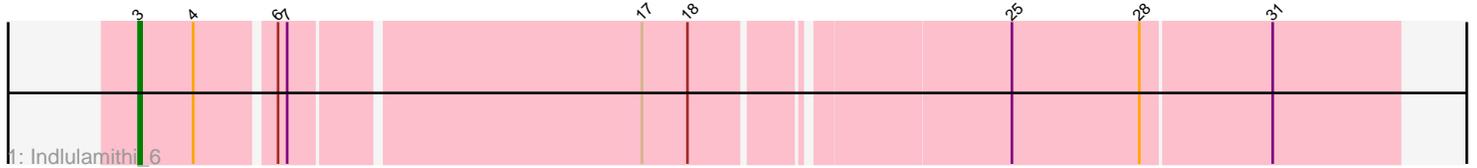


Pham 291514



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 291514 Report

This analysis was run 03/28/26 on database version 641.

Pham number 291514 has 23 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Indlulamithi\_6
- Track 2 : MrMiyagi\_6, Fowlmouth\_6
- Track 3 : Cuke\_5
- Track 4 : Djokovic\_8, Terapin\_8, Sienna\_8, BiteSize\_8, Beyoncage\_8, Madi\_8
- Track 5 : LilyPad\_9
- Track 6 : Suzy\_9
- Track 7 : LittleFella\_9
- Track 8 : Nilo\_12, Zenon\_12, Papyrus\_11, Yelo\_11, Send513\_11, Weiss13\_11, MontyDev\_11, Candle\_11
- Track 9 : Rope\_11, Riparian\_11

### ***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 9 of the 22 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Candle\_11, MontyDev\_11, Nilo\_12, Papyrus\_11, Riparian\_11, Rope\_11, Send513\_11, Weiss13\_11, Yelo\_11, Zenon\_12,

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

- Indlulamithi\_6,

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

- Beyoncage\_8, BiteSize\_8, Cuke\_5, Djokovic\_8, Fowlmouth\_6, LilyPad\_9, LittleFella\_9, Madi\_8, MrMiyagi\_6, Sienna\_8, Suzy\_9, Terapin\_8,

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

Start 1:

- Found in 3 of 23 ( 13.0% ) of genes in pham
- Manual Annotations of this start: 3 of 22
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Cuke\_5 (AC), Fowlmouth\_6 (AC), MrMiyagi\_6 (AC),

#### Start 2:

- Found in 8 of 23 ( 34.8% ) of genes in pham
- Manual Annotations of this start: 8 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Beyoncage\_8 (DG1), BiteSize\_8 (DG1), Djokovic\_8 (DG1), LilyPad\_9 (DG1), Madi\_8 (DG1), Sienna\_8 (DG1), Suzy\_9 (DG1), Terapin\_8 (DG1),

#### Start 3:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Indlulamithi\_6 (AC),

#### Start 4:

- Found in 11 of 23 ( 47.8% ) of genes in pham
- Manual Annotations of this start: 9 of 22
- Called 90.9% of time when present
- Phage (with cluster) where this start called: Candle\_11 (R), MontyDev\_11 (R), Nilo\_12 (R), Papyrus\_11 (R), Riparian\_11 (R), Rope\_11 (R), Send513\_11 (R), Weiss13\_11 (R), Yelo\_11 (R), Zenon\_12 (R),

#### Start 5:

- Found in 1 of 23 ( 4.3% ) of genes in pham
- Manual Annotations of this start: 1 of 22
- Called 100.0% of time when present
- Phage (with cluster) where this start called: LittleFella\_9 (DG2),

### **Summary by clusters:**

There are 4 clusters represented in this pham: DG2, R, DG1, AC,

Info for manual annotations of cluster AC:

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

Info for manual annotations of cluster DG1:

- Start number 2 was manually annotated 8 times for cluster DG1.

Info for manual annotations of cluster DG2:

- Start number 5 was manually annotated 1 time for cluster DG2.

Info for manual annotations of cluster R:

- Start number 4 was manually annotated 9 times for cluster R.

### **Gene Information:**

Gene: Beyoncage\_8 Start: 5498, Stop: 5872, Start Num: 2

Candidate Starts for Beyoncage\_8:

(Start: 2 @5498 has 8 MA's), (16, 5645), (23, 5732), (29, 5834),

Gene: BiteSize\_8 Start: 5498, Stop: 5872, Start Num: 2

Candidate Starts for BiteSize\_8:

(Start: 2 @5498 has 8 MA's), (16, 5645), (23, 5732), (29, 5834),

Gene: Candle\_11 Start: 6411, Stop: 6803, Start Num: 4

Candidate Starts for Candle\_11:

(Start: 4 @6411 has 9 MA's), (6, 6435), (11, 6486), (14, 6510), (17, 6549), (28, 6705), (32, 6771),

Gene: Cuke\_5 Start: 3636, Stop: 4034, Start Num: 1

Candidate Starts for Cuke\_5:

(Start: 1 @3636 has 3 MA's), (6, 3696), (9, 3711), (11, 3747), (17, 3810), (25, 3927), (28, 3969),

Gene: Djokovic\_8 Start: 5498, Stop: 5872, Start Num: 2

Candidate Starts for Djokovic\_8:

(Start: 2 @5498 has 8 MA's), (16, 5645), (23, 5732), (29, 5834),

Gene: Fowlmouth\_6 Start: 3802, Stop: 4200, Start Num: 1

Candidate Starts for Fowlmouth\_6:

(Start: 1 @3802 has 3 MA's), (9, 3877), (11, 3913), (17, 3976), (24, 4078),

Gene: Indlulamithi\_6 Start: 3798, Stop: 4190, Start Num: 3

Candidate Starts for Indlulamithi\_6:

(Start: 3 @3798 has 1 MA's), (Start: 4 @3816 has 9 MA's), (6, 3840), (7, 3843), (17, 3954), (18, 3969), (25, 4065), (28, 4107), (31, 4149),

Gene: LilyPad\_9 Start: 6255, Stop: 6629, Start Num: 2

Candidate Starts for LilyPad\_9:

(Start: 2 @6255 has 8 MA's), (10, 6360), (17, 6429), (18, 6444), (19, 6453), (21, 6480), (29, 6591), (30, 6612),

Gene: LittleFella\_9 Start: 7272, Stop: 7697, Start Num: 5

Candidate Starts for LittleFella\_9:

(Start: 5 @7272 has 1 MA's), (8, 7299), (12, 7347), (15, 7377), (17, 7407), (20, 7440), (21, 7458), (27, 7545), (33, 7647),

Gene: Madi\_8 Start: 5498, Stop: 5872, Start Num: 2

Candidate Starts for Madi\_8:

(Start: 2 @5498 has 8 MA's), (16, 5645), (23, 5732), (29, 5834),

Gene: MontyDev\_11 Start: 6069, Stop: 6461, Start Num: 4

Candidate Starts for MontyDev\_11:

(Start: 4 @6069 has 9 MA's), (6, 6093), (11, 6144), (14, 6168), (17, 6207), (28, 6363), (32, 6429),

Gene: MrMiyagi\_6 Start: 3802, Stop: 4200, Start Num: 1

Candidate Starts for MrMiyagi\_6:

(Start: 1 @3802 has 3 MA's), (9, 3877), (11, 3913), (17, 3976), (24, 4078),

Gene: Nilo\_12 Start: 6411, Stop: 6803, Start Num: 4

Candidate Starts for Nilo\_12:

(Start: 4 @6411 has 9 MA's), (6, 6435), (11, 6486), (14, 6510), (17, 6549), (28, 6705), (32, 6771),

Gene: Papyrus\_11 Start: 6070, Stop: 6462, Start Num: 4  
Candidate Starts for Papyrus\_11:  
(Start: 4 @6070 has 9 MA's), (6, 6094), (11, 6145), (14, 6169), (17, 6208), (28, 6364), (32, 6430),

Gene: Riparian\_11 Start: 5869, Stop: 6261, Start Num: 4  
Candidate Starts for Riparian\_11:  
(Start: 4 @5869 has 9 MA's), (6, 5893), (11, 5944), (14, 5968), (17, 6007), (28, 6163), (32, 6229),

Gene: Rope\_11 Start: 6061, Stop: 6453, Start Num: 4  
Candidate Starts for Rope\_11:  
(Start: 4 @6061 has 9 MA's), (6, 6085), (11, 6136), (14, 6160), (17, 6199), (28, 6355), (32, 6421),

Gene: Send513\_11 Start: 6411, Stop: 6803, Start Num: 4  
Candidate Starts for Send513\_11:  
(Start: 4 @6411 has 9 MA's), (6, 6435), (11, 6486), (14, 6510), (17, 6549), (28, 6705), (32, 6771),

Gene: Sienna\_8 Start: 5498, Stop: 5872, Start Num: 2  
Candidate Starts for Sienna\_8:  
(Start: 2 @5498 has 8 MA's), (16, 5645), (23, 5732), (29, 5834),

Gene: Suzy\_9 Start: 6741, Stop: 7115, Start Num: 2  
Candidate Starts for Suzy\_9:  
(Start: 2 @6741 has 8 MA's), (10, 6846), (11, 6852), (13, 6867), (22, 6969), (26, 7047), (29, 7077),

Gene: Terapin\_8 Start: 5498, Stop: 5872, Start Num: 2  
Candidate Starts for Terapin\_8:  
(Start: 2 @5498 has 8 MA's), (16, 5645), (23, 5732), (29, 5834),

Gene: Weiss13\_11 Start: 6100, Stop: 6492, Start Num: 4  
Candidate Starts for Weiss13\_11:  
(Start: 4 @6100 has 9 MA's), (6, 6124), (11, 6175), (14, 6199), (17, 6238), (28, 6394), (32, 6460),

Gene: Yelo\_11 Start: 6411, Stop: 6803, Start Num: 4  
Candidate Starts for Yelo\_11:  
(Start: 4 @6411 has 9 MA's), (6, 6435), (11, 6486), (14, 6510), (17, 6549), (28, 6705), (32, 6771),

Gene: Zenon\_12 Start: 6413, Stop: 6805, Start Num: 4  
Candidate Starts for Zenon\_12:  
(Start: 4 @6413 has 9 MA's), (6, 6437), (11, 6488), (14, 6512), (17, 6551), (28, 6707), (32, 6773),