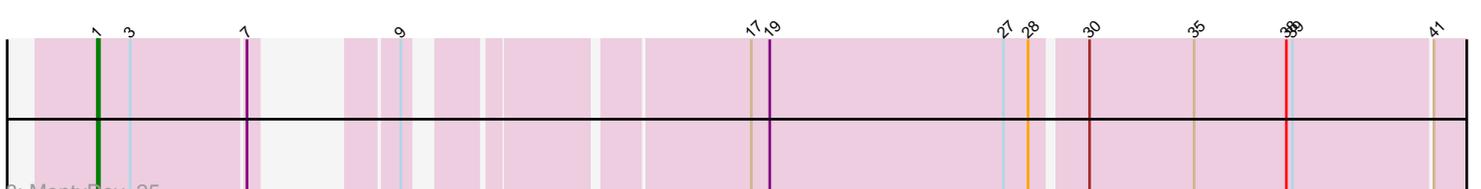
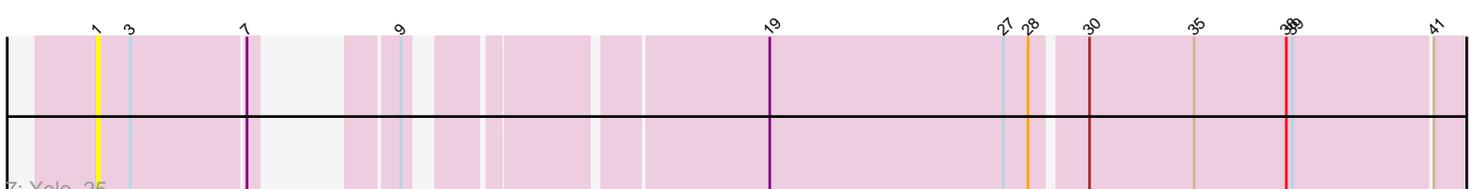
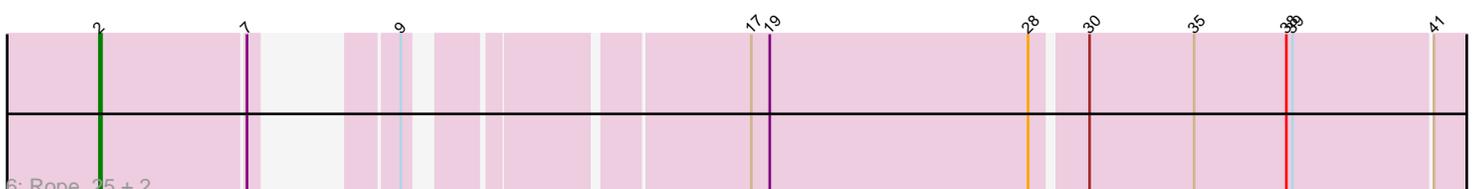
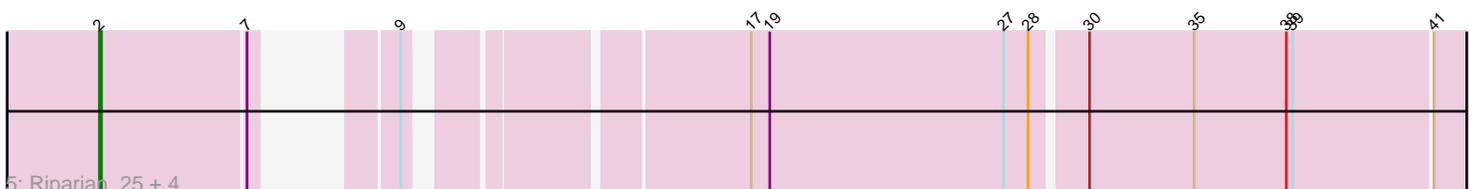
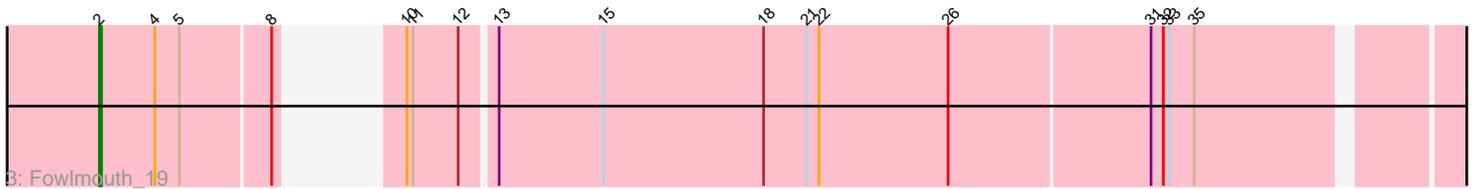
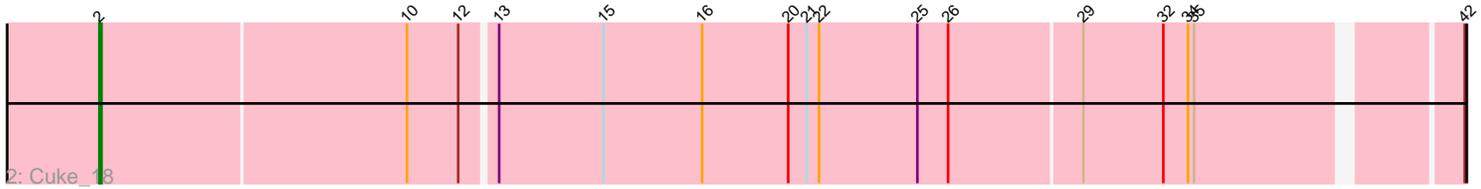
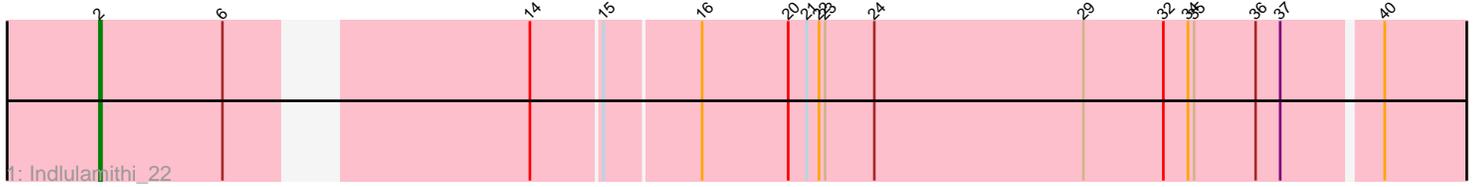


# Zoomed Pham 288301



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 288301 Report

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

Pham number 288301 has 14 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Indlulamithi\_22
- Track 2 : Cuke\_18
- Track 3 : Fowlmouth\_19
- Track 4 : MrMiyagi\_19
- Track 5 : Riparian\_25, Candle\_25, Send513\_25, Nilo\_26, Zenon\_26
- Track 6 : Rope\_25, Papyrus\_25, Weiss13\_25
- Track 7 : Yelo\_25
- Track 8 : MontyDev\_25

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

The start number called the most often in the published annotations is 2, it was called in 12 of the 13 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Candle\_25, Cuke\_18, Fowlmouth\_19, Indlulamithi\_22, MrMiyagi\_19, Nilo\_26, Papyrus\_25, Riparian\_25, Rope\_25, Send513\_25, Weiss13\_25, Zenon\_26,

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

- 

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

- MontyDev\_25, Yelo\_25,

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

Start 1:

- Found in 2 of 14 ( 14.3% ) of genes in pham
- Manual Annotations of this start: 1 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: MontyDev\_25 (R), Yelo\_25 (R),

Start 2:

- Found in 12 of 14 ( 85.7% ) of genes in pham

- Manual Annotations of this start: 12 of 13
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Candle\_25 (R), Cuke\_18 (AC), Fowlmouth\_19 (AC), Indlulamithi\_22 (AC), MrMiyagi\_19 (AC), Nilo\_26 (R), Papyrus\_25 (R), Riparian\_25 (R), Rope\_25 (R), Send513\_25 (R), Weiss13\_25 (R), Zenon\_26 (R),

### **Summary by clusters:**

There are 2 clusters represented in this pham: AC, R,

Info for manual annotations of cluster AC:

- Start number 2 was manually annotated 4 times for cluster AC.

Info for manual annotations of cluster R:

- Start number 1 was manually annotated 1 time for cluster R.
- Start number 2 was manually annotated 8 times for cluster R.

### **Gene Information:**

Gene: Candle\_25 Start: 15923, Stop: 16699, Start Num: 2

Candidate Starts for Candle\_25:

(Start: 2 @15923 has 12 MA's), (7, 15992), (9, 16022), (17, 16166), (19, 16175), (27, 16289), (28, 16301), (30, 16325), (35, 16376), (38, 16421), (39, 16424), (41, 16490), (46, 16547), (49, 16580), (51, 16610), (52, 16616), (53, 16649), (55, 16661),

Gene: Cuke\_18 Start: 11044, Stop: 11877, Start Num: 2

Candidate Starts for Cuke\_18:

(Start: 2 @11044 has 12 MA's), (10, 11191), (12, 11215), (13, 11230), (15, 11281), (16, 11329), (20, 11371), (21, 11380), (22, 11386), (25, 11434), (26, 11449), (29, 11512), (32, 11551), (34, 11563), (35, 11566), (42, 11683), (44, 11701), (49, 11758), (51, 11788), (52, 11794), (55, 11839),

Gene: Fowlmouth\_19 Start: 11198, Stop: 11980, Start Num: 2

Candidate Starts for Fowlmouth\_19:

(Start: 2 @11198 has 12 MA's), (4, 11225), (5, 11237), (8, 11279), (10, 11294), (11, 11297), (12, 11318), (13, 11333), (15, 11384), (18, 11462), (21, 11483), (22, 11489), (26, 11552), (31, 11648), (32, 11654), (33, 11657), (35, 11669), (47, 11843), (49, 11861), (50, 11879), (52, 11897), (54, 11933), (55, 11942),

Gene: Indlulamithi\_22 Start: 13331, Stop: 14158, Start Num: 2

Candidate Starts for Indlulamithi\_22:

(Start: 2 @13331 has 12 MA's), (6, 13391), (14, 13511), (15, 13544), (16, 13589), (20, 13631), (21, 13640), (22, 13646), (23, 13649), (24, 13673), (29, 13775), (32, 13814), (34, 13826), (35, 13829), (36, 13859), (37, 13871), (40, 13916), (43, 13958), (45, 13979), (48, 14018), (49, 14030), (51, 14060), (52, 14066), (53, 14099), (55, 14111), (56, 14135),

Gene: MontyDev\_25 Start: 15564, Stop: 16340, Start Num: 1

Candidate Starts for MontyDev\_25:

(Start: 1 @15564 has 1 MA's), (3, 15579), (7, 15633), (9, 15663), (17, 15807), (19, 15816), (27, 15930), (28, 15942), (30, 15966), (35, 16017), (38, 16062), (39, 16065), (41, 16131), (46, 16188), (49, 16221), (51, 16251), (52, 16257), (53, 16290), (55, 16302),

Gene: MrMiyagi\_19 Start: 11218, Stop: 12000, Start Num: 2

Candidate Starts for MrMiyagi\_19:

(Start: 2 @11218 has 12 MA's), (4, 11245), (5, 11257), (8, 11299), (10, 11314), (11, 11317), (12, 11338), (13, 11353), (15, 11404), (18, 11482), (21, 11503), (22, 11509), (26, 11572), (31, 11668), (32, 11674), (33, 11677), (35, 11689), (49, 11881), (50, 11899), (52, 11917), (54, 11953), (55, 11962),

Gene: Nilo\_26 Start: 15920, Stop: 16696, Start Num: 2

Candidate Starts for Nilo\_26:

(Start: 2 @15920 has 12 MA's), (7, 15989), (9, 16019), (17, 16163), (19, 16172), (27, 16286), (28, 16298), (30, 16322), (35, 16373), (38, 16418), (39, 16421), (41, 16487), (46, 16544), (49, 16577), (51, 16607), (52, 16613), (53, 16646), (55, 16658),

Gene: Papyrus\_25 Start: 15582, Stop: 16358, Start Num: 2

Candidate Starts for Papyrus\_25:

(Start: 2 @15582 has 12 MA's), (7, 15651), (9, 15681), (17, 15825), (19, 15834), (28, 15960), (30, 15984), (35, 16035), (38, 16080), (39, 16083), (41, 16149), (46, 16206), (49, 16239), (51, 16269), (52, 16275), (53, 16308), (55, 16320),

Gene: Riparian\_25 Start: 15381, Stop: 16157, Start Num: 2

Candidate Starts for Riparian\_25:

(Start: 2 @15381 has 12 MA's), (7, 15450), (9, 15480), (17, 15624), (19, 15633), (27, 15747), (28, 15759), (30, 15783), (35, 15834), (38, 15879), (39, 15882), (41, 15948), (46, 16005), (49, 16038), (51, 16068), (52, 16074), (53, 16107), (55, 16119),

Gene: Rope\_25 Start: 15573, Stop: 16349, Start Num: 2

Candidate Starts for Rope\_25:

(Start: 2 @15573 has 12 MA's), (7, 15642), (9, 15672), (17, 15816), (19, 15825), (28, 15951), (30, 15975), (35, 16026), (38, 16071), (39, 16074), (41, 16140), (46, 16197), (49, 16230), (51, 16260), (52, 16266), (53, 16299), (55, 16311),

Gene: Send513\_25 Start: 15923, Stop: 16699, Start Num: 2

Candidate Starts for Send513\_25:

(Start: 2 @15923 has 12 MA's), (7, 15992), (9, 16022), (17, 16166), (19, 16175), (27, 16289), (28, 16301), (30, 16325), (35, 16376), (38, 16421), (39, 16424), (41, 16490), (46, 16547), (49, 16580), (51, 16610), (52, 16616), (53, 16649), (55, 16661),

Gene: Weiss13\_25 Start: 15613, Stop: 16389, Start Num: 2

Candidate Starts for Weiss13\_25:

(Start: 2 @15613 has 12 MA's), (7, 15682), (9, 15712), (17, 15856), (19, 15865), (28, 15991), (30, 16015), (35, 16066), (38, 16111), (39, 16114), (41, 16180), (46, 16237), (49, 16270), (51, 16300), (52, 16306), (53, 16339), (55, 16351),

Gene: Yelo\_25 Start: 15906, Stop: 16682, Start Num: 1

Candidate Starts for Yelo\_25:

(Start: 1 @15906 has 1 MA's), (3, 15921), (7, 15975), (9, 16005), (19, 16158), (27, 16272), (28, 16284), (30, 16308), (35, 16359), (38, 16404), (39, 16407), (41, 16473), (46, 16530), (49, 16563), (51, 16593), (52, 16599), (53, 16632), (55, 16644),

Gene: Zenon\_26 Start: 15925, Stop: 16701, Start Num: 2

Candidate Starts for Zenon\_26:

(Start: 2 @15925 has 12 MA's), (7, 15994), (9, 16024), (17, 16168), (19, 16177), (27, 16291), (28, 16303), (30, 16327), (35, 16378), (38, 16423), (39, 16426), (41, 16492), (46, 16549), (49, 16582), (51,

16612), (52, 16618), (53, 16651), (55, 16663),