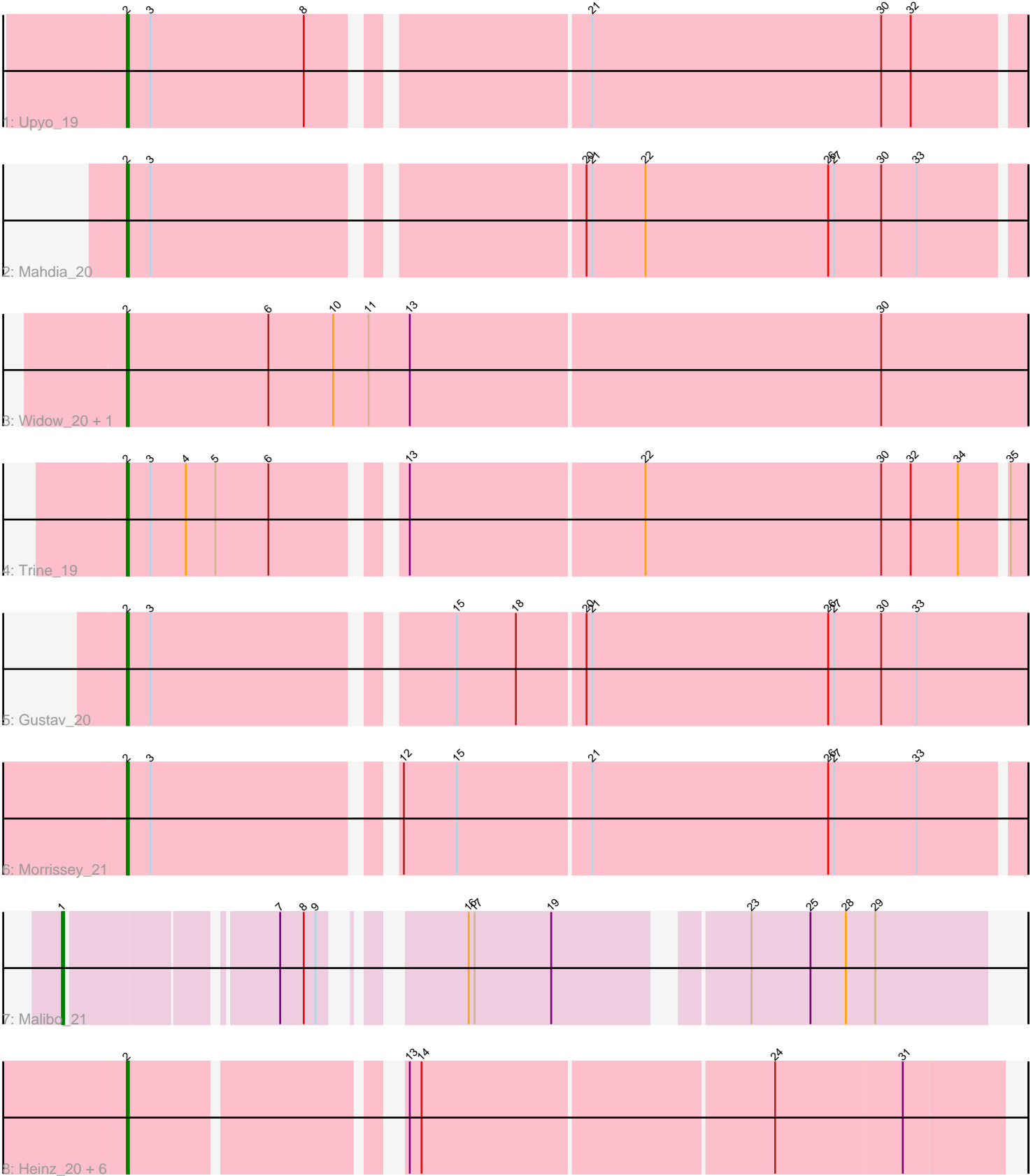


Pham 4920



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 4920 Report

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

Pham number 4920 has 15 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Upyo\_19
- Track 2 : Mahdia\_20
- Track 3 : Widow\_20, Puppies\_20
- Track 4 : Trine\_19
- Track 5 : Gustav\_20
- Track 6 : Morrissey\_21
- Track 7 : Malibo\_21
- Track 8 : Heinz\_20, DonkeyMan\_19, Reyja\_20, Jojo24\_19, Tarzan\_19, Hibiscus\_19, Santhid\_19

### ***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:

- DonkeyMan\_19, Gustav\_20, Heinz\_20, Hibiscus\_19, Jojo24\_19, Mahdia\_20, Morrissey\_21, Puppies\_20, Reyja\_20, Santhid\_19, Tarzan\_19, Trine\_19, Upyo\_19, Widow\_20,

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

- 

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

- Malibo\_21,

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

Start 1:

- Found in 1 of 15 ( 6.7% ) 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: Malibo\_21 (DW),

Start 2:

- Found in 14 of 15 ( 93.3% ) 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: DonkeyMan\_19 (DY), Gustav\_20 (CD), Heinz\_20 (DY), Hibiscus\_19 (DY), Jojo24\_19 (DY), Mahdia\_20 (CD), Morrissey\_21 (CD), Puppies\_20 (CD), Reyja\_20 (DY), Santhid\_19 (DY), Tarzan\_19 (DY), Trine\_19 (CD), Upyo\_19 (CD), Widow\_20 (CD),

### **Summary by clusters:**

There are 3 clusters represented in this pham: DW, DY, CD,

Info for manual annotations of cluster CD:

- Start number 2 was manually annotated 7 times for cluster CD.

Info for manual annotations of cluster DW:

- Start number 1 was manually annotated 1 time for cluster DW.

Info for manual annotations of cluster DY:

- Start number 2 was manually annotated 5 times for cluster DY.

### **Gene Information:**

Gene: DonkeyMan\_19 Start: 16562, Stop: 16975, Start Num: 2

Candidate Starts for DonkeyMan\_19:

(Start: 2 @16562 has 12 MA's), (13, 16682), (14, 16688), (24, 16862), (31, 16925),

Gene: Gustav\_20 Start: 16989, Stop: 17426, Start Num: 2

Candidate Starts for Gustav\_20:

(Start: 2 @16989 has 12 MA's), (3, 17001), (15, 17139), (18, 17169), (20, 17202), (21, 17205), (26, 17325), (27, 17328), (30, 17352), (33, 17370),

Gene: Heinz\_20 Start: 16653, Stop: 17066, Start Num: 2

Candidate Starts for Heinz\_20:

(Start: 2 @16653 has 12 MA's), (13, 16773), (14, 16779), (24, 16953), (31, 17016),

Gene: Hibiscus\_19 Start: 16601, Stop: 17014, Start Num: 2

Candidate Starts for Hibiscus\_19:

(Start: 2 @16601 has 12 MA's), (13, 16721), (14, 16727), (24, 16901), (31, 16964),

Gene: Jojo24\_19 Start: 16598, Stop: 17011, Start Num: 2

Candidate Starts for Jojo24\_19:

(Start: 2 @16598 has 12 MA's), (13, 16718), (14, 16724), (24, 16898), (31, 16961),

Gene: Mahdia\_20 Start: 16665, Stop: 17096, Start Num: 2

Candidate Starts for Mahdia\_20:

(Start: 2 @16665 has 12 MA's), (3, 16677), (20, 16878), (21, 16881), (22, 16908), (26, 17001), (27, 17004), (30, 17028), (33, 17046),

Gene: Malibo\_21 Start: 18137, Stop: 18544, Start Num: 1

Candidate Starts for Malibo\_21:

(Start: 1 @18137 has 1 MA's), (7, 18233), (8, 18245), (9, 18251), (16, 18299), (17, 18302), (19, 18341), (23, 18425), (25, 18455), (28, 18473), (29, 18488),

Gene: Morrissey\_21 Start: 17889, Stop: 18320, Start Num: 2

Candidate Starts for Morrissey\_21:

(Start: 2 @17889 has 12 MA's), (3, 17901), (12, 18012), (15, 18039), (21, 18105), (26, 18225), (27, 18228), (33, 18270),

Gene: Puppies\_20 Start: 16981, Stop: 17436, Start Num: 2

Candidate Starts for Puppies\_20:

(Start: 2 @16981 has 12 MA's), (6, 17053), (10, 17086), (11, 17104), (13, 17125), (30, 17362),

Gene: Reyja\_20 Start: 16773, Stop: 17186, Start Num: 2

Candidate Starts for Reyja\_20:

(Start: 2 @16773 has 12 MA's), (13, 16893), (14, 16899), (24, 17073), (31, 17136),

Gene: Santhid\_19 Start: 16606, Stop: 17019, Start Num: 2

Candidate Starts for Santhid\_19:

(Start: 2 @16606 has 12 MA's), (13, 16726), (14, 16732), (24, 16906), (31, 16969),

Gene: Tarzan\_19 Start: 16576, Stop: 16989, Start Num: 2

Candidate Starts for Tarzan\_19:

(Start: 2 @16576 has 12 MA's), (13, 16696), (14, 16702), (24, 16876), (31, 16939),

Gene: Trine\_19 Start: 16385, Stop: 16816, Start Num: 2

Candidate Starts for Trine\_19:

(Start: 2 @16385 has 12 MA's), (3, 16397), (4, 16415), (5, 16430), (6, 16457), (13, 16511), (22, 16628), (30, 16748), (32, 16763), (34, 16787), (35, 16808),

Gene: Upyo\_19 Start: 16558, Stop: 16989, Start Num: 2

Candidate Starts for Upyo\_19:

(Start: 2 @16558 has 12 MA's), (3, 16570), (8, 16648), (21, 16774), (30, 16921), (32, 16936),

Gene: Widow\_20 Start: 16972, Stop: 17427, Start Num: 2

Candidate Starts for Widow\_20:

(Start: 2 @16972 has 12 MA's), (6, 17044), (10, 17077), (11, 17095), (13, 17116), (30, 17353),