

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 5041 Report

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

Pham number 5041 has 14 members, 2 are drafts.

Phages represented in each track:

• Track 1 : Upyo 13

Track 2 : Morrissey\_14Track 3 : Puppers\_13, Widow\_13

• Track 4 : Mahdia 13

Track 5: Trine 13

• Track 6 : Gustav\_13

Track 7: Tarzan 13, Reyja 14, DonkeyMan 13

Track 8 : Jojo24\_13

Track 9: Hibiscus 13

Track 10 : Santhid\_13

• Track 11 : Heinz 13

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

The start number called the most often in the published annotations is 11, it was called in 5 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• DonkeyMan\_13, Heinz\_13, Hibiscus\_13, Jojo24\_13, Reyja\_14, Santhid 13, Tarzan\_13,

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

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

 Gustav\_13, Mahdia\_13, Morrissey\_14, Puppers\_13, Trine\_13, Upyo\_13, Widow\_13,

## Summary by start number:

### Start 5:

- Found in 2 of 14 (14.3%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 50.0% of time when present

Phage (with cluster) where this start called: Morrissey\_14 (CD),

#### Start 9:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Mahdia\_13 (CD),

#### Start 11:

- Found in 7 of 14 (50.0%) of genes in pham
- Manual Annotations of this start: 5 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: DonkeyMan\_13 (DY), Heinz\_13 (DY), Hibiscus\_13 (DY), Jojo24\_13 (DY), Reyja\_14 (DY), Santhid\_13 (DY), Tarzan\_13 (DY),

#### Start 12:

- Found in 6 of 14 (42.9%) of genes in pham
- Manual Annotations of this start: 4 of 12
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Gustav\_13 (CD), Puppers\_13 (CD), Trine\_13 (CD), Widow\_13 (CD),

## Start 13:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo\_13 (CD),

## **Summary by clusters:**

There are 2 clusters represented in this pham: CD, DY,

Info for manual annotations of cluster CD:

- •Start number 5 was manually annotated 1 time for cluster CD.
- •Start number 9 was manually annotated 1 time for cluster CD.
- •Start number 12 was manually annotated 4 times for cluster CD.
- •Start number 13 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DY:

•Start number 11 was manually annotated 5 times for cluster DY.

### Gene Information:

Gene: DonkeyMan\_13 Start: 8605, Stop: 8931, Start Num: 11

Candidate Starts for DonkeyMan\_13:

(Start: 11 @8605 has 5 MA's),

Gene: Gustav 13 Start: 8549, Stop: 8848, Start Num: 12

Candidate Starts for Gustav 13:

(Start: 12 @8549 has 4 MA's), (14, 8558), (18, 8735), (19, 8771), (21, 8783),

Gene: Heinz\_13 Start: 8636, Stop: 8962, Start Num: 11

Candidate Starts for Heinz\_13:

(2, 8537), (3, 8546), (Start: 11 @8636 has 5 MA's), (21, 8894),

Gene: Hibiscus\_13 Start: 8620, Stop: 8946, Start Num: 11

Candidate Starts for Hibiscus\_13: (Start: 11 @8620 has 5 MA's),

Gene: Jojo24\_13 Start: 8614, Stop: 8940, Start Num: 11

Candidate Starts for Jojo24 13:

(2, 8512), (3, 8521), (Start: 11 @8614 has 5 MA's),

Gene: Mahdia\_13 Start: 8477, Stop: 8827, Start Num: 9

Candidate Starts for Mahdia\_13:

 $(7,\,8465),\,(Start:\,9\,\,@\,8477\,\,has\,\,1\,\,MA's),\,(Start:\,12\,\,@\,8528\,\,has\,\,4\,\,MA's),\,(14,\,8537),\,(16,\,8651),\,(19,\,19,\,19),\,(11,\,12),\,(11,\,1$ 

8750), (21, 8762), (24, 8798),

Gene: Morrissey\_14 Start: 8806, Stop: 9189, Start Num: 5

Candidate Starts for Morrissey\_14:

(1, 8740), (Start: 5 @8806 has 1 MA's), (8, 8830), (Start: 12 @8887 has 4 MA's), (14, 8896), (15,

8980), (16, 9010), (23, 9148),

Gene: Puppers\_13 Start: 8430, Stop: 8729, Start Num: 12

Candidate Starts for Puppers\_13:

(Start: 12 @8430 has 4 MA's), (23, 8691),

Gene: Revia 14 Start: 8756, Stop: 9082, Start Num: 11

Candidate Starts for Reyja\_14: (Start: 11 @8756 has 5 MA's),

Gene: Santhid\_13 Start: 8622, Stop: 8948, Start Num: 11

Candidate Starts for Santhid 13:

(4, 8535), (6, 8556), (Start: 11 @8622 has 5 MA's),

Gene: Tarzan\_13 Start: 8610, Stop: 8936, Start Num: 11

Candidate Starts for Tarzan\_13: (Start: 11 @8610 has 5 MA's),

Gene: Trine\_13 Start: 8442, Stop: 8735, Start Num: 12

Candidate Starts for Trine 13:

(Start: 12 @8442 has 4 MA's), (15, 8532), (16, 8562), (17, 8610), (23, 8700),

Gene: Upyo\_13 Start: 8546, Stop: 8845, Start Num: 13

Candidate Starts for Upyo 13:

(Start: 5 @8462 has 1 MA's), (10, 8528), (Start: 13 @8546 has 1 MA's), (14, 8552), (16, 8666), (20,

8774), (21, 8780), (22, 8783), (23, 8804),

Gene: Widow\_13 Start: 8421, Stop: 8720, Start Num: 12

Candidate Starts for Widow\_13:

(Start: 12 @8421 has 4 MA's), (23, 8682),