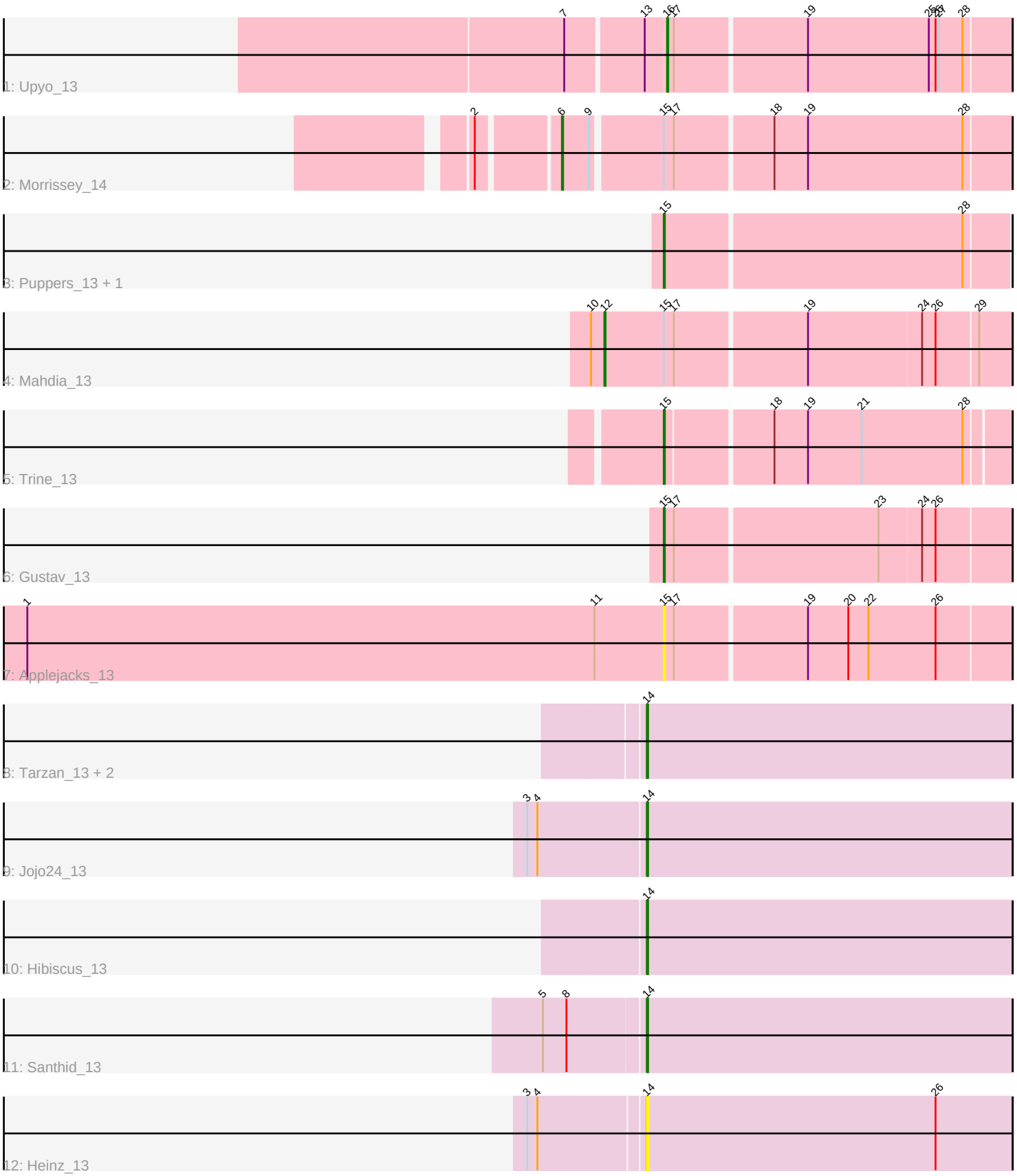
# Pham 278713


7
13
15
17
19
25
27
28
1: Upyo_13
2
6
9
15
17
18
19
28
2: Morrissey_14
15
28
3: Puppers_13 + 1
10
12
15
17
19
24
26
29
4: Mahdia_13
15
18
19
21
28
5: Trine_13
15
17
23
24
26
6: Gustav_13
1
11
15
17
19
20
22
26
7: Applejacks_13
14
8: Tarzan_13 + 2
3
4
14
9: Jojo24_13
14
10: Hibiscus_13
5
8
14
11: Santhid_13
3
4
14
26
12: Heinz_13

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 278713 Report

This analysis was run 02/07/26 on database version 634.

Pham number 278713 has 15 members, 2 are drafts.

Phages represented in each track:
• Track 1 : Upyo_13
• Track 2 : Morrissey_14
• Track 3 : Puppers_13, Widow_13
• Track 4 : Mahdia_13
• Track 5 : Trine_13
• Track 6 : Gustav_13
• Track 7 : Applejacks_13
• Track 8 : Tarzan_13, Reyja_14, DonkeyMan_13
• Track 9 : Jojo24_13
• Track 10 : Hibiscus_13
• Track 11 : Santhid_13
• Track 12 : 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 14, it was called in 6 of the 13 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:
• Applejacks_13, Gustav_13, Mahdia_13, Morrissey_14, Puppers_13, Trine_13, Upyo_13, Widow_13,

**Summary by start number:**

Start 6:
• 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: Morrissey_14 (CD),

Start 12:
• 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: Mahdia_13 (CD),

Start 14:
• Found in 7 of 15 ( 46.7% ) of genes in pham
• Manual Annotations of this start: 6 of 13
• 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 15:
• Found in 7 of 15 ( 46.7% ) of genes in pham
• Manual Annotations of this start: 4 of 13
• Called 71.4% of time when present
• Phage (with cluster) where this start called: Applejacks_13 (CD), Gustav_13 (CD), Puppers_13 (CD), Trine_13 (CD), Widow_13 (CD),

Start 16:
• 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: 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 6 was manually annotated 1 time for cluster CD.
•Start number 12 was manually annotated 1 time for cluster CD.
•Start number 15 was manually annotated 4 times for cluster CD.
•Start number 16 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster DY:
•Start number 14 was manually annotated 6 times for cluster DY.

***Gene Information:***

Gene: Applejacks_13 Start: 8462, Stop: 8764, Start Num: 15
Candidate Starts for Applejacks_13:
(1, 7895), (11, 8402), (Start: 15 @8462 has 4 MA's), (17, 8471), (19, 8585), (20, 8621), (22, 8639), (26, 8699),

Gene: DonkeyMan_13 Start: 8605, Stop: 8931, Start Num: 14

Candidate Starts for DonkeyMan_13:
(Start: 14 @8605 has 6 MA's),

Gene: Gustav_13 Start: 8549, Stop: 8848, Start Num: 15
Candidate Starts for Gustav_13:
(Start: 15 @8549 has 4 MA's), (17, 8558), (23, 8735), (24, 8771), (26, 8783),

Gene: Heinz_13 Start: 8636, Stop: 8962, Start Num: 14
Candidate Starts for Heinz_13:
(3, 8537), (4, 8546), (Start: 14 @8636 has 6 MA's), (26, 8894),

Gene: Hibiscus_13 Start: 8620, Stop: 8946, Start Num: 14
Candidate Starts for Hibiscus_13:
(Start: 14 @8620 has 6 MA's),

Gene: Jojo24_13 Start: 8614, Stop: 8940, Start Num: 14
Candidate Starts for Jojo24_13:
(3, 8512), (4, 8521), (Start: 14 @8614 has 6 MA's),

Gene: Mahdia_13 Start: 8477, Stop: 8827, Start Num: 12
Candidate Starts for Mahdia_13:
(10, 8465), (Start: 12 @8477 has 1 MA's), (Start: 15 @8528 has 4 MA's), (17, 8537), (19, 8651), (24, 8750), (26, 8762), (29, 8798),

Gene: Morrissey_14 Start: 8806, Stop: 9189, Start Num: 6
Candidate Starts for Morrissey_14:
(2, 8740), (Start: 6 @8806 has 1 MA's), (9, 8830), (Start: 15 @8887 has 4 MA's), (17, 8896), (18, 8980), (19, 9010), (28, 9148),

Gene: Puppers_13 Start: 8430, Stop: 8729, Start Num: 15
Candidate Starts for Puppers_13:
(Start: 15 @8430 has 4 MA's), (28, 8691),

Gene: Reyja_14 Start: 8756, Stop: 9082, Start Num: 14
Candidate Starts for Reyja_14:
(Start: 14 @8756 has 6 MA's),

Gene: Santhid_13 Start: 8622, Stop: 8948, Start Num: 14
Candidate Starts for Santhid_13:
(5, 8535), (8, 8556), (Start: 14 @8622 has 6 MA's),

Gene: Tarzan_13 Start: 8610, Stop: 8936, Start Num: 14
Candidate Starts for Tarzan_13:
(Start: 14 @8610 has 6 MA's),

Gene: Trine_13 Start: 8442, Stop: 8735, Start Num: 15
Candidate Starts for Trine_13:
(Start: 15 @8442 has 4 MA's), (18, 8532), (19, 8562), (21, 8610), (28, 8700),

Gene: Upyo_13 Start: 8546, Stop: 8845, Start Num: 16
Candidate Starts for Upyo_13:
(7, 8462), (13, 8528), (Start: 16 @8546 has 1 MA's), (17, 8552), (19, 8666), (25, 8774), (26, 8780), (27, 8783), (28, 8804),

Gene: Widow_13 Start: 8421, Stop: 8720, Start Num: 15
Candidate Starts for Widow_13:
(Start: 15 @8421 has 4 MA's), (28, 8682),