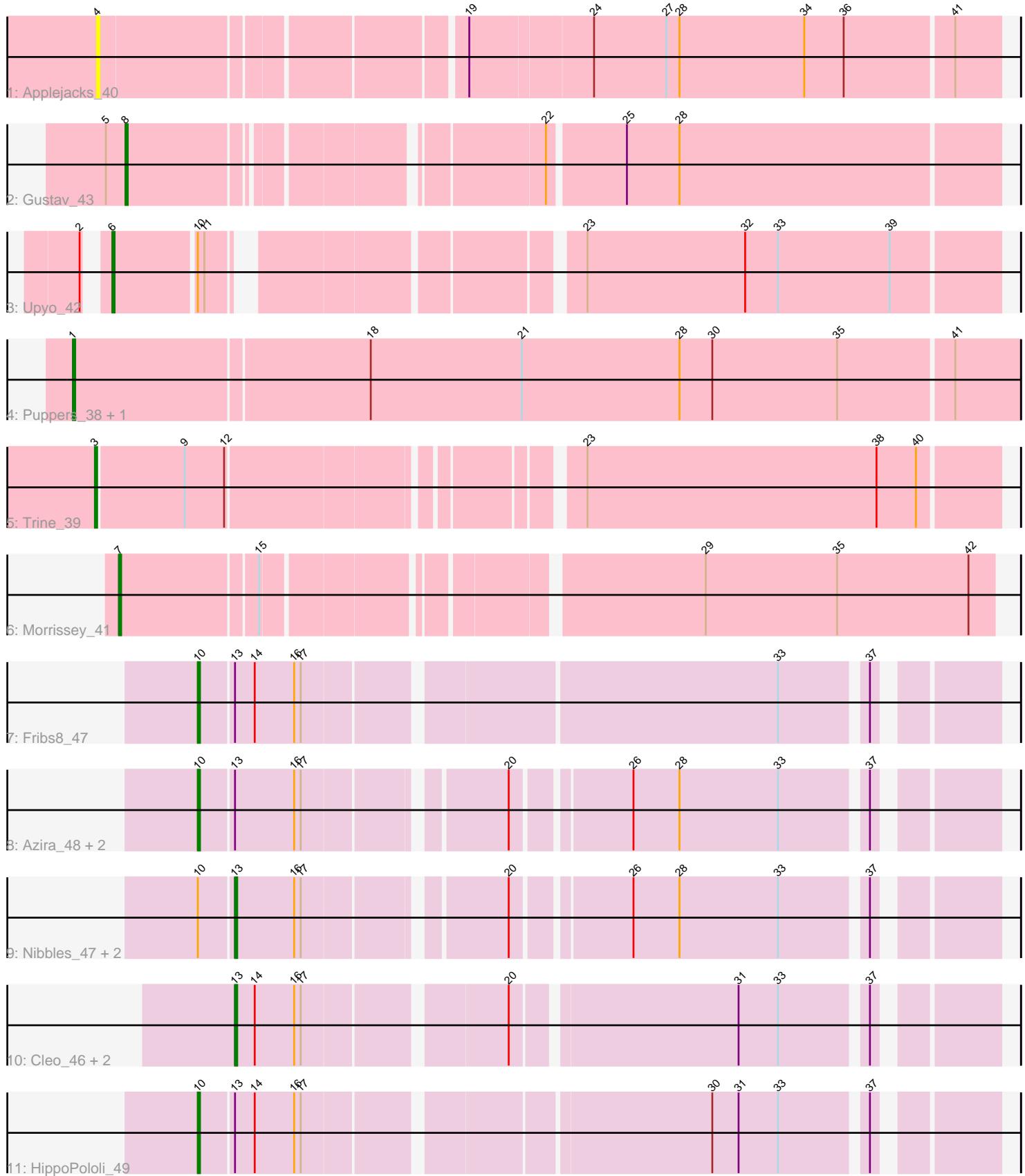


# Pham 278636



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 278636 Report

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

Pham number 278636 has 18 members, 2 are drafts.

Phages represented in each track:

- Track 1 : Applejacks\_40
- Track 2 : Gustav\_43
- Track 3 : Upyo\_42
- Track 4 : Puppers\_38, Widow\_40
- Track 5 : Trine\_39
- Track 6 : Morrissey\_41
- Track 7 : Fribs8\_47
- Track 8 : Azira\_48, MaVan\_48, Survivors\_48
- Track 9 : Nibbles\_47, Wolfwood\_50, Zareef\_48
- Track 10 : Cleo\_46, Dre3\_47, Gibbous\_47
- Track 11 : HippoPololi\_49

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

The start number called the most often in the published annotations is 13, it was called in 5 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Cleo\_46, Dre3\_47, Gibbous\_47, Nibbles\_47, Wolfwood\_50, Zareef\_48,

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

- Azira\_48, Fribs8\_47, HippoPololi\_49, MaVan\_48, Survivors\_48,

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

- Applejacks\_40, Gustav\_43, Morrissey\_41, Puppers\_38, Trine\_39, Upyo\_42, Widow\_40,

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

Start 1:

- Found in 2 of 18 ( 11.1% ) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Puppers\_38 (CD), Widow\_40 (CD),

Start 3:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Trine\_39 (CD),

Start 4:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Applejacks\_40 (CD),

Start 6:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Upyo\_42 (CD),

Start 7:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Morrissey\_41 (CD),

Start 8:

- Found in 1 of 18 ( 5.6% ) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Gustav\_43 (CD),

Start 10:

- Found in 9 of 18 ( 50.0% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 55.6% of time when present
- Phage (with cluster) where this start called: Azira\_48 (CT), Fribs8\_47 (CT), HippoPololi\_49 (CT), MaVan\_48 (CT), Survivors\_48 (CT),

Start 13:

- Found in 11 of 18 ( 61.1% ) of genes in pham
- Manual Annotations of this start: 5 of 16
- Called 54.5% of time when present
- Phage (with cluster) where this start called: Cleo\_46 (CT), Dre3\_47 (CT), Gibbous\_47 (CT), Nibbles\_47 (CT), Wolfwood\_50 (CT), Zareef\_48 (CT),

**Summary by clusters:**

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

Info for manual annotations of cluster CD:

- Start number 1 was manually annotated 2 times for cluster CD.
- Start number 3 was manually annotated 1 time for cluster CD.
- Start number 6 was manually annotated 1 time for cluster CD.

- Start number 7 was manually annotated 1 time for cluster CD.
- Start number 8 was manually annotated 1 time for cluster CD.

Info for manual annotations of cluster CT:

- Start number 10 was manually annotated 5 times for cluster CT.
- Start number 13 was manually annotated 5 times for cluster CT.

### ***Gene Information:***

Gene: Applejacks\_40 Start: 31333, Stop: 30944, Start Num: 4

Candidate Starts for Applejacks\_40:

(4, 31333), (19, 31180), (24, 31126), (27, 31093), (28, 31087), (34, 31030), (36, 31012), (41, 30964),

Gene: Azira\_48 Start: 36422, Stop: 36099, Start Num: 10

Candidate Starts for Azira\_48:

(Start: 10 @36422 has 5 MA's), (Start: 13 @36407 has 5 MA's), (16, 36380), (17, 36377), (20, 36296), (26, 36248), (28, 36227), (33, 36182), (37, 36146),

Gene: Cleo\_46 Start: 36154, Stop: 35843, Start Num: 13

Candidate Starts for Cleo\_46:

(Start: 13 @36154 has 5 MA's), (14, 36145), (16, 36127), (17, 36124), (20, 36040), (31, 35944), (33, 35926), (37, 35890),

Gene: Dre3\_47 Start: 35897, Stop: 35586, Start Num: 13

Candidate Starts for Dre3\_47:

(Start: 13 @35897 has 5 MA's), (14, 35888), (16, 35870), (17, 35867), (20, 35783), (31, 35687), (33, 35669), (37, 35633),

Gene: Fribs8\_47 Start: 36192, Stop: 35860, Start Num: 10

Candidate Starts for Fribs8\_47:

(Start: 10 @36192 has 5 MA's), (Start: 13 @36177 has 5 MA's), (14, 36168), (16, 36150), (17, 36147), (33, 35943), (37, 35907),

Gene: Gibbous\_47 Start: 35897, Stop: 35586, Start Num: 13

Candidate Starts for Gibbous\_47:

(Start: 13 @35897 has 5 MA's), (14, 35888), (16, 35870), (17, 35867), (20, 35783), (31, 35687), (33, 35669), (37, 35633),

Gene: Gustav\_43 Start: 32873, Stop: 32505, Start Num: 8

Candidate Starts for Gustav\_43:

(5, 32882), (Start: 8 @32873 has 1 MA's), (22, 32705), (25, 32672), (28, 32648),

Gene: HippoPololi\_49 Start: 36327, Stop: 35998, Start Num: 10

Candidate Starts for HippoPololi\_49:

(Start: 10 @36327 has 5 MA's), (Start: 13 @36312 has 5 MA's), (14, 36303), (16, 36285), (17, 36282), (30, 36111), (31, 36099), (33, 36081), (37, 36045),

Gene: MaVan\_48 Start: 36451, Stop: 36128, Start Num: 10

Candidate Starts for MaVan\_48:

(Start: 10 @36451 has 5 MA's), (Start: 13 @36436 has 5 MA's), (16, 36409), (17, 36406), (20, 36325), (26, 36277), (28, 36256), (33, 36211), (37, 36175),

Gene: Morrissey\_41 Start: 32244, Stop: 31873, Start Num: 7

Candidate Starts for Morrissey\_41:

(Start: 7 @32244 has 1 MA's), (15, 32184), (29, 32004), (35, 31944), (42, 31884),

Gene: Nibbles\_47 Start: 36132, Stop: 35824, Start Num: 13

Candidate Starts for Nibbles\_47:

(Start: 10 @36147 has 5 MA's), (Start: 13 @36132 has 5 MA's), (16, 36105), (17, 36102), (20, 36021), (26, 35973), (28, 35952), (33, 35907), (37, 35871),

Gene: Puppers\_38 Start: 31067, Stop: 30642, Start Num: 1

Candidate Starts for Puppers\_38:

(Start: 1 @31067 has 2 MA's), (18, 30935), (21, 30866), (28, 30794), (30, 30779), (35, 30722), (41, 30671),

Gene: Survivors\_48 Start: 36347, Stop: 36024, Start Num: 10

Candidate Starts for Survivors\_48:

(Start: 10 @36347 has 5 MA's), (Start: 13 @36332 has 5 MA's), (16, 36305), (17, 36302), (20, 36221), (26, 36173), (28, 36152), (33, 36107), (37, 36071),

Gene: Trine\_39 Start: 31423, Stop: 31040, Start Num: 3

Candidate Starts for Trine\_39:

(Start: 3 @31423 has 1 MA's), (9, 31384), (12, 31366), (23, 31225), (38, 31093), (40, 31075),

Gene: Upyo\_42 Start: 32741, Stop: 32373, Start Num: 6

Candidate Starts for Upyo\_42:

(2, 32747), (Start: 6 @32741 has 1 MA's), (Start: 10 @32705 has 5 MA's), (11, 32702), (23, 32558), (32, 32486), (33, 32471), (39, 32420),

Gene: Widow\_40 Start: 32148, Stop: 31723, Start Num: 1

Candidate Starts for Widow\_40:

(Start: 1 @32148 has 2 MA's), (18, 32016), (21, 31947), (28, 31875), (30, 31860), (35, 31803), (41, 31752),

Gene: Wolfwood\_50 Start: 36404, Stop: 36096, Start Num: 13

Candidate Starts for Wolfwood\_50:

(Start: 10 @36419 has 5 MA's), (Start: 13 @36404 has 5 MA's), (16, 36377), (17, 36374), (20, 36293), (26, 36245), (28, 36224), (33, 36179), (37, 36143),

Gene: Zareef\_48 Start: 36426, Stop: 36118, Start Num: 13

Candidate Starts for Zareef\_48:

(Start: 10 @36441 has 5 MA's), (Start: 13 @36426 has 5 MA's), (16, 36399), (17, 36396), (20, 36315), (26, 36267), (28, 36246), (33, 36201), (37, 36165),