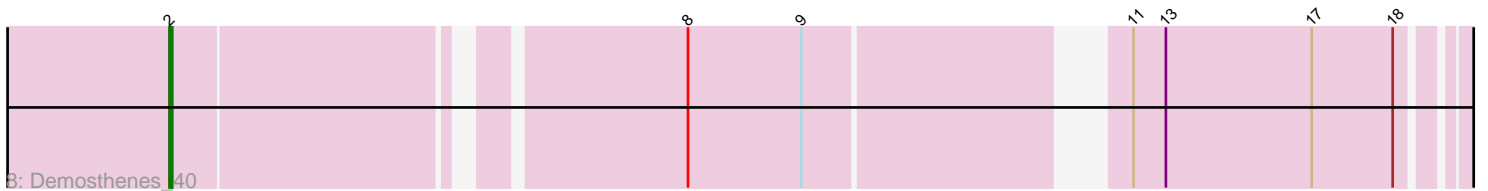
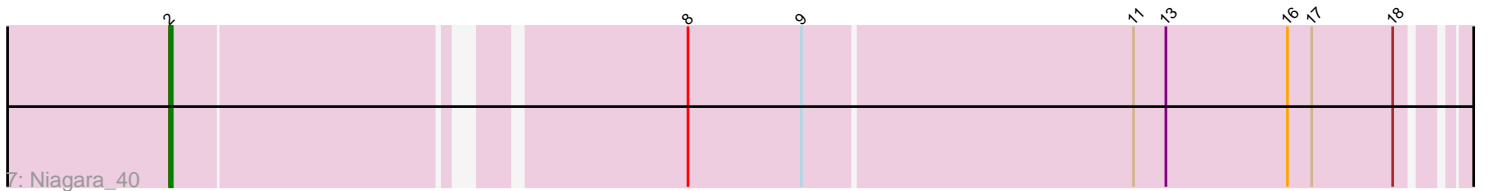
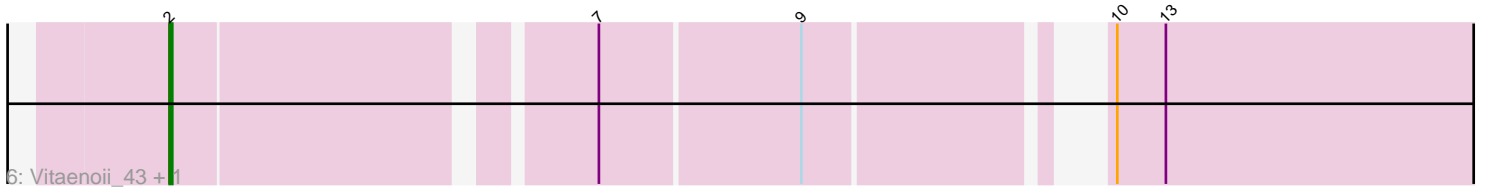
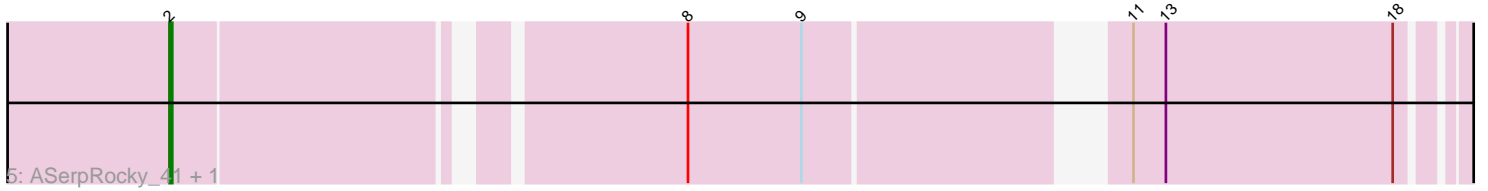
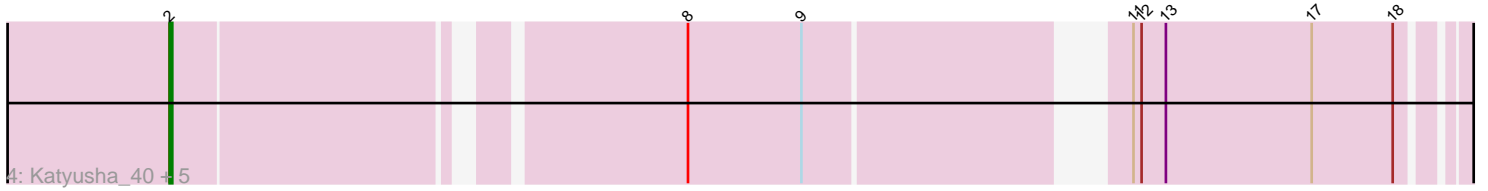
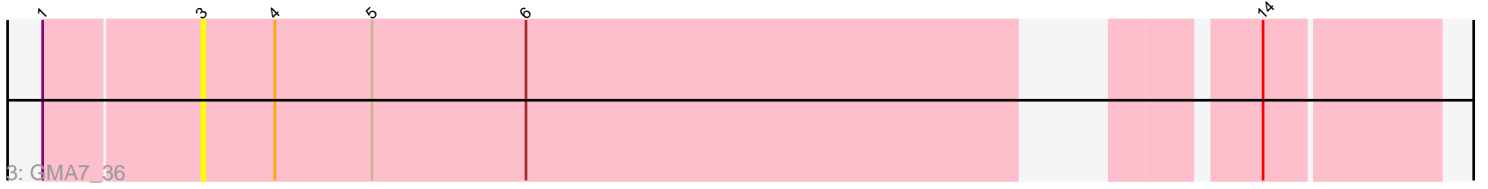
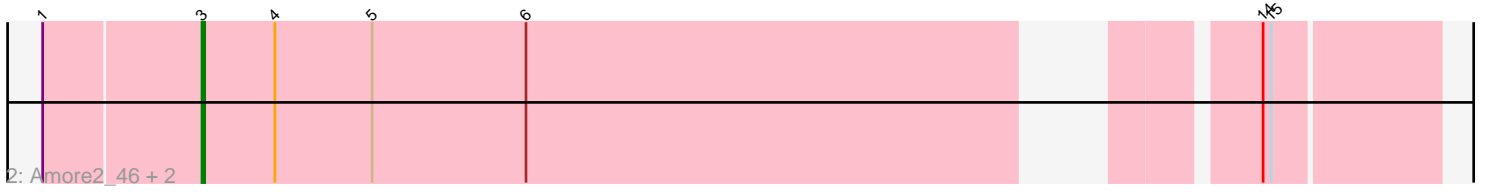
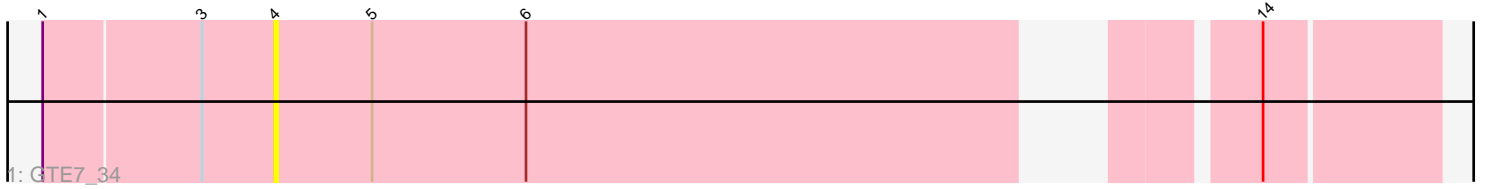


Pham 305369



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 305369 Report

This analysis was run 06/08/26 on database version 649.

Pham number 305369 has 17 members, 2 are drafts.

Phages represented in each track:

- Track 1 : GTE7\_34
- Track 2 : Amore2\_46, HayZem\_45, Austin\_46
- Track 3 : GMA7\_36
- Track 4 : Katyusha\_40, Teatealatte\_41, Tredge\_41, Benczkowski14\_40, Teech\_41, Kvothe\_40
- Track 5 : ASerpRocky\_41, Hollow\_41
- Track 6 : Vitaenoi\_43, Philon9\_43
- Track 7 : Niagara\_40
- Track 8 : Demosthenes\_40

### ***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 15 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASerpRocky\_41, Benczkowski14\_40, Demosthenes\_40, Hollow\_41, Katyusha\_40, Kvothe\_40, Niagara\_40, Philon9\_43, Teatealatte\_41, Teech\_41, Tredge\_41, Vitaenoi\_43,

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

- 

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

- Amore2\_46, Austin\_46, GMA7\_36, GTE7\_34, HayZem\_45,

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

Start 2:

- Found in 12 of 17 ( 70.6% ) of genes in pham
- Manual Annotations of this start: 12 of 15
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky\_41 (CS4), Benczkowski14\_40 (CS4), Demosthenes\_40 (CS4), Hollow\_41 (CS4), Katyusha\_40

(CS4), Kvothe\_40 (CS4), Niagara\_40 (CS4), Philon9\_43 (CS4), Teatealatte\_41 (CS4), Teech\_41 (CS4), Tredge\_41 (CS4), Vitaenoi\_43 (CS4),

Start 3:

- Found in 5 of 17 ( 29.4% ) of genes in pham
- Manual Annotations of this start: 3 of 15
- Called 80.0% of time when present
- Phage (with cluster) where this start called: Amore2\_46 (CS1), Austin\_46 (CS1), GMA7\_36 (CS1), HayZem\_45 (CS1),

Start 4:

- Found in 5 of 17 ( 29.4% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: GTE7\_34 (CS1),

### **Summary by clusters:**

There are 2 clusters represented in this pham: CS4, CS1,

Info for manual annotations of cluster CS1:

- Start number 3 was manually annotated 3 times for cluster CS1.

Info for manual annotations of cluster CS4:

- Start number 2 was manually annotated 12 times for cluster CS4.

### **Gene Information:**

Gene: ASerpRocky\_41 Start: 44705, Stop: 44253, Start Num: 2

Candidate Starts for ASerpRocky\_41:

(Start: 2 @44705 has 12 MA's), (8, 44534), (9, 44492), (11, 44393), (13, 44381), (18, 44297),

Gene: Amore2\_46 Start: 43956, Stop: 43543, Start Num: 3

Candidate Starts for Amore2\_46:

(1, 44013), (Start: 3 @43956 has 3 MA's), (4, 43929), (5, 43893), (6, 43836), (14, 43605), (15, 43602),

Gene: Austin\_46 Start: 43956, Stop: 43543, Start Num: 3

Candidate Starts for Austin\_46:

(1, 44013), (Start: 3 @43956 has 3 MA's), (4, 43929), (5, 43893), (6, 43836), (14, 43605), (15, 43602),

Gene: Benczkowski14\_40 Start: 44738, Stop: 44286, Start Num: 2

Candidate Starts for Benczkowski14\_40:

(Start: 2 @44738 has 12 MA's), (8, 44567), (9, 44525), (11, 44426), (12, 44423), (13, 44414), (17, 44360), (18, 44330),

Gene: Demosthenes\_40 Start: 44678, Stop: 44226, Start Num: 2

Candidate Starts for Demosthenes\_40:

(Start: 2 @44678 has 12 MA's), (8, 44507), (9, 44465), (11, 44366), (13, 44354), (17, 44300), (18, 44270),

Gene: GMA7\_36 Start: 38170, Stop: 37757, Start Num: 3

Candidate Starts for GMA7\_36:

(1, 38227), (Start: 3 @38170 has 3 MA's), (4, 38143), (5, 38107), (6, 38050), (14, 37819),

Gene: GTE7\_34 Start: 38174, Stop: 37788, Start Num: 4

Candidate Starts for GTE7\_34:

(1, 38258), (Start: 3 @38201 has 3 MA's), (4, 38174), (5, 38138), (6, 38081), (14, 37850),

Gene: HayZem\_45 Start: 43953, Stop: 43540, Start Num: 3

Candidate Starts for HayZem\_45:

(1, 44010), (Start: 3 @43953 has 3 MA's), (4, 43926), (5, 43890), (6, 43833), (14, 43602), (15, 43599),

Gene: Hollow\_41 Start: 45084, Stop: 44632, Start Num: 2

Candidate Starts for Hollow\_41:

(Start: 2 @45084 has 12 MA's), (8, 44913), (9, 44871), (11, 44772), (13, 44760), (18, 44676),

Gene: Katyusha\_40 Start: 44738, Stop: 44286, Start Num: 2

Candidate Starts for Katyusha\_40:

(Start: 2 @44738 has 12 MA's), (8, 44567), (9, 44525), (11, 44426), (12, 44423), (13, 44414), (17, 44360), (18, 44330),

Gene: Kvothe\_40 Start: 44637, Stop: 44185, Start Num: 2

Candidate Starts for Kvothe\_40:

(Start: 2 @44637 has 12 MA's), (8, 44466), (9, 44424), (11, 44325), (12, 44322), (13, 44313), (17, 44259), (18, 44229),

Gene: Niagara\_40 Start: 44716, Stop: 44243, Start Num: 2

Candidate Starts for Niagara\_40:

(Start: 2 @44716 has 12 MA's), (8, 44545), (9, 44503), (11, 44383), (13, 44371), (16, 44326), (17, 44317), (18, 44287),

Gene: Philon9\_43 Start: 45911, Stop: 45444, Start Num: 2

Candidate Starts for Philon9\_43:

(Start: 2 @45911 has 12 MA's), (7, 45770), (9, 45698), (10, 45611), (13, 45593),

Gene: Teatealatte\_41 Start: 44640, Stop: 44188, Start Num: 2

Candidate Starts for Teatealatte\_41:

(Start: 2 @44640 has 12 MA's), (8, 44469), (9, 44427), (11, 44328), (12, 44325), (13, 44316), (17, 44262), (18, 44232),

Gene: Teech\_41 Start: 44441, Stop: 43989, Start Num: 2

Candidate Starts for Teech\_41:

(Start: 2 @44441 has 12 MA's), (8, 44270), (9, 44228), (11, 44129), (12, 44126), (13, 44117), (17, 44063), (18, 44033),

Gene: Tredge\_41 Start: 44640, Stop: 44188, Start Num: 2

Candidate Starts for Tredge\_41:

(Start: 2 @44640 has 12 MA's), (8, 44469), (9, 44427), (11, 44328), (12, 44325), (13, 44316), (17, 44262), (18, 44232),

Gene: Vitaenoi\_43 Start: 45910, Stop: 45443, Start Num: 2

Candidate Starts for Vitaenoi\_43:

(Start: 2 @45910 has 12 MA's), (7, 45769), (9, 45697), (10, 45610), (13, 45592),