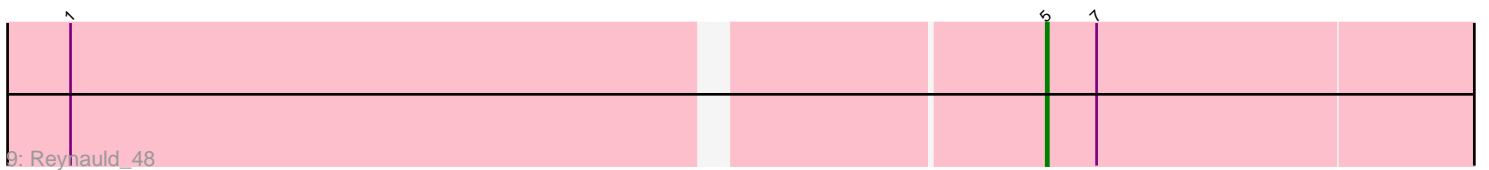
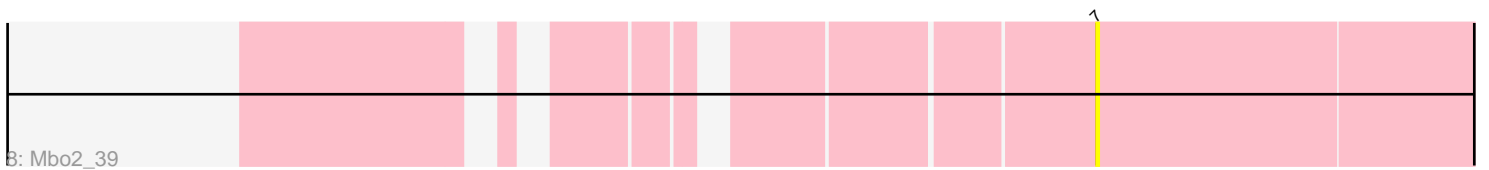
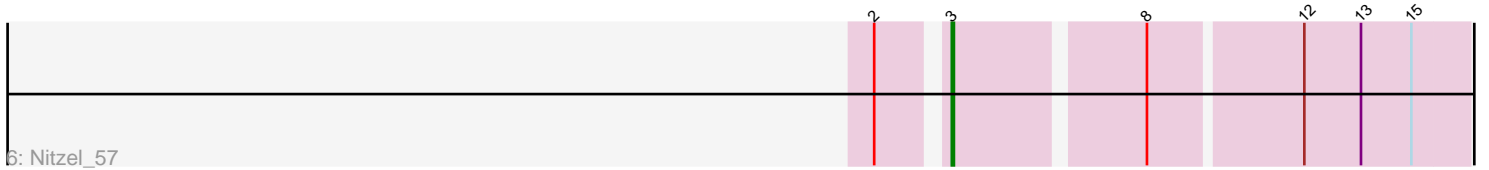
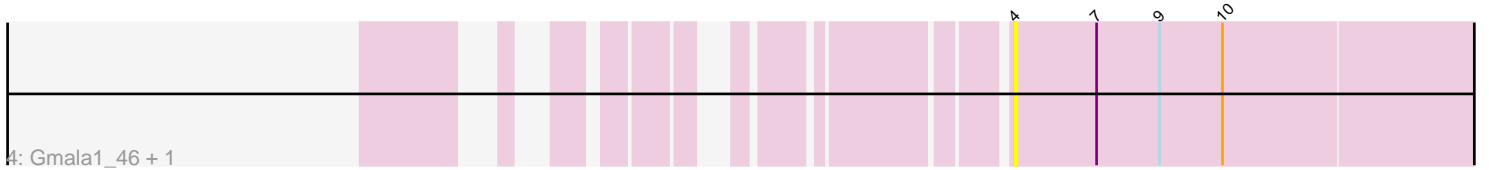
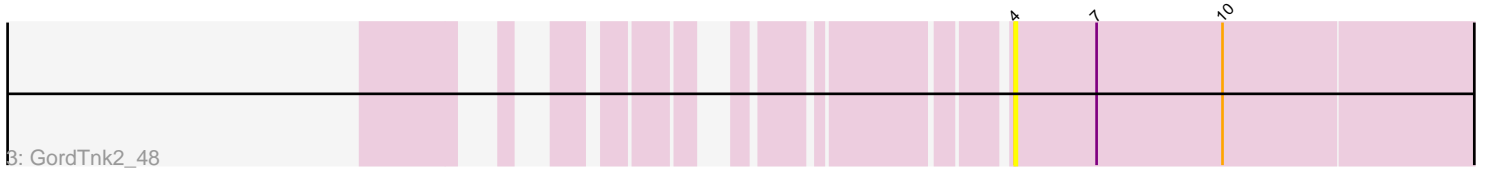
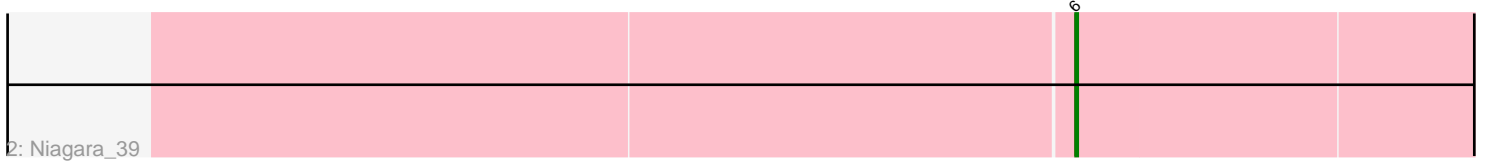


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Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. 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 162201 Report

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

Pham number 162201 has 19 members, 7 are drafts.

Phages represented in each track:

- Track 1 : Benczkowski14\_39, Tredge\_40, Demosthenes\_39, Teatealatte\_40, Katyusha\_39, ASerpRocky\_40, Teech\_40, Kvothe\_39, Hollow\_40
- Track 2 : Niagara\_39
- Track 3 : GordTnk2\_48
- Track 4 : Gmala1\_46, GordDuk1\_47
- Track 5 : Jumbo\_47, GMA3\_48
- Track 6 : Nitzel\_57
- Track 7 : DocB7\_034
- Track 8 : Mbo2\_39
- Track 9 : Reynauld\_48

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

The start number called the most often in the published annotations is 6, it was called in 9 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- ASerpRocky\_40, Benczkowski14\_39, Demosthenes\_39, Hollow\_40, Katyusha\_39, Kvothe\_39, Niagara\_39, Teatealatte\_40, Teech\_40, Tredge\_40,

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

- 

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

- DocB7\_034, GMA3\_48, Gmala1\_46, GordDuk1\_47, GordTnk2\_48, Jumbo\_47, Mbo2\_39, Nitzel\_57, Reynauld\_48,

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

Start 3:

- Found in 1 of 19 ( 5.3% ) 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: Nitzel\_57 (F1),

Start 4:

- Found in 5 of 19 ( 26.3% ) 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: GMA3\_48 (DF2), Gmala1\_46 (DF1), GordDuk1\_47 (DF1), GordTnk2\_48 (DF1), Jumbo\_47 (DF3),

Start 5:

- Found in 2 of 19 ( 10.5% ) 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: DocB7\_034 (singleton), Reynauld\_48 (singleton),

Start 6:

- Found in 10 of 19 ( 52.6% ) of genes in pham
- Manual Annotations of this start: 9 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ASerpRocky\_40 (CS4), Benczkowski14\_39 (CS4), Demosthenes\_39 (CS4), Hollow\_40 (CS4), Katyusha\_39 (CS4), Kvothe\_39 (CS4), Niagara\_39 (CS4), Teatealatte\_40 (CS4), Teech\_40 (CS4), Tredge\_40 (CS4),

Start 7:

- Found in 5 of 19 ( 26.3% ) of genes in pham
- No Manual Annotations of this start.
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Mbo2\_39 (singleton),

**Summary by clusters:**

There are 6 clusters represented in this pham: F1, singleton, DF1, DF3, DF2, CS4,

Info for manual annotations of cluster CS4:

- Start number 6 was manually annotated 9 times for cluster CS4.

Info for manual annotations of cluster DF3:

- Start number 4 was manually annotated 1 time for cluster DF3.

Info for manual annotations of cluster F1:

- Start number 3 was manually annotated 1 time for cluster F1.

**Gene Information:**

Gene: ASerpRocky\_40 Start: 44241, Stop: 44041, Start Num: 6

Candidate Starts for ASerpRocky\_40:

(Start: 6 @44241 has 9 MA's),

Gene: Benczkowski14\_39 Start: 44274, Stop: 44074, Start Num: 6  
Candidate Starts for Benczkowski14\_39:  
(Start: 6 @44274 has 9 MA's),

Gene: Demosthenes\_39 Start: 44214, Stop: 44014, Start Num: 6  
Candidate Starts for Demosthenes\_39:  
(Start: 6 @44214 has 9 MA's),

Gene: DocB7\_034 Start: 36428, Stop: 36228, Start Num: 5  
Candidate Starts for DocB7\_034:  
(Start: 5 @36428 has 1 MA's), (11, 36332), (12, 36320), (14, 36287),

Gene: GMA3\_48 Start: 45185, Stop: 44973, Start Num: 4  
Candidate Starts for GMA3\_48:  
(Start: 4 @45185 has 1 MA's),

Gene: Gmala1\_46 Start: 43387, Stop: 43169, Start Num: 4  
Candidate Starts for Gmala1\_46:  
(Start: 4 @43387 has 1 MA's), (7, 43348), (9, 43318), (10, 43288),

Gene: GordDuk1\_47 Start: 43538, Stop: 43320, Start Num: 4  
Candidate Starts for GordDuk1\_47:  
(Start: 4 @43538 has 1 MA's), (7, 43499), (9, 43469), (10, 43439),

Gene: GordTnk2\_48 Start: 43692, Stop: 43468, Start Num: 4  
Candidate Starts for GordTnk2\_48:  
(Start: 4 @43692 has 1 MA's), (7, 43653), (10, 43593),

Gene: Hollow\_40 Start: 44620, Stop: 44420, Start Num: 6  
Candidate Starts for Hollow\_40:  
(Start: 6 @44620 has 9 MA's),

Gene: Jumbo\_47 Start: 48027, Stop: 47818, Start Num: 4  
Candidate Starts for Jumbo\_47:  
(Start: 4 @48027 has 1 MA's),

Gene: Katyusha\_39 Start: 44274, Stop: 44074, Start Num: 6  
Candidate Starts for Katyusha\_39:  
(Start: 6 @44274 has 9 MA's),

Gene: Kvothe\_39 Start: 44173, Stop: 43973, Start Num: 6  
Candidate Starts for Kvothe\_39:  
(Start: 6 @44173 has 9 MA's),

Gene: Mbo2\_39 Start: 36317, Stop: 36114, Start Num: 7  
Candidate Starts for Mbo2\_39:  
(7, 36317),

Gene: Niagara\_39 Start: 44231, Stop: 44031, Start Num: 6  
Candidate Starts for Niagara\_39:  
(Start: 6 @44231 has 9 MA's),

Gene: Nitzel\_57 Start: 39291, Stop: 39521, Start Num: 3

Candidate Starts for Nitzel\_57:

(2, 39264), (Start: 3 @39291 has 1 MA's), (8, 39375), (12, 39444), (13, 39471), (15, 39495),

Gene: Reynauld\_48 Start: 45364, Stop: 45140, Start Num: 5

Candidate Starts for Reynauld\_48:

(1, 45808), (Start: 5 @45364 has 1 MA's), (7, 45340),

Gene: Teatealatte\_40 Start: 44176, Stop: 43976, Start Num: 6

Candidate Starts for Teatealatte\_40:

(Start: 6 @44176 has 9 MA's),

Gene: Teech\_40 Start: 43977, Stop: 43777, Start Num: 6

Candidate Starts for Teech\_40:

(Start: 6 @43977 has 9 MA's),

Gene: Tredge\_40 Start: 44176, Stop: 43976, Start Num: 6

Candidate Starts for Tredge\_40:

(Start: 6 @44176 has 9 MA's),