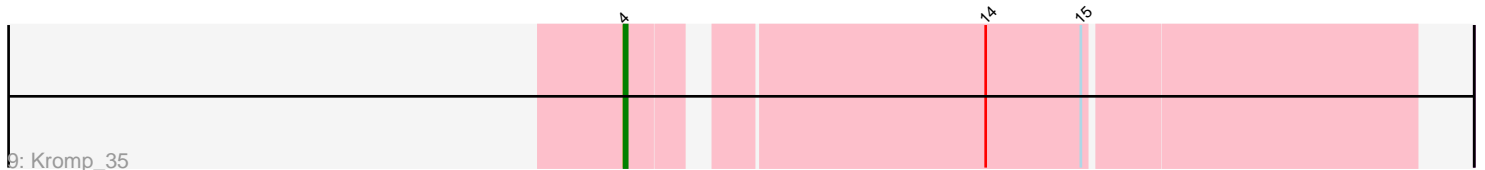
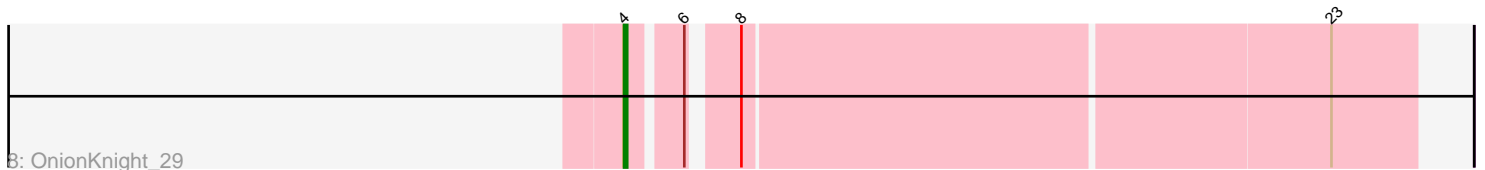
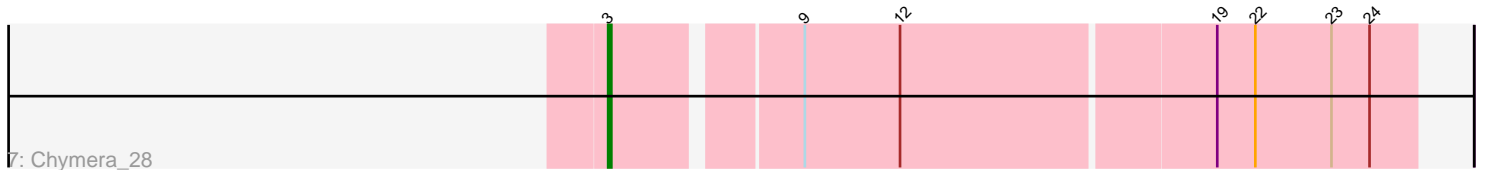
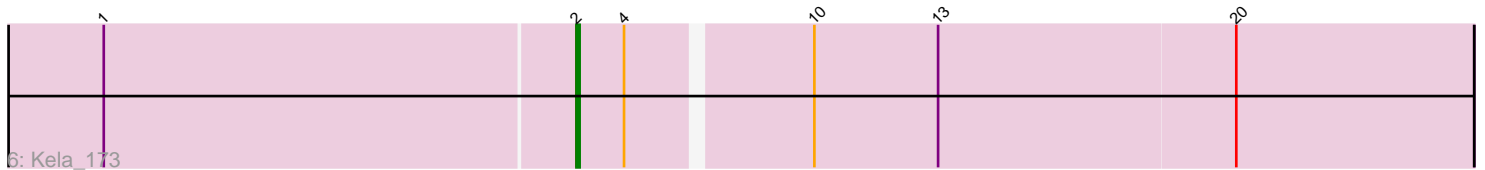
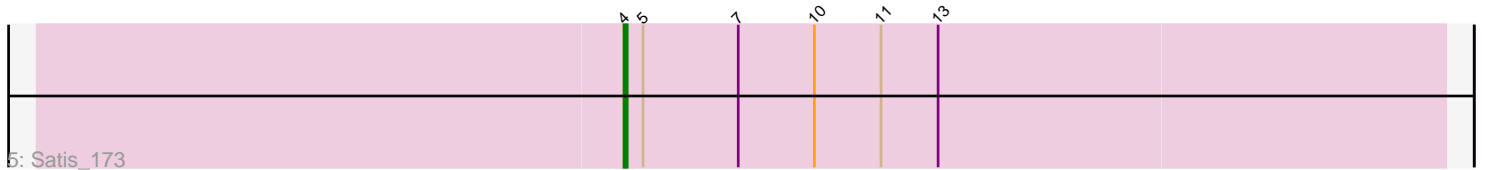
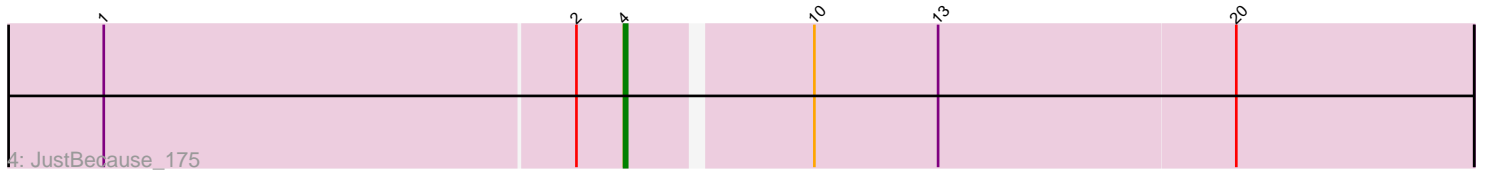
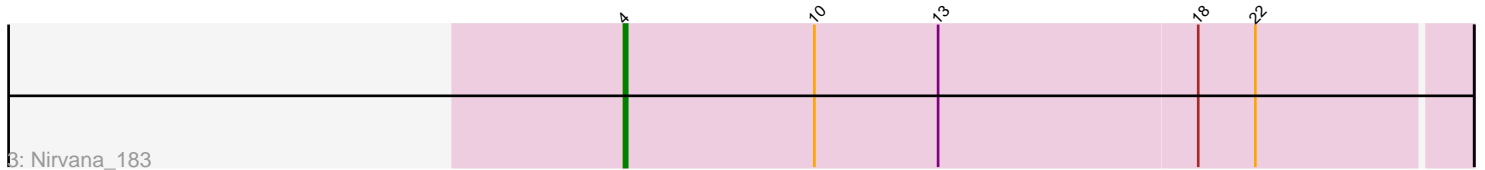
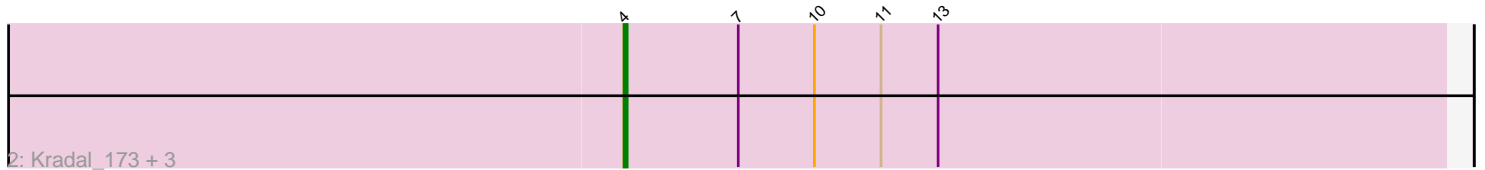
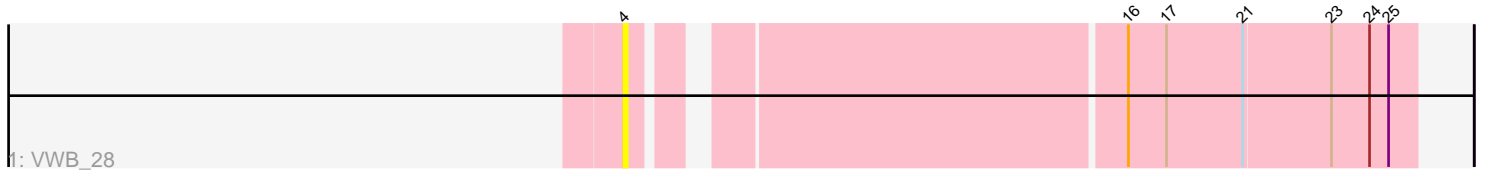


Pham 297128



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 297128 Report

This analysis was run 04/25/26 on database version 644.

Pham number 297128 has 12 members, 2 are drafts.

Phages represented in each track:

- Track 1 : VWB\_28
- Track 2 : Kradal\_173, Quantum\_172, Sarkar\_182, EhyElimayoE\_174
- Track 3 : Nirvana\_183
- Track 4 : JustBecause\_175
- Track 5 : Satis\_173
- Track 6 : Kela\_173
- Track 7 : Chymera\_28
- Track 8 : OnionKnight\_29
- Track 9 : Kromp\_35

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

The start number called the most often in the published annotations is 4, it was called in 8 of the 10 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- EhyElimayoE\_174, JustBecause\_175, Kradal\_173, Kromp\_35, Nirvana\_183, OnionKnight\_29, Quantum\_172, Sarkar\_182, Satis\_173, VWB\_28,

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

- Kela\_173,

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

- Chymera\_28,

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

Start 2:

- Found in 2 of 12 ( 16.7% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Kela\_173 (BM),

Start 3:

- Found in 1 of 12 ( 8.3% ) of genes in pham
- Manual Annotations of this start: 1 of 10
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Chymera\_28 (singleton),

Start 4:

- Found in 11 of 12 ( 91.7% ) of genes in pham
- Manual Annotations of this start: 8 of 10
- Called 90.9% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_174 (BM), JustBecause\_175 (BM), Kradal\_173 (BM), Kromp\_35 (singleton), Nirvana\_183 (BM), OnionKnight\_29 (singleton), Quantum\_172 (BM), Sarkar\_182 (BM), Satis\_173 (BM), VWB\_28 (BA),

### Summary by clusters:

There are 3 clusters represented in this pham: BM, singleton, BA,

Info for manual annotations of cluster BM:

- Start number 2 was manually annotated 1 time for cluster BM.
- Start number 4 was manually annotated 6 times for cluster BM.

### Gene Information:

Gene: Chymera\_28 Start: 21061, Stop: 20819, Start Num: 3

Candidate Starts for Chymera\_28:

(Start: 3 @21061 has 1 MA's), (9, 21007), (12, 20977), (19, 20881), (22, 20869), (23, 20845), (24, 20833),

Gene: EhyElimayoE\_174 Start: 112216, Stop: 111959, Start Num: 4

Candidate Starts for EhyElimayoE\_174:

(Start: 4 @112216 has 8 MA's), (7, 112180), (10, 112156), (11, 112135), (13, 112117),

Gene: JustBecause\_175 Start: 109723, Stop: 109463, Start Num: 4

Candidate Starts for JustBecause\_175:

(1, 109885), (Start: 2 @109738 has 1 MA's), (Start: 4 @109723 has 8 MA's), (10, 109669), (13, 109630), (20, 109537),

Gene: Kela\_173 Start: 109612, Stop: 109337, Start Num: 2

Candidate Starts for Kela\_173:

(1, 109759), (Start: 2 @109612 has 1 MA's), (Start: 4 @109597 has 8 MA's), (10, 109543), (13, 109504), (20, 109411),

Gene: Kradal\_173 Start: 112213, Stop: 111956, Start Num: 4

Candidate Starts for Kradal\_173:

(Start: 4 @112213 has 8 MA's), (7, 112177), (10, 112153), (11, 112132), (13, 112114),

Gene: Kromp\_35 Start: 27947, Stop: 27714, Start Num: 4

Candidate Starts for Kromp\_35:

(Start: 4 @27947 has 8 MA's), (14, 27845), (15, 27815),

Gene: Nirvana\_183 Start: 120173, Stop: 119910, Start Num: 4  
Candidate Starts for Nirvana\_183:  
(Start: 4 @120173 has 8 MA's), (10, 120113), (13, 120074), (18, 119993), (22, 119975),

Gene: OnionKnight\_29 Start: 22224, Stop: 21991, Start Num: 4  
Candidate Starts for OnionKnight\_29:  
(Start: 4 @22224 has 8 MA's), (6, 22209), (8, 22197), (23, 22017),

Gene: Quantum\_172 Start: 112213, Stop: 111956, Start Num: 4  
Candidate Starts for Quantum\_172:  
(Start: 4 @112213 has 8 MA's), (7, 112177), (10, 112153), (11, 112132), (13, 112114),

Gene: Sarkar\_182 Start: 112213, Stop: 111956, Start Num: 4  
Candidate Starts for Sarkar\_182:  
(Start: 4 @112213 has 8 MA's), (7, 112177), (10, 112153), (11, 112132), (13, 112114),

Gene: Satis\_173 Start: 112209, Stop: 111952, Start Num: 4  
Candidate Starts for Satis\_173:  
(Start: 4 @112209 has 8 MA's), (5, 112203), (7, 112173), (10, 112149), (11, 112128), (13, 112110),

Gene: VWB\_28 Start: 25376, Stop: 25146, Start Num: 4  
Candidate Starts for VWB\_28:  
(Start: 4 @25376 has 8 MA's), (16, 25235), (17, 25223), (21, 25199), (23, 25172), (24, 25160), (25, 25154),