

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 140317 Report

This analysis was run 04/05/24 on database version 557.

Pham number 140317 has 8 members, 1 are drafts.

Phages represented in each track:

Track 1 : JustBecause\_225, Kela\_223

Track 2 : Satis\_220, EhyElimayoE\_223, Kradal\_222

Track 3 : Frankenweenie\_242

Track 4 : Nirvana\_254Track 5 : Popper 63

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

The start number called the most often in the published annotations is 1, it was called in 3 of the 7 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

EhyElimayoE\_223, Kradal\_222, Satis\_220,

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

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

• Frankenweenie\_242, JustBecause\_225, Kela\_223, Nirvana\_254, Popper\_63,

### Summary by start number:

#### Start 1:

- Found in 3 of 8 ( 37.5% ) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_223 (BM), Kradal\_222 (BM), Satis\_220 (BM),

#### Start 2:

- Found in 4 of 8 (50.0%) of genes in pham
- Manual Annotations of this start: 3 of 7
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Frankenweenie\_242 (BM), JustBecause\_225 (BM), Kela\_223 (BM), Nirvana\_254 (BM),

#### Start 3:

- Found in 5 of 8 (62.5%) of genes in pham
- Manual Annotations of this start: 1 of 7
- Called 20.0% of time when present
- Phage (with cluster) where this start called: Popper\_63 (FF),

### **Summary by clusters:**

There are 2 clusters represented in this pham: BM, FF,

Info for manual annotations of cluster BM:

- •Start number 1 was manually annotated 3 times for cluster BM.
- •Start number 2 was manually annotated 3 times for cluster BM.

Info for manual annotations of cluster FF:

•Start number 3 was manually annotated 1 time for cluster FF.

#### Gene Information:

Gene: EhyElimayoE\_223 Start: 133218, Stop: 133532, Start Num: 1

Candidate Starts for EhyElimayoE\_223:

(Start: 1 @133218 has 3 MA's), (Start: 3 @133242 has 1 MA's), (4, 133251), (6, 133296), (7, 133299), (8, 133311), (9, 133320), (13, 133359), (16, 133425), (19, 133500),

Gene: Frankenweenie\_242 Start: 144433, Stop: 144753, Start Num: 2

Candidate Starts for Frankenweenie\_242:

(Start: 2 @144433 has 3 MA's), (Start: 3 @144448 has 1 MA's), (4, 144457), (6, 144502), (8, 144517), (9, 144526), (11, 144544), (12, 144556), (13, 144565), (16, 144631), (20, 144724),

Gene: JustBecause 225 Start: 132157, Stop: 132456, Start Num: 2

Candidate Starts for JustBecause\_225:

(Start: 2 @132157 has 3 MA's), (4, 132166), (5, 132187), (6, 132211), (7, 132214), (9, 132235), (12, 132265), (16, 132340),

Gene: Kela 223 Start: 132002, Stop: 132301, Start Num: 2

Candidate Starts for Kela 223:

(Start: 2 @132002 has 3 MA's), (4, 132011), (5, 132032), (6, 132056), (7, 132059), (9, 132080), (12, 132110), (16, 132185),

Gene: Kradal\_222 Start: 133215, Stop: 133529, Start Num: 1

Candidate Starts for Kradal\_222:

(Start: 1 @133215 has 3 MA's), (Start: 3 @133239 has 1 MA's), (4, 133248), (6, 133293), (7, 133296), (8, 133308), (9, 133317), (13, 133356), (16, 133422), (19, 133497),

Gene: Nirvana 254 Start: 143308, Stop: 143607, Start Num: 2

Candidate Starts for Nirvana 254:

(Start: 2 @143308 has 3 MA's), (4, 143317), (7, 143365), (8, 143377), (9, 143386), (11, 143404), (13, 143425), (16, 143491), (20, 143584),

Gene: Popper\_63 Start: 38038, Stop: 38418, Start Num: 3

Candidate Starts for Popper\_63:

 $(Start: 3 @ 38038 \ has \ 1 \ MA's), \ (7, 38095), \ (10, 38143), \ (14, 38191), \ (15, 38221), \ (17, 38284), \ (18, 38191), \ (18, 38191), \ (19, 38191)$ 

38299), (21, 38353),

Gene: Satis\_220 Start: 133552, Stop: 133866, Start Num: 1

Candidate Starts for Satis\_220:

(Start: 1 @133552 has 3 MA's), (Start: 3 @133576 has 1 MA's), (4, 133585), (6, 133630), (7, 133633),

(8, 133645), (9, 133654), (13, 133693), (16, 133759), (19, 133834),