

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 158366 Report

This analysis was run 04/13/24 on database version 558.

Pham number 158366 has 10 members, 1 are drafts.

Phages represented in each track:

Track 1 : EhyElimayoE\_131, Kradal\_130, Satis\_130

Track 2 : Frankenweenie\_140

Track 3: EhyElimayoE\_136, Kradal\_135, Satis\_135

Track 4 : Kela 129, JustBecause 128

Track 5 : Nirvana\_141

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

The start number called the most often in the published annotations is 9, it was called in 3 of the 9 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

Frankenweenie\_140, JustBecause\_128, Kela\_129, Nirvana\_141,

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:

EhyElimayoE\_131, EhyElimayoE\_136, Kradal\_130, Kradal\_135, Satis\_130, Satis\_135,

### Summary by start number:

#### Start 9:

- Found in 4 of 10 (40.0%) of genes in pham
- Manual Annotations of this start: 3 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Frankenweenie\_140 (BM), JustBecause\_128 (BM), Kela\_129 (BM), Nirvana\_141 (BM),

### Start 10:

- Found in 3 of 10 ( 30.0% ) of genes in pham
- Manual Annotations of this start: 3 of 9
- Called 100.0% of time when present

• Phage (with cluster) where this start called: EhyElimayoE\_131 (BM), Kradal\_130 (BM), Satis 130 (BM),

#### Start 11:

- Found in 3 of 10 (30.0%) of genes in pham
- Manual Annotations of this start: 3 of 9
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_136 (BM), Kradal\_135 (BM), Satis\_135 (BM),

## **Summary by clusters:**

There is one cluster represented in this pham: BM

Info for manual annotations of cluster BM:

- •Start number 9 was manually annotated 3 times for cluster BM.
- •Start number 10 was manually annotated 3 times for cluster BM.
- •Start number 11 was manually annotated 3 times for cluster BM.

### Gene Information:

Gene: EhyElimayoE\_131 Start: 83672, Stop: 83448, Start Num: 10

Candidate Starts for EhyElimayoE\_131:

(Start: 10 @83672 has 3 MA's), (17, 83558), (19, 83471),

Gene: EhyElimayoE\_136 Start: 85184, Stop: 84945, Start Num: 11

Candidate Starts for EhyElimayoE\_136:

(6, 85271), (7, 85211), (8, 85202), (Start: 11 @85184 has 3 MA's), (14, 85085), (15, 85064), (16,

85058), (18, 85028), (21, 84956),

Gene: Frankenweenie 140 Start: 88739, Stop: 88512, Start Num: 9

Candidate Starts for Frankenweenie\_140:

(1, 89195), (2, 89105), (3, 89021), (4, 88958), (5, 88877), (Start: 9 @88739 has 3 MA's), (12, 88721), (17, 88622), (19, 88535),

Gene: JustBecause\_128 Start: 82850, Stop: 82623, Start Num: 9

Candidate Starts for JustBecause 128:

(5, 82988), (Start: 9 @82850 has 3 MA's), (19, 82646), (20, 82640),

Gene: Kela 129 Start: 82730, Stop: 82503, Start Num: 9

Candidate Starts for Kela 129:

(5, 82868), (Start: 9 @82730 has 3 MA's), (19, 82526), (20, 82520),

Gene: Kradal 135 Start: 85181, Stop: 84942, Start Num: 11

Candidate Starts for Kradal 135:

(6, 85268), (7, 85208), (8, 85199), (Start: 11 @85181 has 3 MA's), (14, 85082), (15, 85061), (16, 85055), (18, 85025), (21, 84953),

Gene: Kradal 130 Start: 83669, Stop: 83445, Start Num: 10

Candidate Starts for Kradal 130:

(Start: 10 @83669 has 3 MA's), (17, 83555), (19, 83468),

Gene: Nirvana\_141 Start: 87146, Stop: 86919, Start Num: 9 Candidate Starts for Nirvana\_141: (1, 87602), (2, 87512), (3, 87428), (4, 87365), (5, 87284), (Start: 9 @87146 has 3 MA's), (13, 87119), (17, 87029),

Gene: Satis\_135 Start: 85177, Stop: 84938, Start Num: 11 Candidate Starts for Satis\_135: (6, 85264), (7, 85204), (8, 85195), (Start: 11 @85177 has 3 MA's), (14, 85078), (15, 85057), (16, 85051), (18, 85021), (21, 84949),

Gene: Satis\_130 Start: 83665, Stop: 83441, Start Num: 10 Candidate Starts for Satis\_130:

(Start: 10 @83665 has 3 MA's), (17, 83551), (19, 83464),