

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 7417 Report

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

Pham number 7417 has 7 members, 1 are drafts.

Phages represented in each track:

Track 1: Satis 70, EhyElimayoE 70, Kradal 70

Track 2 : Kela\_66, JustBecause\_65

Track 3 : Frankenweenie\_77

Track 4 : Nirvana 76

## 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 6 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• EhyElimayoE\_70, Frankenweenie\_77, JustBecause\_65, Kela\_66, Kradal\_70, Nirvana\_76, Satis\_70,

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

•

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

### Summary by start number:

#### Start 2:

- Found in 7 of 7 (100.0%) of genes in pham
- Manual Annotations of this start: 6 of 6
- Called 100.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE\_70 (BM),
  Frankenweenie\_77 (BM), JustBecause\_65 (BM), Kela\_66 (BM), Kradal\_70 (BM),
  Nirvana\_76 (BM), Satis\_70 (BM),

### Summary by clusters:

There is one cluster represented in this pham: BM

Info for manual annotations of cluster BM:

•Start number 2 was manually annotated 6 times for cluster BM.

#### Gene Information:

Gene: EhyElimayoE 70 Start: 51368, Stop: 50133, Start Num: 2

Candidate Starts for EhyElimayoE\_70:

(Start: 2 @51368 has 6 MA's), (4, 51278), (5, 51251), (8, 51152), (10, 51128), (11, 51122), (13, 51047), (15, 50948), (16, 50744), (17, 50729), (18, 50708), (20, 50690), (23, 50582), (24, 50573), (28, 50420), (30, 50369), (34, 50258),

Gene: Frankenweenie\_77 Start: 54078, Stop: 52867, Start Num: 2

Candidate Starts for Frankenweenie\_77:

(1, 54117), (Start: 2 @54078 has 6 MA's), (3, 54027), (6, 53940), (7, 53907), (9, 53862), (10, 53844), (12, 53820), (13, 53763), (14, 53727), (15, 53667), (17, 53448), (19, 53412), (20, 53409), (21, 53337), (28, 53160), (30, 53109), (31, 53082), (33, 53004), (34, 52998), (37, 52932),

Gene: JustBecause\_65 Start: 48733, Stop: 47483, Start Num: 2

Candidate Starts for JustBecause 65:

(Start: 2 @ 48733 has 6 MA's), (10, 48496), (13, 48415), (14, 48376), (17, 48097), (18, 48076), (19, 48061), (20, 48058), (26, 47854), (27, 47836), (28, 47794), (29, 47749), (32, 47701),

Gene: Kela\_66 Start: 48598, Stop: 47348, Start Num: 2

Candidate Starts for Kela 66:

(Start: 2 @48598 has 6 MA's), (10, 48361), (13, 48280), (14, 48241), (17, 47962), (18, 47941), (19, 47926), (20, 47923), (26, 47719), (27, 47701), (28, 47659), (29, 47614), (32, 47566),

Gene: Kradal 70 Start: 51368, Stop: 50133, Start Num: 2

Candidate Starts for Kradal 70:

(Start: 2 @51368 has 6 MA's), (4, 51278), (5, 51251), (8, 51152), (10, 51128), (11, 51122), (13, 51047), (15, 50948), (16, 50744), (17, 50729), (18, 50708), (20, 50690), (23, 50582), (24, 50573), (28, 50420), (30, 50369), (34, 50258),

Gene: Nirvana\_76 Start: 53472, Stop: 52237, Start Num: 2

Candidate Starts for Nirvana\_76:

(Start: 2 @53472 has 6 MA's), (3, 53412), (6, 53328), (7, 53295), (10, 53232), (13, 53151), (14, 53115), (15, 53055), (17, 52836), (19, 52800), (20, 52797), (21, 52725), (22, 52719), (25, 52635), (28, 52548), (30, 52497), (33, 52392), (34, 52386), (35, 52377), (36, 52353),

Gene: Satis 70 Start: 51364, Stop: 50129, Start Num: 2

Candidate Starts for Satis 70:

(Start: 2 @51364 has 6 MA's), (4, 51274), (5, 51247), (8, 51148), (10, 51124), (11, 51118), (13, 51043), (15, 50944), (16, 50740), (17, 50725), (18, 50704), (20, 50686), (23, 50578), (24, 50569), (28, 50416), (30, 50365), (34, 50254),