E. Kradal_111 + 2 E. Kradal_111 + 2 E. Frankenwaenia_121			b 6 9 10
E: Kradal_111 + 2 B: Kela_111 B: Frankenweenie_121			
E: Kradal_111 + 2 B: Kela_111 B: Frankenweenie_121	1: Nirvana 122		
E. Kradal_111 + 2 B. Kela_111 B. Frankenweenie_121			
B: Kela_111			
B: Kela_111			
B: Kela_111 A: Frankenweenie_121	2: Kradal_111 + 2		
4: Frankenweenie_121			
4: Frankenweenie_121	B: Kela_111		
d: Frankenweenie_121	_	·V	k 5 6 1 9
	4: Frankenweenie 121		
		ď	
5: JustBecause_110	5: JustBecause_110		

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 7437 Report

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

Pham number 7437 has 7 members, 1 are drafts.

Phages represented in each track:

• Track 1 : Nirvana 122

• Track 2 : Kradal_111, EhyElimayoE_112, Satis_111

Track 3: Kela 111

Track 4 : Frankenweenie_121Track 5 : JustBecause_110

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

The start number called the most often in the published annotations is 3, it was called in 3 of the 6 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

EhyElimayoE_112, Kradal_111, Satis_111,

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

JustBecause_110,

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

Frankenweenie 121, Kela 111, Nirvana 122,

Summary by start number:

Start 3:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 75.0% of time when present
- Phage (with cluster) where this start called: EhyElimayoE_112 (BM), Kradal_111 (BM), Satis_111 (BM),

Start 4:

- Found in 4 of 7 (57.1%) of genes in pham
- Manual Annotations of this start: 3 of 6
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Frankenweenie_121 (BM), JustBecause_110 (BM), Kela_111 (BM), Nirvana_122 (BM),

Summary by clusters:

There is one cluster represented in this pham: BM

Info for manual annotations of cluster BM:

- •Start number 3 was manually annotated 3 times for cluster BM.
- •Start number 4 was manually annotated 3 times for cluster BM.

Gene Information:

Gene: EhyElimayoE_112 Start: 74449, Stop: 74216, Start Num: 3

Candidate Starts for EhyElimayoE 112:

(Start: 3 @74449 has 3 MA's), (6, 74347), (9, 74284), (10, 74239),

Gene: Frankenweenie_121 Start: 79408, Stop: 79190, Start Num: 4

Candidate Starts for Frankenweenie 121:

(1, 80056), (2, 79513), (Start: 4 @79408 has 3 MA's), (5, 79327), (6, 79303), (7, 79276), (9, 79261),

Gene: JustBecause_110 Start: 73635, Stop: 73417, Start Num: 4

Candidate Starts for JustBecause_110:

(Start: 3 @73638 has 3 MA's), (Start: 4 @73635 has 3 MA's), (5, 73554), (6, 73530), (7, 73503), (9, 73488), (10, 73440), (11, 73431),

Gene: Kela_111 Start: 73500, Stop: 73282, Start Num: 4

Candidate Starts for Kela_111:

(2, 73605), (Start: 4 @73500 has 3 MA's), (5, 73419), (6, 73395), (7, 73368), (9, 73353), (10, 73305), (11, 73296),

Gene: Kradal_111 Start: 74449, Stop: 74216, Start Num: 3

Candidate Starts for Kradal 111:

(Start: 3 @74449 has 3 MA's), (6, 74347), (9, 74284), (10, 74239),

Gene: Nirvana_122 Start: 77811, Stop: 77593, Start Num: 4

Candidate Starts for Nirvana 122:

(Start: 4 @ 77811 has 3 MA's), (6, 77706), (8, 77664), (10, 77616), (12, 77598),

Gene: Satis_111 Start: 74445, Stop: 74212, Start Num: 3

Candidate Starts for Satis 111:

(Start: 3 @74445 has 3 MA's), (6, 74343), (9, 74280), (10, 74235),