		<u>6</u> 1	% %
1: Noella_81 + 12			
	x 6	6	♦ 9
2: JF2_76 + 1			
	x 5	0	9 9
B: Isca_76			
	. 6	6	& S .
		Ĭ	Ĭ
4: B1_70			
	× 6	6	9
5: MK4_73			

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 4243 Report

This analysis was run 04/28/24 on database version 559.

Pham number 4243 has 18 members, 1 are drafts.

Phages represented in each track:

• Track 1: Noella_81, Hookmount_80, Panamaxus_77, Popcicle_80, ResDef_78, Norbert_76, Lambert1_80, Pocahontas_79, Texage_78, Margo_80, Veracruz_77, QuinnKiro_79, Todacoro_80

• Track 2 : JF2_76, JF4_76

Track 3 : Isca_76Track 4 : B1_70Track 5 : MK4 73

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

The start number called the most often in the published annotations is 6, it was called in 16 of the 17 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Hookmount_80, Isca_76, JF2_76, JF4_76, Lambert1_80, MK4_73, Margo_80, Noella_81, Norbert_76, Panamaxus_77, Pocahontas_79, Popcicle_80, QuinnKiro_79, ResDef_78, Texage_78, Todacoro_80, Veracruz_77,

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

• B1 70.

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

•

Summary by start number:

Start 5:

- Found in 5 of 18 (27.8%) of genes in pham
- Manual Annotations of this start: 1 of 17
- Called 20.0% of time when present
- Phage (with cluster) where this start called: B1_70 (A3),

Start 6:

• Found in 18 of 18 (100.0%) of genes in pham

- Manual Annotations of this start: 16 of 17
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Hookmount_80 (A3), Isca_76 (A3), JF2_76 (A3), JF4_76 (A3), Lambert1_80 (A3), MK4_73 (A3), Margo_80 (A3), Noella_81 (A3), Norbert_76 (A3), Panamaxus_77 (A3), Pocahontas_79 (A3), Popcicle_80 (A3), QuinnKiro_79 (A3), ResDef_78 (A3), Texage_78 (A3), Todacoro_80 (A3), Veracruz_77 (A3),

Summary by clusters:

There is one cluster represented in this pham: A3

Info for manual annotations of cluster A3:

- •Start number 5 was manually annotated 1 time for cluster A3.
- •Start number 6 was manually annotated 16 times for cluster A3.

Gene Information:

Gene: B1_70 Start: 44022, Stop: 43846, Start Num: 5

Candidate Starts for B1 70:

(4, 44037), (Start: 5 @ 44022 has 1 MA's), (Start: 6 @ 43992 has 16 MA's), (8, 43926), (9, 43920),

Gene: Hookmount_80 Start: 46144, Stop: 45998, Start Num: 6

Candidate Starts for Hookmount 80:

(Start: 6 @ 46144 has 16 MA's), (7, 46132), (8, 46078), (9, 46072),

Gene: Isca_76 Start: 45296, Stop: 45150, Start Num: 6

Candidate Starts for Isca_76:

(1, 45548), (2, 45506), (3, 45473), (4, 45341), (Start: 5 @45326 has 1 MA's), (Start: 6 @45296 has 16 MA's), (8, 45230), (9, 45224),

Gene: JF2 76 Start: 43992, Stop: 43846, Start Num: 6

Candidate Starts for JF2 76:

(4, 44037), (Start: 5 @ 44022 has 1 MA's), (Start: 6 @ 43992 has 16 MA's), (8, 43926), (9, 43920),

Gene: JF4_76 Start: 43992, Stop: 43846, Start Num: 6

Candidate Starts for JF4_76:

(4, 44037), (Start: 5 @44022 has 1 MA's), (Start: 6 @43992 has 16 MA's), (8, 43926), (9, 43920),

Gene: Lambert1_80 Start: 46145, Stop: 45999, Start Num: 6

Candidate Starts for Lambert 180:

(Start: 6 @ 46145 has 16 MA's), (7, 46133), (8, 46079), (9, 46073),

Gene: MK4_73 Start: 43719, Stop: 43573, Start Num: 6

Candidate Starts for MK4 73:

(2, 43929), (3, 43896), (4, 43764), (Start: 5 @43749 has 1 MA's), (Start: 6 @43719 has 16 MA's), (8, 43653), (9, 43647),

Gene: Margo 80 Start: 46170, Stop: 46024, Start Num: 6

Candidate Starts for Margo 80:

(Start: 6 @ 46170 has 16 MA's), (7, 46158), (8, 46104), (9, 46098),

Gene: Noella_81 Start: 46146, Stop: 46000, Start Num: 6

Candidate Starts for Noella_81:

(Start: 6 @ 46146 has 16 MA's), (7, 46134), (8, 46080), (9, 46074),

Gene: Norbert_76 Start: 46143, Stop: 45997, Start Num: 6

Candidate Starts for Norbert_76:

(Start: 6 @ 46143 has 16 MA's), (7, 46131), (8, 46077), (9, 46071),

Gene: Panamaxus_77 Start: 46145, Stop: 45999, Start Num: 6

Candidate Starts for Panamaxus 77:

(Start: 6 @ 46145 has 16 MA's), (7, 46133), (8, 46079), (9, 46073),

Gene: Pocahontas_79 Start: 46141, Stop: 45995, Start Num: 6

Candidate Starts for Pocahontas_79:

(Start: 6 @ 46141 has 16 MA's), (7, 46129), (8, 46075), (9, 46069),

Gene: Popcicle_80 Start: 46141, Stop: 45995, Start Num: 6

Candidate Starts for Popcicle 80:

(Start: 6 @ 46141 has 16 MA's), (7, 46129), (8, 46075), (9, 46069),

Gene: QuinnKiro_79 Start: 46144, Stop: 45998, Start Num: 6

Candidate Starts for QuinnKiro_79:

(Start: 6 @ 46144 has 16 MA's), (7, 46132), (8, 46078), (9, 46072),

Gene: ResDef_78 Start: 46147, Stop: 46001, Start Num: 6

Candidate Starts for ResDef_78:

(Start: 6 @ 46147 has 16 MA's), (7, 46135), (8, 46081), (9, 46075),

Gene: Texage_78 Start: 46145, Stop: 45999, Start Num: 6

Candidate Starts for Texage_78:

(Start: 6 @ 46145 has 16 MA's), (7, 46133), (8, 46079), (9, 46073),

Gene: Todacoro_80 Start: 46144, Stop: 45998, Start Num: 6

Candidate Starts for Todacoro_80:

(Start: 6 @ 46144 has 16 MA's), (7, 46132), (8, 46078), (9, 46072),

Gene: Veracruz_77 Start: 46145, Stop: 45999, Start Num: 6

Candidate Starts for Veracruz_77:

(Start: 6 @ 46145 has 16 MA's), (7, 46133), (8, 46079), (9, 46073),