	2	<u> </u>	6 1 8	9	
1: Atcob_75 + 5					
	ı		6 1 B	9	ν,
			ĬÌ		
2: Mali i hi_76					
				9	
3: Bunnies_78 + 2					
			6 1 8	9	
4: Jung_74 + 1					
		, S	1		,0
5: Xavia_68					
D					

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 225013 Report

This analysis was run 03/28/25 on database version 593.

Pham number 225013 has 13 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Atcoo_75, Sonah_78, Brusacoram_75, FirstPlacePfu_79, Thespis_75, Camster_77
- Track 2: Malithi 76
- Track 3: Bunnies_78, Ksquared_77, Bhagsy_78
- Track 4 : Jung_74, StevieRay_78
- Track 5 : Xavia_68

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

The start number called the most often in the published annotations is 4, it was called in 11 of the 12 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Atcoo_75, Bhagsy_78, Brusacoram_75, Bunnies_78, Camster_77, FirstPlacePfu_79, Jung_74, Ksquared_77, Malithi_76, Sonah_78, StevieRay_78, Thespis_75,

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

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

• Xavia_68,

Summary by start number:

Start 3:

- Found in 1 of 13 (7.7%) of genes in pham
- Manual Annotations of this start: 1 of 12
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Xavia_68 (P3),

Start 4:

- Found in 12 of 13 (92.3%) of genes in pham
- Manual Annotations of this start: 11 of 12

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atcoo_75 (P1), Bhagsy_78 (P1), Brusacoram_75 (P1), Bunnies_78 (P1), Camster_77 (P1), FirstPlacePfu_79 (P1), Jung_74 (P1), Ksquared_77 (P1), Malithi_76 (P1), Sonah_78 (P1), StevieRay_78 (P1), Thespis_75 (P1),

Summary by clusters:

There are 2 clusters represented in this pham: P3, P1,

Info for manual annotations of cluster P1:

Start number 4 was manually annotated 11 times for cluster P1.

Info for manual annotations of cluster P3:

•Start number 3 was manually annotated 1 time for cluster P3.

Gene Information:

Gene: Atcoo_75 Start: 47621, Stop: 47878, Start Num: 4

Candidate Starts for Atcoo 75:

(1, 47309), (2, 47381), (Start: 4 @ 47621 has 11 MA's), (6, 47654), (7, 47690), (8, 47705), (9, 47807),

Gene: Bhagsy_78 Start: 46742, Stop: 46999, Start Num: 4

Candidate Starts for Bhagsy_78:

(1, 46427), (2, 46499), (Start: 4 @ 46742 has 11 MA's), (6, 46775), (7, 46811), (8, 46826), (9, 46928),

Gene: Brusacoram_75 Start: 46164, Stop: 46421, Start Num: 4

Candidate Starts for Brusacoram 75:

(1, 45852), (2, 45924), (Start: 4 @ 46164 has 11 MA's), (6, 46197), (7, 46233), (8, 46248), (9, 46350),

Gene: Bunnies 78 Start: 47369, Stop: 47626, Start Num: 4

Candidate Starts for Bunnies 78:

(1, 47054), (2, 47126), (Start: 4 @ 47369 has 11 MA's), (6, 47402), (7, 47438), (8, 47453), (9, 47555),

Gene: Camster_77 Start: 45696, Stop: 45953, Start Num: 4

Candidate Starts for Camster_77:

(1, 45384), (2, 45456), (Start: 4 @ 45696 has 11 MA's), (6, 45729), (7, 45765), (8, 45780), (9, 45882),

Gene: FirstPlacePfu 79 Start: 44227, Stop: 44484, Start Num: 4

Candidate Starts for FirstPlacePfu 79:

(1, 43915), (2, 43987), (Start: 4 @ 44227 has 11 MA's), (6, 44260), (7, 44296), (8, 44311), (9, 44413),

Gene: Jung_74 Start: 45106, Stop: 45363, Start Num: 4

Candidate Starts for Jung_74:

(1, 44830), (2, 44902), (Start: 4 @ 45106 has 11 MA's), (6, 45139), (7, 45175), (8, 45190), (9, 45292),

Gene: Ksquared 77 Start: 47246, Stop: 47503, Start Num: 4

Candidate Starts for Ksquared 77:

(1, 46931), (2, 47003), (Start: 4 @ 47246 has 11 MA's), (6, 47279), (7, 47315), (8, 47330), (9, 47432),

Gene: Malithi_76 Start: 45416, Stop: 45673, Start Num: 4

Candidate Starts for Malithi 76:

(1, 45104), (2, 45176), (Start: 4 @ 45416 has 11 MA's), (6, 45449), (7, 45485), (8, 45500), (9, 45602), (11, 45656),

Gene: Sonah_78 Start: 44961, Stop: 45218, Start Num: 4

Candidate Starts for Sonah 78:

(1, 44649), (2, 44721), (Start: 4 @ 44961 has 11 MA's), (6, 44994), (7, 45030), (8, 45045), (9, 45147),

Gene: StevieRay_78 Start: 47362, Stop: 47619, Start Num: 4

Candidate Starts for StevieRay_78:

(1, 47086), (2, 47158), (Start: 4 @ 47362 has 11 MA's), (6, 47395), (7, 47431), (8, 47446), (9, 47548),

Gene: Thespis_75 Start: 46164, Stop: 46421, Start Num: 4

Candidate Starts for Thespis_75:

(1, 45852), (2, 45924), (Start: 4 @ 46164 has 11 MA's), (6, 46197), (7, 46233), (8, 46248), (9, 46350),

Gene: Xavia_68 Start: 48390, Stop: 48626, Start Num: 3

Candidate Starts for Xavia_68:

(Start: 3 @ 48390 has 1 MA's), (5, 48411), (7, 48459), (10, 48591),