Pham 224845

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2: Button_68 + 2					
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B: AikoCarson_67					
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4: MaVan_64 + 2					
	Q	P P	° 1° 1° 1	\$ \$	
5: Burnsey_67 + 1		a di		<sub>1</sub> 2	÷
	9	p p	<u>ት</u> የትም የቅ	<sup>1</sup> 2	13 <sup>2</sup>
6: AndPeggy_60 + 1 ე ახავ	~	~~	<u></u>	چې چې	
7: Orla_73	<i>"</i> 0	~~	Ŷ	\$ \$	
B: Hexbug_72	×.	Pt V	ዮኁዮ	° <sup>5</sup>	ې مې
B: Fribs8_64		\$ \$\$\$ }}	φ τ΄ φ	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
10: HippoPololi_64	9	2° 22	<u> ም</u> ም ቆ ም	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	a <sup>ja</sup>
11: Biskit_69 + 2	φ <sup>(<sup>2</sup>)</sup>	×° ,	is 1.18		
12: Jamzy_72	~~	<sup>1</sup> 0 <sup>1</sup> 8	¢	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
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13: RanchParmCat_72 + 1	~~	× × × × × × × × ×	¢	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

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 224845 Report

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

Pham number 224845 has 24 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Gibbous\_64, Dre3\_64
- Track 2 : Button\_68, Yakult\_71, GiKK\_72
- Track 3 : AikoCarson\_67
- Track 4 : MaVan\_64, Azira\_64, Survivors\_66
- Track 5 : Burnsey\_67, Quasar\_68
- Track 6 : AndPeggy\_60, Yarn\_61
- Track 7 : Orla\_73
- Track 8 : Hexbug\_72
- Track 9 : Fribs8\_64
- Track 10 : HippoPololi\_64
- Track 11 : Biskit\_69, SketchMex\_67, Blondies\_72
- Track 12 : Jamzy\_72
- Track 13 : RanchParmCat\_72, Margaret\_73
- Track 14 : Nodigi\_72

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

The start number called the most often in the published annotations is 14, it was called in 4 of the 23 non-draft genes in the pham.

Genes that call this "Most Annotated" start: • Azira\_64, Fribs8\_64, MaVan\_64, Survivors\_66,

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

Genes that do not have the "Most Annotated" start: • AikoCarson\_67, AndPeggy\_60, Biskit\_69, Blondies\_72, Burnsey\_67, Button\_68, Dre3\_64, GiKK\_72, Gibbous\_64, Hexbug\_72, HippoPololi\_64, Jamzy\_72, Margaret\_73, Nodigi\_72, Orla\_73, Quasar\_68, RanchParmCat\_72, SketchMex\_67, Yakult\_71, Yarn\_61,

## Summary by start number:

## Start 9:

- Found in 8 of 24 (33.3%) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called 50.0% of time when present

• Phage (with cluster) where this start called: AikoCarson\_67 (CT), Biskit\_69 (CT), Blondies\_72 (CT), SketchMex\_67 (CT),

#### Start 11:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Margaret\_73 (CT), RanchParmCat\_72 (CT),

Start 14:

- Found in 4 of 24 (16.7%) of genes in pham
- Manual Annotations of this start: 4 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Azira\_64 (CT), Fribs8\_64 (CT),
- MaVan\_64 (CT), Survivors\_66 (CT),

#### Start 15:

- Found in 1 of 24 (4.2%) of genes in pham
- Manual Annotations of this start: 1 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: HippoPololi\_64 (CT),

## Start 16:

- Found in 6 of 24 (25.0%) of genes in pham
- Manual Annotations of this start: 4 of 23
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Button\_68 (CT), GiKK\_72 (CT), Jamzy\_72 (CT), Yakult\_71 (CT),

## Start 17:

- Found in 2 of 24 (8.3%) of genes in pham
- Manual Annotations of this start: 2 of 23
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dre3\_64 (CT), Gibbous\_64 (CT),

#### Start 18:

- Found in 5 of 24 (20.8%) of genes in pham
- Manual Annotations of this start: 3 of 23
- Called 60.0% of time when present
- Phage (with cluster) where this start called: Hexbug\_72 (CT), Nodigi\_72 (CT), Orla\_73 (CT),

## Start 20:

- Found in 15 of 24 (62.5%) of genes in pham
- Manual Annotation's of this start: 4 of 23
- Called 26.7% of time when present
- Phage (with cluster) where this start called: AndPeggy\_60 (CT), Burnsey\_67 (CT), Quasar\_68 (CT), Yarn\_61 (CT),

#### Summary by clusters:

There is one cluster represented in this pham: CT

Info for manual annotations of cluster CT:

•Start number 9 was manually annotated 3 times for cluster CT.

•Start number 11 was manually annotated 2 times for cluster CT.

•Start number 14 was manually annotated 4 times for cluster CT.

•Start number 15 was manually annotated 1 time for cluster CT.

Start number 16 was manually annotated 4 times for cluster CT.

•Start number 17 was manually annotated 2 times for cluster CT.

•Start number 18 was manually annotated 3 times for cluster CT.

•Start number 20 was manually annotated 4 times for cluster CT.

#### Gene Information:

Gene: AikoCarson\_67 Start: 44165, Stop: 44407, Start Num: 9 Candidate Starts for AikoCarson\_67: (Start: 9 @44165 has 3 MA's), (Start: 20 @44240 has 4 MA's), (23, 44255), (24, 44285), (25, 44294), (26, 44300), (28, 44318), (33, 44360),

Gene: AndPeggy\_60 Start: 43276, Stop: 43449, Start Num: 20 Candidate Starts for AndPeggy\_60: (Start: 9 @43207 has 3 MA's), (Start: 20 @43276 has 4 MA's), (22, 43285), (24, 43321), (25, 43330), (26, 43336), (28, 43354), (29, 43375), (32, 43393), (33, 43396), (35, 43414),

Gene: Azira\_64 Start: 44044, Stop: 44253, Start Num: 14 Candidate Starts for Azira\_64: (Start: 14 @44044 has 4 MA's), (Start: 20 @44089 has 4 MA's), (21, 44092), (22, 44101), (26, 44152), (27, 44161), (28, 44170), (31, 44203), (32, 44209), (33, 44212),

Gene: Biskit\_69 Start: 44728, Stop: 44964, Start Num: 9 Candidate Starts for Biskit\_69: (Start: 9 @44728 has 3 MA's), (Start: 20 @44803 has 4 MA's), (22, 44812), (25, 44857), (26, 44863), (27, 44872), (28, 44881), (33, 44923), (34, 44941),

Gene: Blondies\_72 Start: 45047, Stop: 45283, Start Num: 9 Candidate Starts for Blondies\_72: (Start: 9 @45047 has 3 MA's), (Start: 20 @45122 has 4 MA's), (22, 45131), (25, 45176), (26, 45182), (27, 45191), (28, 45200), (33, 45242), (34, 45260),

Gene: Burnsey\_67 Start: 44874, Stop: 45083, Start Num: 20 Candidate Starts for Burnsey\_67: (Start: 9 @44811 has 3 MA's), (Start: 20 @44874 has 4 MA's), (22, 44883), (24, 44919), (25, 44928), (26, 44934), (28, 44952), (29, 44973), (33, 44994),

Gene: Button\_68 Start: 45066, Stop: 45266, Start Num: 16 Candidate Starts for Button\_68: (12, 45045), (Start: 16 @45066 has 4 MA's), (23, 45117), (27, 45171), (28, 45180), Gene: Dre3\_64 Start: 44202, Stop: 44378, Start Num: 17 Candidate Starts for Dre3\_64: (Start: 17 @44202 has 2 MA's), (Start: 20 @44229 has 4 MA's), (22, 44241), (27, 44301), (28, 44310), (29, 44331), (32, 44349), (33, 44352),

Gene: Fribs8\_64 Start: 44678, Stop: 44887, Start Num: 14 Candidate Starts for Fribs8\_64: (Start: 14 @44678 has 4 MA's), (Start: 20 @44723 has 4 MA's), (21, 44726), (22, 44735), (26, 44786), (27, 44795), (28, 44804), (31, 44837), (36, 44876),

Gene: GiKK\_72 Start: 46277, Stop: 46456, Start Num: 16 Candidate Starts for GiKK\_72: (12, 46256), (Start: 16 @46277 has 4 MA's), (23, 46328), (27, 46382), (28, 46391),

Gene: Gibbous\_64 Start: 44202, Stop: 44378, Start Num: 17 Candidate Starts for Gibbous\_64: (Start: 17 @44202 has 2 MA's), (Start: 20 @44229 has 4 MA's), (22, 44241), (27, 44301), (28, 44310), (29, 44331), (32, 44349), (33, 44352),

Gene: Hexbug\_72 Start: 46284, Stop: 46460, Start Num: 18 Candidate Starts for Hexbug\_72: (2, 46077), (3, 46125), (4, 46134), (5, 46155), (10, 46227), (Start: 18 @46284 has 3 MA's), (28, 46374), (30, 46401), (33, 46416),

Gene: HippoPololi\_64 Start: 43762, Stop: 43956, Start Num: 15 Candidate Starts for HippoPololi\_64: (Start: 15 @43762 has 1 MA's), (19, 43795), (Start: 20 @43801 has 4 MA's), (22, 43813), (25, 43858), (27, 43873), (28, 43882), (29, 43903), (30, 43909), (33, 43924),

Gene: Jamzy\_72 Start: 46007, Stop: 46186, Start Num: 16 Candidate Starts for Jamzy\_72: (7, 45944), (8, 45965), (13, 45992), (Start: 16 @46007 has 4 MA's), (23, 46058), (27, 46112), (28, 46121),

Gene: MaVan\_64 Start: 44074, Stop: 44283, Start Num: 14 Candidate Starts for MaVan\_64: (Start: 14 @44074 has 4 MA's), (Start: 20 @44119 has 4 MA's), (21, 44122), (22, 44131), (26, 44182), (27, 44191), (28, 44200), (31, 44233), (32, 44239), (33, 44242),

Gene: Margaret\_73 Start: 45790, Stop: 46011, Start Num: 11 Candidate Starts for Margaret\_73: (Start: 11 @45790 has 2 MA's), (Start: 16 @45811 has 4 MA's), (Start: 18 @45835 has 3 MA's), (28, 45925), (30, 45952), (33, 45967),

Gene: Nodigi\_72 Start: 46305, Stop: 46481, Start Num: 18 Candidate Starts for Nodigi\_72: (1, 46047), (2, 46098), (3, 46146), (4, 46155), (5, 46176), (10, 46248), (Start: 18 @46305 has 3 MA's), (28, 46395), (30, 46422), (33, 46437),

Gene: Orla\_73 Start: 46436, Stop: 46612, Start Num: 18 Candidate Starts for Orla\_73: (2, 46229), (3, 46277), (4, 46286), (5, 46307), (6, 46340), (10, 46379), (Start: 18 @46436 has 3 MA's), (28, 46526), (30, 46553), (33, 46568), Gene: Quasar\_68 Start: 45648, Stop: 45857, Start Num: 20 Candidate Starts for Quasar\_68: (Start: 9 @45585 has 3 MA's), (Start: 20 @45648 has 4 MA's), (22, 45657), (24, 45693), (25, 45702), (26, 45708), (28, 45726), (29, 45747), (33, 45768),

Gene: RanchParmCat\_72 Start: 46082, Stop: 46303, Start Num: 11 Candidate Starts for RanchParmCat\_72: (Start: 11 @46082 has 2 MA's), (Start: 16 @46103 has 4 MA's), (Start: 18 @46127 has 3 MA's), (28, 46217), (30, 46244), (33, 46259),

Gene: SketchMex\_67 Start: 44728, Stop: 44964, Start Num: 9 Candidate Starts for SketchMex\_67: (Start: 9 @44728 has 3 MA's), (Start: 20 @44803 has 4 MA's), (22, 44812), (25, 44857), (26, 44863), (27, 44872), (28, 44881), (33, 44923), (34, 44941),

Gene: Survivors\_66 Start: 44109, Stop: 44309, Start Num: 14 Candidate Starts for Survivors\_66: (Start: 14 @44109 has 4 MA's), (Start: 20 @44154 has 4 MA's), (21, 44157), (22, 44166), (26, 44217), (27, 44226), (28, 44235), (31, 44268), (32, 44274), (33, 44277),

Gene: Yakult\_71 Start: 46173, Stop: 46373, Start Num: 16 Candidate Starts for Yakult\_71: (12, 46152), (Start: 16 @46173 has 4 MA's), (23, 46224), (27, 46278), (28, 46287),

Gene: Yarn\_61 Start: 43281, Stop: 43460, Start Num: 20 Candidate Starts for Yarn\_61: (Start: 9 @43212 has 3 MA's), (Start: 20 @43281 has 4 MA's), (22, 43290), (24, 43326), (25, 43335), (26, 43341), (28, 43359), (29, 43380), (32, 43398), (33, 43401), (35, 43425),