Pham 163972

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1: MidnightRain_54				
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2: Persistence_46				
	6 91 1	\$^ \$\$ 1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	су.
B: Raqqa_42				
		×\ <sub>1</sub> 2		
4: Arianna_34 + 3				
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5: SamW_29 + 2		,6	× ×	<u>چ</u>
			<u>ь</u> , р.	5
6: StAB_28	8	¢	× ×	\$ <sup>3</sup>
7: Adelaide_27	8	بە بە	× ×	\$ <sup>3</sup>
B: Stiles_29		<sup>አ</sup>	ŵ ŵ	\$ \$ \$
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9: Sonali_38		N89 p p 39	ર્જ જે	\$\$ \$\$ \$\$ \$
10: Mufasa8_37		× v v v	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ŵ
11: Juicebox_32	Ŕ		ታጭ ጭ	₩ 6 <sup>0</sup> 6 <sup>3</sup> 6 <sup>3</sup>
12: Sleepyhead_39				

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 163972 Report

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

Pham number 163972 has 17 members, 1 are drafts.

Phages represented in each track:

- Track 1 : MidnightRain\_54
- Track 2 : Persistence\_46
- Track 3 : Raqqa\_42
- Track 4 : Arianna\_34, Poushou\_34, TouchMeNot\_34, Colleen\_34
- Track 5 : SamW\_29, Troy\_29, Lederberg\_29
- Track 6 : StAB\_28
- Track 7 : Adelaide\_27
- Track 8 : Stiles\_29
- Track 9 : Sonali\_38
- Track 10 : Mufasa8\_37
- Track 11 : Juicebox\_32
- Track 12 : Sleepyhead\_39

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

The start number called the most often in the published annotations is 13, it was called in 4 of the 16 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Arianna\_34, Colleen\_34, Poushou\_34, TouchMeNot\_34,

Genes that have the "Most Annotated" start but do not call it: • MidnightRain\_54, Persistence\_46, Raqqa\_42,

Genes that do not have the "Most Annotated" start: • Adelaide\_27, Juicebox\_32, Lederberg\_29, Mufasa8\_37, SamW\_29, Sleepyhead\_39, Sonali\_38, StAB\_28, Stiles\_29, Troy\_29,

## Summary by start number:

Start 13:

- Found in 7 of 17 (41.2%) of genes in pham
- Manual Annotations of this start: 4 of 16
- Called 57.1% of time when present

• Phage (with cluster) where this start called: Arianna\_34 (EO), Colleen\_34 (EO), Poushou\_34 (EO), TouchMeNot\_34 (EO),

Start 14:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juicebox\_32 (singleton),

#### Start 15:

- Found in 5 of 17 (29.4%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 60.0% of time when present

• Phage (with cluster) where this start called: Adelaide\_27 (EP), StAB\_28 (EP), Stiles\_29 (EP),

### Start 16:

- Found in 2 of 17 (11.8%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Sonali\_38 (FG),

#### Start 18:

- Found in 1 of 17 (5.9%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Sleepyhead\_39 (singleton),

#### Start 21:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 1 of 16
- Called 33.3% of time when present
- Phage (with cluster) where this start called: Mufasa8\_37 (FG),

#### Start 23:

- Found in 3 of 17 (17.6%) of genes in pham
- Manual Annotations of this start: 2 of 16
- Called 66.7% of time when present
- Phage (with cluster) where this start called: MidnightRain\_54 (AY), Persistence\_46 (AY),

## Start 29:

- Found in 1 of 17 (5.9%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Raqqa\_42 (AY),

#### Start 32:

- Found in 4 of 17 (23.5%) of genes in pham
- Manual Annotations of this start: 3 of 16
- Called 75.0% of time when present
- Phage (with cluster) where this start called: Lederberg\_29 (EP), SamW\_29 (EP), Troy\_29 (EP),

#### Summary by clusters:

There are 5 clusters represented in this pham: AY, EO, FG, EP, singleton,

Info for manual annotations of cluster AY: •Start number 23 was manually annotated 2 times for cluster AY.

Info for manual annotations of cluster EO: •Start number 13 was manually annotated 4 times for cluster EO.

Info for manual annotations of cluster EP:Start number 15 was manually annotated 3 times for cluster EP.Start number 32 was manually annotated 3 times for cluster EP.

Info for manual annotations of cluster FG:Start number 16 was manually annotated 1 time for cluster FG.Start number 21 was manually annotated 1 time for cluster FG.

#### Gene Information:

Gene: Adelaide\_27 Start: 25237, Stop: 24851, Start Num: 15 Candidate Starts for Adelaide\_27: (1, 25642), (3, 25414), (8, 25294), (Start: 15 @25237 has 3 MA's), (41, 25066), (44, 25021), (53, 24886),

Gene: Arianna\_34 Start: 32062, Stop: 31622, Start Num: 13 Candidate Starts for Arianna\_34: (Start: 13 @32062 has 4 MA's), (17, 32053), (22, 32020), (49, 31750), (54, 31705), (55, 31699), (60, 31639),

Gene: Colleen\_34 Start: 32062, Stop: 31622, Start Num: 13 Candidate Starts for Colleen\_34: (Start: 13 @32062 has 4 MA's), (17, 32053), (22, 32020), (49, 31750), (54, 31705), (55, 31699), (60, 31639),

Gene: Juicebox\_32 Start: 28059, Stop: 27667, Start Num: 14 Candidate Starts for Juicebox\_32: (Start: 14 @28059 has 1 MA's), (Start: 21 @28038 has 1 MA's), (22, 28026), (Start: 32 @27969 has 3 MA's), (38, 27906), (42, 27870), (53, 27702),

Gene: Lederberg\_29 Start: 26515, Stop: 26210, Start Num: 32 Candidate Starts for Lederberg\_29: (2, 26833), (7, 26656), (8, 26653), (Start: 32 @26515 has 3 MA's), (38, 26452), (41, 26428), (44, 26383), (53, 26248),

Gene: MidnightRain\_54 Start: 32585, Stop: 32211, Start Num: 23 Candidate Starts for MidnightRain\_54: (6, 32708), (9, 32672), (10, 32666), (11, 32651), (Start: 13 @32633 has 4 MA's), (Start: 15 @32627 has 3 MA's), (Start: 23 @32585 has 2 MA's), (25, 32579), (36, 32480), (38, 32468), (39, 32465), (43, 32426), (45, 32360), (47, 32351), (52, 32300), Gene: Mufasa8\_37 Start: 30860, Stop: 30435, Start Num: 21 Candidate Starts for Mufasa8\_37: (Start: 16 @30878 has 1 MA's), (19, 30869), (Start: 21 @30860 has 1 MA's), (22, 30848), (30, 30818), (35, 30755), (37, 30731), (48, 30590), (54, 30536), (56, 30512), (57, 30506), (59, 30479),

Gene: Persistence\_46 Start: 30198, Stop: 29824, Start Num: 23 Candidate Starts for Persistence\_46: (4, 30387), (5, 30357), (6, 30321), (9, 30285), (10, 30279), (11, 30264), (Start: 13 @30246 has 4

MA's), (Start: 15 @30240 has 3 MA's), (Start: 23 @30198 has 2 MA's), (25, 30192), (36, 30093), (38, 30081), (39, 30078), (52, 29913),

Gene: Poushou\_34 Start: 31891, Stop: 31451, Start Num: 13 Candidate Starts for Poushou\_34: (Start: 13 @31891 has 4 MA's), (17, 31882), (22, 31849), (49, 31579), (54, 31534), (55, 31528), (60, 31468),

Gene: Raqqa\_42 Start: 28245, Stop: 27895, Start Num: 29 Candidate Starts for Raqqa\_42: (6, 28392), (9, 28356), (10, 28350), (11, 28335), (Start: 13 @28317 has 4 MA's), (Start: 23 @28269 has 2 MA's), (25, 28263), (29, 28245), (39, 28149), (43, 28110), (52, 27984),

Gene: SamW\_29 Start: 26130, Stop: 25825, Start Num: 32 Candidate Starts for SamW\_29: (2, 26448), (7, 26271), (8, 26268), (Start: 32 @26130 has 3 MA's), (38, 26067), (41, 26043), (44, 25998), (53, 25863),

Gene: Sleepyhead\_39 Start: 29869, Stop: 29420, Start Num: 18 Candidate Starts for Sleepyhead\_39: (12, 29878), (Start: 18 @29869 has 1 MA's), (20, 29854), (28, 29812), (34, 29761), (35, 29749), (36, 29734), (40, 29710), (46, 29596), (50, 29545), (53, 29518), (61, 29431),

Gene: Sonali\_38 Start: 33170, Stop: 32727, Start Num: 16 Candidate Starts for Sonali\_38: (Start: 16 @33170 has 1 MA's), (Start: 21 @33152 has 1 MA's), (22, 33140), (24, 33134), (26, 33128), (27, 33116), (30, 33110), (31, 33095), (33, 33077), (35, 33047), (38, 33020), (51, 32855), (56, 32804), (58, 32783),

Gene: StAB\_28 Start: 26487, Stop: 26098, Start Num: 15 Candidate Starts for StAB\_28: (8, 26544), (Start: 15 @26487 has 3 MA's), (41, 26316), (44, 26271), (53, 26136),

Gene: Stiles\_29 Start: 26031, Stop: 25642, Start Num: 15 Candidate Starts for Stiles\_29: (8, 26088), (Start: 15 @26031 has 3 MA's), (41, 25860), (44, 25815), (53, 25680),

Gene: TouchMeNot\_34 Start: 32062, Stop: 31622, Start Num: 13 Candidate Starts for TouchMeNot\_34: (Start: 13 @32062 has 4 MA's), (17, 32053), (22, 32020), (49, 31750), (54, 31705), (55, 31699), (60, 31639),

Gene: Troy\_29 Start: 26130, Stop: 25825, Start Num: 32 Candidate Starts for Troy\_29: (2, 26448), (7, 26271), (8, 26268), (Start: 32 @26130 has 3 MA's), (38, 26067), (41, 26043), (44, 25998), (53, 25863),