Pham 4682

	\$2 × \$≥	r⊁ r≥r≯		\$P \$P
1: B3_35 + 1				
	,î ,k≪\			Å Å
2: Anatole_36 + 1	\\ \\?>\\	ი. იხირი იხირი ი. იხირი იხირი	Å	
B: E22_38	\$~ <i>₹</i> *	\$ \$P\$	<u>چ</u>	\$ \$ \$ \$
4: G4_37				
_	~3 <i>~</i> 1	1× 1× 1× 1× 1×		R R
5: E6_40				
		ŶŶŶŶŶ	ýk	** ** ** **
6: Doucette_39				
	N 10	\$ 7 <sup>k</sup> \$ 5 <sup>t</sup>	Ň	
7: Doucette_38				
	<i>`</i> ∿ <i>`</i> ,∿	° 1° 1°	ŝ	₩¢ ¢
B: E6_39				
	Ń	1 <sup>2</sup> 1 <sup>2</sup> 1 <sup>2</sup>		\$ \$
Ð: G4_55				
	~2 ~KX1		<u>}</u>	\$\$ \$\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
10: PFR1_34 + 1				
	<i>√</i> ⊘	<i>PP</i>		3 <sup>3</sup> X
11: CN1A_10				

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 4682 Report

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

Pham number 4682 has 14 members, 3 are drafts.

Phages represented in each track:

- Track 1 : B3\_35, B22\_37
- Track 2 : Anatole\_36, E1\_36
- Track 3 : B22\_38
- Track 4 : G4\_37
- Track 5 : E6\_40
- Track 6 : Doucette\_39
- Track 7 : Doucette\_38
- Track 8 : E6\_39
- Track 9 : G4\_55
- Track 10 : PFR1\_34, PFR2\_36
- Track 11 : CN1A\_10

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

The start number called the most often in the published annotations is 12, it was called in 7 of the 11 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

• Anatole\_36, B22\_37, B3\_35, Doucette\_38, E1\_36, E6\_39, G4\_37, PFR1\_34, PFR2\_36,

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

Genes that do not have the "Most Annotated" start: • B22\_38, CN1A\_10, Doucette\_39, E6\_40, G4\_55,

# Summary by start number:

Start 12:

- Found in 9 of 14 (64.3%) of genes in pham
- Manual Annotations of this start: 7 of 11
- Called 100.0% of time when present

• Phage (with cluster) where this start called: Anatole\_36 (BV), B22\_37 (BW), B3\_35 (BV), Doucette\_38 (BW), E1\_36 (BV), E6\_39 (BW), G4\_37 (BW), PFR1\_34 (BX), PFR2\_36 (BX),

Start 16:

- Found in 1 of 14 (7.1%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: CN1A\_10 (singleton),

Start 17:

- Found in 7 of 14 (50.0%) of genes in pham
- Manual Annotations of this start: 3 of 11
- Called 42.9% of time when present

• Phage (with cluster) where this start called: B22\_38 (BW), Doucette\_39 (BW), E6\_40 (BW),

### Start 18:

- Found in 1 of 14 (7.1%) of genes in pham
- Manual Annotations of this start: 1 of 11
- Called 100.0% of time when present
- Phage (with cluster) where this start called: G4\_55 (BW),

### Summary by clusters:

There are 4 clusters represented in this pham: singleton, BW, BX, BV,

Info for manual annotations of cluster BV: •Start number 12 was manually annotated 3 times for cluster BV.

Info for manual annotations of cluster BW:

•Start number 12 was manually annotated 4 times for cluster BW.

•Start number 17 was manually annotated 3 times for cluster BW.

•Start number 18 was manually annotated 1 time for cluster BW.

# Gene Information:

Gene: Anatole\_36 Start: 25887, Stop: 26636, Start Num: 12 Candidate Starts for Anatole\_36: (Start: 12 @25887 has 7 MA's), (14, 25917), (15, 25923), (Start: 17 @25932 has 3 MA's), (19, 26025), (20, 26052), (24, 26118), (26, 26166), (27, 26184), (42, 26610), (43, 26625),

Gene: B22\_38 Start: 25760, Stop: 26401, Start Num: 17 Candidate Starts for B22\_38: (1, 25271), (2, 25313), (3, 25361), (4, 25388), (5, 25508), (6, 25520), (7, 25532), (8, 25604), (9, 25628), (10, 25640), (11, 25670), (13, 25724), (Start: 17 @25760 has 3 MA's), (21, 25895), (24, 25934), (25, 25955), (28, 26003), (29, 26021), (32, 26165), (33, 26273), (39, 26360), (42, 26381), (43, 26390),

Gene: B22\_37 Start: 25017, Stop: 25763, Start Num: 12

Candidate Starts for B22\_37: (Start: 12 @25017 has 7 MA's), (14, 25047), (24, 25245), (26, 25293), (27, 25311), (42, 25737), (43, 25752),

Gene: B3\_35 Start: 25147, Stop: 25893, Start Num: 12 Candidate Starts for B3\_35: (Start: 12 @25147 has 7 MA's), (14, 25177), (24, 25375), (26, 25423), (27, 25441), (42, 25867), (43, 25882),

Gene: CN1A\_10 Start: 4938, Stop: 5642, Start Num: 16 Candidate Starts for CN1A\_10: (16, 4938), (22, 5085), (23, 5097), (34, 5466),

Gene: Doucette\_39 Start: 27150, Stop: 27779, Start Num: 17 Candidate Starts for Doucette\_39: (13, 27111), (Start: 17 @27150 has 3 MA's), (21, 27285), (24, 27324), (25, 27345), (28, 27393), (29, 27411), (32, 27555), (33, 27663), (39, 27738), (42, 27759), (43, 27768),

Gene: Doucette\_38 Start: 26431, Stop: 27153, Start Num: 12 Candidate Starts for Doucette\_38: (Start: 12 @26431 has 7 MA's), (15, 26467), (20, 26593), (24, 26659), (26, 26707), (27, 26725), (31, 26887), (40, 27115), (41, 27121), (42, 27124), (43, 27142),

Gene: E1\_36 Start: 25887, Stop: 26636, Start Num: 12 Candidate Starts for E1\_36: (Start: 12 @25887 has 7 MA's), (14, 25917), (15, 25923), (Start: 17 @25932 has 3 MA's), (19, 26025), (20, 26052), (24, 26118), (26, 26166), (27, 26184), (42, 26610), (43, 26625),

Gene: E6\_40 Start: 28531, Stop: 29217, Start Num: 17 Candidate Starts for E6\_40: (13, 28492), (Start: 17 @28531 has 3 MA's), (21, 28666), (24, 28705), (26, 28753), (27, 28771), (42, 29197), (43, 29206),

Gene: E6\_39 Start: 27788, Stop: 28534, Start Num: 12 Candidate Starts for E6\_39: (Start: 12 @27788 has 7 MA's), (14, 27818), (24, 28016), (26, 28064), (27, 28082), (31, 28244), (40, 28496), (41, 28502), (42, 28505), (43, 28523),

Gene: G4\_37 Start: 26050, Stop: 26751, Start Num: 12 Candidate Starts for G4\_37: (Start: 12 @26050 has 7 MA's), (14, 26080), (20, 26212), (22, 26263), (24, 26278), (26, 26326), (27, 26344), (31, 26506), (36, 26668), (42, 26731), (43, 26740),

Gene: G4\_55 Start: 32346, Stop: 33044, Start Num: 18 Candidate Starts for G4\_55: (Start: 18 @32346 has 1 MA's), (24, 32523), (26, 32571), (27, 32589), (42, 33015), (43, 33033),

Gene: PFR1\_34 Start: 25864, Stop: 26598, Start Num: 12 Candidate Starts for PFR1\_34: (Start: 12 @25864 has 7 MA's), (14, 25894), (15, 25900), (Start: 17 @25909 has 3 MA's), (20, 26020), (24, 26086), (26, 26134), (27, 26152), (30, 26305), (31, 26314), (35, 26506), (37, 26518), (38, 26527), (42, 26578), (43, 26587), Gene: PFR2\_36 Start: 27433, Stop: 28167, Start Num: 12 Candidate Starts for PFR2\_36: (Start: 12 @27433 has 7 MA's), (14, 27463), (15, 27469), (Start: 17 @27478 has 3 MA's), (20, 27589), (24, 27655), (26, 27703), (27, 27721), (30, 27874), (31, 27883), (35, 28075), (37, 28087), (38, 28096), (42, 28147), (43, 28156),