

FAO World Reference Laboratory for Foot-and-Mouth Disease (WRLFMD)

Genotyping Report

FMDV serotype: O
Country: Palestinian AT
Year: 2017
Batch: WRLMEG/2017/00062
No. of sequences: 1
Report date: 18th December 2017
Report generated by: Nick Knowles
Report checked by: Antonello Di Nardo

This report is prepared on behalf of the Kimron Veterinary Institute (Beit Dagon, Hamerkaz, Israel) and covers a VP1 sequence submitted to the WRLFMD on 18 December 2017



Copyright ©2017 The Pirbright Institute, Ash Road, Pirbright, Woking GU24 0NF, United Kingdom.

www: <http://www.wrlfmd.org/>

email: reporting@pirbright.ac.uk

The contents of this report should not be reproduced without permission.

Virus sample name:	Bani Na'im/PAT/2017 308618
Sender reference:	Bani_Naim_Dec_2017_308618
Location of origin:	Bani Na'im, Hebron, West Bank
Country of origin:	Palestinian AT
Date of collection:	12/12/2017
Host species:	sheep
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	18/12/2017
Last updated:	18/12/2017
VIBASys IDs: sample 35404, genome 35405, sequence viba_35406, sequencing info 35407	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_34020	Yatta-Kraisah/PAT/2017	cattle	99.1	0	O	EA-3		
viba_34015	Ayn al-Sahla/ISR/2017	cattle	99.1	0	O	EA-3		
viba_32315	ISR/4/2017	cattle	98.9	0	O	EA-3		
viba_32311	ISR/3/2017	cattle	98.9	0	O	EA-3		
viba_32352	PAT/6/2017	cattle	98.9	0	O	EA-3		
viba_32336	PAT/1/2017	cattle	98.9	0	O	EA-3		
viba_32331	ISR/8/2017	cattle	98.9	0	O	EA-3		
viba_32307	ISR/2/2017	cattle	98.9	0	O	EA-3		
viba_34036	Bani Na'im/PAT/2017 C	sheep	98.9	0	O	EA-3		
viba_34032	Bani Na'im/PAT/2017 B	sheep	98.9	0	O	EA-3		

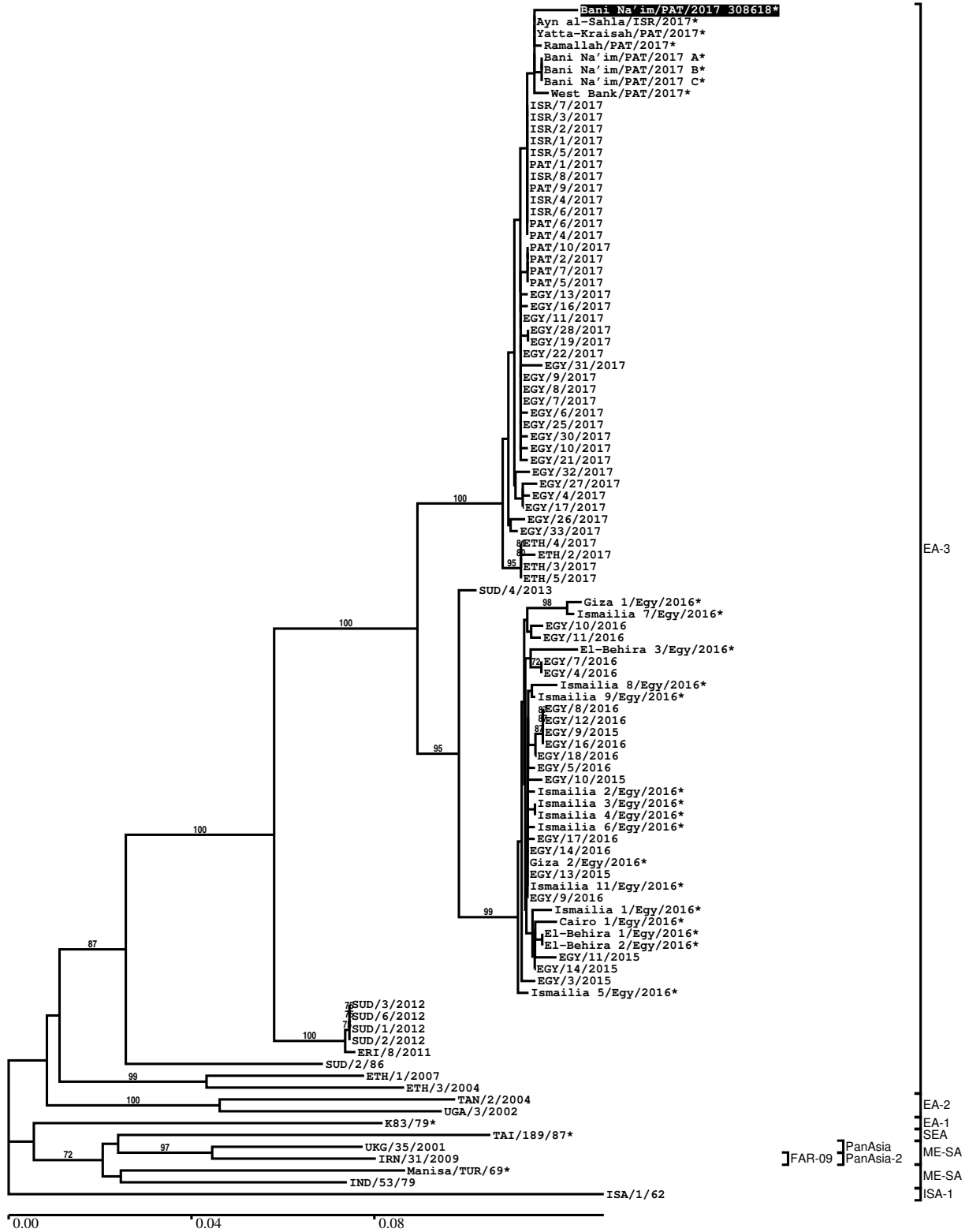
Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_116	SUD/2/86	bovine	87.8	0	O	EA-3		
viba_854	ETH/1/2007	cattle	84.2	0	O	EA-3		
viba_617	IND/53/79	bovine	84.1	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	83.9	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	83.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_408	ETH/3/2004	cattle	83.5	0	O	EA-3		
viba_85	UGA/3/2002		83.4	0	O	EA-2		
viba_263	TAN/2/2004	bovine	83.1	0	O	EA-2		
viba_359	Manisa/TUR/69		83.1	0	O	ME-SA		
viba_523	K83/79		82.9	0	O	EA-1		

Report on FMDV O in Palestinian AT in 2017

Batch: WRLMEG/2017/00062



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLMEG/2017/00062-Palestinian AT-O (1 sequences)
Sequence database set:	allseqs_O (3669 sequences)
Prototype sequence set:	!prototypes_O (48 sequences)
Number of related sequences reported:	10
Minimal VP1 subsequence match length	600
Sequence alignment method:	muscle (default parameters)
Sequence alignment length:	636
Phylogeny reconstruction method:	fdnadist, fneighbor
Number of bootstrap samples:	1000
Random seed for bootstrapping:	1
Displaying bootstrap values above:	70.0%
Number of sequences in tree capped at:	100
Number of prototype sequences in tree:	10
VIBASys version:	reflabs-1.1.2

Sequences in the Phylogenetic Tree

All sequences in the tree are in taxonomic group FMDV/O

label	accession	host(s)	lab	country	taxonomic information
Bani Na'im/PAT/2017 308618*	n/a	sheep	KVI	Palestinian AT	EA-3
Ayn al-Sahla/ISR/2017*	n/a	cattle	KVI	Israel	EA-3
Yatta-Kraisah/PAT/2017*	n/a	cattle	KVI	Palestinian AT	EA-3
Ramallah/PAT/2017*	n/a	sheep	KVI	Palestinian AT	EA-3
Bani Na'im/PAT/2017 A*	n/a	sheep	KVI	Palestinian AT	EA-3
Bani Na'im/PAT/2017 B*	n/a	sheep	KVI	Palestinian AT	EA-3
Bani Na'im/PAT/2017 C*	n/a	sheep	KVI	Palestinian AT	EA-3
West Bank/PAT/2017*	n/a	sheep	KVI	Palestinian AT	EA-3
ISR/7/2017	n/a	cattle	WRLFMD	Israel	EA-3
ISR/3/2017	n/a	cattle	WRLFMD	Israel	EA-3
ISR/2/2017	n/a	cattle	WRLFMD	Israel	EA-3
ISR/1/2017	n/a	cattle	WRLFMD	Israel	EA-3
ISR/5/2017	n/a	cattle	WRLFMD	Israel	EA-3
PAT/1/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
ISR/8/2017	n/a	cattle	WRLFMD	Israel	EA-3
PAT/9/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
ISR/4/2017	n/a	cattle	WRLFMD	Israel	EA-3
ISR/6/2017	n/a	cattle	WRLFMD	Israel	EA-3
PAT/6/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
PAT/4/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
PAT/10/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
PAT/2/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
PAT/7/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
PAT/5/2017	n/a	cattle	WRLFMD	Palestinian AT	EA-3
EGY/13/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/16/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/11/2017	n/a	water buffalo	WRLFMD	Egypt	EA-3
EGY/28/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/19/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/22/2017	n/a	water buffalo	WRLFMD	Egypt	EA-3
EGY/31/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/9/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/8/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/7/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/6/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/25/2017	n/a	cattle	WRLFMD	Egypt	EA-3

continued on next page

label	accession	host(s)	lab	country	taxonomic information
EGY/30/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/10/2017	n/a	water buffalo	WRLFMD	Egypt	EA-3
EGY/21/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/32/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/27/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/4/2017	n/a	water buffalo	WRLFMD	Egypt	EA-3
EGY/17/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/26/2017	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/33/2017	n/a	cattle	WRLFMD	Egypt	EA-3
ETH/4/2017	n/a	cattle	WRLFMD	Ethiopia	EA-3
ETH/2/2017	n/a	cattle	WRLFMD	Ethiopia	EA-3
ETH/3/2017	n/a	cattle	WRLFMD	Ethiopia	EA-3
ETH/5/2017	n/a	cattle	WRLFMD	Ethiopia	EA-3
SUD/4/2013	n/a	cattle	WRLFMD	Sudan	EA-3
Giza 1/Egy/2016*	KX447131	cattle	Suez Canal Univ	Egypt	EA-3
Ismailia 7/Egy/2016*	KX447133	cattle	Suez Canal Univ	Egypt	EA-3
EGY/10/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/11/2016	n/a	cattle	WRLFMD	Egypt	EA-3
El-Behira 3/Egy/2016*	KX447123	cattle	Suez Canal Univ	Egypt	EA-3
EGY/7/2016	n/a	water buffalo	WRLFMD	Egypt	EA-3
EGY/4/2016	n/a	cattle	WRLFMD	Egypt	EA-3
Ismailia 8/Egy/2016*	KX447134	cattle	Suez Canal Univ	Egypt	EA-3
Ismailia 9/Egy/2016*	KX447135	cattle	Suez Canal Univ	Egypt	EA-3
EGY/8/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/12/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/9/2015	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/16/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/18/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/5/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/10/2015	n/a	cattle	WRLFMD	Egypt	EA-3
Ismailia 2/Egy/2016*	KX447125	cattle	Suez Canal Univ	Egypt	EA-3
Ismailia 3/Egy/2016*	KX447126	cattle	Suez Canal Univ	Egypt	EA-3
Ismailia 4/Egy/2016*	KX447127	cattle	Suez Canal Univ	Egypt	EA-3
Ismailia 6/Egy/2016*	KX447129	cattle	Suez Canal Univ	Egypt	EA-3
EGY/17/2016	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/14/2016	n/a	cattle	WRLFMD	Egypt	EA-3
Giza 2/Egy/2016*	KX447132	cattle	Suez Canal Univ	Egypt	EA-3
EGY/13/2015	n/a	cattle	WRLFMD	Egypt	EA-3
Ismailia 11/Egy/2016*	KX447138	cattle	Suez Canal Univ	Egypt	EA-3
EGY/9/2016	n/a	cattle	WRLFMD	Egypt	EA-3
Ismailia 1/Egy/2016*	KX447124	cattle	Suez Canal Univ	Egypt	EA-3
Cairo 1/Egy/2016*	KX447130	cattle	Suez Canal Univ	Egypt	EA-3
El-Behira 1/Egy/2016*	KX447121	cattle	Suez Canal Univ	Egypt	EA-3
El-Behira 2/Egy/2016*	KX447122	cattle	Suez Canal Univ	Egypt	EA-3
EGY/11/2015	n/a	water buffalo	WRLFMD	Egypt	EA-3
EGY/14/2015	n/a	cattle	WRLFMD	Egypt	EA-3
EGY/3/2015	n/a	cattle	WRLFMD	Egypt	EA-3
Ismailia 5/Egy/2016*	KX447128	cattle	Suez Canal Univ	Egypt	EA-3
SUD/3/2012	n/a	cattle	WRLFMD	Sudan	EA-3
SUD/6/2012	n/a	cattle	WRLFMD	Sudan	EA-3
SUD/1/2012	n/a	cattle	WRLFMD	Sudan	EA-3
SUD/2/2012	n/a	cattle	WRLFMD	Sudan	EA-3

continued on next page

label	accession	host(s)	lab	country	taxonomic information
ERI/8/2011	n/a	porcine	WRLFMD	Eritrea	EA-3
SUD/2/86	DQ165075	bovine	WRLFMD	Sudan	EA-3
ETH/1/2007	FJ798137	cattle	WRLFMD	Ethiopia	EA-3
ETH/3/2004	FJ798109	cattle	WRLFMD	Ethiopia	EA-3
TAN/2/2004	KF561679	bovine	WRLFMD	Tanzania	EA-2
UGA/3/2002	DQ165077	n/a	WRLFMD	Uganda	EA-2
K83/79*	AJ303511	n/a	WRLFMD	Kenya	EA-1
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
IRN/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

*, not a WRLFMD Reference Number

n/a, not available