

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

Genotyping Report

FMDV serotype: O
Country: Egypt
Year: 2011
Batch: WRLFMD/2016/00017
No. of sequences: 1
Report date: 13th July 2016
Report generated by: Nick Knowles
Report checked by: Kasia Bankowska

Analysis Parameters

VP1 subsequence extractor: vp1_O
Query sequence set: WRLFMD/2016/00017-Egypt-O (1 sequences)
Sequence database set: allseqs_O (2964 sequences)
Prototype sequence set: prototypes_O (47 sequences)
Number of related sequences reported: 10
Minimal VP1 subsequence match length: 600
VIBASys version: reflabs-1.0.2



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

email: reporting@pirbright.ac.uk

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Virus sample name:	EGY/11/2011
Sender reference:	No. 1
Location of origin:	n/a
Country of origin:	Egypt
Date of collection:	01/01/2011
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	15/06/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	04/07/2016
Created:	05/07/2016
Last updated:	05/07/2016
VIBASys IDs: sample 27740, genome 27741, sequence viba_27742, sequencing info 27743	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_12448	EGY/8/2009	cattle	100.0	0	O	ME-SA		
viba_12477	EGY/23/2009	cattle	100.0	0	O	ME-SA		
viba_12497	EGY/28/2009	cattle	100.0	0	O	ME-SA		
viba_12485	EGY/25/2009	cattle	100.0	0	O	ME-SA		
viba_8706	EGY/8/2006		100.0	0	O	ME-SA		
viba_12461	EGY/19/2009	cattle	100.0	0	O	ME-SA		
viba_12469	EGY/21/2009	cattle	100.0	0	O	ME-SA		
viba_12509	EGY/31/2009	sheep	100.0	0	O	ME-SA		
viba_12481	EGY/24/2009	cattle	100.0	0	O	ME-SA		
viba_12489	EGY/26/2009	cattle	100.0	0	O	ME-SA		

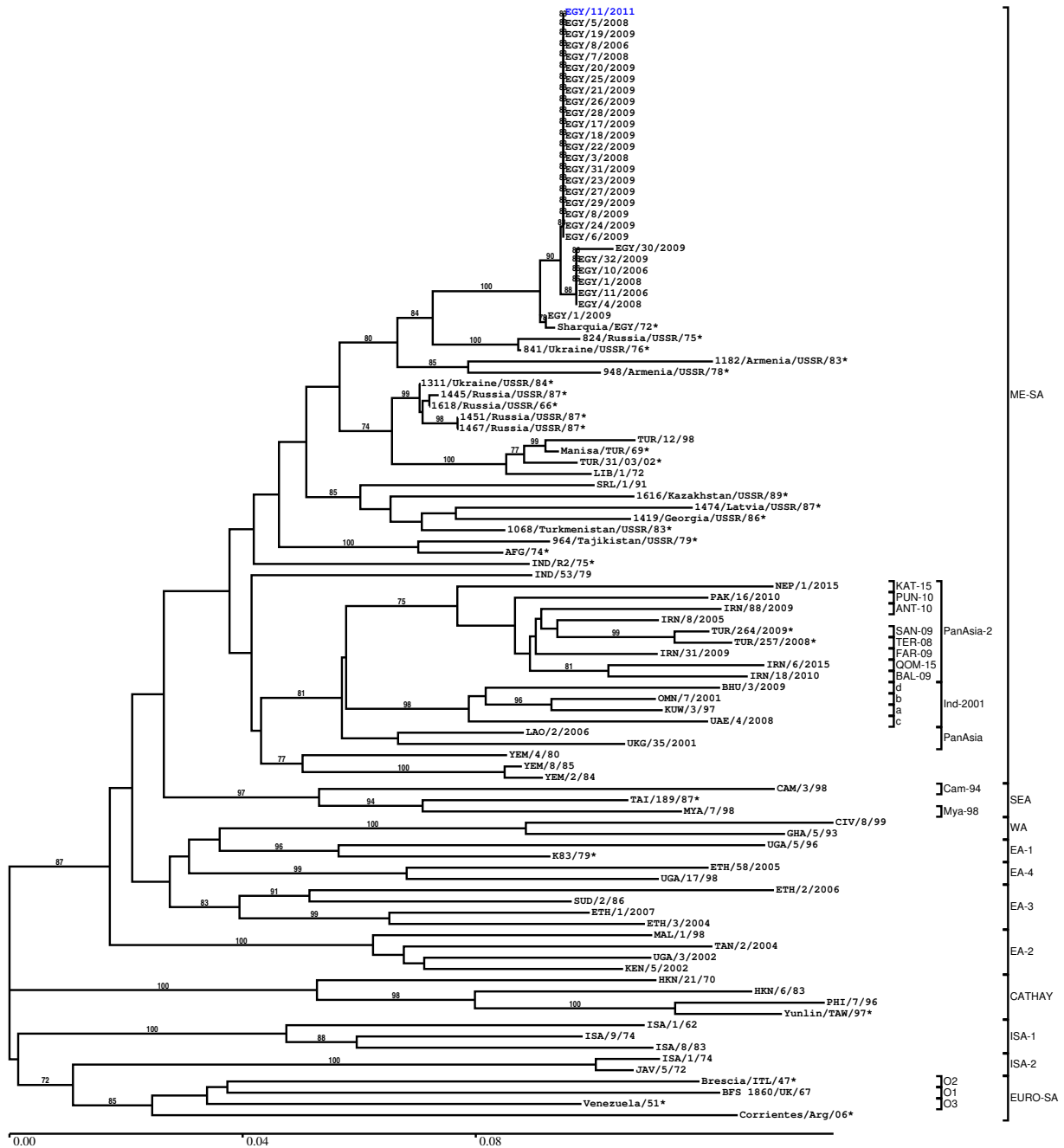
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_359	Manisa/TUR/69		92.7	0	O	ME-SA		
viba_576	IND/R2/75		90.5	0	O	ME-SA		
viba_617	IND/53/79	bovine	89.6	0	O	ME-SA		
viba_541	OMN/7/2001	bovine	87.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	87.7	0	O	ME-SA	Ind-2001	a
viba_650	IRN/8/2005	ovine	87.5	0	O	ME-SA	PanAsia-2	
viba_523	K83/79		87.4	0	O	EA-1		
viba_766	IRN/31/2009	cattle	87.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.1	0	O	ME-SA	PanAsia	
viba_293	BHU/3/2009	cattle	86.8	0	O	ME-SA	Ind-2001	d

Report on FMDV O in Egypt in 2011

Batch: WRLFMD/2016/00017



Sequence alignment method: muscle (default parameters)
 Phylogeny reconstruction method: fdnadist, fneighbor
 Number of bootstrap samples: 1000
 Displaying bootstrap values above: 70.0%
 Number of sequences in tree capped at: 100
 *, not a WRLFMD Reference Number

Sequences in the Phylogenetic Tree

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

label	accession	host(s)	lab	country	taxonomic information
EGY/11/2011	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/5/2008	n/a	sheep	WRLFMD	Egypt	ME-SA
EGY/19/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/8/2006	n/a	n/a	WRLFMD	Egypt	ME-SA
EGY/7/2008	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/20/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/25/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/21/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/26/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/28/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/17/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/18/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/22/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/3/2008	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/31/2009	n/a	sheep	WRLFMD	Egypt	ME-SA
EGY/23/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/27/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/29/2009	n/a	sheep	WRLFMD	Egypt	ME-SA
EGY/8/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/24/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/6/2009	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/30/2009	n/a	sheep	WRLFMD	Egypt	ME-SA
EGY/32/2009	n/a	sheep	WRLFMD	Egypt	ME-SA
EGY/10/2006	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/1/2008	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/11/2006	n/a	cattle	WRLFMD	Egypt	ME-SA
EGY/4/2008	n/a	sheep	WRLFMD	Egypt	ME-SA
EGY/1/2009	n/a	n/a	WRLFMD	Egypt	ME-SA
Sharquia/EGY/72*	DQ164871	n/a	WRLFMD	Egypt	ME-SA
824/Russia/USSR/75*	n/a	n/a	ARRIAH	USSR	ME-SA
841/Ukraine/USSR/76*	n/a	n/a	ARRIAH	USSR	ME-SA
1182/Armenia/USSR/83*	n/a	n/a	ARRIAH	USSR	ME-SA
948/Armenia/USSR/78*	n/a	n/a	ARRIAH	USSR	ME-SA
1311/Ukraine/USSR/84*	n/a	n/a	ARRIAH	USSR	ME-SA
1445/Russia/USSR/87*	n/a	n/a	ARRIAH	USSR	ME-SA
1618/Russia/USSR/66*	n/a	cattle	ARRIAH	USSR	ME-SA
1451/Russia/USSR/87*	n/a	n/a	ARRIAH	USSR	ME-SA
1467/Russia/USSR/87*	n/a	porcine	ARRIAH	USSR	ME-SA
TUR/12/98	n/a	n/a	WRLFMD	Turkey	ME-SA
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
TUR/31/03/02*	DQ296524	n/a	LINDHOLM	Turkey	ME-SA
LIB/1/72	n/a	n/a	WRLFMD	Libya	ME-SA
SRL/1/91	n/a	water buffalo	WRLFMD	Sri Lanka	ME-SA
1616/Kazakhstan/USSR/89*	n/a	n/a	ARRIAH	USSR	ME-SA
1474/Latvia/USSR/87*	n/a	cattle	ARRIAH	USSR	ME-SA
1419/Georgia/USSR/86*	n/a	n/a	ARRIAH	USSR	ME-SA
1068/Turkmenistan/USSR/83*	n/a	n/a	ARRIAH	USSR	ME-SA
964/Tajikistan/USSR/79*	n/a	n/a	ARRIAH	USSR	ME-SA
AFG/74*	n/a	n/a	ARRIAH	Afghanistan	ME-SA
IND/R2/75*	AF204276	n/a	PD-FMD	India	ME-SA
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
NEP/1/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/PanAsia-2/KAT-15
PAK/16/2010	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-10
IRN/88/2009	n/a	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/8/2005	n/a	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
TUR/264/2009*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/SAN-09
TUR/257/2008*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/TER-08
IRN/31/2009	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
IRN/6/2015	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/QOM-15
IRN/18/2010	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09

continued on next page

label	accession	host(s)	lab	country	taxonomic information
BHU/3/2009	KM921814	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
OMN/7/2001	DQ164941	bovine	WRLFMD	Oman	ME-SA/Ind-2001/b
KUW/3/97	DQ164904	bovine	WRLFMD	Kuwait	ME-SA/Ind-2001/a
UAE/4/2008	KM921876	gazelle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/c
LAO/2/2006	EU667451	cattle	WRLFMD	Laos	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
YEM/4/80	n/a	cattle	WRLFMD	Yemen	ME-SA
YEM/8/85	n/a	bovine	WRLFMD	Yemen	ME-SA
YEM/2/84	n/a	ovine	WRLFMD	Yemen	ME-SA
CAM/3/98	AJ294910	bovine	WRLFMD	Cambodia	SEA/Cam-94
TAI/189/87*	n/a	bovine	TRRL	Thailand	SEA
MYA/7/98	DQ164925	bovine	WRLFMD	Myanmar	SEA/Mya-98
CIV/8/99	AJ303485	bovine	WRLFMD	Cote d'Ivoire	WA
GHA/5/93	AJ303488	bovine	WRLFMD	Ghana	WA
UGA/5/96	AJ296327	bovine	WRLFMD	Uganda	EA-1
K83/79*	AJ303511	n/a	WRLFMD	Kenya	EA-1
ETH/58/2005	FJ798141	bovine	WRLFMD	Ethiopia	EA-4
UGA/17/98	HM211075	n/a	WRLFMD	Uganda	EA-4
ETH/2/2006	FJ798127	bovine	WRLFMD	Ethiopia	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
MAL/1/98	DQ165074	n/a	WRLFMD	Malawi	EA-2
TAN/2/2004	KF561679	bovine	WRLFMD	Tanzania	EA-2
UGA/3/2002	DQ165077	n/a	WRLFMD	Uganda	EA-2
KEN/5/2002	DQ165073	bovine	WRLFMD	Kenya	EA-2
HKN/21/70	AJ294911	porcine	WRLFMD	Hong Kong SAR	CATHAY
HKN/6/83	AJ294919	bovine	WRLFMD	Hong Kong SAR	CATHAY
PHI/7/96	AJ294926	porcine	WRLFMD	Philippines	CATHAY
Yunlin/TAW/97*	AF308157	porcine	PIADC	Taiwan	CATHAY
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1
ISA/9/74	AJ303502	bovine	WRLFMD	Indonesia	ISA-1
ISA/8/83	AJ303503	bovine	WRLFMD	Indonesia	ISA-1
ISA/1/74	AJ303501	bovine	WRLFMD	Indonesia	ISA-2
JAV/5/72	AJ303509	n/a	WRLFMD	Java	ISA-2
Brescia/ITL/47*	M55287	n/a	BFAV	Italy	EURO-SA/O2
BFS 1860/UK/67	AY593815	bovine	PIADC	United Kingdom (BFS)	EURO-SA/O1
Venezuela/51*	AJ004645	n/a	BFAV	Venezuela	EURO-SA/O3
Corrientes/Arg/06*	DQ834727	n/a	PAFMDC	Argentina	EURO-SA

*, not a WRLFMD Reference Number

n/a, not available