

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

Genotyping Report

FMDV serotype: O
Country: Uganda
Year: 2017
Batch: WRLFMD/2017/00027
No. of sequences: 1
Report date: 1st November 2017
Report generated by: Kasia Bankowska
Report checked by: Nick Knowles



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

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Virus sample name:	UGA/1/2017
Sender reference:	UGA8/17
Location of origin:	Entebbe
Country of origin:	Uganda
Date of collection:	23/05/2017
Host species:	cattle
Serotype:	O
Topotype:	EA-2
Lineage:	
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	24/10/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	30/10/2017
Created:	01/11/2017
Last updated:	01/11/2017
VIBASys IDs: sample 35198, genome 35199, sequence viba_35200, sequencing info 35201	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_23305	TAN/5/2014	bovine	96.4	0	O	EA-2		
viba_23309	TAN/6/2014	bovine	96.4	0	O	EA-2		
viba_23301	TAN/4/2014	bovine	96.4	0	O	EA-2		
viba_23325	TAN/10/2014	bovine	96.4	0	O	EA-2		
viba_23313	TAN/7/2014	bovine	96.4	0	O	EA-2		
viba_33174	TAN-CVL-2011-0106	cattle	96.4	0	O	EA-2		
viba_23297	TAN/3/2014	bovine	96.4	0	O	EA-2		
viba_23321	TAN/9/2014	bovine	96.4	0	O	EA-2		
viba_14479	COD/1/2010	cattle	96.2	0	O	EA-2		
viba_14483	COD/2/2010	cattle	96.2	0	O	EA-2		

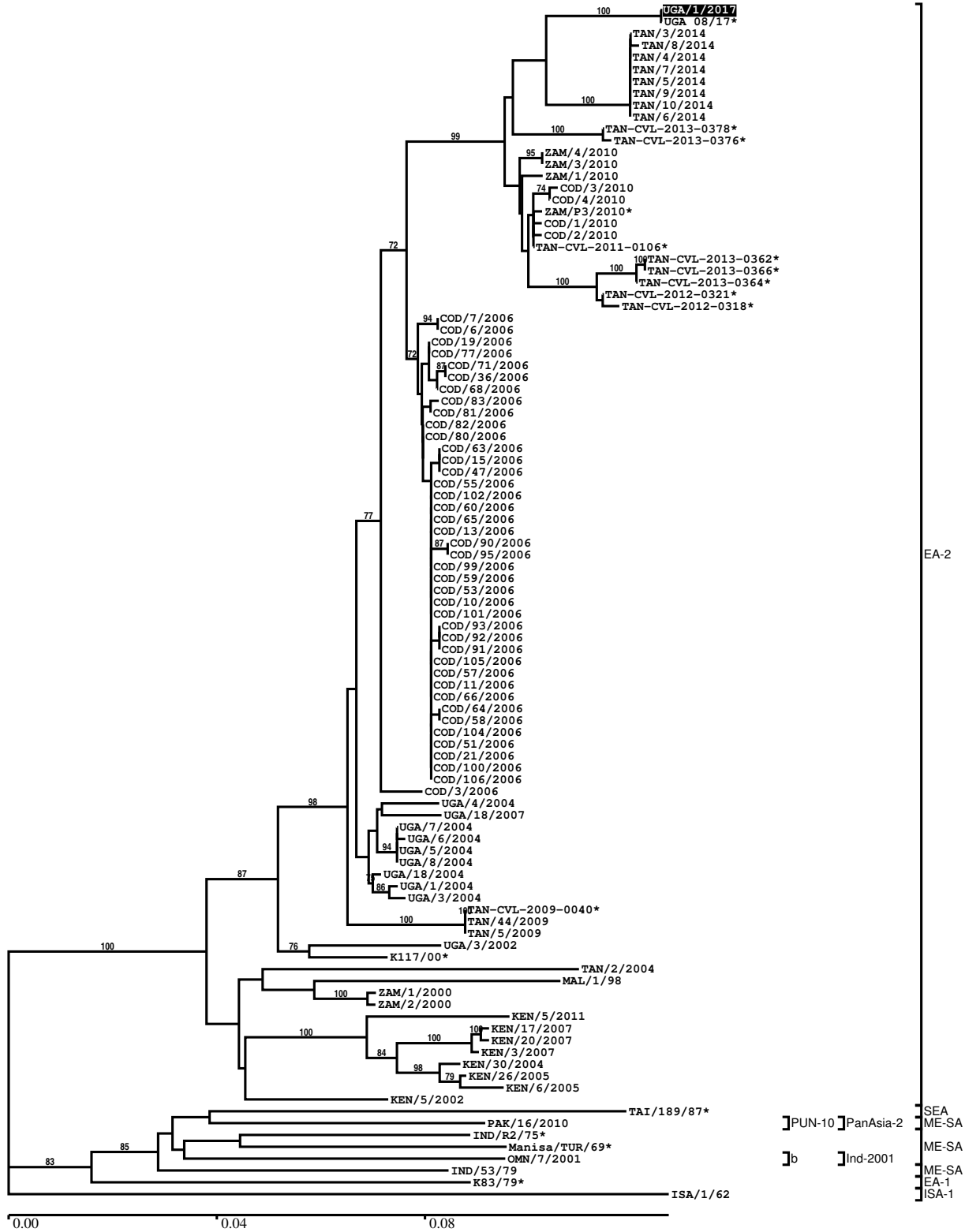
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_74	KEN/5/2002	bovine	90.3	0	O	EA-2		
viba_85	UGA/3/2002		90.2	0	O	EA-2		
viba_221	MAL/1/98		87.9	0	O	EA-2		
viba_263	TAN/2/2004	bovine	87.3	0	O	EA-2		
viba_576	IND/R2/75		84.8	0	O	ME-SA		
viba_523	K83/79		84.5	0	O	EA-1		
viba_541	OMN/7/2001	bovine	84.5	0	O	ME-SA	Ind-2001	b
viba_617	IND/53/79	bovine	84.3	0	O	ME-SA		
viba_354	PAK/16/2010	cattle	84.2	0	O	ME-SA	PanAsia-2	PUN-10
viba_359	Manisa/TUR/69		84.1	0	O	ME-SA		

Report on FMDV O in Uganda in 2017

Batch: WRLFMD/2017/00027



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor: vp1_O
 Query sequence set: WRLFMD/2017/00027-Uganda-O (1 sequences)
 Sequence database set: allseqs_O (3638 sequences)
 Prototype sequence set: !prototypes_O (47 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
UGA/1/2017	n/a	cattle	WRLFMD	Uganda	EA-2
UGA 08/17*	n/a	bovine	BVI	Uganda	EA-2
TAN/3/2014	MF592665	bovine	WRLFMD	Tanzania	EA-2
TAN/8/2014	MF592669	bovine	WRLFMD	Tanzania	EA-2
TAN/4/2014	MF592666	bovine	WRLFMD	Tanzania	EA-2
TAN/7/2014	MF592668	bovine	WRLFMD	Tanzania	EA-2
TAN/5/2014	n/a	bovine	WRLFMD	Tanzania	EA-2
TAN/9/2014	MF592670	bovine	WRLFMD	Tanzania	EA-2
TAN/10/2014	MF592671	bovine	WRLFMD	Tanzania	EA-2
TAN/6/2014	MF592667	bovine	WRLFMD	Tanzania	EA-2
TAN-CVL-2013-0378*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
TAN-CVL-2013-0376*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
ZAM/4/2010	n/a	cattle	WRLFMD	Zambia	EA-2
ZAM/3/2010	n/a	cattle	WRLFMD	Zambia	EA-2
ZAM/1/2010	n/a	cattle	WRLFMD	Zambia	EA-2
COD/3/2010	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/4/2010	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
ZAM/P3/2010*	n/a	african buffalo	WRLFMD	Zambia	EA-2
COD/1/2010	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/2/2010	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
TAN-CVL-2011-0106*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
TAN-CVL-2013-0362*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
TAN-CVL-2013-0366*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
TAN-CVL-2013-0364*	n/a	cattle	CVL, Tanzania	Tanzania	EA-2
TAN-CVL-2012-0321*	n/a	bovine	CVL	Tanzania	EA-2
TAN-CVL-2012-0318*	n/a	bovine	CVL	Tanzania	EA-2
COD/7/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2

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label	accession	host(s)	lab	country	taxonomic information
COD/6/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/19/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/77/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/71/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/36/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/68/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/83/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/81/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/82/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/80/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/63/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/15/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/47/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/55/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/102/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/60/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/65/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/13/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/90/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/95/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/99/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/59/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/53/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2

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label	accession	host(s)	lab	country	taxonomic information
COD/10/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/101/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/93/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/92/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/91/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/105/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/57/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/11/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/66/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/64/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/58/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/104/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/51/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/21/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/100/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/106/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
COD/3/2006	n/a	cattle	WRLFMD	Democratic Republic of the Congo	EA-2
UGA/4/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/18/2007	n/a	cattle	WRLFMD	Uganda	EA-2
UGA/7/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/6/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/5/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/8/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/18/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/1/2004	n/a	bovine	WRLFMD	Uganda	EA-2
UGA/3/2004	n/a	bovine	WRLFMD	Uganda	EA-2
TAN-CVL-2009-0040*	n/a	bovine	CVL	Tanzania	EA-2
TAN/44/2009	KF561686	cattle	WRLFMD	Tanzania	EA-2
TAN/5/2009	KF561685	cattle	WRLFMD	Tanzania	EA-2
UGA/3/2002	DQ165077	n/a	WRLFMD	Uganda	EA-2
K117/00*	HM756607	bovine	Makerere University	Kenya	EA-2
TAN/2/2004	KF561679	bovine	WRLFMD	Tanzania	EA-2
MAL/1/98	DQ165074	n/a	WRLFMD	Malawi	EA-2

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label	accession	host(s)	lab	country	taxonomic information
ZAM/1/2000	n/a	bovine	WRLFMD	Zambia	EA-2
ZAM/2/2000	n/a	bovine	WRLFMD	Zambia	EA-2
KEN/5/2011	KF135290	cattle	WRLFMD	Kenya	EA-2
KEN/17/2007	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/20/2007	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/3/2007	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/30/2004	KF135271	cattle	WRLFMD	Kenya	EA-2
KEN/26/2005	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/6/2005	n/a	cattle	WRLFMD	Kenya	EA-2
KEN/5/2002	DQ165073	bovine	WRLFMD	Kenya	EA-2
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
PAK/16/2010	KY091285	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-10
IND/R2/75*	AF204276	n/a	PD-FMD	India	ME-SA
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
OMN/7/2001	DQ164941	bovine	WRLFMD	Oman	ME-SA/Ind-2001/b
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
K83/79*	AJ303511	n/a	WRLFMD	Kenya	EA-1
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

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n/a, not available