

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

Genotyping Report

FMDV serotype: SAT2
Country: Egypt
Year: 2018
Batch: WRLFMD/2019/00005
No. of sequences: 6
Report date: 27th February 2019
Report generated by: Jemma Wadsworth
Report checked by: Nick Knowles



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

email: reporting@pirbright.ac.uk

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Virus sample name:	EGY/1/2018
Sender reference:	(33) RV/1
Location of origin:	Gabaliat, Ganaen, Suez
Country of origin:	Egypt
Date of collection:	20/01/2018
Host species:	cattle
Serotype:	SAT2
Topotype:	VII
Lineage:	Ghb-12
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	08/02/2019
Primers:	SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R
Received for sequencing:	22/02/2019
Created:	27/02/2019
Last updated:	27/02/2019
VIBASys IDs: sample 40218, genome 40219, sequence viba_40220, sequencing info 40221	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_20562	EGY/43/2012	cattle	100.0	0	SAT2	VII	Ghb-12	
viba_27746	EGY/44/2012	cattle	100.0	0	SAT2	VII	Ghb-12	
viba_20550	EGY/28/2012	cattle	99.8	0	SAT2	VII	Ghb-12	
viba_20546	EGY/22/2012	cattle	99.5	0	SAT2	VII	Ghb-12	
viba_20530	EGY/15/2012		99.5	0	SAT2	VII	Ghb-12	
viba_20558	EGY/31/2012	cattle	99.5	0	SAT2	VII	Ghb-12	
viba_20633	PAT/1/2012	cattle	99.5	0	SAT2	VII	Ghb-12	
viba_20526	EGY/14/2012		99.5	0	SAT2	VII	Ghb-12	
viba_20542	EGY/21/2012	cattle	99.5	0	SAT2	VII	Ghb-12	
viba_20572	EGY/7/2012	water buffalo	99.5	0	SAT2	VII	Ghb-12	

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_742	CAR/8/2005	cattle	89.4	0	SAT2	VII		
viba_424	SAU/6/2000	bovine	89.3	1	SAT2	VII		
viba_470	KEN/2/84	bovine	76.1	0	SAT2	IX		
viba_127	KEN/3/57		74.5	0	SAT2	IX		
viba_752	SA/106/59		74.0	0	SAT2	I		
viba_189	RWA/1/2000		73.9	0	SAT2	VIII		
viba_756	UGA/19/98		73.4	0	SAT2	X		
viba_374	ZAI/1/74		73.3	0	SAT2	VIII		
viba_500	NIG/2/75	bovine	73.2	0	SAT2	V		
viba_139	ETH/2/2007	cattle	73.0	0	SAT2	XIII		

Virus sample name:	EGY/7/2018
Sender reference:	(36) RL/169
Location of origin:	Asma, Qalub, Qalubia
Country of origin:	Egypt
Date of collection:	22/04/2018
Host species:	cattle
Serotype:	SAT2
Topotype:	VII
Lineage:	Lib-12
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/02/2019
Primers:	SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R
Received for sequencing:	22/02/2019
Created:	27/02/2019
Last updated:	27/02/2019
VIBASys IDs: sample 40222, genome 40223, sequence viba_40224, sequencing info 40225	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_36131	ETH/11/2018	cattle	98.1	0	SAT2	VII	Lib-12	
viba_40232	EGY/21/2018	cattle	96.7	0	SAT2	VII	Lib-12	
viba_40228	EGY/19/2018	cattle	96.4	0	SAT2	VII	Lib-12	
viba_40240	EGY/34/2018	cattle	96.3	0	SAT2	VII	Lib-12	
viba_40236	EGY/31/2018	cattle	95.8	0	SAT2	VII	Lib-12	
viba_20481	CAR/24/2012	bovine	95.5	0	SAT2	VII	Lib-12	
viba_20465	CAR/4/2012		95.3	0	SAT2	VII	Lib-12	
viba_20461	CAR/3/2012		95.3	0	SAT2	VII	Lib-12	
viba_20477	CAR/10/2012		95.3	0	SAT2	VII	Lib-12	
viba_20469	CAR/8/2012		95.3	0	SAT2	VII	Lib-12	

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_742	CAR/8/2005	cattle	88.0	0	SAT2	VII		
viba_424	SAU/6/2000	bovine	86.5	1	SAT2	VII		
viba_369	UGA/51/75	bovine	74.8	0	SAT2	XII		
viba_470	KEN/2/84	bovine	73.7	0	SAT2	IX		
viba_374	ZAI/1/74		73.7	0	SAT2	VIII		
viba_127	KEN/3/57		73.6	0	SAT2	IX		
viba_756	UGA/19/98		73.1	0	SAT2	X		
viba_724	ETH/2/91	bovine	73.0	0	SAT2	XIV		
viba_189	RWA/1/2000		72.8	0	SAT2	VIII		
viba_273	ETH/1/90	bovine	72.7	0	SAT2	IV		

Virus sample name:	EGY/19/2018
Sender reference:	(16) RL/445b
Location of origin:	Elsafa, Elamded, Dakahlia
Country of origin:	Egypt
Date of collection:	28/08/2018
Host species:	cattle
Serotype:	SAT2
Topotype:	VII
Lineage:	Lib-12
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	12/02/2019
Primers:	SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R
Received for sequencing:	22/02/2019
Created:	27/02/2019
Last updated:	27/02/2019
VIBASys IDs: sample 40226, genome 40227, sequence viba_40228, sequencing info 40229	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_40232	EGY/21/2018	cattle	99.4	0	SAT2	VII	Lib-12	
viba_40240	EGY/34/2018	cattle	99.2	0	SAT2	VII	Lib-12	
viba_40236	EGY/31/2018	cattle	98.8	0	SAT2	VII	Lib-12	
viba_36131	ETH/11/2018	cattle	96.9	0	SAT2	VII	Lib-12	
viba_40224	EGY/7/2018	cattle	96.4	0	SAT2	VII	Lib-12	
viba_20477	CAR/10/2012		93.9	0	SAT2	VII	Lib-12	
viba_20469	CAR/8/2012		93.9	0	SAT2	VII	Lib-12	
viba_35967	CAR/G3808/2012	cattle	93.9	0	SAT2	VII	Lib-12	
viba_20473	CAR/9/2012		93.9	0	SAT2	VII	Lib-12	
viba_35963	CAR/G3796/2012	cattle	93.9	0	SAT2	VII	Lib-12	

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_742	CAR/8/2005	cattle	87.4	0	SAT2	VII		
viba_424	SAU/6/2000	bovine	85.5	1	SAT2	VII		
viba_369	UGA/51/75	bovine	74.4	0	SAT2	XII		
viba_374	ZAI/1/74		73.9	0	SAT2	VIII		
viba_756	UGA/19/98		73.7	0	SAT2	X		
viba_127	KEN/3/57		73.5	0	SAT2	IX		
viba_470	KEN/2/84	bovine	72.9	0	SAT2	IX		
viba_728	GHA/2/90	bovine	72.6	0	SAT2	V		
viba_752	SA/106/59		71.9	0	SAT2	I		
viba_139	ETH/2/2007	cattle	71.9	0	SAT2	XIII		

Virus sample name:	EGY/21/2018
Sender reference:	(18) RL/500
Location of origin:	Monof, Monof, Monofia
Country of origin:	Egypt
Date of collection:	04/10/2018
Host species:	cattle
Serotype:	SAT2
Topotype:	VII
Lineage:	Lib-12
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	12/02/2019
Primers:	SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R
Received for sequencing:	22/02/2019
Created:	27/02/2019
Last updated:	27/02/2019
VIBASys IDs: sample 40230, genome 40231, sequence viba_40232, sequencing info 40233	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_40228	EGY/19/2018	cattle	99.4	0	SAT2	VII	Lib-12	
viba_40240	EGY/34/2018	cattle	98.9	0	SAT2	VII	Lib-12	
viba_40236	EGY/31/2018	cattle	98.8	0	SAT2	VII	Lib-12	
viba_36131	ETH/11/2018	cattle	97.0	0	SAT2	VII	Lib-12	
viba_40224	EGY/7/2018	cattle	96.7	0	SAT2	VII	Lib-12	
viba_20477	CAR/10/2012		94.2	0	SAT2	VII	Lib-12	
viba_20469	CAR/8/2012		94.2	0	SAT2	VII	Lib-12	
viba_35967	CAR/G3808/2012	cattle	94.2	0	SAT2	VII	Lib-12	
viba_20473	CAR/9/2012		94.2	0	SAT2	VII	Lib-12	
viba_35963	CAR/G3796/2012	cattle	94.2	0	SAT2	VII	Lib-12	

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_742	CAR/8/2005	cattle	88.0	0	SAT2	VII		
viba_424	SAU/6/2000	bovine	86.2	1	SAT2	VII		
viba_369	UGA/51/75	bovine	74.1	0	SAT2	XII		
viba_756	UGA/19/98		73.8	0	SAT2	X		
viba_374	ZAI/1/74		73.8	0	SAT2	VIII		
viba_127	KEN/3/57		73.2	0	SAT2	IX		
viba_470	KEN/2/84	bovine	72.8	0	SAT2	IX		
viba_728	GHA/2/90	bovine	72.4	0	SAT2	V		
viba_139	ETH/2/2007	cattle	72.1	0	SAT2	XIII		
viba_500	NIG/2/75	bovine	71.9	0	SAT2	V		

Virus sample name:	EGY/31/2018
Sender reference:	(28) RL/564d
Location of origin:	Elroman, Dekernes, Dakahlia
Country of origin:	Egypt
Date of collection:	04/11/2018
Host species:	cattle
Serotype:	SAT2
Topotype:	VII
Lineage:	Lib-12
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	BTy2
Harvest date of material:	15/02/2019
Primers:	SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R
Received for sequencing:	22/02/2019
Created:	27/02/2019
Last updated:	27/02/2019
VIBASys IDs: sample 40234, genome 40235, sequence viba_40236, sequencing info 40237	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_40228	EGY/19/2018	cattle	98.8	0	SAT2	VII	Lib-12	
viba_40232	EGY/21/2018	cattle	98.8	0	SAT2	VII	Lib-12	
viba_40240	EGY/34/2018	cattle	98.3	0	SAT2	VII	Lib-12	
viba_36131	ETH/11/2018	cattle	96.6	0	SAT2	VII	Lib-12	
viba_40224	EGY/7/2018	cattle	95.8	0	SAT2	VII	Lib-12	
viba_20485	CAR/78/2012	bovine	93.5	0	SAT2	VII	Lib-12	
viba_35971	CAR/B001070/2012	cattle	93.5	0	SAT2	VII	Lib-12	
viba_20477	CAR/10/2012		93.3	0	SAT2	VII	Lib-12	
viba_20469	CAR/8/2012		93.3	0	SAT2	VII	Lib-12	
viba_35967	CAR/G3808/2012	cattle	93.3	0	SAT2	VII	Lib-12	

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_742	CAR/8/2005	cattle	87.4	0	SAT2	VII		
viba_424	SAU/6/2000	bovine	85.7	1	SAT2	VII		
viba_756	UGA/19/98		74.1	0	SAT2	X		
viba_369	UGA/51/75	bovine	74.0	0	SAT2	XII		
viba_374	ZAI/1/74		73.5	0	SAT2	VIII		
viba_470	KEN/2/84	bovine	72.8	0	SAT2	IX		
viba_139	ETH/2/2007	cattle	72.1	0	SAT2	XIII		
viba_273	ETH/1/90	bovine	71.6	0	SAT2	IV		
viba_500	NIG/2/75	bovine	71.6	0	SAT2	V		
viba_127	KEN/3/57		71.6	0	SAT2	IX		

Virus sample name:	EGY/34/2018
Sender reference:	(31) RL/575
Location of origin:	Elmalak, Eltal Elkbeer, Esmalia
Country of origin:	Egypt
Date of collection:	10/11/2018
Host species:	cattle
Serotype:	SAT2
Topotype:	VII
Lineage:	Lib-12
Sublineage:	
Sequence length:	642
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	13/02/2019
Primers:	SAT2-1C445F/SAT-2B208R; SAT2-P1-1223F/SAT-2B208R; FMD-3161F/FMD-4303R
Received for sequencing:	22/02/2019
Created:	27/02/2019
Last updated:	27/02/2019
VIBASys IDs: sample 40238, genome 40239, sequence viba_40240, sequencing info 40241	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_40228	EGY/19/2018	cattle	99.2	0	SAT2	VII	Lib-12	
viba_40232	EGY/21/2018	cattle	98.9	0	SAT2	VII	Lib-12	
viba_40236	EGY/31/2018	cattle	98.3	0	SAT2	VII	Lib-12	
viba_36131	ETH/11/2018	cattle	96.4	0	SAT2	VII	Lib-12	
viba_40224	EGY/7/2018	cattle	96.3	0	SAT2	VII	Lib-12	
viba_20477	CAR/10/2012		93.6	0	SAT2	VII	Lib-12	
viba_20469	CAR/8/2012		93.6	0	SAT2	VII	Lib-12	
viba_35967	CAR/G3808/2012	cattle	93.6	0	SAT2	VII	Lib-12	
viba_20473	CAR/9/2012		93.6	0	SAT2	VII	Lib-12	
viba_35963	CAR/G3796/2012	cattle	93.6	0	SAT2	VII	Lib-12	

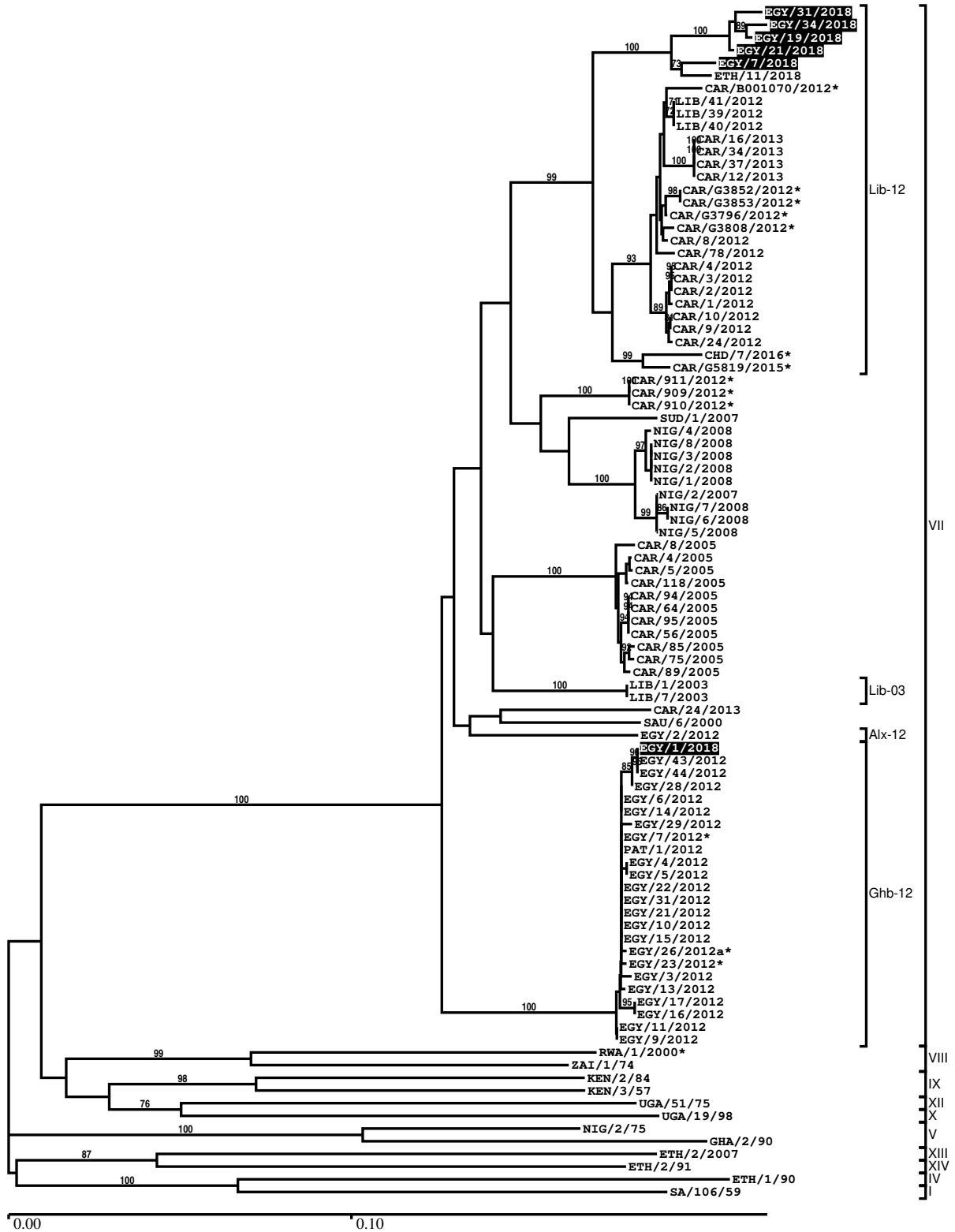
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_742	CAR/8/2005	cattle	87.1	0	SAT2	VII		
viba_424	SAU/6/2000	bovine	85.1	1	SAT2	VII		
viba_369	UGA/51/75	bovine	74.1	0	SAT2	XII		
viba_374	ZAI/1/74		73.8	0	SAT2	VIII		
viba_756	UGA/19/98		73.3	0	SAT2	X		
viba_127	KEN/3/57		72.9	0	SAT2	IX		
viba_470	KEN/2/84	bovine	72.3	0	SAT2	IX		
viba_728	GHA/2/90	bovine	72.1	0	SAT2	V		
viba_752	SA/106/59		71.8	0	SAT2	I		
viba_139	ETH/2/2007	cattle	71.8	0	SAT2	XIII		

Report on FMDV SAT2 in Egypt in 2018

Batch: WRLFMD/2019/00005



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_SAT2
Query sequence set:	WRLFMD/2019/00005-Egypt-SAT2 (6 sequences)
Sequence database set:	allseqs_SAT2 (882 sequences)
Prototype sequence set:	!prototypes_SAT2 (25 sequences)
Number of related sequences reported:	10
Minimal VP1 subsequence match length	600
Sequence alignment method:	muscle (default parameters)
Sequence alignment length:	642
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:	14
VIBASys version:	reflabs-1.1.2

Sequences in the Phylogenetic Tree

All sequences in the tree are in taxonomic group FMDV/SAT2

label	accession	host(s)	lab	country	taxonomic information
EGY/31/2018	n/a	cattle	WRLFMD	Egypt	VII/Lib-12
EGY/34/2018	n/a	cattle	WRLFMD	Egypt	VII/Lib-12
EGY/19/2018	n/a	cattle	WRLFMD	Egypt	VII/Lib-12
EGY/21/2018	n/a	cattle	WRLFMD	Egypt	VII/Lib-12
EGY/7/2018	n/a	cattle	WRLFMD	Egypt	VII/Lib-12
ETH/11/2018	n/a	cattle	WRLFMD	Ethiopia	VII/Lib-12
CAR/B001070/2012*	KY581675	cattle	PIADC	Cameroon	VII/Lib-12
LIB/41/2012	JX570635	cattle	WRLFMD	Libya	VII/Lib-12
LIB/39/2012	JX570633	cattle	WRLFMD	Libya	VII/Lib-12
LIB/40/2012	JX570634	cattle	WRLFMD	Libya	VII/Lib-12
CAR/16/2013	n/a	cattle	WRLFMD	Cameroon	VII/Lib-12
CAR/34/2013	n/a	cattle	WRLFMD	Cameroon	VII/Lib-12
CAR/37/2013	n/a	cattle	WRLFMD	Cameroon	VII/Lib-12
CAR/12/2013	n/a	cattle	WRLFMD	Cameroon	VII/Lib-12
CAR/G3852/2012*	KY581672	cattle	PIADC	Cameroon	VII/Lib-12
CAR/G3853/2012*	KY581671	cattle	PIADC	Cameroon	VII/Lib-12
CAR/G3796/2012*	KY581674	cattle	PIADC	Cameroon	VII/Lib-12
CAR/G3808/2012*	KY581673	cattle	PIADC	Cameroon	VII/Lib-12
CAR/8/2012	KX266287	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/78/2012	KX266291	bovine	WRLFMD	Cameroon	VII/Lib-12
CAR/4/2012	KX266286	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/3/2012	KX266285	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/2/2012	KX266284	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/1/2012	KX266283	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/10/2012	KX266289	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/9/2012	KX266288	n/a	WRLFMD	Cameroon	VII/Lib-12
CAR/24/2012	KX266290	bovine	WRLFMD	Cameroon	VII/Lib-12
CHD/7/2016*	n/a	cattle	ANSES	Chad	VII/Lib-12
CAR/G5819/2015*	MG873224	cattle	PIADC	Cameroon	VII/Lib-12
CAR/911/2012*	KU720584	cattle	PIADC	Cameroon	VII
CAR/909/2012*	KU720582	cattle	PIADC	Cameroon	VII
CAR/910/2012*	KU720583	cattle	PIADC	Cameroon	VII
SUD/1/2007	GU566071	cattle	WRLFMD	Sudan	VII
NIG/4/2008	KX258079	cattle	WRLFMD	Nigeria	VII
NIG/8/2008	KX258083	cattle	WRLFMD	Nigeria	VII
NIG/3/2008	KX258078	cattle	WRLFMD	Nigeria	VII

continued on next page

label	accession	host(s)	lab	country	taxonomic information
NIG/2/2008	KX258077	cattle	WRLFMD	Nigeria	VII
NIG/1/2008	KX258076	cattle	WRLFMD	Nigeria	VII
NIG/2/2007	JX570636	cattle	WRLFMD	Nigeria	VII
NIG/7/2008	KX258082	cattle	WRLFMD	Nigeria	VII
NIG/6/2008	KX258081	cattle	WRLFMD	Nigeria	VII
NIG/5/2008	KX258080	cattle	WRLFMD	Nigeria	VII
CAR/8/2005	JX570616	cattle	WRLFMD	Cameroon	VII
CAR/4/2005	KX258136	cattle	WRLFMD	Cameroon	VII
CAR/5/2005	KX258137	cattle	WRLFMD	Cameroon	VII
CAR/118/2005	KX258183	cattle	WRLFMD	Cameroon	VII
CAR/94/2005	KX258172	cattle	WRLFMD	Cameroon	VII
CAR/64/2005	KX258161	cattle	WRLFMD	Cameroon	VII
CAR/95/2005	KX258173	cattle	WRLFMD	Cameroon	VII
CAR/56/2005	KX258155	cattle	WRLFMD	Cameroon	VII
CAR/85/2005	KX258169	cattle	WRLFMD	Cameroon	VII
CAR/75/2005	KX258165	cattle	WRLFMD	Cameroon	VII
CAR/89/2005	KX258170	cattle	WRLFMD	Cameroon	VII
LIB/1/2003	JX570631	n/a	WRLFMD	Libya	VII/Lib-03
LIB/7/2003	JX570632	n/a	WRLFMD	Libya	VII/Lib-03
CAR/24/2013	n/a	cattle	WRLFMD	Cameroon	VII
SAU/6/2000	AF367135	bovine	OVI	Saudi Arabia	VII
EGY/2/2012	JX570617	n/a	WRLFMD	Egypt	VII/Alx-12
EGY/1/2018	n/a	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/43/2012	KX258063	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/44/2012	n/a	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/28/2012	KF112935	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/6/2012	JX570621	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/14/2012	JX570626	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/29/2012	KF112936	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/7/2012*	JX013978	water buffalo	n/a	Egypt	VII/Ghb-12
PAT/1/2012	JX570637	cattle	WRLFMD	Palestinian AT	VII/Ghb-12
EGY/4/2012	JX570619	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/5/2012	JX570620	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/22/2012	KF112934	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/31/2012	KF112937	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/21/2012	KF112933	cattle	WRLFMD	Egypt	VII/Ghb-12
EGY/10/2012	JX570623	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/15/2012	JX570627	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/26/2012a*	JX013979	water buffalo	n/a	Egypt	VII/Ghb-12
EGY/23/2012*	JX013980	cattle	n/a	Egypt	VII/Ghb-12
EGY/3/2012	JX570618	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/13/2012	JX570625	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/17/2012	KF112932	water buffalo	WRLFMD	Egypt	VII/Ghb-12
EGY/16/2012	KF112931	water buffalo	WRLFMD	Egypt	VII/Ghb-12
EGY/11/2012	JX570624	n/a	WRLFMD	Egypt	VII/Ghb-12
EGY/9/2012	JX570622	n/a	WRLFMD	Egypt	VII/Ghb-12
RWA/1/2000*	AF367134	n/a	OVI	Rwanda	VIII
ZAI/1/74	DQ009737	n/a	OVI	Zaire	VIII
KEN/2/84	AY343941	bovine	OVI	Kenya	IX
KEN/3/57	AJ251473	n/a	WRLFMD	Kenya	IX
UGA/51/75	AY343963	bovine	OVI	Uganda	XII
UGA/19/98	AY343969	n/a	OVI	Uganda	X
NIG/2/75	AF367139	bovine	OVI	Nigeria	V
GHA/2/90	AF479415	bovine	OVI	Ghana	V
ETH/2/2007	FJ798161	cattle	WRLFMD	Ethiopia	XIII
ETH/2/91	AY343938	bovine	OVI	Ethiopia	XIV
ETH/1/90	AY343935	bovine	OVI	Ethiopia	IV
SA/106/59	AY593848	n/a	PIADC	South Africa (SA)	I

*, not a WRLFMD Reference Number

n/a, not available