

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

Genotyping Report

FMDV serotype: O
Country: China
Year: 2018
Batch: WRLMEG/2018/00034
No. of sequences: 5
Report date: 23rd August 2018
Report generated by: Nick Knowles
Report checked by: Kasia Bankowska



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

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Virus sample name:	NXYCh/CHA/2018-B
Sender reference:	O-NXYCh-CHA-2018-B
Location of origin:	Yinchuan, Ningxia
Country of origin:	China
Date of collection:	10/01/2018
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
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:	23/08/2018
Last updated:	23/08/2018
VIBASys IDs: sample 37121, genome 37122, sequence viba_37123, sequencing info 37124	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_26288	TAI/22/2015	water buffalo	97.3	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	97.2	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	97.2	0	O	SEA	Mya-98	
viba_36424	VIT/24/2016	bovine	97.0	0	O	SEA	Mya-98	
viba_30494	TAI/21/2016	cattle	97.0	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	97.0	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	96.8	0	O	SEA	Mya-98	
viba_33993	TAI/59/2016	cattle	96.7	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	96.7	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	96.7	0	O	SEA	Mya-98	

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_199	MYA/7/98	bovine	91.0	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	89.1	0	O	SEA		
viba_354	PAK/16/2010	cattle	84.2	0	O	ME-SA	PanAsia-2	PUN-10
viba_491	TUR/257/2008		84.2	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_860	IRN/6/2015	cattle	84.1	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		83.9	0	O	ME-SA	PanAsia-2	SAN-09
viba_666	IRN/18/2010	cattle	83.7	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	83.6	0	O	ME-SA	PanAsia-2	
viba_694	CAM/3/98	bovine	83.5	0	O	SEA	Cam-94	

Virus sample name:	GXCX/CHA/2018-S
Sender reference:	O-GXCX-CHA-2018-S
Location of origin:	Cenxi, Guangxi
Country of origin:	China
Date of collection:	11/04/2018
Host species:	porcine
Serotype:	O
Topotype:	CATHAY
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:	23/08/2018
Last updated:	23/08/2018
VIBASys IDs: sample 37125, genome 37126, sequence viba_37127, sequencing info 37128	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_31464	VIT/8/2016	porcine	94.8	0	O	CATHAY		
viba_36473	VIT/26/2017	porcine	94.5	0	O	CATHAY		
viba_36420	VIT/23/2016	porcine	94.3	0	O	CATHAY		
viba_26337	CanTho/VIT/15-20501	porcine	93.8	0	O	CATHAY		
viba_36469	VIT/22/2017	porcine	93.8	0	O	CATHAY		
viba_31216	SCGH/CHA/2016	porcine	93.7	0	O	CATHAY		
viba_31208	GD/CHA/JH12/2013	porcine	93.4	0	O	CATHAY		
viba_36465	VIT/21/2017	porcine	93.2	0	O	CATHAY		
viba_36477	VIT/27/2017	porcine	92.9	0	O	CATHAY		
viba_36440	VIT/3/2017	porcine	92.6	0	O	CATHAY		

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_480	Yunlin/TAW/97	porcine	86.6	0	O	CATHAY		
viba_418	PHI/7/96	porcine	85.5	0	O	CATHAY		
viba_584	HKN/6/83	bovine	81.8	2	O	CATHAY		
viba_325	HKN/21/70	porcine	81.2	2	O	CATHAY		
viba_359	Manisa/TUR/69		80.1	0	O	ME-SA		
viba_617	IND/53/79	bovine	80.1	0	O	ME-SA		
viba_541	OMN/7/2001	bovine	79.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	79.5	0	O	ME-SA	Ind-2001	a
viba_85	UGA/3/2002		79.3	0	O	EA-2		
viba_354	PAK/16/2010	cattle	79.2	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	XJHM/CHA/2018-B
Sender reference:	O-XJHM-CHA-2018-B
Location of origin:	Hami, Xinjiang
Country of origin:	China
Date of collection:	12/04/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia
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:	23/08/2018
Last updated:	23/08/2018
VIBASys IDs: sample 37129, genome 37130, sequence viba_37131, sequencing info 37132	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_36461	VIT/18/2017	bovine	99.5	0	O	ME-SA	PanAsia	
viba_36481	VIT/29/2017	bovine	99.2	0	O	ME-SA	PanAsia	
viba_36497	VIT/1/2018	bovine	99.2	0	O	ME-SA	PanAsia	
viba_35454	BaTri/VIT/17-19372	cattle	99.2	0	O	ME-SA	PanAsia	
viba_36493	VIT/32/2017	bovine	99.2	0	O	ME-SA	PanAsia	
viba_36489	VIT/31/2017	bovine	99.1	0	O	ME-SA	PanAsia	
viba_37135	SXXZh/CHA/2018-B	cattle	98.9	0	O	ME-SA	PanAsia	
viba_36485	VIT/30/2017	bovine	98.6	0	O	ME-SA	PanAsia	
viba_16348	VIT/22/2010	cattle	95.7	0	O	ME-SA	PanAsia	
viba_18828	VIT/34/2011	cattle	95.6	0	O	ME-SA	PanAsia	

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_285	UKG/35/2001	porcine	91.8	0	O	ME-SA	PanAsia	
viba_705	KUW/3/97	bovine	91.2	0	O	ME-SA	Ind-2001	a
viba_293	BHU/3/2009	cattle	91.0	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	90.5	0	O	ME-SA	Ind-2001	b
viba_505	TUR/264/2009		89.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_397	UAE/4/2008	gazelle	89.6	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.6	0	O	ME-SA	PanAsia-2	
viba_354	PAK/16/2010	cattle	89.3	0	O	ME-SA	PanAsia-2	PUN-10
viba_666	IRN/18/2010	cattle	89.1	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	SXXZh/CHA/2018-B
Sender reference:	O-SXXZh-CHA-2018-B
Location of origin:	Xinzhou, Shanxi
Country of origin:	China
Date of collection:	27/05/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia
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:	23/08/2018
Last updated:	23/08/2018
VIBASys IDs: sample 37133, genome 37134, sequence viba_37135, sequencing info 37136	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_36461	VIT/18/2017	bovine	99.1	0	O	ME-SA	PanAsia	
viba_37131	XJHM/CHA/2018-B	cattle	98.9	0	O	ME-SA	PanAsia	
viba_36481	VIT/29/2017	bovine	98.7	0	O	ME-SA	PanAsia	
viba_36497	VIT/1/2018	bovine	98.7	0	O	ME-SA	PanAsia	
viba_35454	BaTri/VIT/17-19372	cattle	98.7	0	O	ME-SA	PanAsia	
viba_36493	VIT/32/2017	bovine	98.7	0	O	ME-SA	PanAsia	
viba_36489	VIT/31/2017	bovine	98.6	0	O	ME-SA	PanAsia	
viba_36485	VIT/30/2017	bovine	98.1	0	O	ME-SA	PanAsia	
viba_33761	MOG/10/2017	cattle	94.9	0	O	ME-SA	PanAsia	
viba_33749	MOG/1/2017	cattle	94.9	0	O	ME-SA	PanAsia	

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_285	UKG/35/2001	porcine	91.3	0	O	ME-SA	PanAsia	
viba_705	KUW/3/97	bovine	90.4	0	O	ME-SA	Ind-2001	a
viba_293	BHU/3/2009	cattle	89.9	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	89.7	0	O	ME-SA	Ind-2001	b
viba_505	TUR/264/2009		89.3	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	89.1	0	O	ME-SA	PanAsia-2	
viba_397	UAE/4/2008	gazelle	88.8	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.8	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_491	TUR/257/2008		88.6	0	O	ME-SA	PanAsia-2	TER-08

Virus sample name:	GZZY/CHA/2018-B
Sender reference:	O-GZZY-CHA-2018-B
Location of origin:	Zunyi, Guizhou
Country of origin:	China
Date of collection:	05/06/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
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:	23/08/2018
Last updated:	23/08/2018
VIBASys IDs: sample 37137, genome 37138, sequence viba_37139, sequencing info 37140	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33785	MYA/1/2017	cattle	97.6	0	O	ME-SA	Ind-2001	e
viba_32128	XJPS/CHA/2017		97.5	0	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	97.5	0	O	ME-SA	Ind-2001	e
viba_32441	MYA/9/2017	cattle	97.5	0	O	ME-SA	Ind-2001	e
viba_31541	BHU/2/2016	cattle	97.3	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	97.3	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	97.3	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	97.3	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	97.3	0	O	ME-SA	Ind-2001	e
viba_31135	BAN/NL/Lo-245/2015	cattle	97.3	0	O	ME-SA	Ind-2001	e

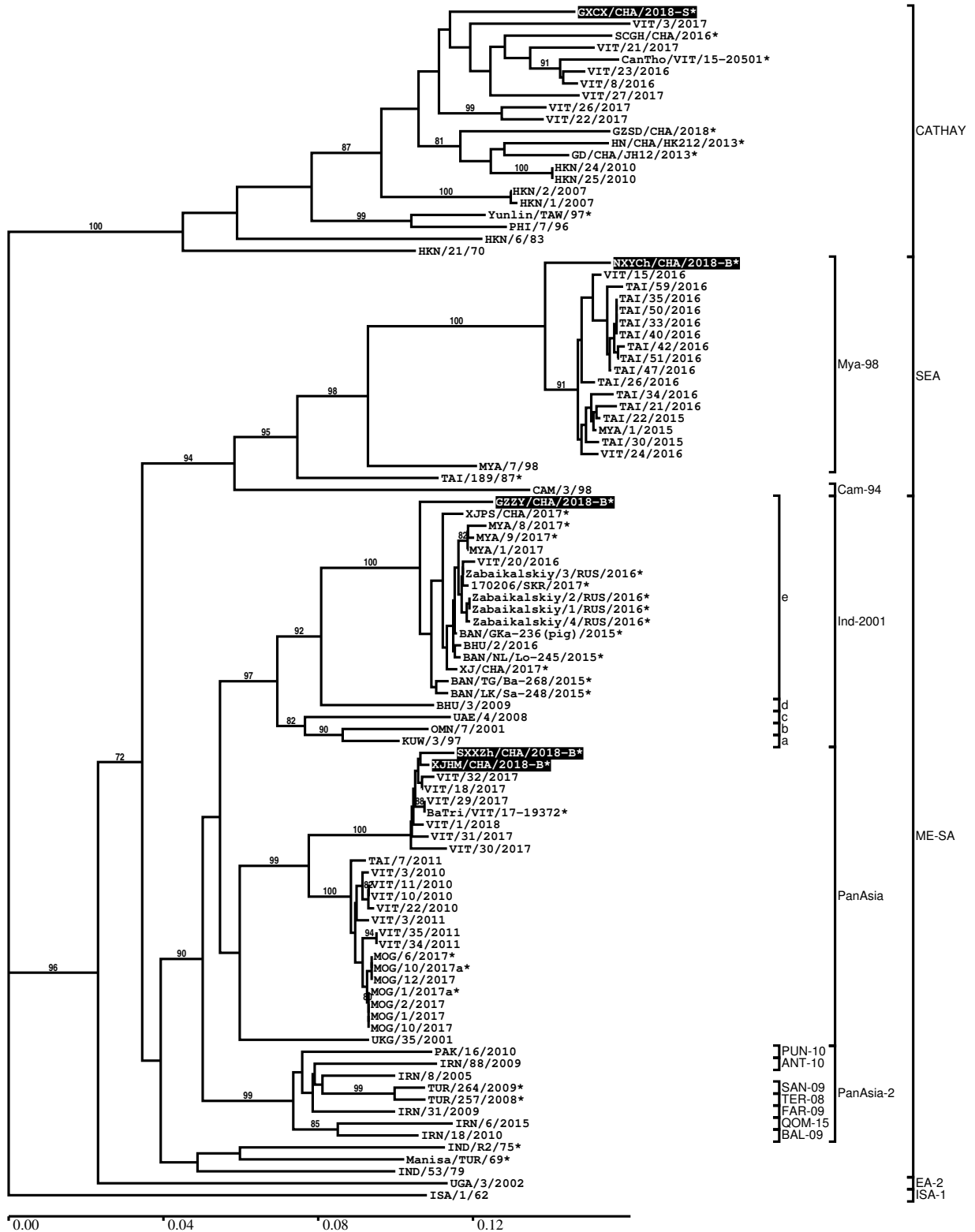
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_293	BHU/3/2009	cattle	92.7	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.7	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.2	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	87.4	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	87.2	0	O	ME-SA	PanAsia-2	BAL-09
viba_576	IND/R2/75		86.9	0	O	ME-SA		
viba_719	IRN/88/2009		86.9	0	O	ME-SA	PanAsia-2	ANT-10

Report on FMDV O in China in 2018

Batch: WRLMEG/2018/00034



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor: vp1_O
 Query sequence set: WRLMEG/2018/00034-China-O (5 sequences)
 Sequence database set: allseqs_O (3835 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: 24
 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
GXCX/CHA/2018-S*	n/a	porcine	LVRI	China	CATHAY
VIT/3/2017	n/a	porcine	WRLFMD	Vietnam	CATHAY
SCGH/CHA/2016*	KX161429	porcine	LVRI	China	CATHAY
VIT/21/2017	n/a	porcine	WRLFMD	Vietnam	CATHAY
CanTho/VIT/15-20501*	n/a	porcine	RAHO6	Vietnam	CATHAY
VIT/23/2016	n/a	porcine	WRLFMD	Vietnam	CATHAY
VIT/8/2016	n/a	porcine	WRLFMD	Vietnam	CATHAY
VIT/27/2017	n/a	porcine	WRLFMD	Vietnam	CATHAY
VIT/26/2017	n/a	porcine	WRLFMD	Vietnam	CATHAY
VIT/22/2017	n/a	porcine	WRLFMD	Vietnam	CATHAY
GZSD/CHA/2018*	MG840803	porcine	LVRI	China	CATHAY
HN/CHA/HK212/2013*	KU204893	porcine	SMU	China	CATHAY
GD/CHA/JH12/2013*	KU204894	porcine	SMU	China	CATHAY
HKN/24/2010	KM243162	porcine	WRLFMD	Hong Kong SAR	CATHAY
HKN/25/2010	KM243163	porcine	WRLFMD	Hong Kong SAR	CATHAY
HKN/2/2007	KM243151	porcine	WRLFMD	Hong Kong SAR	CATHAY
HKN/1/2007	KM243150	porcine	WRLFMD	Hong Kong SAR	CATHAY
Yunlin/TAW/97*	AF308157	porcine	PIADC	Taiwan	CATHAY
PHI/7/96	AJ294926	porcine	WRLFMD	Philippines	CATHAY
HKN/6/83	AJ294919	bovine	WRLFMD	Hong Kong SAR	CATHAY
HKN/21/70	AJ294911	porcine	WRLFMD	Hong Kong SAR	CATHAY
NXYCh/CHA/2018-B*	n/a	cattle	LVRI	China	SEA/Mya-98
VIT/15/2016	n/a	water buffalo	WRLFMD	Vietnam	SEA/Mya-98
TAI/59/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/35/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/50/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/33/2016	n/a	porcine	WRLFMD	Thailand	SEA/Mya-98
TAI/40/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/42/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/51/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/47/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98

continued on next page

label	accession	host(s)	lab	country	taxonomic information
TAI/26/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/34/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/21/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/22/2015	n/a	water buffalo	WRLFMD	Thailand	SEA/Mya-98
MYA/1/2015	n/a	bovine	WRLFMD	Myanmar	SEA/Mya-98
TAI/30/2015	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
VIT/24/2016	n/a	bovine	WRLFMD	Vietnam	SEA/Mya-98
MYA/7/98	DQ164925	bovine	WRLFMD	Myanmar	SEA/Mya-98
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
CAM/3/98	AJ294910	bovine	WRLFMD	Cambodia	SEA/Cam-94
GZZY/CHA/2018-B*	n/a	cattle	LVRI	China	ME-SA/Ind-2001/e
XJPS/CHA/2017*	KY696707	n/a	LVRI	China	ME-SA/Ind-2001/e
MYA/8/2017*	MG972522	water buffalo	TRRL	Myanmar	ME-SA/Ind-2001/e
MYA/9/2017*	MG972523	cattle	TRRL	Myanmar	ME-SA/Ind-2001/e
MYA/1/2017	MG972517	cattle	WRLFMD	Myanmar	ME-SA/Ind-2001/e
VIT/20/2016	MG972619	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
Zabaikalskiy/3/RUS/2016*	MG972584	cattle	ARRIAH	Russia	ME-SA/Ind-2001/e
170206/SKR/2017*	n/a	cattle	QIA	Republic of Korea (South Korea)	ME-SA/Ind-2001/e
Zabaikalskiy/2/RUS/2016*	MG972583	cattle	ARRIAH	Russia	ME-SA/Ind-2001/e
Zabaikalskiy/1/RUS/2016*	MG983720	cattle	ARRIAH	Russia	ME-SA/Ind-2001/e
Zabaikalskiy/4/RUS/2016*	MG972585	cattle	ARRIAH	Russia	ME-SA/Ind-2001/e
BAN/GKa-236(pig)/2015*	KX712091	porcine	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/e
BHU/2/2016	MG972480	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BAN/NL/Lo-245/2015*	KY077611	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/e
XJ/CHA/2017*	MF461724	cattle	LVRI	China	ME-SA/Ind-2001/e
BAN/TG/Ba-268/2015*	KY077621	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/e
BAN/LK/Sa-248/2015*	KY077612	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/e
BHU/3/2009	KM921814	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
UAE/4/2008	KM921876	gazelle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/c
OMN/7/2001	DQ164941	bovine	WRLFMD	Oman	ME-SA/Ind-2001/b
KUW/3/97	DQ164904	bovine	WRLFMD	Kuwait	ME-SA/Ind-2001/a
SXXZh/CHA/2018-B*	n/a	cattle	LVRI	China	ME-SA/PanAsia
XJHM/CHA/2018-B*	n/a	cattle	LVRI	China	ME-SA/PanAsia
VIT/32/2017	n/a	bovine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/18/2017	n/a	bovine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/29/2017	n/a	bovine	WRLFMD	Vietnam	ME-SA/PanAsia
BaTri/VIT/17-19372*	n/a	cattle	RAHO6	Vietnam	ME-SA/PanAsia
VIT/1/2018	n/a	bovine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/31/2017	n/a	bovine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/30/2017	n/a	bovine	WRLFMD	Vietnam	ME-SA/PanAsia
TAI/7/2011	n/a	cattle	WRLFMD	Thailand	ME-SA/PanAsia
VIT/3/2010	n/a	porcine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/11/2010	n/a	cattle	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/10/2010	n/a	cattle	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/22/2010	n/a	cattle	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/3/2011	n/a	porcine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/35/2011	n/a	cattle	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/34/2011	n/a	cattle	WRLFMD	Vietnam	ME-SA/PanAsia
MOG/6/2017*	n/a	gazelle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/10/2017a*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/12/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/1/2017a*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/2/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/1/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/10/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
PAK/16/2010	KY091285	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-10
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/8/2005	KY091281	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	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
IRN/6/2015	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/QOM-15

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label	accession	host(s)	lab	country	taxonomic information
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
IND/R2/75*	AF204276	n/a	PD-FMD	India	ME-SA
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
UGA/3/2002	DQ165077	n/a	WRLFMD	Uganda	EA-2
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

*, not a WRLFMD Reference Number

n/a, not available