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

Genotyping Report

FMDV serotype:	O
Country:	Mongolia
Year:	2018
Batch:	WRLFMD/2018/00022
No. of sequences:	14
Report date:	13th September 2018
Report generated by:	Kasia Bankowska
Report checked by:	Antonello Di Nardo

www: http://www.wrlfmd.org/
email: reporting@pirbright.ac.uk

Virus sample name:	MOG/15/2017
Sender reference:	O/MOG/DE/18/54
Location of origin:	Deren, Dundgovi
Country of origin:	Mongolia
Date of collection:	15/01/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	29/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37322, genome 37323, sequence viba_37324, sequencing info 37325

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	99.1	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.7	0	O	ME-SA	Ind-2001	e
viba_37025	XJ/CHA/2017	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.6	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.6	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	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.3	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.0	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	88.7	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.0	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	87.9	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	87.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	87.4	0	O	ME-SA	PanAsia-2	BAL-09
viba_354	PAK/16/2010	cattle	87.4	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	MOG/2/2018
Sender reference:	LFBK-34 FMDV Camel No.1 Virus-1
Location of origin:	Gurvansaikhan, Dundgovi
Country of origin:	Mongolia
Date of collection:	03/01/2018
Host species:	
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	29/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018
VIBASys IDs: sample 37326, genome 37327, sequence viba_37328, sequencing info 37329	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.6	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.1	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		97.9	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	92.4	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.5	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.2	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	88.6	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	87.9	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		87.2	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	87.1	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	87.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	86.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_491	TUR/257/2008		86.8	0	O	ME-SA	PanAsia-2	TER-08

Virus sample name:	MOG/7/2018
Sender reference:	O/MOG/SB/18/17
Location of origin:	Ongon, Sukhbaatar
Country of origin:	Mongolia
Date of collection:	03/02/2018
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	29/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37330, genome 37331, sequence viba_37332, sequencing info 37333

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_26288	TAI/22/2015	water buffalo	97.6	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	97.5	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	97.5	0	O	SEA	Mya-98	
viba_30494	TAI/21/2016	cattle	97.3	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	97.3	0	O	SEA	Mya-98	
viba_36424	VIT/24/2016	bovine	97.3	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	97.2	0	O	SEA	Mya-98	
viba_33981	TAI/51/2016	cattle	97.0	0	O	SEA	Mya-98	
viba_33993	TAI/59/2016	cattle	97.0	0	O	SEA	Mya-98	
viba_33965	TAI/47/2016	cattle	97.0	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	91.6	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	89.1	0	O	SEA		
viba_491	TUR/257/2008		85.0	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	85.0	0	O	ME-SA	PanAsia-2	FAR-09
viba_860	IRN/6/2015	cattle	84.9	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		84.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_666	IRN/18/2010	cattle	84.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		84.4	0	O	ME-SA	PanAsia-2	ANT-10
viba_850	NEP/1/2015	cattle	84.3	1	O	ME-SA	PanAsia-2	KAT-15
viba_354	PAK/16/2010	cattle	84.1	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	MOG/8/2018
Sender reference:	O/MOG/Sukh.N/18/22
Location of origin:	Naran, Sukhbaatar
Country of origin:	Mongolia
Date of collection:	16/02/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	29/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37334, genome 37335, sequence viba_37336, sequencing info 37337

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33542	MOG/2/2017a	cattle	98.6	0	O	ME-SA	PanAsia	
viba_33562	MOG/8/2017	cattle	98.6	0	O	ME-SA	PanAsia	
viba_33769	MOG/12/2017	cattle	98.6	0	O	ME-SA	PanAsia	
viba_33570	MOG/10/2017a	cattle	98.6	0	O	ME-SA	PanAsia	
viba_33554	MOG/6/2017	gazelle	98.6	0	O	ME-SA	PanAsia	
viba_33546	MOG/3/2017a	cattle	98.6	0	O	ME-SA	PanAsia	
viba_33558	MOG/7/2017	gazelle	98.6	0	O	ME-SA	PanAsia	
viba_33550	MOG/5/2017	cattle	98.6	0	O	ME-SA	PanAsia	
viba_18848	VIT/42/2011	porcine	98.4	0	O	ME-SA	PanAsia	
viba_18840	VIT/37/2011	water buffalo	98.4	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	92.7	0	O	ME-SA	PanAsia	
viba_705	KUW/3/97	bovine	90.8	0	O	ME-SA	Ind-2001	a
viba_650	IRN/8/2005	ovine	90.5	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	90.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_293	BHU/3/2009	cattle	90.2	0	O	ME-SA	Ind-2001	d
viba_666	IRN/18/2010	cattle	89.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_860	IRN/6/2015	cattle	89.9	0	O	ME-SA	PanAsia-2	QOM-15
viba_541	OMN/7/2001	bovine	89.6	0	O	ME-SA	Ind-2001	b
viba_719	IRN/88/2009		89.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_491	TUR/257/2008		89.4	0	O	ME-SA	PanAsia-2	TER-08

Virus sample name:	MOG/9/2018
Sender reference:	O/MOG/Drg-sh/18/61
Location of origin:	Sainshand, Dornogovi
Country of origin:	Mongolia
Date of collection:	19/02/2018
Host species:	sheep
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	30/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018
VIBASys IDs: sample 37338, genome 37339, sequence viba_37340, sequencing info 37341	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.9	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.4	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.3	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	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.0	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.2	0	O	ME-SA	PanAsia	
viba_666	IRN/18/2010	cattle	87.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	87.7	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		87.5	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	87.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_354	PAK/16/2010	cattle	87.3	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	MOG/10/2018
Sender reference:	O/MOG/Sukh/18/18
Location of origin:	Ongon, Sukhbaatar
Country of origin:	Mongolia
Date of collection:	22/02/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	29/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37342, genome 37343, sequence viba_37344, sequencing info 37345

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33542	MOG/2/2017a	cattle	99.4	0	O	ME-SA	PanAsia	
viba_33562	MOG/8/2017	cattle	99.4	0	O	ME-SA	PanAsia	
viba_33769	MOG/12/2017	cattle	99.4	0	O	ME-SA	PanAsia	
viba_33570	MOG/10/2017a	cattle	99.4	0	O	ME-SA	PanAsia	
viba_33554	MOG/6/2017	gazelle	99.4	0	O	ME-SA	PanAsia	
viba_33546	MOG/3/2017a	cattle	99.4	0	O	ME-SA	PanAsia	
viba_33558	MOG/7/2017	gazelle	99.4	0	O	ME-SA	PanAsia	
viba_33550	MOG/5/2017	cattle	99.4	0	O	ME-SA	PanAsia	
viba_18732	VIT/5/2011	cattle	99.2	0	O	ME-SA	PanAsia	
viba_33761	MOG/10/2017	cattle	99.2	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	93.5	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	91.3	0	O	ME-SA	PanAsia-2	
viba_705	KUW/3/97	bovine	91.0	0	O	ME-SA	Ind-2001	a
viba_766	IRN/31/2009	cattle	90.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_541	OMN/7/2001	bovine	90.0	0	O	ME-SA	Ind-2001	b
viba_666	IRN/18/2010	cattle	90.0	0	O	ME-SA	PanAsia-2	BAL-09
viba_293	BHU/3/2009	cattle	90.0	0	O	ME-SA	Ind-2001	d
viba_860	IRN/6/2015	cattle	89.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_491	TUR/257/2008		89.6	0	O	ME-SA	PanAsia-2	TER-08
viba_719	IRN/88/2009		89.4	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	MOG/11/2018
Sender reference:	O/MOG/Khe-Tse/18/60
Location of origin:	Tsenhermandal, Khentii
Country of origin:	Mongolia
Date of collection:	22/02/2018
Host species:	sheep
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	30/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018
VIBASys IDs: sample 37346, genome 37347, sequence viba_37348, sequencing info 37349	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.9	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.4	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.3	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	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.0	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.2	0	O	ME-SA	PanAsia	
viba_666	IRN/18/2010	cattle	87.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	87.7	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		87.5	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	87.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_354	PAK/16/2010	cattle	87.3	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	MOG/12/2018
Sender reference:	O/MOG/Do/18/01
Location of origin:	Chuluunkhoroot, Dornod
Country of origin:	Mongolia
Date of collection:	23/02/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy2
Harvest date of material:	05/09/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018
VIBASys IDs: sample 37350, genome 37351, sequence viba_37352, sequencing info 37353	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.7	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.6	0	O	ME-SA	Ind-2001	e
viba_31492	VIT/20/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_37025	XJ/CHA/2017	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_33785	MYA/1/2017	cattle	98.6	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	93.0	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.2	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	88.0	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	87.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	87.2	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	87.2	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		87.2	0	O	ME-SA		
viba_719	IRN/88/2009		86.9	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	MOG/13/2018
Sender reference:	O/MOG/Do.b/18/04
Location of origin:	Bayandun, Dornod
Country of origin:	Mongolia
Date of collection:	23/02/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy2
Harvest date of material:	31/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37354, genome 37355, sequence viba_37356, sequencing info 37357

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.6	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.1	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		97.9	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	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.3	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	87.9	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		87.5	0	O	ME-SA		
viba_505	TUR/264/2009		87.4	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	87.4	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	87.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	87.2	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	MOG/15/2018
Sender reference:	O/MOG/Kh/18/11
Location of origin:	Kherlen, Khentii
Country of origin:	Mongolia
Date of collection:	23/02/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	29/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37358, genome 37359, sequence viba_37360, sequencing info 37361

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.6	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.1	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		97.9	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	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.3	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	87.9	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		87.5	0	O	ME-SA		
viba_505	TUR/264/2009		87.4	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	87.4	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	87.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	87.2	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	MOG/16/2018
Sender reference:	O/MOG/Ug/18/33
Location of origin:	Togttsetsii, Umnugovi
Country of origin:	Mongolia
Date of collection:	03/03/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	30/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37362, genome 37363, sequence viba_37364, sequencing info 37365

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.7	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.3	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	98.1	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.1	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	92.6	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	90.4	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.1	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.0	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		87.4	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	87.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	87.2	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	87.1	0	O	ME-SA	PanAsia-2	BAL-09
viba_491	TUR/257/2008		87.0	0	O	ME-SA	PanAsia-2	TER-08

Virus sample name:	MOG/17/2018
Sender reference:	O/MOG/UuM/18/52
Location of origin:	Manlai, Omnogovi
Country of origin:	Mongolia
Date of collection:	03/03/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	PanAsia
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	30/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37366, genome 37367, sequence viba_37368, sequencing info 37369

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_33761	MOG/10/2017	cattle	99.1	0	O	ME-SA	PanAsia	
viba_33753	MOG/2/2017	cattle	99.1	0	O	ME-SA	PanAsia	
viba_33749	MOG/1/2017	cattle	99.1	0	O	ME-SA	PanAsia	
viba_33538	MOG/1/2017a	cattle	99.1	0	O	ME-SA	PanAsia	
viba_33542	MOG/2/2017a	cattle	98.9	0	O	ME-SA	PanAsia	
viba_34847	MOG 11/2017	cattle	98.9	0	O	ME-SA	PanAsia	
viba_33562	MOG/8/2017	cattle	98.9	0	O	ME-SA	PanAsia	
viba_33769	MOG/12/2017	cattle	98.9	0	O	ME-SA	PanAsia	
viba_33570	MOG/10/2017a	cattle	98.9	0	O	ME-SA	PanAsia	
viba_33554	MOG/6/2017	gazelle	98.9	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	93.4	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	91.2	0	O	ME-SA	PanAsia-2	
viba_705	KUW/3/97	bovine	90.8	0	O	ME-SA	Ind-2001	a
viba_766	IRN/31/2009	cattle	90.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_541	OMN/7/2001	bovine	89.9	0	O	ME-SA	Ind-2001	b
viba_666	IRN/18/2010	cattle	89.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_293	BHU/3/2009	cattle	89.9	0	O	ME-SA	Ind-2001	d
viba_860	IRN/6/2015	cattle	89.6	0	O	ME-SA	PanAsia-2	QOM-15
viba_491	TUR/257/2008		89.4	0	O	ME-SA	PanAsia-2	TER-08
viba_719	IRN/88/2009		89.3	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	MOG/18/2018
Sender reference:	O/MOG/Su/18/53
Location of origin:	Sumber, Govisumber
Country of origin:	Mongolia
Date of collection:	09/01/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	31/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018

VIBASys IDs: sample 37370, genome 37371, sequence viba_37372, sequencing info 37373

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_35832	MOG/14/2017	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_34855	MOG 13/2017	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	98.9	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	98.6	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.4	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.4	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	98.3	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.3	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	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.0	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	87.7	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	87.7	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		87.5	0	O	ME-SA		
viba_491	TUR/257/2008		87.4	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		87.4	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	MOG/19/2018
Sender reference:	O/MOG/SB-sh/18/58
Location of origin:	Ongon, Sukhbaatar
Country of origin:	Mongolia
Date of collection:	09/04/2018
Host species:	sheep
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	31/08/2018
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	07/09/2018
Created:	11/09/2018
Last updated:	11/09/2018
VIBASys IDs: sample 37374, genome 37375, sequence viba_37376, sequencing info 37377	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_34855	MOG 13/2017	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_34872	MOG/BU/2-7/2015	cattle	99.4	1	O	ME-SA	Ind-2001	e
viba_31595	Zabaikalskiy/3/RUS/2016	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_35832	MOG/14/2017	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_30859	Zabaikalskiy/2/RUS/2016	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_30855	Zabaikalskiy/1/RUS/2016	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_31082	BAN/GKa-236(pig)/2015	porcine	98.9	0	O	ME-SA	Ind-2001	e
viba_31573	170206/SKR/2017	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_31599	Zabaikalskiy/4/RUS/2016	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_32124	XJBC/CHA/2017		98.7	0	O	ME-SA	Ind-2001	e

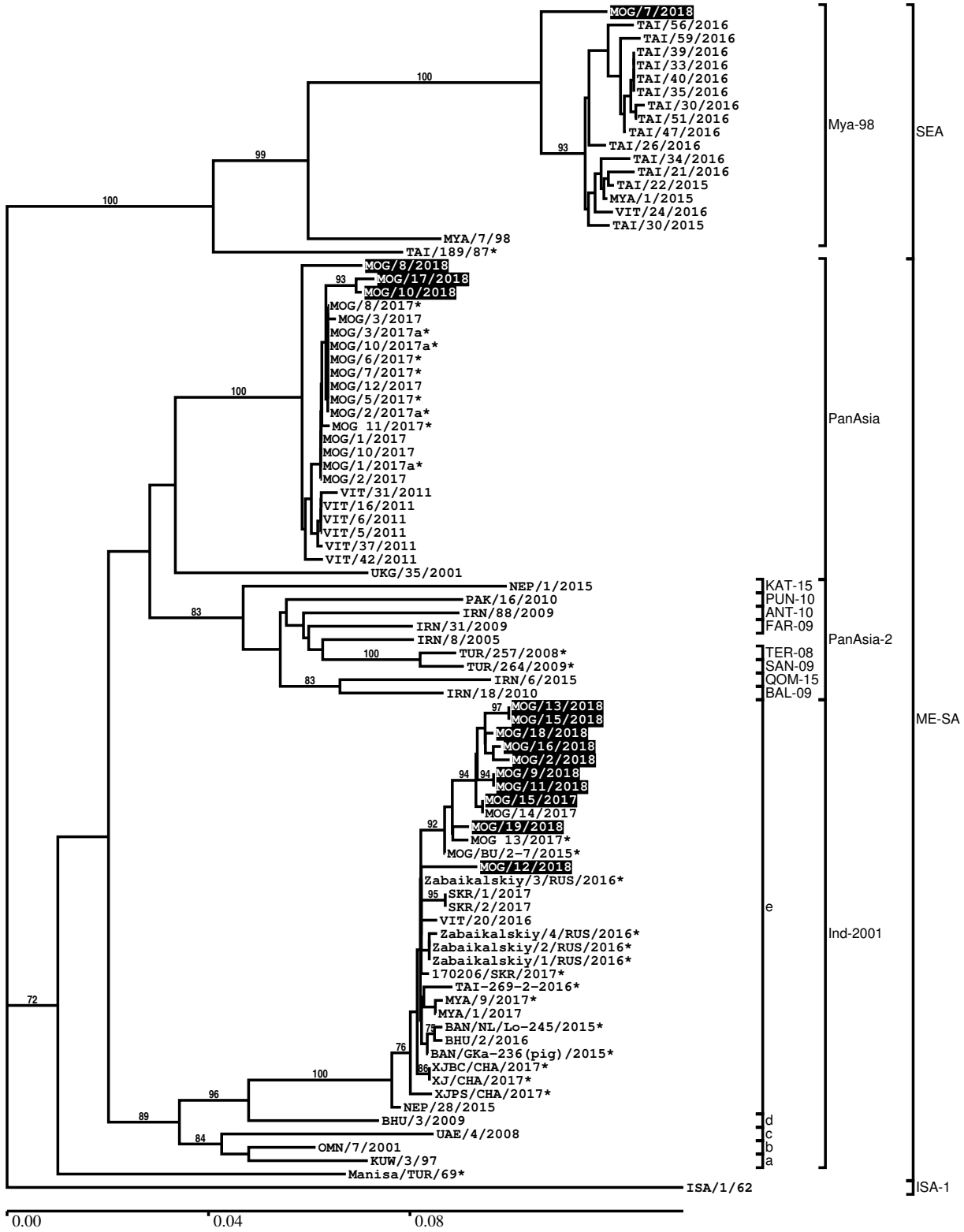
Most Closely Related Prototype Sequences

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	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.3	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.0	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	88.7	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	87.9	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	87.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	87.7	0	O	ME-SA	PanAsia-2	BAL-09
viba_491	TUR/257/2008		87.6	0	O	ME-SA	PanAsia-2	TER-08

Report on FMDV O in Mongolia in 2018

Batch: WRLFMD/2018/00022



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2018/00022-Mongolia-O (14 sequences)
Sequence database set:	allseqs_O (3852 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:	17
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
MOG/7/2018	n/a	cattle	WRLFMD	Mongolia	SEA/Mya-98
TAI/56/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/59/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/39/2016	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/35/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/30/2016	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
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
VIT/24/2016	n/a	bovine	WRLFMD	Vietnam	SEA/Mya-98
TAI/30/2015	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
MYA/7/98	DQ164925	bovine	WRLFMD	Myanmar	SEA/Mya-98
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
MOG/8/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/17/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/10/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/8/2017*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/3/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/3/2017a*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/10/2017a*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/6/2017*	n/a	gazelle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/7/2017*	n/a	gazelle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/12/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia
MOG/5/2017*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/2/2017a*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG 11/2017*	n/a	cattle	ARRIAH	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
MOG/1/2017a*	n/a	cattle	ARRIAH	Mongolia	ME-SA/PanAsia
MOG/2/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/PanAsia

continued on next page

label	accession	host(s)	lab	country	taxonomic information
VIT/31/2011	n/a	porcine	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/16/2011	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/6/2011	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/5/2011	n/a	cattle	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/37/2011	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/PanAsia
VIT/42/2011	n/a	porcine	WRLFMD	Vietnam	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
NEP/1/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/PanAsia-2/KAT-15
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/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
IRN/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
TUR/257/2008*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/TER-08
TUR/264/2009*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/SAN-09
IRN/6/2015	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/QOM-15
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
MOG/13/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/15/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/18/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/16/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/2/2018	n/a	n/a	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/9/2018	n/a	sheep	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/11/2018	n/a	sheep	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/15/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/14/2017	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/19/2018	n/a	sheep	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG 13/2017*	n/a	cattle	ARRIAH	Mongolia	ME-SA/Ind-2001/e
MOG/BU/2-7/2015*	LC320038	cattle	NIAH-Japan	Mongolia	ME-SA/Ind-2001/e
MOG/12/2018	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
Zabaikalskiy/3/RUS/2016*	MG972584	cattle	ARRIAH	Russia	ME-SA/Ind-2001/e
SKR/1/2017	MG972599	cattle	WRLFMD	Republic of Korea (South Korea)	ME-SA/Ind-2001/e
SKR/2/2017	MG972600	cattle	WRLFMD	Republic of Korea (South Korea)	ME-SA/Ind-2001/e
VIT/20/2016	MG972619	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
Zabaikalskiy/4/RUS/2016*	MG972585	cattle	ARRIAH	Russia	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
170206/SKR/2017*	n/a	cattle	QIA	Republic of Korea (South Korea)	ME-SA/Ind-2001/e
TAI-269-2-2016*	MG972602	cattle	TRRL	Thailand	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
BAN/NL/Lo-245/2015*	KY077611	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/e
BHU/2/2016	MG972480	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BAN/GKa-236(pig)/2015*	KX712091	porcine	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/e
XJBC/CHA/2017*	KY696708	n/a	LVRI	China	ME-SA/Ind-2001/e
XJ/CHA/2017*	MF461724	cattle	LVRI	China	ME-SA/Ind-2001/e
XJPS/CHA/2017*	KY696707	n/a	LVRI	China	ME-SA/Ind-2001/e
NEP/28/2015	KY449052	cattle	WRLFMD	Nepal	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
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

*, not a WRLFMD Reference Number
n/a, not available