

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

Genotyping Report

FMDV serotype: O
Country: Nepal
Year: 2016, 2017
Batch: WRLFMD/2017/00003
No. of sequences: 19
Report date: 27th March 2017
Report generated by: Nick Knowles
Report checked by: Antonello Di Nardo



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

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Virus sample name:	NEP/20/2016
Sender reference:	2 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	15/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy2
Harvest date of material:	11/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	24/03/2017
Last updated:	24/03/2017
VIBASys IDs: sample 32221, genome 32222, sequence viba_32223, sequencing info 32224	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32235	NEP/24/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32275	NEP/35/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32283	NEP/37/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32239	NEP/25/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32227	NEP/22/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d

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	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.3	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.9	0	O	ME-SA		
viba_719	IRN/88/2009		88.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.5	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.2	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/22/2016
Sender reference:	4 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	15/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	08/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	24/03/2017
Last updated:	24/03/2017
VIBASys IDs: sample 32225, genome 32226, sequence viba_32227, sequencing info 32228	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32239	NEP/25/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32223	NEP/20/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32235	NEP/24/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32275	NEP/35/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32283	NEP/37/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d

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	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.8	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/23/2016
Sender reference:	5 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	15/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	08/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	24/03/2017
Last updated:	24/03/2017
VIBASys IDs: sample 32229, genome 32230, sequence viba_32231, sequencing info 32232	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32239	NEP/25/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32227	NEP/22/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32223	NEP/20/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32235	NEP/24/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32275	NEP/35/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32283	NEP/37/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d

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	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.8	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/24/2016
Sender reference:	6 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	15/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	08/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	24/03/2017
Last updated:	24/03/2017
VIBASys IDs: sample 32233, genome 32234, sequence viba_32235, sequencing info 32236	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32223	NEP/20/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32275	NEP/35/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32283	NEP/37/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32239	NEP/25/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32227	NEP/22/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d

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	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.3	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.9	0	O	ME-SA		
viba_719	IRN/88/2009		88.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.5	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.2	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/25/2016
Sender reference:	7 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	15/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	24/03/2017
Last updated:	24/03/2017

VIBASys IDs: sample 32237, genome 32238, sequence viba_32239, sequencing info 32240

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32227	NEP/22/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32223	NEP/20/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32235	NEP/24/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32275	NEP/35/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32283	NEP/37/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.2	0	O	ME-SA	Ind-2001	d

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	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.8	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/27/2016
Sender reference:	9 Np/073/074
Location of origin:	Nuwakot district, Province No. 3
Country of origin:	Nepal
Date of collection:	17/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	24/03/2017
Last updated:	24/03/2017
VIBASys IDs: sample 32241, genome 32242, sequence viba_32243, sequencing info 32244	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32223	NEP/20/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32235	NEP/24/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32239	NEP/25/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32227	NEP/22/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32275	NEP/35/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	99.5	0	O	ME-SA	Ind-2001	d

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	94.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.5	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.4	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		89.1	0	O	ME-SA		
viba_719	IRN/88/2009		88.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.6	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.3	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/28/2016
Sender reference:	10 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32245, genome 32246, sequence viba_32247, sequencing info 32248	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32271	NEP/34/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32259	NEP/31/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32255	NEP/30/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32251	NEP/29/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32263	NEP/32/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32267	NEP/33/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.6	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.6	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.6	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.6	0	O	ME-SA	Ind-2001	d

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	92.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.1	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.8	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.7	0	O	ME-SA		

Virus sample name:	NEP/29/2016
Sender reference:	11 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	10/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32249, genome 32250, sequence viba_32251, sequencing info 32252	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32259	NEP/31/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32255	NEP/30/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32263	NEP/32/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32267	NEP/33/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32271	NEP/34/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32247	NEP/28/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d

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	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.7	0	O	ME-SA		

Virus sample name:	NEP/30/2016
Sender reference:	12 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	10/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32253, genome 32254, sequence viba_32255, sequencing info 32256	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32259	NEP/31/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32251	NEP/29/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32263	NEP/32/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32267	NEP/33/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32271	NEP/34/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32247	NEP/28/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d

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	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.7	0	O	ME-SA		

Virus sample name:	NEP/31/2016
Sender reference:	13 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32257, genome 32258, sequence viba_32259, sequencing info 32260	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32255	NEP/30/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32251	NEP/29/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32263	NEP/32/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32267	NEP/33/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32271	NEP/34/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32247	NEP/28/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d

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	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.7	0	O	ME-SA		

Virus sample name:	NEP/32/2016
Sender reference:	14 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32261, genome 32262, sequence viba_32263, sequencing info 32264	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32259	NEP/31/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32255	NEP/30/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32251	NEP/29/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32267	NEP/33/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32271	NEP/34/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32247	NEP/28/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d

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	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.7	0	O	ME-SA		

Virus sample name:	NEP/33/2016
Sender reference:	15 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017

VIBASys IDs: sample 32265, genome 32266, sequence viba_32267, sequencing info 32268

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32259	NEP/31/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32255	NEP/30/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32251	NEP/29/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32263	NEP/32/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32271	NEP/34/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32247	NEP/28/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.9	0	O	ME-SA	Ind-2001	d

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	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.6	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.7	0	O	ME-SA		

Virus sample name:	NEP/34/2016
Sender reference:	16 Np/073/074
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017

VIBASys IDs: sample 32269, genome 32270, sequence viba_32271, sequencing info 32272

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32259	NEP/31/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32255	NEP/30/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32251	NEP/29/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32247	NEP/28/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32263	NEP/32/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32267	NEP/33/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	98.7	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	98.7	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	98.7	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	98.7	0	O	ME-SA	Ind-2001	d

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	93.4	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.7	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.0	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		88.5	0	O	ME-SA	PanAsia-2	ANT-10
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.2	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	87.8	0	O	ME-SA		

Virus sample name:	NEP/35/2016
Sender reference:	17 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32273, genome 32274, sequence viba_32275, sequencing info 32276	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32283	NEP/37/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32223	NEP/20/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32235	NEP/24/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32239	NEP/25/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32227	NEP/22/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.4	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.4	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.4	0	O	ME-SA	Ind-2001	d

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	94.0	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	93.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.8	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.8	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/36/2016
Sender reference:	18 Np/073/074
Location of origin:	Bhaktapur district, Province No. 3
Country of origin:	Nepal
Date of collection:	18/11/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32277, genome 32278, sequence viba_32279, sequencing info 32280	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32295	NEP/2/2017	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32291	NEP/1/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32287	NEP/39/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_29963	NEP/17/2016	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_31557	BHU/10/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_29923	NEP/5/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d

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	94.0	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.4	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	89.9	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.0	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	88.6	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		87.5	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	NEP/37/2016
Sender reference:	19 Np/073/074
Location of origin:	Nuwakot district, Province No. 3
Country of origin:	Nepal
Date of collection:	07/12/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32281, genome 32282, sequence viba_32283, sequencing info 32284	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32275	NEP/35/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32223	NEP/20/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32235	NEP/24/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32239	NEP/25/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32227	NEP/22/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32231	NEP/23/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	99.4	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	99.4	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	99.4	0	O	ME-SA	Ind-2001	d

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	94.0	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	93.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.8	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	89.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.8	0	O	ME-SA		
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/39/2016
Sender reference:	21 Np/073/074
Location of origin:	Nuwakot district, Province No. 3
Country of origin:	Nepal
Date of collection:	07/12/2016
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	10/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32285, genome 32286, sequence viba_32287, sequencing info 32288	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32279	NEP/36/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32295	NEP/2/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32291	NEP/1/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_29963	NEP/17/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_31557	BHU/10/2016	cattle	97.5	0	O	ME-SA	Ind-2001	d
viba_29923	NEP/5/2016	cattle	97.5	0	O	ME-SA	Ind-2001	d

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	93.8	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	89.7	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.8	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	88.5	0	O	ME-SA	PanAsia-2	
viba_617	IND/53/79	bovine	88.5	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.2	0	O	ME-SA		
viba_719	IRN/88/2009		87.4	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	NEP/1/2017
Sender reference:	23 Np/073/074
Location of origin:	Ramechhap district, Province No. 3
Country of origin:	Nepal
Date of collection:	20/01/2017
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy2
Harvest date of material:	11/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32289, genome 32290, sequence viba_32291, sequencing info 32292	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32279	NEP/36/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32295	NEP/2/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32287	NEP/39/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_29963	NEP/17/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_31557	BHU/10/2016	cattle	97.5	0	O	ME-SA	Ind-2001	d
viba_29923	NEP/5/2016	cattle	97.5	0	O	ME-SA	Ind-2001	d

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	93.8	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	89.7	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.8	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	88.5	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.2	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.2	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		87.4	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	NEP/2/2017
Sender reference:	24 Np/073/074
Location of origin:	Ramechhap district, Province No. 3
Country of origin:	Nepal
Date of collection:	20/01/2017
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	d
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	09/03/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	22/03/2017
Created:	26/03/2017
Last updated:	26/03/2017
VIBASys IDs: sample 32293, genome 32294, sequence viba_32295, sequencing info 32296	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32279	NEP/36/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32291	NEP/1/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32287	NEP/39/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_29963	NEP/17/2016	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	97.8	0	O	ME-SA	Ind-2001	d
viba_31557	BHU/10/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d
viba_29923	NEP/5/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d

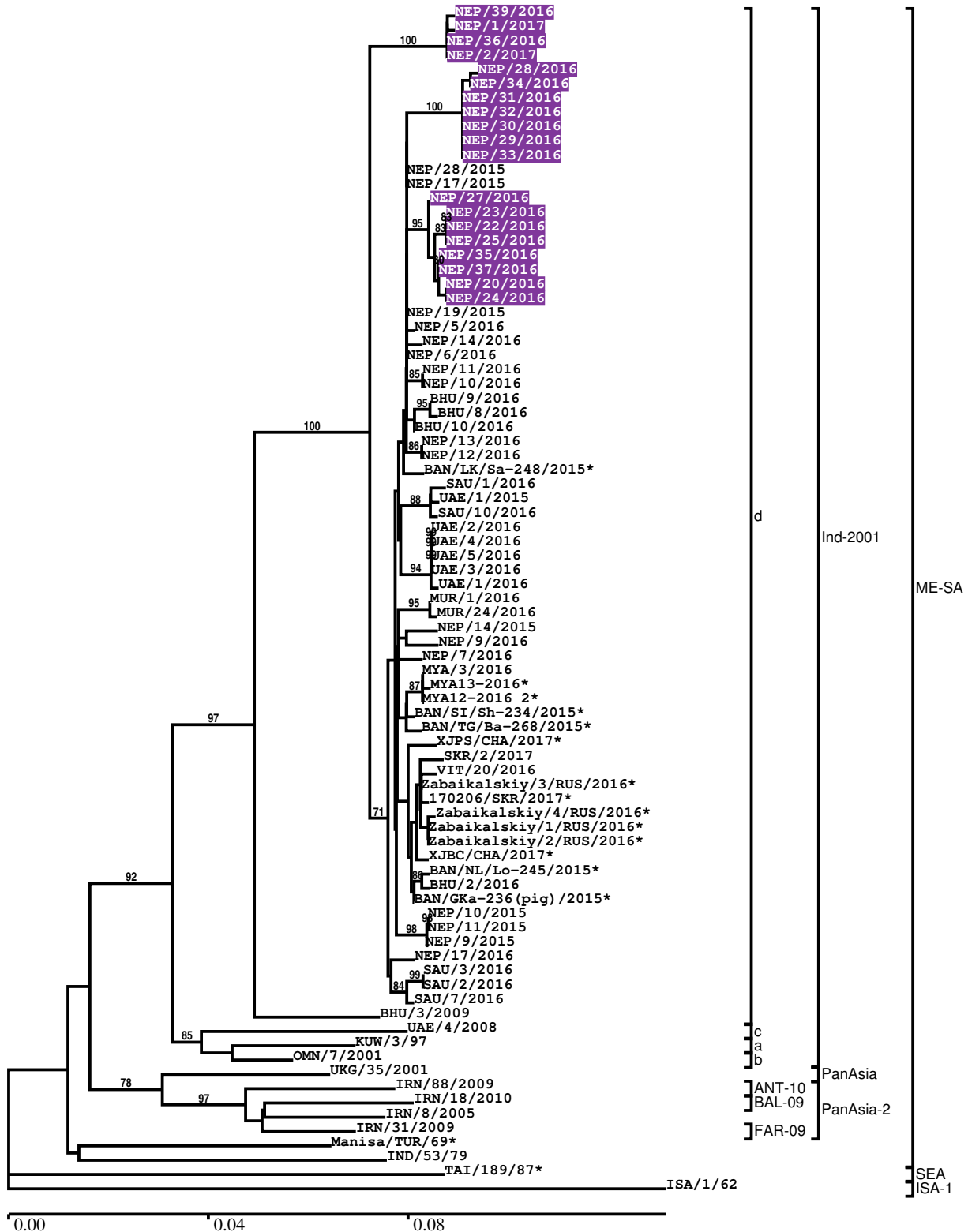
Most Closely Related Prototype Sequences

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	94.0	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.4	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	89.9	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.0	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	88.6	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		87.5	0	O	ME-SA	PanAsia-2	ANT-10

Report on FMDV O in Nepal in 2016, 2017

Batch: WRLFMD/2017/00003



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2017/00003-Nepal-O (19 sequences)
Sequence database set:	allseqs_O (3331 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:	11
VIBASys version:	master-1.1.0-17-gf69a4d1

Sequences in the Phylogenetic Tree

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

label	accession	host(s)	lab	country	taxonomic information
NEP/39/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/1/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/36/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/2/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/28/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/34/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/31/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/32/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/30/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/29/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/33/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/28/2015	KY449052	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/17/2015	KY449050	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/27/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/23/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/22/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/25/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/35/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/37/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/20/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/24/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/19/2015	KY449051	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/5/2016	KY449053	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/14/2016	n/a	water buffalo	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/6/2016	KY449054	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/11/2016	n/a	goats	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/10/2016	n/a	goats	WRLFMD	Nepal	ME-SA/Ind-2001/d
BHU/9/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
BHU/8/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
BHU/10/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
NEP/13/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/12/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
BAN/LK/Sa-248/2015*	KY077612	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
SAU/1/2016	n/a	cattle	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
UAE/1/2015	n/a	gazelle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d

continued on next page

label	accession	host(s)	lab	country	taxonomic information
SAU/10/2016	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
UAE/2/2016	n/a	cattle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
UAE/4/2016	n/a	cattle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
UAE/5/2016	n/a	cattle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
UAE/3/2016	n/a	cattle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
UAE/1/2016	n/a	cattle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
MUR/1/2016	n/a	cattle	WRLFMD	Mauritius	ME-SA/Ind-2001/d
MUR/24/2016	n/a	cattle	WRLFMD	Mauritius	ME-SA/Ind-2001/d
NEP/14/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/9/2016	n/a	porcine	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/7/2016	KY449055	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
MYA/3/2016	n/a	cattle	WRLFMD	Myanmar	ME-SA/Ind-2001/d
MYA13-2016*	n/a	n/a	TRRL	Myanmar	ME-SA/Ind-2001/d
MYA12-2016 2*	n/a	n/a	TRRL	Myanmar	ME-SA/Ind-2001/d
BAN/SI/Sh-234/2015*	KY077610	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
BAN/TG/Ba-268/2015*	KY077621	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
XJPS/CHA/2017*	n/a	n/a	LVRI	China	ME-SA/Ind-2001/d
SKR/2/2017	n/a	cattle	WRLFMD	South Korea, Republic of	ME-SA/Ind-2001/d
VIT/20/2016	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/d
Zabaikalskiy/3/RUS/2016*	n/a	cattle	ARRIAH	Russia	ME-SA/Ind-2001/d
170206/SKR/2017*	n/a	cattle	QIA	South Korea, Republic of	ME-SA/Ind-2001/d
Zabaikalskiy/4/RUS/2016*	n/a	cattle	ARRIAH	Russia	ME-SA/Ind-2001/d
Zabaikalskiy/1/RUS/2016*	n/a	cattle	ARRIAH	Russia	ME-SA/Ind-2001/d
Zabaikalskiy/2/RUS/2016*	n/a	cattle	ARRIAH	Russia	ME-SA/Ind-2001/d
XJBC/CHA/2017*	n/a	n/a	LVRI	China	ME-SA/Ind-2001/d
BAN/NL/Lo-245/2015*	KY077611	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
BHU/2/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
BAN/GKa-236(pig)/2015*	KX712091	porcine	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
NEP/10/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/11/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/9/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/17/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
SAU/3/2016	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/2/2016	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/7/2016	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
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
KUW/3/97	DQ164904	bovine	WRLFMD	Kuwait	ME-SA/Ind-2001/a
OMN/7/2001	DQ164941	bovine	WRLFMD	Oman	ME-SA/Ind-2001/b
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
IRN/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
IRN/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

*, not a WRLFMD Reference Number

n/a, not available