

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

## Genotyping Report

FMDV serotype: O  
Country: Nepal  
Year: 2017  
Batch: WRLFMD/2017/00016  
No. of sequences: 7  
Report date: 11th August 2017  
Report generated by: Nick Knowles  
Report checked by: Kasia Bankowska



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Virus sample name:	NEP/3/2017
Sender reference:	1 Np/073/074-A 90
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:	21/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017

VIBASys IDs: sample 34124, genome 34125, sequence viba\_34126, sequencing info 34127

#### 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_32279	NEP/36/2016	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_32287	NEP/39/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32291	NEP/1/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_34138	NEP/10/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_34130	NEP/4/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_34134	NEP/8/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	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_29927	NEP/6/2016	cattle	97.8	0	O	ME-SA	Ind-2001	d

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.5	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	NEP/4/2017
Sender reference:	2 Np/073/074-A 91
Location of origin:	Kathmandu district, Province No. 3
Country of origin:	Nepal
Date of collection:	26/01/2017
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:	21/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017
VIBASys IDs: sample 34128, genome 34129, sequence viba_34130, sequencing info 34131	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_34138	NEP/10/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32295	NEP/2/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32279	NEP/36/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_34126	NEP/3/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32287	NEP/39/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32291	NEP/1/2017	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_34134	NEP/8/2017	cattle	99.4	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	97.5	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	97.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	97.5	0	O	ME-SA	Ind-2001	d

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_293	BHU/3/2009	cattle	93.7	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.6	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.7	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	88.3	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		88.0	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.0	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.2	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	NEP/8/2017
Sender reference:	8 Np/073/074-A 102
Location of origin:	Chitwan district, Province No. 3
Country of origin:	Nepal
Date of collection:	13/03/2017
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:	22/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017
VIBASys IDs: sample 34132, genome 34133, sequence viba_34134, sequencing info 34135	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32295	NEP/2/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32279	NEP/36/2016	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_34126	NEP/3/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_32287	NEP/39/2016	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_32291	NEP/1/2017	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_34138	NEP/10/2017	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_34130	NEP/4/2017	cattle	99.4	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	97.5	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	97.5	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	97.5	0	O	ME-SA	Ind-2001	d

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_293	BHU/3/2009	cattle	93.7	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	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	88.7	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_617	IND/53/79	bovine	88.3	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.0	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	88.0	0	O	ME-SA	PanAsia-2	FAR-09
viba_860	IRN/6/2015	cattle	87.4	0	O	ME-SA	PanAsia-2	QOM-15

Virus sample name:	NEP/10/2017
Sender reference:	6 Np/073/074-A 99
Location of origin:	Rasuwa district, Province No. 3
Country of origin:	Nepal
Date of collection:	15/03/2017
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:	22/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017
VIBASys IDs: sample 34136, genome 34137, sequence viba_34138, sequencing info 34139	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_32295	NEP/2/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_34130	NEP/4/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_32279	NEP/36/2016	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_34126	NEP/3/2017	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_32291	NEP/1/2017	cattle	99.7	0	O	ME-SA	Ind-2001	d
viba_34134	NEP/8/2017	cattle	99.5	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	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_29927	NEP/6/2016	cattle	97.6	0	O	ME-SA	Ind-2001	d

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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_650	IRN/8/2005	ovine	88.2	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		88.2	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.4	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	NEP/22/2017
Sender reference:	20 Np/073/074-A 141
Location of origin:	Nawalparasi district, Province No. 4/5
Country of origin:	Nepal
Date of collection:	03/05/2017
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:	25/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017
VIBASys IDs: sample 34140, genome 34141, sequence viba_34142, sequencing info 34143	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_34150	NEP/24/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_34146	NEP/23/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	96.8	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	96.8	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	96.8	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	96.8	0	O	ME-SA	Ind-2001	d
viba_23812	SAU/2/2016	bovine	96.7	0	O	ME-SA	Ind-2001	d
viba_23816	SAU/3/2016	bovine	96.7	0	O	ME-SA	Ind-2001	d
viba_31175	BAN/TG/Ba-268/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	96.7	0	O	ME-SA	Ind-2001	d

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_293	BHU/3/2009	cattle	92.9	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	90.9	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	87.8	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.6	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		87.4	0	O	ME-SA	PanAsia-2	ANT-10
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_666	IRN/18/2010	cattle	87.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/23/2017
Sender reference:	21 Np/073/074-A 143
Location of origin:	Nawalparasi district, Province No. 4/5
Country of origin:	Nepal
Date of collection:	03/05/2017
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:	25/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017
VIBASys IDs: sample 34144, genome 34145, sequence viba_34146, sequencing info 34147	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_34150	NEP/24/2017	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_34142	NEP/22/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_23812	SAU/2/2016	bovine	96.5	0	O	ME-SA	Ind-2001	d
viba_23816	SAU/3/2016	bovine	96.5	0	O	ME-SA	Ind-2001	d
viba_31175	BAN/TG/Ba-268/2015	cattle	96.5	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	96.5	0	O	ME-SA	Ind-2001	d

#### Most Closely Related Prototype Sequences

see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](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	91.3	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	90.4	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	87.7	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.4	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		87.2	0	O	ME-SA	PanAsia-2	ANT-10
viba_359	Manisa/TUR/69		87.0	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	86.9	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	86.9	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	NEP/24/2017
Sender reference:	22 Np/073/074-A 144
Location of origin:	Nawalparasi district, Province No. 4/5
Country of origin:	Nepal
Date of collection:	03/05/2017
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:	25/07/2017
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/08/2017
Created:	11/08/2017
Last updated:	11/08/2017
VIBASys IDs: sample 34148, genome 34149, sequence viba_34150, sequencing info 34151	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_34146	NEP/23/2017	cattle	100.0	0	O	ME-SA	Ind-2001	d
viba_34142	NEP/22/2017	cattle	99.8	0	O	ME-SA	Ind-2001	d
viba_26117	NEP/17/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_26125	NEP/19/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_29927	NEP/6/2016	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_29907	NEP/28/2015	cattle	96.7	0	O	ME-SA	Ind-2001	d
viba_23812	SAU/2/2016	bovine	96.5	0	O	ME-SA	Ind-2001	d
viba_23816	SAU/3/2016	bovine	96.5	0	O	ME-SA	Ind-2001	d
viba_31175	BAN/TG/Ba-268/2015	cattle	96.5	0	O	ME-SA	Ind-2001	d
viba_32243	NEP/27/2016	cattle	96.5	0	O	ME-SA	Ind-2001	d

### Most Closely Related Prototype Sequences

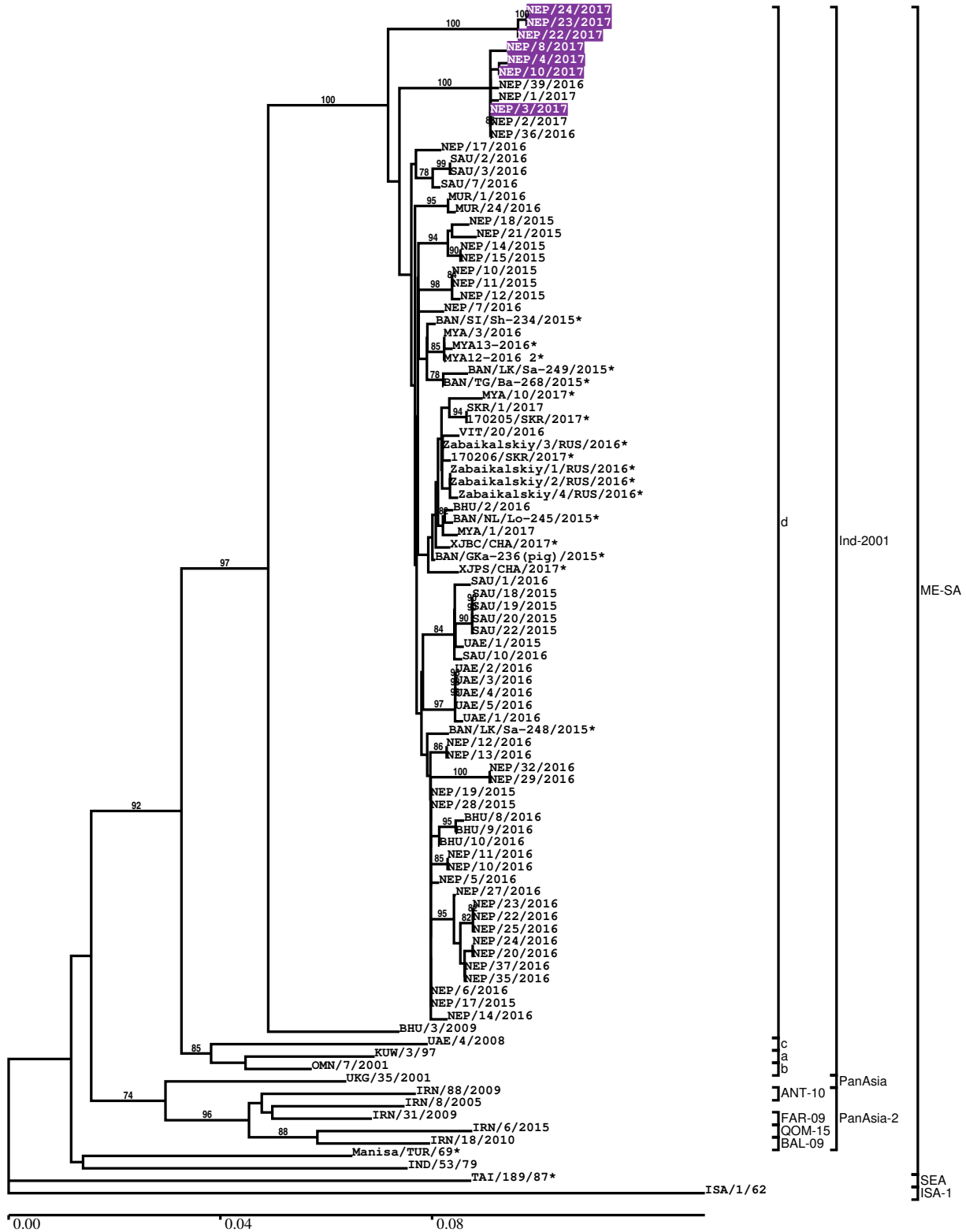
see [http://www.wrlfmd.org/fmd\\_genotyping/prototypes.htm](http://www.wrlfmd.org/fmd_genotyping/prototypes.htm)

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	91.3	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	90.4	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	87.7	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.4	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		87.2	0	O	ME-SA	PanAsia-2	ANT-10
viba_359	Manisa/TUR/69		87.0	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	86.9	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	86.9	0	O	ME-SA	PanAsia-2	BAL-09



Report on FMDV O in Nepal in 2017

Batch: WRLFMD/2017/00016



\*, not a WRLFMD Reference Number

## Analysis Parameters

VP1 subsequence extractor: vp1\_O  
 Query sequence set: WRLFMD/2017/00016-Nepal-O (7 sequences)  
 Sequence database set: allseqs\_O (3583 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: 12  
 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/24/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/23/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/22/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/8/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/4/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/10/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
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/3/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/2/2017	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/36/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/17/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
SAU/2/2016	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/3/2016	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
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/18/2015	n/a	porcine	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/21/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/14/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/15/2015	n/a	cattle	WRLFMD	Nepal	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/12/2015	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/7/2016	KY449055	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
BAN/SI/Sh-234/2015*	KY077610	cattle	Univ Dhaka	Bangladesh	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/LK/Sa-249/2015*	KY077613	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
BAN/TG/Ba-268/2015*	KY077621	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
MYA/10/2017*	n/a	cattle	TRRL	Myanmar	ME-SA/Ind-2001/d
SKR/1/2017	n/a	cattle	WRLFMD	South Korea, Republic of	ME-SA/Ind-2001/d
170205/SKR/2017*	n/a	cattle	QIA	South Korea, Republic of	ME-SA/Ind-2001/d

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label	accession	host(s)	lab	country	taxonomic information
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/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
Zabaikalskiy/4/RUS/2016*	n/a	cattle	ARRIAH	Russia	ME-SA/Ind-2001/d
BHU/2/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
BAN/NL/Lo-245/2015*	KY077611	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
MYA/1/2017	n/a	cattle	WRLFMD	Myanmar	ME-SA/Ind-2001/d
XJBC/CHA/2017*	n/a	n/a	LVRI	China	ME-SA/Ind-2001/d
BAN/GKa-236(pig)/2015*	KX712091	porcine	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
XJPS/CHA/2017*	n/a	n/a	LVRI	China	ME-SA/Ind-2001/d
SAU/1/2016	n/a	cattle	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/18/2015	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/19/2015	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/20/2015	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
SAU/22/2015	n/a	bovine	WRLFMD	Saudi Arabia	ME-SA/Ind-2001/d
UAE/1/2015	n/a	gazelle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
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/3/2016	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/1/2016	n/a	cattle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/d
BAN/LK/Sa-248/2015*	KY077612	cattle	Univ Dhaka	Bangladesh	ME-SA/Ind-2001/d
NEP/12/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/13/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/32/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/29/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/19/2015	KY449051	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/28/2015	KY449052	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
BHU/8/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
BHU/9/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
BHU/10/2016	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
NEP/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
NEP/5/2016	KY449053	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/24/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/20/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/37/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/35/2016	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/6/2016	KY449054	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/17/2015	KY449050	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/d
NEP/14/2016	n/a	water buffalo	WRLFMD	Nepal	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/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
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
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09

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label	accession	host(s)	lab	country	taxonomic information
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