

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

Genotyping Report

FMDV serotype: O
Country: Nepal
Year: 2021, 2022
Batch: WRLFMD/2023/000039B
No. of sequences: 18
Report date: 13th June 2023
Report generated by: Nick Knowles
Report checked by: Jemma Wadsworth



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

email: reporting@pirbright.ac.uk

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Virus sample name:	NEP/86/2021
Sender reference:	30 Np FMD; 152/2078/79
Location of origin:	Dhanusha district, Madhesh province
Country of origin:	Nepal
Date of collection:	05/12/2021
Host species:	
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	12/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 52976, genome 52977, sequence viba_52978, sequencing info 52979	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.5	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	95.1	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	91.5	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	91.5	0	O	ME-SA	PanAsia-2	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/87/2021
Sender reference:	31 Np FMD; 159/2078/79
Location of origin:	Siraha district, Madhesh province
Country of origin:	Nepal
Date of collection:	05/12/2021
Host species:	water buffalo
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK2
Harvest date of material:	16/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 52980, genome 52981, sequence viba_52982, sequencing info 52983	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.1	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.9	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	91.3	0	O	ME-SA	Srl-97	
viba_860	IRN/6/2015	cattle	91.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_650	IRN/8/2005	ovine	91.0	0	O	ME-SA	PanAsia-2	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/88/2021
Sender reference:	32 Np FMD; 162/2078/79
Location of origin:	Siraha district, Madhesh province
Country of origin:	Nepal
Date of collection:	05/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	13/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 52984, genome 52985, sequence viba_52986, sequencing info 52987	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.5	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	95.1	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	91.5	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	91.5	0	O	ME-SA	PanAsia-2	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/95/2021
Sender reference:	39 Np FMD; 189/2078/79
Location of origin:	Kathmandu district, Bagmati province
Country of origin:	Nepal
Date of collection:	21/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	13/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 52988, genome 52989, sequence viba_52990, sequencing info 52991	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.2	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.5	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	91.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.8	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	91.3	0	O	ME-SA	PanAsia-2	BAL-09
viba_491	TUR/257/2008		91.2	0	O	ME-SA	PanAsia-2	TER-08
viba_354	PAK/16/2010	cattle	91.0	0	O	ME-SA	PanAsia-2	PUN-10
viba_27877	SRL/2/97	bovine	90.8	0	O	ME-SA	Srl-97	
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	NEP/99/2021
Sender reference:	43 Np FMD; 206/2078/79
Location of origin:	Mustang district, Gandaki province
Country of origin:	Nepal
Date of collection:	24/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	13/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 52992, genome 52993, sequence viba_52994, sequencing info 52995	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.1	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.3	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.3	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	90.7	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.7	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.4	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/2/2022
Sender reference:	45 Np FMD; 230/2078/79
Location of origin:	Dhading district, Bagmati province
Country of origin:	Nepal
Date of collection:	03/01/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	14/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53004, genome 53005, sequence viba_53006, sequencing info 53007	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.5	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	95.1	0	O	ME-SA	SA-2018	
viba_666	IRN/18/2010	cattle	91.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.5	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	91.2	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/3/2022
Sender reference:	46 Np FMD; 231/2078/79
Location of origin:	Dhading district, Bagmati province
Country of origin:	Nepal
Date of collection:	03/01/2022
Host species:	goat
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	14/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53008, genome 53009, sequence viba_53010, sequencing info 53011	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.5	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	95.1	0	O	ME-SA	SA-2018	
viba_666	IRN/18/2010	cattle	91.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.5	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	91.2	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/4/2022
Sender reference:	47 Np FMD; 232/2078/79
Location of origin:	Dhading district, Bagmati province
Country of origin:	Nepal
Date of collection:	03/01/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	19/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53012, genome 53013, sequence viba_53014, sequencing info 53015	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.5	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	95.1	0	O	ME-SA	SA-2018	
viba_666	IRN/18/2010	cattle	91.9	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.5	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	91.2	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/5/2022
Sender reference:	48 Np FMD; 245/2078/79
Location of origin:	Dhading district, Bagmati province
Country of origin:	Nepal
Date of collection:	03/01/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	19/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53016, genome 53017, sequence viba_53018, sequencing info 53019	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.4	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.4	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.4	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.4	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.9	0	O	ME-SA	SA-2018	
viba_666	IRN/18/2010	cattle	91.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		91.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	91.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.3	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	91.0	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.7	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_9021	LAO/2/2006	cattle	90.7	0	O	ME-SA	PanAsia	
viba_505	TUR/264/2009		90.7	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	NEP/7/2022
Sender reference:	50 Np FMD; 258/2078/79
Location of origin:	Makwanpur district, Bagmati province
Country of origin:	Nepal
Date of collection:	06/01/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	19/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53020, genome 53021, sequence viba_53022, sequencing info 53023	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.4	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.4	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.4	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.4	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.4	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.6	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		92.1	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.8	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.6	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	91.3	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		91.0	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	91.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		91.0	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.8	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/8/2022
Sender reference:	51 Np FMD; 259/2078/79
Location of origin:	Makwanpur district, Bagmati province
Country of origin:	Nepal
Date of collection:	06/01/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	19/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53024, genome 53025, sequence viba_53026, sequencing info 53027	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.5	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.5	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.8	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.5	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	91.2	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.7	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/13/2022
Sender reference:	55 Np FMD; 276/2078/79
Location of origin:	Lamjung district, Gandaki province
Country of origin:	Nepal
Date of collection:	23/01/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	20/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53028, genome 53029, sequence viba_53030, sequencing info 53031	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51888	BAN/MY/My-469/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51896	BAN/MY/My-480/2021	cattle	99.5	0	O	ME-SA	SA-2018	
viba_51639	OMN/22Z2088/2021_136	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.2	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.5	0	O	ME-SA	SA-2018	
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		91.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	91.2	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	91.0	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	90.8	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.5	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		90.5	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.4	0	O	ME-SA	PanAsia-2	PUN-10
viba_285	UKG/35/2001	porcine	90.4	0	O	ME-SA	PanAsia	

Virus sample name:	NEP/14/2022
Sender reference:	57 Np FMD; 291/2078/79
Location of origin:	Makwanpur district, Bagmati province
Country of origin:	Nepal
Date of collection:	04/02/2022
Host species:	goat
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	20/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53032, genome 53033, sequence viba_53034, sequencing info 53035	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.2	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.2	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.2	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.5	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.3	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.2	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	90.8	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.8	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		90.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_285	UKG/35/2001	porcine	90.7	0	O	ME-SA	PanAsia	
viba_860	IRN/6/2015	cattle	90.5	0	O	ME-SA	PanAsia-2	QOM-15

Virus sample name:	NEP/19/2022
Sender reference:	62 Np FMD; 305/2078/79
Location of origin:	Ramechhap district, Bagmati province
Country of origin:	Nepal
Date of collection:	11/02/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	20/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023

VIBASys IDs: sample 53036, genome 53037, sequence viba_53038, sequencing info 53039

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.1	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.3	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.3	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	90.7	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.7	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_9021	LAO/2/2006	cattle	90.7	0	O	ME-SA	PanAsia	
viba_505	TUR/264/2009		90.7	0	O	ME-SA	PanAsia-2	SAN-09

Virus sample name:	NEP/21/2022
Sender reference:	64 Np FMD; 313/2078/79
Location of origin:	Morang district, Koshi province
Country of origin:	Nepal
Date of collection:	13/02/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	20/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53040, genome 53041, sequence viba_53042, sequencing info 53043	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.1	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.3	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	91.3	0	O	ME-SA	PanAsia-2	
viba_27877	SRL/2/97	bovine	90.7	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		90.7	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		90.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.5	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	NEP/26/2022
Sender reference:	70 Np FMD; 361/2078/79
Location of origin:	Makwanpur district, Bagmati province
Country of origin:	Nepal
Date of collection:	11/03/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	2
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	20/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53044, genome 53045, sequence viba_53046, sequencing info 53047	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	98.7	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	98.7	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	98.7	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	98.7	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	98.7	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	98.7	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	98.7	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	98.7	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	98.7	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	98.7	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.5	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		92.1	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	91.6	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	91.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	91.0	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		91.0	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		91.0	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.8	0	O	ME-SA	PanAsia-2	PUN-10
viba_285	UKG/35/2001	porcine	90.5	0	O	ME-SA	PanAsia	

Virus sample name:	NEP/27/2022
Sender reference:	69 Np FMD; 360/2078/79
Location of origin:	Makwanpur district, Bagmati province
Country of origin:	Nepal
Date of collection:	13/03/2022
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	21/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53048, genome 53049, sequence viba_53050, sequencing info 53051	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	98.9	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	98.9	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	98.9	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	98.9	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	98.9	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	98.9	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	98.9	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	98.9	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	98.9	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	98.9	0	O	ME-SA	SA-2018	

Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.8	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		92.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	91.8	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	91.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	91.2	0	O	ME-SA	Srl-97	
viba_491	TUR/257/2008		91.2	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		91.2	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	91.0	0	O	ME-SA	PanAsia-2	PUN-10
viba_285	UKG/35/2001	porcine	90.7	0	O	ME-SA	PanAsia	

Virus sample name:	NEP/36/2022
Sender reference:	79 Np FMD; 397/2078/79
Location of origin:	Kaski district, Gandaki province
Country of origin:	Nepal
Date of collection:	09/06/2022
Host species:	
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	24/05/2023
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	05/06/2023
Created:	13/06/2023
Last updated:	13/06/2023
VIBASys IDs: sample 53052, genome 53053, sequence viba_53054, sequencing info 53055	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51639	OMN/22Z2088/2021_136	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51892	BAN/MY/My-478/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51651	OMN/22Z2093/2021_142	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.1	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.1	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.1	0	O	ME-SA	SA-2018	

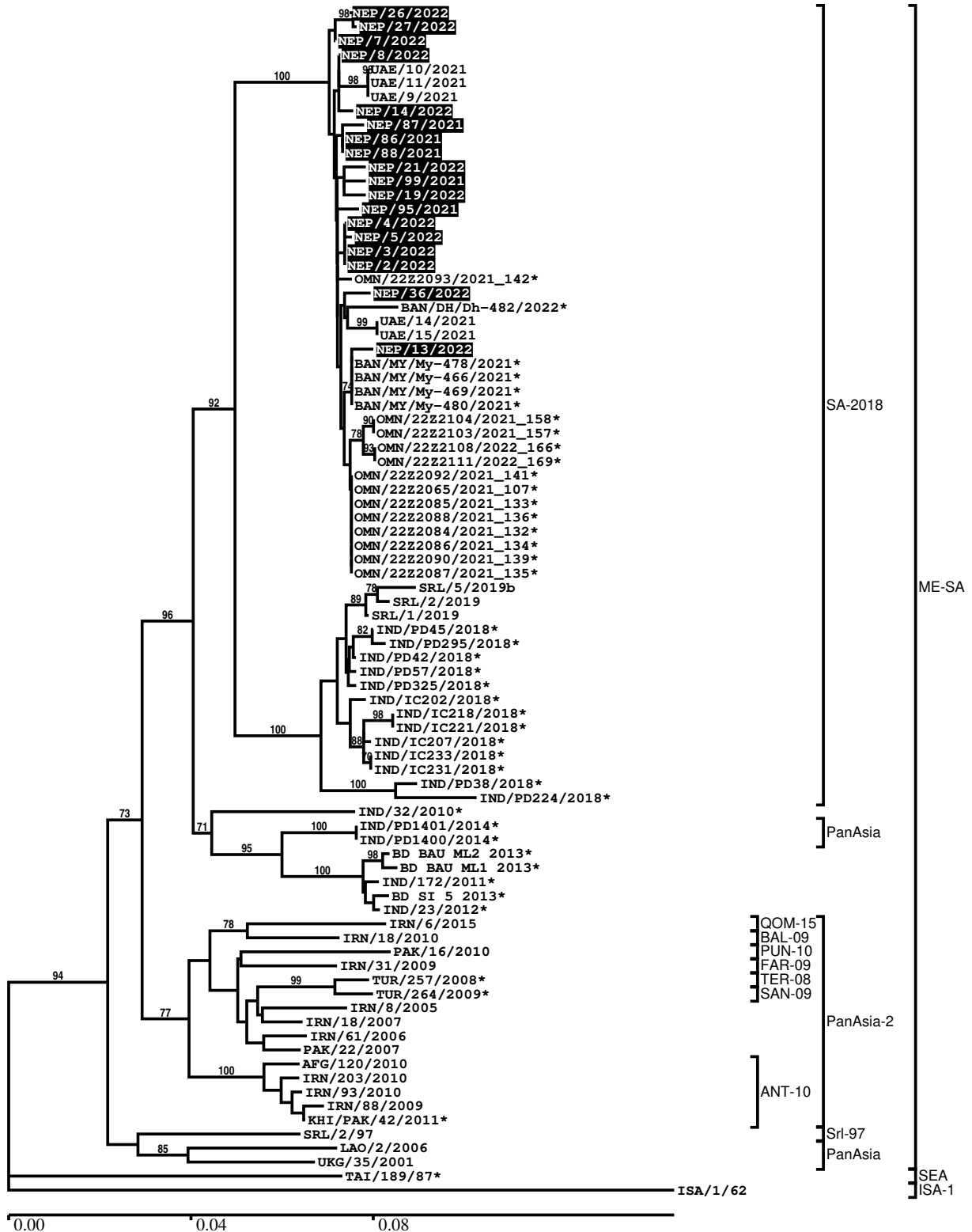
Most Closely Related Prototype Sequences

see <http://www.wrlfmd.org/fmdv-genome/fmd-prototype-strains>

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47579	SRL/1/2019	cattle	94.3	0	O	ME-SA	SA-2018	
viba_719	IRN/88/2009		91.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	91.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_766	IRN/31/2009	cattle	91.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_27877	SRL/2/97	bovine	91.3	0	O	ME-SA	Srl-97	
viba_650	IRN/8/2005	ovine	91.3	0	O	ME-SA	PanAsia-2	
viba_860	IRN/6/2015	cattle	90.8	0	O	ME-SA	PanAsia-2	QOM-15
viba_491	TUR/257/2008		90.7	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		90.7	0	O	ME-SA	PanAsia-2	SAN-09
viba_354	PAK/16/2010	cattle	90.5	0	O	ME-SA	PanAsia-2	PUN-10

Report on FMDV O in Nepal in 2021, 2022

Batch: WRLFMD/2023/000039B



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2023/000039B-Nepal-O (18 sequences)
Sequence database set:	allseqs_O (5882 sequences)
Prototype sequence set:	!prototypes_O (58 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:	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
NEP/26/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/27/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/7/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/8/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
UAE/10/2021	n/a	goat	WRLFMD	United Arab Emirates	ME-SA/SA-2018
UAE/11/2021	n/a	goat	WRLFMD	United Arab Emirates	ME-SA/SA-2018
UAE/9/2021	n/a	goat	WRLFMD	United Arab Emirates	ME-SA/SA-2018
NEP/14/2022	n/a	goat	WRLFMD	Nepal	ME-SA/SA-2018
NEP/87/2021	n/a	water buffalo	WRLFMD	Nepal	ME-SA/SA-2018
NEP/86/2021	n/a	n/a	WRLFMD	Nepal	ME-SA/SA-2018
NEP/88/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/21/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/99/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/19/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/95/2021	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/4/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/5/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
NEP/3/2022	n/a	goat	WRLFMD	Nepal	ME-SA/SA-2018
NEP/2/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
OMN/22Z2093/2021_142*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
NEP/36/2022	n/a	n/a	WRLFMD	Nepal	ME-SA/SA-2018
BAN/DH/Dh-482/2022*	OP913189	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
UAE/14/2021	n/a	sheep	WRLFMD	United Arab Emirates	ME-SA/SA-2018
UAE/15/2021	n/a	sheep	WRLFMD	United Arab Emirates	ME-SA/SA-2018
NEP/13/2022	n/a	cattle	WRLFMD	Nepal	ME-SA/SA-2018
BAN/MY/My-478/2021*	OP320457	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
BAN/MY/My-466/2021*	OP320455	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
BAN/MY/My-469/2021*	OP320456	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018

continued on next page

label	accession	host(s)	lab	country	taxonomic information
BAN/MY/My-480/2021*	OP320458	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
OMN/22Z2104/2021_158*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2103/2021_157*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2108/2022_166*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2111/2022_169*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2092/2021_141*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2065/2021_107*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2085/2021_133*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2088/2021_136*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2084/2021_132*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2086/2021_134*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2090/2021_139*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2087/2021_135*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
SRL/5/2019b	n/a	cattle	WRLFMD	Sri Lanka	ME-SA/SA-2018
SRL/2/2019	n/a	cattle	WRLFMD	Sri Lanka	ME-SA/SA-2018
SRL/1/2019	n/a	cattle	WRLFMD	Sri Lanka	ME-SA/SA-2018
IND/PD45/2018*	MT918997	cattle	PD-FMD	India	ME-SA/SA-2018
IND/PD295/2018*	MT919004	cattle	PD-FMD	India	ME-SA/SA-2018
IND/PD42/2018*	MT918995	cattle	PD-FMD	India	ME-SA/SA-2018
IND/PD57/2018*	MT918999	water buffalo	PD-FMD	India	ME-SA/SA-2018
IND/PD325/2018*	MT919005	cattle	PD-FMD	India	ME-SA/SA-2018
IND/IC202/2018*	MT936110	cattle	PD-FMD	India	ME-SA/SA-2018
IND/IC218/2018*	MT936113	cattle	PD-FMD	India	ME-SA/SA-2018
IND/IC221/2018*	MT936114	cattle	PD-FMD	India	ME-SA/SA-2018
IND/IC207/2018*	MT936111	cattle	PD-FMD	India	ME-SA/SA-2018
IND/IC233/2018*	MT936116	cattle	PD-FMD	India	ME-SA/SA-2018
IND/IC231/2018*	MT936115	cattle	PD-FMD	India	ME-SA/SA-2018
IND/PD38/2018*	MT918994	cattle	PD-FMD	India	ME-SA/SA-2018
IND/PD224/2018*	MT919002	cattle	PD-FMD	India	ME-SA/SA-2018
IND/32/2010*	KC506435	cattle	PD-FMD	India	ME-SA
IND/PD1401/2014*	MT909602	cattle	PD-FMD	India	ME-SA/PanAsia
IND/PD1400/2014*	MT909601	cattle	PD-FMD	India	ME-SA/PanAsia
BD BAU ML2 2013*	KT982203	cattle	Bangladesh Agri Univ	Bangladesh	ME-SA
BD BAU ML1 2013*	KT960948	cattle	Bangladesh Agri Univ	Bangladesh	ME-SA
IND/172/2011*	KC506438	cattle	PD-FMD	India	ME-SA
BD SI 5 2013*	KT037118	cattle	Bangladesh Agri Univ	Bangladesh	ME-SA
IND/23/2012*	KC506439	cattle	PD-FMD	India	ME-SA
IRN/6/2015	MN276044	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/QOM-15
IRN/18/2010	KY091283	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
PAK/16/2010	KY091285	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-10
IRN/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
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/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
IRN/18/2007	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2
IRN/61/2006	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2
PAK/22/2007	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2
AFG/120/2010	n/a	cattle	WRLFMD	Afghanistan	ME-SA/PanAsia-2/ANT-10
IRN/203/2010	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/93/2010	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
KHI/PAK/42/2011*	JX170757	water buffalo	PIADC/LINDHOLM	Pakistan	ME-SA/PanAsia-2/ANT-10
SRL/2/97	AJ303531	bovine	WRLFMD	Sri Lanka	ME-SA/Sri-97
LAO/2/2006	EU667451	cattle	WRLFMD	Laos	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
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