

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

Genotyping Report

FMDV serotype: O
Country: Oman
Year: 2018
Batch: WRLMEG/2023/00001B
No. of sequences: 10
Report date: 9th January 2023
Report generated by: Nick Knowles
Report checked by: Jemma Wadsworth

This report has been prepared on behalf of the Central Laboratory of Animal Health (Oman), the Sultan Qaboos University (Oman) and the European Union Reference Laboratory (EURL), FAO Reference Centre & OIE Reference Laboratory for Foot-and-Mouth Disease chez Agence nationale de sécurité sanitaire –ANSES, Maisons-Alfort, Île-de-France, France and covers VP1 sequences submitted to the WRLFMD on 06/01/2023.



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

email: reporting@pirbright.ac.uk

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Virus sample name:	OMN/22Z2009/2018_30
Sender reference:	OMN/22Z2009/2018_30
Location of origin:	Izki, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	16/04/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52163, genome 52164, sequence viba_52165, sequencing info 52166	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_41249	BHU/9/2018	goat	99.7	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_41241	BHU/6/2018	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_47164	IND/IC120/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41692	NEP/40/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41624	NEP/22/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41728	NEP/4/2019	water buffalo	99.5	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.8	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.7	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_27877	SRL/2/97	bovine	90.7	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.9	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.6	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.4	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		88.2	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	OMN/22Z2002/2018_23
Sender reference:	OMN/22Z2002/2018_23
Location of origin:	Al Mudhaibi, Ash Sharqiyah North
Country of origin:	Oman
Date of collection:	25/04/2018
Host species:	sheep
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52167, genome 52168, sequence viba_52169, sequencing info 52170	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52173	OMN/22Z2003/2018_24	sheep	100.0	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47164	IND/IC120/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_41692	NEP/40/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_41624	NEP/22/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47156	IND/IC117/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47160	IND/IC119/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.7	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	91.0	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.5	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	90.1	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.0	0	O	ME-SA		

Virus sample name:	OMN/22Z2003/2018_24
Sender reference:	OMN/22Z2003/2018_24
Location of origin:	Al Mudhaibi, Ash Sharqiyah North
Country of origin:	Oman
Date of collection:	25/04/2018
Host species:	sheep
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52171, genome 52172, sequence viba_52173, sequencing info 52174	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52169	OMN/22Z2002/2018_23	sheep	100.0	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47164	IND/IC120/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_41692	NEP/40/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_41624	NEP/22/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47156	IND/IC117/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47160	IND/IC119/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.7	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	91.0	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.5	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	90.1	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.0	0	O	ME-SA		

Virus sample name:	OMN/22Z1982/2018_1
Sender reference:	OMN/22Z1982/2018_1
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52175, genome 52176, sequence viba_52177, sequencing info 52178	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52181	OMN/22Z1983/2018_2	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52185	OMN/22Z1984/2018_3	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52201	OMN/22Z1988/2018_7	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52189	OMN/22Z1985/2018_4	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52197	OMN/22Z1987/2018_6	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52193	OMN/22Z1986/2018_5	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	OMN/22Z1983/2018_2
Sender reference:	OMN/22Z1983/2018_2
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52179, genome 52180, sequence viba_52181, sequencing info 52182	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52185	OMN/22Z1984/2018_3	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52201	OMN/22Z1988/2018_7	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52189	OMN/22Z1985/2018_4	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52177	OMN/22Z1982/2018_1	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52197	OMN/22Z1987/2018_6	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52193	OMN/22Z1986/2018_5	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	OMN/22Z1984/2018_3
Sender reference:	OMN/22Z1984/2018_3
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52183, genome 52184, sequence viba_52185, sequencing info 52186	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52181	OMN/22Z1983/2018_2	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52201	OMN/22Z1988/2018_7	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52189	OMN/22Z1985/2018_4	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52177	OMN/22Z1982/2018_1	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52197	OMN/22Z1987/2018_6	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52193	OMN/22Z1986/2018_5	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	OMN/22Z1985/2018_4
Sender reference:	OMN/22Z1985/2018_4
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52187, genome 52188, sequence viba_52189, sequencing info 52190	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52181	OMN/22Z1983/2018_2	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52185	OMN/22Z1984/2018_3	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52201	OMN/22Z1988/2018_7	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52177	OMN/22Z1982/2018_1	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52197	OMN/22Z1987/2018_6	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52193	OMN/22Z1986/2018_5	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	OMN/22Z1986/2018_5
Sender reference:	OMN/22Z1986/2018_5
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52191, genome 52192, sequence viba_52193, sequencing info 52194	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52181	OMN/22Z1983/2018_2	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_52185	OMN/22Z1984/2018_3	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_52201	OMN/22Z1988/2018_7	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_52189	OMN/22Z1985/2018_4	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_52177	OMN/22Z1982/2018_1	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_52197	OMN/22Z1987/2018_6	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.6	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	96.8	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.6	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.7	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.0	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.2	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		87.7	0	O	ME-SA		
viba_38646	SYR/18/62		87.4	0	O	WCSA-1	Syr-62	

Virus sample name:	OMN/22Z1987/2018_6
Sender reference:	OMN/22Z1987/2018_6
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52195, genome 52196, sequence viba_52197, sequencing info 52198	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52181	OMN/22Z1983/2018_2	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52185	OMN/22Z1984/2018_3	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52201	OMN/22Z1988/2018_7	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52189	OMN/22Z1985/2018_4	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52177	OMN/22Z1982/2018_1	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52193	OMN/22Z1986/2018_5	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e

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_30238	MUR/19/2016	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	OMN/22Z1988/2018_7
Sender reference:	OMN/22Z1988/2018_7
Location of origin:	Al Khaboura, Al Batinah North
Country of origin:	Oman
Date of collection:	11/12/2018
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	n/a
Harvest date of material:	n/a
Primers:	n/a
Received for sequencing:	n/a
Created:	09/01/2023
Last updated:	09/01/2023
VIBASys IDs: sample 52199, genome 52200, sequence viba_52201, sequencing info 52202	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52181	OMN/22Z1983/2018_2	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52185	OMN/22Z1984/2018_3	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52189	OMN/22Z1985/2018_4	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52177	OMN/22Z1982/2018_1	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52197	OMN/22Z1987/2018_6	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_52193	OMN/22Z1986/2018_5	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41568	NEP/4/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e

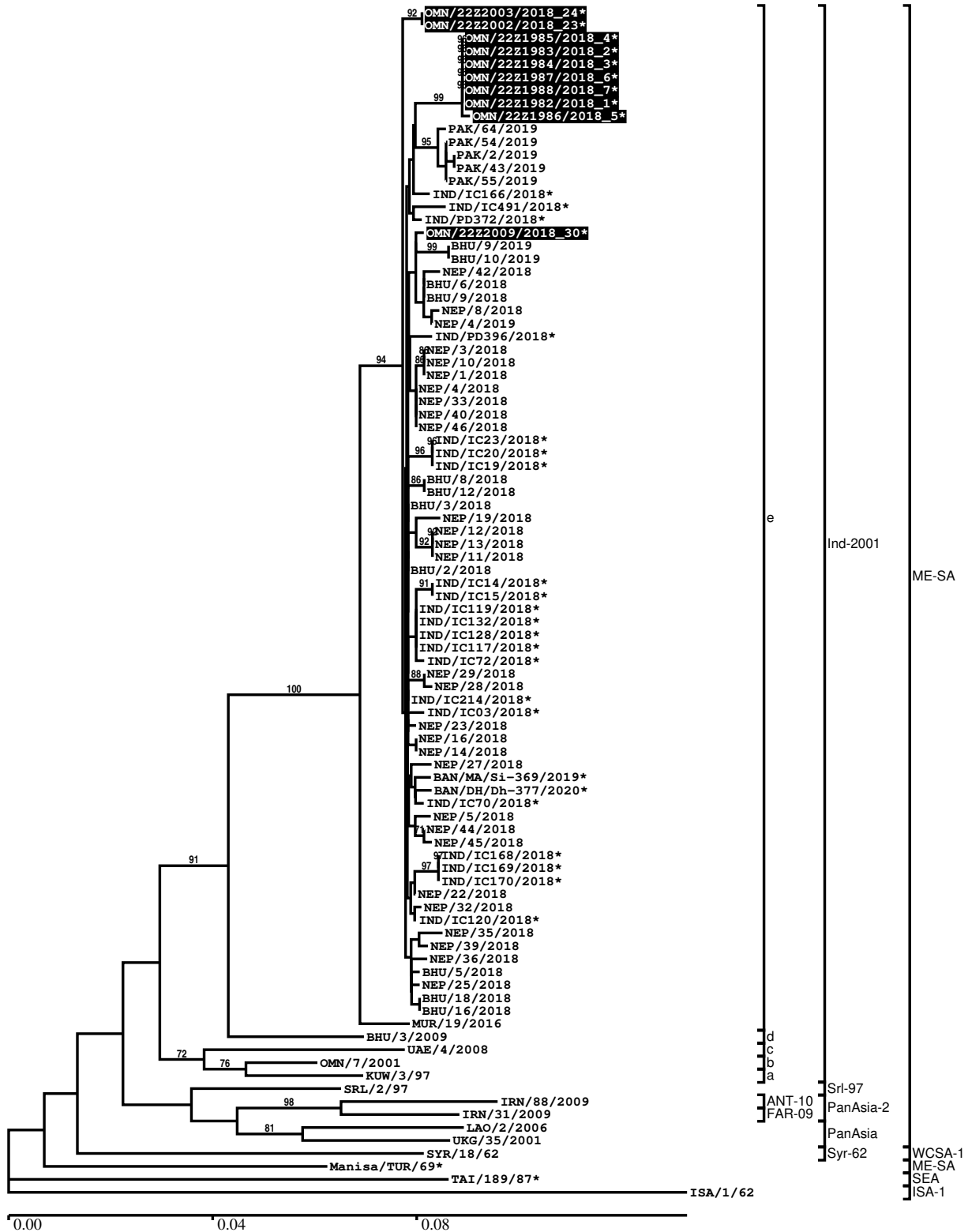
Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30238	MUR/19/2016	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.2	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	91.8	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_27877	SRL/2/97	bovine	90.2	0	O	ME-SA	Srl-97	
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_9021	LAO/2/2006	cattle	88.2	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10

Report on FMDV O in Oman in 2018

Batch: WRLMEG/2023/00001B



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor: vp1_O
 Query sequence set: WRLMEG/2023/00001B-Oman-O (10 sequences)
 Sequence database set: allseqs_O (5853 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
OMN/22Z2003/2018_24*	n/a	sheep	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z2002/2018_23*	n/a	sheep	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1985/2018_4*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1983/2018_2*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1984/2018_3*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1987/2018_6*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1988/2018_7*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1982/2018_1*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
OMN/22Z1986/2018_5*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
PAK/64/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/Ind-2001/e
PAK/54/2019	n/a	water buffalo	WRLFMD	Pakistan	ME-SA/Ind-2001/e
PAK/2/2019	MN953620	cattle	WRLFMD	Pakistan	ME-SA/Ind-2001/e
PAK/43/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/Ind-2001/e
PAK/55/2019	n/a	cattle	WRLFMD	Pakistan	ME-SA/Ind-2001/e
IND/IC166/2018*	MT936106	n/a	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC491/2018*	MT936117	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/PD372/2018*	MT919006	cattle	PD-FMD	India	ME-SA/Ind-2001/e
OMN/22Z2009/2018_30*	n/a	cattle	ANSES	Oman	ME-SA/Ind-2001/e
BHU/9/2019	MT276848	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BHU/10/2019	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
NEP/42/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BHU/6/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BHU/9/2018	n/a	goat	WRLFMD	Bhutan	ME-SA/Ind-2001/e
NEP/8/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/4/2019	MT276850	water buffalo	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/PD396/2018*	MT919008	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/3/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/10/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/1/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/4/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/33/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/40/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/46/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/IC23/2018*	MT936097	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC20/2018*	MT936096	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC19/2018*	MT936095	cattle	PD-FMD	India	ME-SA/Ind-2001/e

continued on next page

label	accession	host(s)	lab	country	taxonomic information
BHU/8/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BHU/12/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BHU/3/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
NEP/19/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/12/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/13/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/11/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BHU/2/2018	MT276847	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
IND/IC14/2018*	MT936091	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC15/2018*	MT936092	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC119/2018*	MT936102	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC132/2018*	MT936105	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC128/2018*	MT936104	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC117/2018*	MT936101	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC72/2018*	MT936100	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/29/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/28/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/IC214/2018*	MT936112	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC03/2018*	MT936090	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/23/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/16/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/14/2018	MT276849	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/27/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BAN/MA/Si-369/2019*	OP320433	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/DH/Dh-377/2020*	OP320434	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
IND/IC70/2018*	MT936099	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/5/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/44/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/45/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/IC168/2018*	MT936107	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC169/2018*	MT936108	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC170/2018*	MT936109	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/22/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/32/2018	n/a	porcine	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/IC120/2018*	MT936103	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/35/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/39/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/36/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BHU/5/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
NEP/25/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BHU/18/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
BHU/16/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
MUR/19/2016	MG972510	cattle	WRLFMD	Mauritius	ME-SA/Ind-2001/e
BHU/3/2009	KM921814	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/d
UAE/4/2008	KM921876	gazelle	WRLFMD	United Arab Emirates	ME-SA/Ind-2001/c
OMN/7/2001	DQ164941	bovine	WRLFMD	Oman	ME-SA/Ind-2001/b
KUW/3/97	DQ164904	bovine	WRLFMD	Kuwait	ME-SA/Ind-2001/a
SRL/2/97	AJ303531	bovine	WRLFMD	Sri Lanka	ME-SA/Srl-97
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
LAO/2/2006	EU667451	cattle	WRLFMD	Laos	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
SYR/18/62	MK390935	n/a	WRLFMD	Syria	WCSA-1/Syr-62
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	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