

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

## Genotyping Report

FMDV serotype: O  
Country: Oman  
Year: 2020  
Batch: WRLMEG/2023/00001A  
No. of sequences: 20  
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](mailto:reporting@pirbright.ac.uk)

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Virus sample name:	OMN/22Z2052/2020_89
Sender reference:	OMN/22Z2052/2020_89
Location of origin:	Qurayyat, Muscat
Country of origin:	Oman
Date of collection:	09/02/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52249, genome 52250, sequence viba_52251, sequencing info 52252	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52255	OMN/22Z1994/2020_14	cattle	99.8	0	O	EA-3		
viba_52259	OMN/22Z2029/2020_64	cattle	99.4	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	99.4	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	99.4	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	99.4	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	99.4	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.4	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	99.4	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	99.4	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	88.9	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		87.1	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.8	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z1994/2020_14
Sender reference:	OMN/22Z1994/2020_14
Location of origin:	Barka, Al Batinah South
Country of origin:	Oman
Date of collection:	08/03/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52253, genome 52254, sequence viba_52255, sequencing info 52256	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52251	OMN/22Z2052/2020_89	cattle	99.8	0	O	EA-3		
viba_52259	OMN/22Z2029/2020_64	cattle	99.5	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	99.5	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	99.5	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	99.5	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	99.5	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	99.5	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	99.5	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	99.5	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.2	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	89.9	0	O	EA-3		
viba_116	SUD/2/86	bovine	88.8	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.7	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	86.9	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.9	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.7	0	O	EA-4		
viba_617	IND/53/79	bovine	86.0	0	O	ME-SA		
viba_1893	K40/84	bovine	85.8	0	O	EA-1		
viba_359	Manisa/TUR/69		85.8	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.5	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2029/2020_64
Sender reference:	OMN/22Z2029/2020_64
Location of origin:	Nizwa, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	17/03/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52257, genome 52258, sequence viba_52259, sequencing info 52260	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2019/2020_54
Sender reference:	OMN/22Z2019/2020_54
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52261, genome 52262, sequence viba_52263, sequencing info 52264	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### Most Closely Related Prototype Sequences

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sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2020/2020_55
Sender reference:	OMN/22Z2020/2020_55
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52265, genome 52266, sequence viba_52267, sequencing info 52268	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2021/2020_56
Sender reference:	OMN/22Z2021/2020_56
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52269, genome 52270, sequence viba_52271, sequencing info 52272	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2022/2020_57
Sender reference:	OMN/22Z2022/2020_57
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52273, genome 52274, sequence viba_52275, sequencing info 52276	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	



Virus sample name:	OMN/22Z2112/2020_182
Sender reference:	OMN/22Z2112/2020_182
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52277, genome 52278, sequence viba_52279, sequencing info 52280	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2113/2020_183
Sender reference:	OMN/22Z2113/2020_183
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52281, genome 52282, sequence viba_52283, sequencing info 52284	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52287	OMN/22Z2114/2020_184	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2114/2020_184
Sender reference:	OMN/22Z2114/2020_184
Location of origin:	Adam, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	02/04/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52285, genome 52286, sequence viba_52287, sequencing info 52288	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52259	OMN/22Z2029/2020_64	cattle	100.0	0	O	EA-3		
viba_52279	OMN/22Z2112/2020_182	cattle	100.0	0	O	EA-3		
viba_52275	OMN/22Z2022/2020_57	cattle	100.0	0	O	EA-3		
viba_52283	OMN/22Z2113/2020_183	cattle	100.0	0	O	EA-3		
viba_52271	OMN/22Z2021/2020_56	cattle	100.0	0	O	EA-3		
viba_52267	OMN/22Z2020/2020_55	cattle	100.0	0	O	EA-3		
viba_52263	OMN/22Z2019/2020_54	cattle	100.0	0	O	EA-3		
viba_52255	OMN/22Z1994/2020_14	cattle	99.5	0	O	EA-3		
viba_52251	OMN/22Z2052/2020_89	cattle	99.4	0	O	EA-3		
viba_51413	ETH/2/2020	bovine	99.1	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	90.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_523	K83/79		86.8	0	O	EA-1		
viba_621	ETH/58/2005	bovine	86.5	0	O	EA-4		
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_1893	K40/84	bovine	86.0	0	O	EA-1		
viba_359	Manisa/TUR/69		85.9	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	85.7	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2083/2020_131
Sender reference:	OMN/22Z2083/2020_131
Location of origin:	Barka, Al Batinah South
Country of origin:	Oman
Date of collection:	12/11/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52321, genome 52322, sequence viba_52323, sequencing info 52324	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52335	OMN/22Z2080/2020_127	cattle	99.8	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	99.8	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	99.8	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	99.8	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.7	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.7	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.7	0	O	EA-3		
viba_51437	ETH/15/2020	bovine	99.7	0	O	EA-3		
viba_51429	ETH/11/2020	bovine	99.7	0	O	EA-3		
viba_51409	ETH/29/2019	bovine	99.7	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.9	0	O	EA-3		
viba_408	ETH/3/2004	cattle	89.3	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.2	0	O	ME-SA	PanAsia	
viba_1893	K40/84	bovine	87.2	0	O	EA-1		
viba_30238	MUR/19/2016	cattle	86.8	0	O	ME-SA	Ind-2001	e
viba_285	UKG/35/2001	porcine	86.6	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_74	KEN/5/2002	bovine	86.3	0	O	EA-2		
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a

Virus sample name:	OMN/22Z2078/2020_125
Sender reference:	OMN/22Z2078/2020_125
Location of origin:	Salalah, Dhofar
Country of origin:	Oman
Date of collection:	01/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52325, genome 52326, sequence viba_52327, sequencing info 52328	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52335	OMN/22Z2080/2020_127	cattle	100.0	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	100.0	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	100.0	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.8	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.8	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.8	0	O	EA-3		
viba_51437	ETH/15/2020	bovine	99.8	0	O	EA-3		
viba_51429	ETH/11/2020	bovine	99.8	0	O	EA-3		
viba_51409	ETH/29/2019	bovine	99.8	0	O	EA-3		
viba_52323	OMN/22Z2083/2020_131	cattle	99.8	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.9	0	O	EA-3		
viba_408	ETH/3/2004	cattle	89.3	0	O	EA-3		
viba_1893	K40/84	bovine	87.2	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.8	0	O	ME-SA	Ind-2001	e
viba_285	UKG/35/2001	porcine	86.6	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_74	KEN/5/2002	bovine	86.3	0	O	EA-2		
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a

Virus sample name:	OMN/22Z2079/2020_126
Sender reference:	OMN/22Z2079/2020_126
Location of origin:	Salalah, Dhofar
Country of origin:	Oman
Date of collection:	01/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52329, genome 52330, sequence viba_52331, sequencing info 52332	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52335	OMN/22Z2080/2020_127	cattle	100.0	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	100.0	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	100.0	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.8	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.8	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.8	0	O	EA-3		
viba_51437	ETH/15/2020	bovine	99.8	0	O	EA-3		
viba_51429	ETH/11/2020	bovine	99.8	0	O	EA-3		
viba_51409	ETH/29/2019	bovine	99.8	0	O	EA-3		
viba_52323	OMN/22Z2083/2020_131	cattle	99.8	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.9	0	O	EA-3		
viba_408	ETH/3/2004	cattle	89.3	0	O	EA-3		
viba_1893	K40/84	bovine	87.2	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.8	0	O	ME-SA	Ind-2001	e
viba_285	UKG/35/2001	porcine	86.6	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_74	KEN/5/2002	bovine	86.3	0	O	EA-2		
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a

Virus sample name:	OMN/22Z2080/2020_127
Sender reference:	OMN/22Z2080/2020_127
Location of origin:	Salalah, Dhofar
Country of origin:	Oman
Date of collection:	01/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52333, genome 52334, sequence viba_52335, sequencing info 52336	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52339	OMN/22Z2081/2020_128	cattle	100.0	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	100.0	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	100.0	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.8	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.8	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.8	0	O	EA-3		
viba_51437	ETH/15/2020	bovine	99.8	0	O	EA-3		
viba_51429	ETH/11/2020	bovine	99.8	0	O	EA-3		
viba_51409	ETH/29/2019	bovine	99.8	0	O	EA-3		
viba_52323	OMN/22Z2083/2020_131	cattle	99.8	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.9	0	O	EA-3		
viba_408	ETH/3/2004	cattle	89.3	0	O	EA-3		
viba_1893	K40/84	bovine	87.2	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.8	0	O	ME-SA	Ind-2001	e
viba_285	UKG/35/2001	porcine	86.6	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_74	KEN/5/2002	bovine	86.3	0	O	EA-2		
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a

Virus sample name:	OMN/22Z2081/2020_128
Sender reference:	OMN/22Z2081/2020_128
Location of origin:	Salalah, Dhofar
Country of origin:	Oman
Date of collection:	01/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52337, genome 52338, sequence viba_52339, sequencing info 52340	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52335	OMN/22Z2080/2020_127	cattle	100.0	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	100.0	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	100.0	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.8	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.8	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.8	0	O	EA-3		
viba_51437	ETH/15/2020	bovine	99.8	0	O	EA-3		
viba_51429	ETH/11/2020	bovine	99.8	0	O	EA-3		
viba_51409	ETH/29/2019	bovine	99.8	0	O	EA-3		
viba_52323	OMN/22Z2083/2020_131	cattle	99.8	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.9	0	O	EA-3		
viba_408	ETH/3/2004	cattle	89.3	0	O	EA-3		
viba_1893	K40/84	bovine	87.2	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.8	0	O	ME-SA	Ind-2001	e
viba_285	UKG/35/2001	porcine	86.6	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_74	KEN/5/2002	bovine	86.3	0	O	EA-2		
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a



Virus sample name:	OMN/22Z2054/2020_93
Sender reference:	OMN/22Z2054/2020_93
Location of origin:	Izki, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	14/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52341, genome 52342, sequence viba_52343, sequencing info 52344	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52347	OMN/22Z2055/2020_94	cattle	100.0	0	O	EA-3		
viba_52363	OMN/22Z2062/2020_103	cattle	99.8	0	O	EA-3		
viba_52351	OMN/22Z2057/2020_96	cattle	99.7	0	O	EA-3		
viba_52355	OMN/22Z2058/2020_97	cattle	99.7	0	O	EA-3		
viba_52335	OMN/22Z2080/2020_127	cattle	99.5	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	99.5	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	99.5	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	99.5	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.4	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.4	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.2	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.4	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_1893	K40/84	bovine	87.0	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	86.9	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.3	0	O	ME-SA	Ind-2001	e
viba_850	NEP/1/2015	cattle	86.2	1	O	ME-SA	PanAsia-2	KAT-15
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_580	UGA/5/96	bovine	86.1	0	O	EA-1		
viba_285	UKG/35/2001	porcine	86.1	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2055/2020_94
Sender reference:	OMN/22Z2055/2020_94
Location of origin:	Izki, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	14/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52345, genome 52346, sequence viba_52347, sequencing info 52348	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52343	OMN/22Z2054/2020_93	cattle	100.0	0	O	EA-3		
viba_52363	OMN/22Z2062/2020_103	cattle	99.8	0	O	EA-3		
viba_52351	OMN/22Z2057/2020_96	cattle	99.7	0	O	EA-3		
viba_52355	OMN/22Z2058/2020_97	cattle	99.7	0	O	EA-3		
viba_52335	OMN/22Z2080/2020_127	cattle	99.5	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	99.5	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	99.5	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	99.5	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.4	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.4	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.2	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.4	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.8	0	O	EA-3		
viba_1893	K40/84	bovine	87.0	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	86.9	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.3	0	O	ME-SA	Ind-2001	e
viba_850	NEP/1/2015	cattle	86.2	1	O	ME-SA	PanAsia-2	KAT-15
viba_617	IND/53/79	bovine	86.1	0	O	ME-SA		
viba_580	UGA/5/96	bovine	86.1	0	O	EA-1		
viba_285	UKG/35/2001	porcine	86.1	0	O	ME-SA	PanAsia	

Virus sample name:	OMN/22Z2057/2020_96
Sender reference:	OMN/22Z2057/2020_96
Location of origin:	Izki, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	14/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52349, genome 52350, sequence viba_52351, sequencing info 52352	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52355	OMN/22Z2058/2020_97	cattle	100.0	0	O	EA-3		
viba_52347	OMN/22Z2055/2020_94	cattle	99.7	0	O	EA-3		
viba_52335	OMN/22Z2080/2020_127	cattle	99.7	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	99.7	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	99.7	0	O	EA-3		
viba_52343	OMN/22Z2054/2020_93	cattle	99.7	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	99.7	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.5	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.5	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.5	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.6	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.9	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_1893	K40/84	bovine	86.9	0	O	EA-1		
viba_30238	MUR/19/2016	cattle	86.5	0	O	ME-SA	Ind-2001	e
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	86.3	0	O	ME-SA	PanAsia	
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a
viba_850	NEP/1/2015	cattle	86.3	1	O	ME-SA	PanAsia-2	KAT-15

Virus sample name:	OMN/22Z2058/2020_97
Sender reference:	OMN/22Z2058/2020_97
Location of origin:	Izki, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	14/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52353, genome 52354, sequence viba_52355, sequencing info 52356	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52351	OMN/22Z2057/2020_96	cattle	100.0	0	O	EA-3		
viba_52347	OMN/22Z2055/2020_94	cattle	99.7	0	O	EA-3		
viba_52335	OMN/22Z2080/2020_127	cattle	99.7	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	99.7	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	99.7	0	O	EA-3		
viba_52343	OMN/22Z2054/2020_93	cattle	99.7	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	99.7	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.5	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.5	0	O	EA-3		
viba_51445	ETH/17/2020	bovine	99.5	0	O	EA-3		

### 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_854	ETH/1/2007	cattle	91.3	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.6	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.9	0	O	EA-3		
viba_9021	LAO/2/2006	cattle	87.1	0	O	ME-SA	PanAsia	
viba_1893	K40/84	bovine	86.9	0	O	EA-1		
viba_30238	MUR/19/2016	cattle	86.5	0	O	ME-SA	Ind-2001	e
viba_617	IND/53/79	bovine	86.3	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	86.3	0	O	ME-SA	PanAsia	
viba_705	KUW/3/97	bovine	86.3	0	O	ME-SA	Ind-2001	a
viba_850	NEP/1/2015	cattle	86.3	1	O	ME-SA	PanAsia-2	KAT-15

Virus sample name:	OMN/22Z2062/2020_103
Sender reference:	OMN/22Z2062/2020_103
Location of origin:	Izki, Ad Dakhiliyah
Country of origin:	Oman
Date of collection:	31/12/2020
Host species:	cattle
Serotype:	O
Topotype:	EA-3
Lineage:	
Sublineage:	
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 52361, genome 52362, sequence viba_52363, sequencing info 52364	

**Most Closely Related Sequences**

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_52347	OMN/22Z2055/2020_94	cattle	99.8	0	O	EA-3		
viba_52343	OMN/22Z2054/2020_93	cattle	99.8	0	O	EA-3		
viba_52351	OMN/22Z2057/2020_96	cattle	99.5	0	O	EA-3		
viba_52355	OMN/22Z2058/2020_97	cattle	99.5	0	O	EA-3		
viba_52335	OMN/22Z2080/2020_127	cattle	99.4	0	O	EA-3		
viba_52339	OMN/22Z2081/2020_128	cattle	99.4	0	O	EA-3		
viba_52331	OMN/22Z2079/2020_126	cattle	99.4	0	O	EA-3		
viba_52327	OMN/22Z2078/2020_125	cattle	99.4	0	O	EA-3		
viba_51425	ETH/10/2020	bovine	99.2	0	O	EA-3		
viba_51453	ETH/2/2021	bovine	99.2	0	O	EA-3		

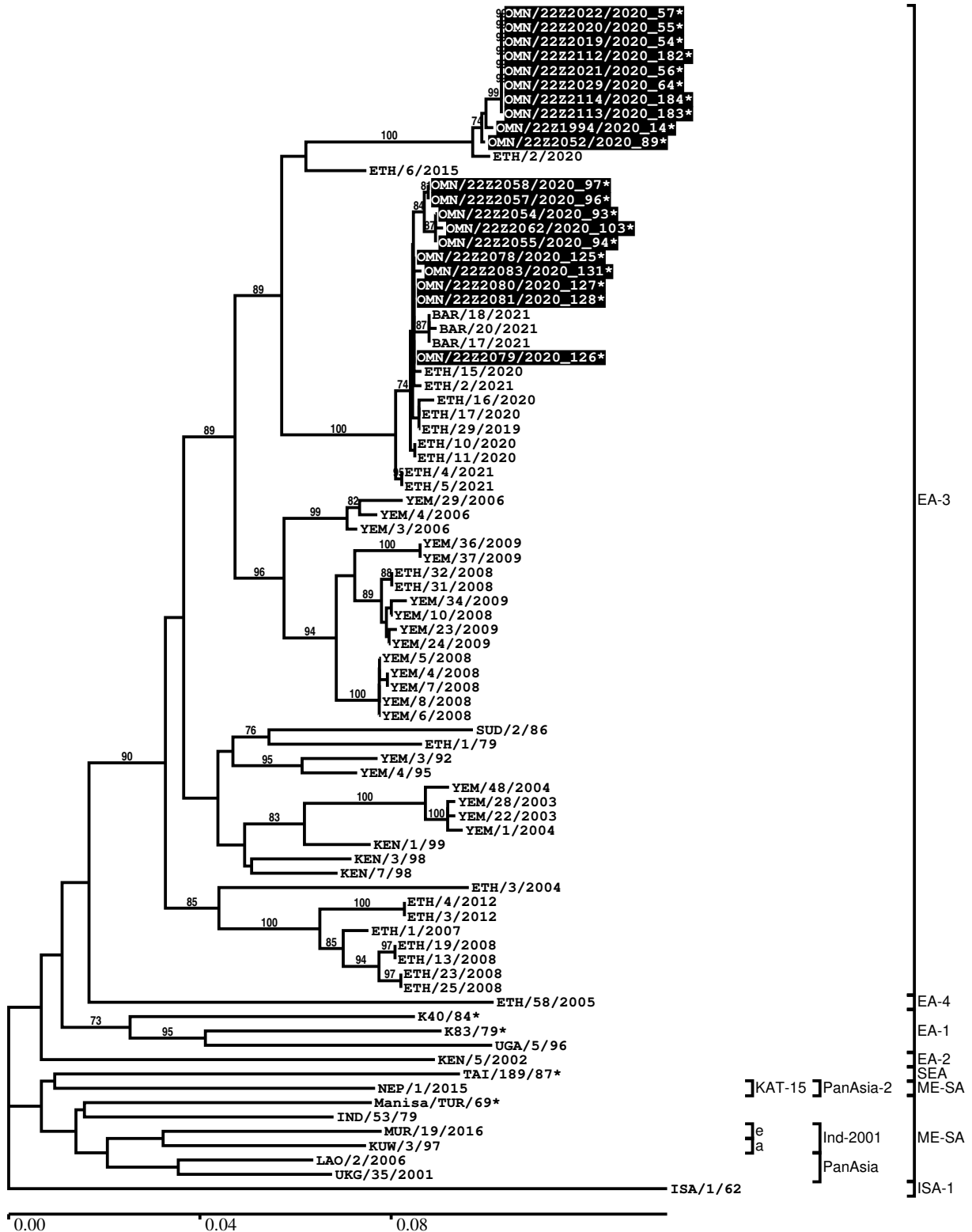
**Most Closely Related Prototype Sequences**

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_854	ETH/1/2007	cattle	91.0	0	O	EA-3		
viba_116	SUD/2/86	bovine	89.3	0	O	EA-3		
viba_408	ETH/3/2004	cattle	88.6	0	O	EA-3		
viba_1893	K40/84	bovine	86.9	0	O	EA-1		
viba_9021	LAO/2/2006	cattle	86.8	0	O	ME-SA	PanAsia	
viba_30238	MUR/19/2016	cattle	86.1	0	O	ME-SA	Ind-2001	e
viba_580	UGA/5/96	bovine	86.0	0	O	EA-1		
viba_285	UKG/35/2001	porcine	86.0	0	O	ME-SA	PanAsia	
viba_850	NEP/1/2015	cattle	86.0	1	O	ME-SA	PanAsia-2	KAT-15
viba_617	IND/53/79	bovine	85.9	0	O	ME-SA		

Report on FMDV O in Oman in 2020

Batch: WRLMEG/2023/00001A



\*, not a WRLFMD Reference Number

## Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLMEG/2023/00001A-Oman-O (20 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:	15
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/22Z2022/2020_57*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2020/2020_55*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2019/2020_54*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2112/2020_182*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2021/2020_56*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2029/2020_64*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2114/2020_184*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2113/2020_183*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z1994/2020_14*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2052/2020_89*	n/a	cattle	ANSES	Oman	EA-3
ETH/2/2020	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/6/2015	MN987423	cattle	WRLFMD	Ethiopia	EA-3
OMN/22Z2058/2020_97*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2057/2020_96*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2054/2020_93*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2062/2020_103*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2055/2020_94*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2078/2020_125*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2083/2020_131*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2080/2020_127*	n/a	cattle	ANSES	Oman	EA-3
OMN/22Z2081/2020_128*	n/a	cattle	ANSES	Oman	EA-3
BAR/18/2021	n/a	cattle	WRLFMD	Bahrain	EA-3
BAR/20/2021	n/a	cattle	WRLFMD	Bahrain	EA-3
BAR/17/2021	n/a	cattle	WRLFMD	Bahrain	EA-3
OMN/22Z2079/2020_126*	n/a	cattle	ANSES	Oman	EA-3
ETH/15/2020	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/2/2021	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/16/2020	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/17/2020	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/29/2019	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/10/2020	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/11/2020	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/4/2021	n/a	bovine	WRLFMD	Ethiopia	EA-3
ETH/5/2021	n/a	bovine	WRLFMD	Ethiopia	EA-3
YEM/29/2006	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/4/2006	n/a	cattle	WRLFMD	Yemen	EA-3

*continued on next page*

label	accession	host(s)	lab	country	taxonomic information
YEM/3/2006	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/36/2009	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/37/2009	n/a	cattle	WRLFMD	Yemen	EA-3
ETH/32/2008	MN987363	cattle	WRLFMD	Ethiopia	EA-3
ETH/31/2008	MN987362	cattle	WRLFMD	Ethiopia	EA-3
YEM/34/2009	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/10/2008	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/23/2009	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/24/2009	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/5/2008	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/4/2008	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/7/2008	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/8/2008	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/6/2008	n/a	cattle	WRLFMD	Yemen	EA-3
SUD/2/86	DQ165075	bovine	WRLFMD	Sudan	EA-3
ETH/1/79	HM211077	cattle	WRLFMD	Ethiopia	EA-3
YEM/3/92	n/a	n/a	WRLFMD	Yemen	EA-3
YEM/4/95	n/a	n/a	WRLFMD	Yemen	EA-3
YEM/48/2004	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/28/2003	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/22/2003	n/a	cattle	WRLFMD	Yemen	EA-3
YEM/1/2004	n/a	cattle	WRLFMD	Yemen	EA-3
KEN/1/99	KF135267	bovine	WRLFMD	Kenya	EA-3
KEN/3/98	n/a	bovine	WRLFMD	Kenya	EA-3
KEN/7/98	KF135266	bovine	WRLFMD	Kenya	EA-3
ETH/3/2004	FJ798109	cattle	WRLFMD	Ethiopia	EA-3
ETH/4/2012	MN987410	cattle	WRLFMD	Ethiopia	EA-3
ETH/3/2012	MN987409	cattle	WRLFMD	Ethiopia	EA-3
ETH/1/2007	FJ798137	cattle	WRLFMD	Ethiopia	EA-3
ETH/19/2008	MN987355	cattle	WRLFMD	Ethiopia	EA-3
ETH/13/2008	MN987353	cattle	WRLFMD	Ethiopia	EA-3
ETH/23/2008	MN987358	cattle	WRLFMD	Ethiopia	EA-3
ETH/25/2008	MN987360	cattle	WRLFMD	Ethiopia	EA-3
ETH/58/2005	FJ798141	bovine	WRLFMD	Ethiopia	EA-4
K40/84*	KY091280	bovine	WRLFMD	Kenya	EA-1
K83/79*	AJ303511	n/a	WRLFMD	Kenya	EA-1
UGA/5/96	AJ296327	bovine	WRLFMD	Uganda	EA-1
KEN/5/2002	DQ165073	bovine	WRLFMD	Kenya	EA-2
TAI/189/87*	KY091288	bovine	TRRL	Thailand	SEA
NEP/1/2015	MN276045	cattle	WRLFMD	Nepal	ME-SA/PanAsia-2/KAT-15
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
MUR/19/2016	MG972510	cattle	WRLFMD	Mauritius	ME-SA/Ind-2001/e
KUW/3/97	DQ164904	bovine	WRLFMD	Kuwait	ME-SA/Ind-2001/a
LAO/2/2006	EU667451	cattle	WRLFMD	Laos	ME-SA/PanAsia
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

\*, not a WRLFMD Reference Number

n/a, not available