

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

## Genotyping Report

FMDV serotype: O  
Country: Bangladesh  
Year: 2019, 2020, 2021  
Batch: WRLMEG/2022/00040  
No. of sequences: 16  
Report date: 10th November 2022  
Report generated by: Nick Knowles  
Report checked by: Jemma Wadsworth



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Virus sample name:	BAN/PA/At-355/2019
Sender reference:	BAN/PA/At-355/2019
Location of origin:	Atghoria, Pabna
Country of origin:	Bangladesh
Date of collection:	18/09/2019
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51834, genome 51835, sequence viba_51836, sequencing info 51837	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51844	BAN/MA/Si-369/2019	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_51840	BAN/DH/Dh-363/2019	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	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_36754	BHU/3/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_47148	IND/IC70/2018	cattle	98.9	0	O	ME-SA	Ind-2001	e
viba_41608	NEP/16/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_47172	IND/IC132/2018	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_51848	BAN/DH/Dh-377/2020	cattle	98.7	0	O	ME-SA	Ind-2001	e
viba_41692	NEP/40/2018	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	97.3	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.4	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.1	0	O	ME-SA	Ind-2001	c
viba_359	Manisa/TUR/69		88.0	0	O	ME-SA		
viba_285	UKG/35/2001	porcine	87.7	0	O	ME-SA	PanAsia	
viba_617	IND/53/79	bovine	87.4	0	O	ME-SA		
viba_719	IRN/88/2009		87.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_766	IRN/31/2009	cattle	86.9	0	O	ME-SA	PanAsia-2	FAR-09

Virus sample name:	BAN/DH/Dh-363/2019
Sender reference:	BAN/DH/Dh-363/2019
Location of origin:	Dhamrai, Dhaka
Country of origin:	Bangladesh
Date of collection:	19/10/2019
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51838, genome 51839, sequence viba_51840, sequencing info 51841	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51844	BAN/MA/Si-369/2019	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47200	IND/IC214/2018	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_36754	BHU/3/2018	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47148	IND/IC70/2018	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_41608	NEP/16/2018	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47172	IND/IC132/2018	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_51848	BAN/DH/Dh-377/2020	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_51836	BAN/PA/At-355/2019	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_41692	NEP/40/2018	cattle	99.1	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	97.6	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.5	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.8	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.1	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.0	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	87.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		87.0	0	O	ME-SA	PanAsia-2	ANT-10
viba_860	IRN/6/2015	cattle	87.0	0	O	ME-SA	PanAsia-2	QOM-15

Virus sample name:	BAN/MA/Si-369/2019
Sender reference:	BAN/MA/Si-369/2019
Location of origin:	Singair, Manikgonj
Country of origin:	Bangladesh
Date of collection:	23/10/2019
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51842, genome 51843, sequence viba_51844, sequencing info 51845	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51840	BAN/DH/Dh-363/2019	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_36750	BHU/2/2018	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_36754	BHU/3/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_47148	IND/IC70/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41608	NEP/16/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47172	IND/IC132/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_51848	BAN/DH/Dh-377/2020	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_51836	BAN/PA/At-355/2019	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

### 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	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.4	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.2	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.1	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	88.4	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		88.3	0	O	ME-SA		
viba_766	IRN/31/2009	cattle	87.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_617	IND/53/79	bovine	87.4	0	O	ME-SA		
viba_719	IRN/88/2009		87.3	0	O	ME-SA	PanAsia-2	ANT-10

Virus sample name:	BAN/DH/Dh-377/2020
Sender reference:	BAN/DH/Dh-377/2020
Location of origin:	Dhamrai, Dhaka
Country of origin:	Bangladesh
Date of collection:	14/01/2020
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51846, genome 51847, sequence viba_51848, sequencing info 51849	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_36750	BHU/2/2018	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_36754	BHU/3/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_47148	IND/IC70/2018	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_41608	NEP/16/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47172	IND/IC132/2018	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_41568	NEP/4/2018	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_51844	BAN/MA/Si-369/2019	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

#### 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	97.6	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.8	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.9	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	88.1	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		87.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_359	Manisa/TUR/69		87.7	0	O	ME-SA		
viba_860	IRN/6/2015	cattle	87.6	0	O	ME-SA	PanAsia-2	QOM-15

Virus sample name:	BAN/DH/Ke-393/2020
Sender reference:	BAN/DH/Ke-393/2020
Location of origin:	Keranigonj, Dhaka
Country of origin:	Bangladesh
Date of collection:	15/11/2020
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51850, genome 51851, sequence viba_51852, sequencing info 51853	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51856	BAN/DH/Ke-395/2020	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_48964	NEP/30/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_51864	BAN/DH/Dh-418/2021	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.7	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48968	NEP/31/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48920	NEP/15/2021	bovine	99.7	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	96.5	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	92.0	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.4	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.0	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		88.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	BAN/DH/Ke-395/2020
Sender reference:	BAN/DH/Ke-395/2020
Location of origin:	Keranigonj, Dhaka
Country of origin:	Bangladesh
Date of collection:	15/11/2020
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51854, genome 51855, sequence viba_51856, sequencing info 51857	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_48964	NEP/30/2021	bovine	99.8	0	O	ME-SA	Ind-2001	e
viba_51864	BAN/DH/Dh-418/2021	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_51852	BAN/DH/Ke-393/2020	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.8	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.8	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.8	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.8	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	99.8	0	O	ME-SA	Ind-2001	e
viba_48968	NEP/31/2021	bovine	99.8	0	O	ME-SA	Ind-2001	e
viba_48920	NEP/15/2021	bovine	99.8	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	96.7	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.4	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.5	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.6	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.1	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		88.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	88.8	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	BAN/DH/Dh-417/2021
Sender reference:	BAN/DH/Dh-417/2021
Location of origin:	Dhamrai, Dhaka
Country of origin:	Bangladesh
Date of collection:	02/08/2021
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51858, genome 51859, sequence viba_51860, sequencing info 51861	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51856	BAN/DH/Ke-395/2020	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_48964	NEP/30/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_51864	BAN/DH/Dh-418/2021	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_51852	BAN/DH/Ke-393/2020	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.5	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48968	NEP/31/2021	bovine	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	96.7	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	92.0	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.4	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.0	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009	cattle	88.6	0	O	ME-SA	PanAsia-2	ANT-10



Virus sample name:	BAN/DH/Dh-418/2021
Sender reference:	BAN/DH/Dh-418/2021
Location of origin:	Dhamrai, Dhaka
Country of origin:	Bangladesh
Date of collection:	02/08/2021
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51862, genome 51863, sequence viba_51864, sequencing info 51865	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51856	BAN/DH/Ke-395/2020	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_48964	NEP/30/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_51852	BAN/DH/Ke-393/2020	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.7	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48968	NEP/31/2021	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48920	NEP/15/2021	bovine	99.7	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	96.5	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	92.0	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.3	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.8	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.0	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		88.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	BAN/SA/Sa-423/2021
Sender reference:	BAN/SA/Sa-423/2021
Location of origin:	Satkhira Sadar, Satkhira
Country of origin:	Bangladesh
Date of collection:	03/03/2021
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51866, genome 51867, sequence viba_51868, sequencing info 51869	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51872	BAN/SA/Sa-426/2021	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_51856	BAN/DH/Ke-395/2020	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_48964	NEP/30/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_51864	BAN/DH/Dh-418/2021	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_51852	BAN/DH/Ke-393/2020	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.5	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	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	96.7	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.4	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.5	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.6	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	89.4	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		88.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	88.8	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	BAN/SA/Sa-426/2021
Sender reference:	BAN/SA/Sa-426/2021
Location of origin:	Satkhira Sadar, Satkhira
Country of origin:	Bangladesh
Date of collection:	03/03/2021
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51870, genome 51871, sequence viba_51872, sequencing info 51873	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51868	BAN/SA/Sa-423/2021	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_51856	BAN/DH/Ke-395/2020	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_48964	NEP/30/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_51864	BAN/DH/Dh-418/2021	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_51852	BAN/DH/Ke-393/2020	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.5	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	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	96.7	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.4	0	O	ME-SA	Ind-2001	d
viba_541	OMN/7/2001	bovine	92.1	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.5	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.6	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	89.4	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	89.3	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		88.9	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	88.8	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	BAN/JH/Jh-454/2021
Sender reference:	BAN/JH/Jh-454/2021
Location of origin:	Jhinaidah Sadar, Jhinaidah
Country of origin:	Bangladesh
Date of collection:	20/03/2021
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51874, genome 51875, sequence viba_51876, sequencing info 51877	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_48928	NEP/20/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.5	0	O	ME-SA	Ind-2001	e
viba_48920	NEP/15/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48972	NEP/32/2021	bovine	99.4	0	O	ME-SA	Ind-2001	e
viba_51872	BAN/SA/Sa-426/2021	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48876	NEP/12/2020	bovine	99.4	0	O	ME-SA	Ind-2001	e
viba_48884	NEP/14/2020	water buffalo	99.4	0	O	ME-SA	Ind-2001	e
viba_48936	NEP/23/2021	bovine	99.4	0	O	ME-SA	Ind-2001	e
viba_51868	BAN/SA/Sa-423/2021	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48948	NEP/26/2021	bovine	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	96.1	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.4	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	91.2	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.4	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.3	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	89.1	0	O	ME-SA	PanAsia-2	
viba_766	IRN/31/2009	cattle	88.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	88.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_491	TUR/257/2008		88.3	0	O	ME-SA	PanAsia-2	TER-08

Virus sample name:	BAN/JH/Jh-455/2021
Sender reference:	BAN/JH/Jh-455/2021
Location of origin:	Jhinaidah Sadar, Jhinaidah
Country of origin:	Bangladesh
Date of collection:	20/03/2021
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51878, genome 51879, sequence viba_51880, sequencing info 51881	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51856	BAN/DH/Ke-395/2020	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_48964	NEP/30/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_51864	BAN/DH/Dh-418/2021	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_51852	BAN/DH/Ke-393/2020	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_48928	NEP/20/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48960	NEP/29/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48924	NEP/19/2021	water buffalo	99.5	0	O	ME-SA	Ind-2001	e
viba_48984	NEP/35/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48956	NEP/28/2021	bovine	99.5	0	O	ME-SA	Ind-2001	e
viba_48968	NEP/31/2021	bovine	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	96.4	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	93.0	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	91.2	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.2	0	O	ME-SA	Ind-2001	c
viba_285	UKG/35/2001	porcine	89.3	0	O	ME-SA	PanAsia	
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_650	IRN/8/2005	ovine	89.0	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		88.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_666	IRN/18/2010	cattle	88.6	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	BAN/MY/My-466/2021
Sender reference:	BAN/MY/My-466/2021
Location of origin:	Mymensingh
Country of origin:	Bangladesh
Date of collection:	30/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51882, genome 51883, sequence viba_51884, sequencing info 51885	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51892	BAN/MY/My-478/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51896	BAN/MY/My-480/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51639	OMN/22Z2088/2021_136	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51647	OMN/22Z2092/2021_141	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.7	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_666	IRN/18/2010	cattle	92.1	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		92.1	0	O	ME-SA	PanAsia-2	ANT-10
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_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	90.8	0	O	ME-SA	PanAsia	
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_705	KUW/3/97	bovine	89.9	0	O	ME-SA	Ind-2001	a

Virus sample name:	BAN/MY/My-469/2021
Sender reference:	BAN/MY/My-469/2021
Location of origin:	Mymensingh
Country of origin:	Bangladesh
Date of collection:	30/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51886, genome 51887, sequence viba_51888, sequencing info 51889	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51892	BAN/MY/My-478/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51896	BAN/MY/My-480/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51639	OMN/22Z2088/2021_136	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51647	OMN/22Z2092/2021_141	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.7	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_666	IRN/18/2010	cattle	92.1	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		92.1	0	O	ME-SA	PanAsia-2	ANT-10
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_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	90.8	0	O	ME-SA	PanAsia	
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_705	KUW/3/97	bovine	89.9	0	O	ME-SA	Ind-2001	a

Virus sample name:	BAN/MY/My-478/2021
Sender reference:	BAN/MY/My-478/2021
Location of origin:	Mymensingh
Country of origin:	Bangladesh
Date of collection:	30/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51890, genome 51891, sequence viba_51892, sequencing info 51893	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51896	BAN/MY/My-480/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51639	OMN/22Z2088/2021_136	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51647	OMN/22Z2092/2021_141	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.7	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_666	IRN/18/2010	cattle	92.1	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		92.1	0	O	ME-SA	PanAsia-2	ANT-10
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_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	90.8	0	O	ME-SA	PanAsia	
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_705	KUW/3/97	bovine	89.9	0	O	ME-SA	Ind-2001	a



Virus sample name:	BAN/MY/My-480/2021
Sender reference:	BAN/MY/My-480/2021
Location of origin:	Mymensingh
Country of origin:	Bangladesh
Date of collection:	30/12/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	SA-2018
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:	09/11/2022
Last updated:	09/11/2022
VIBASys IDs: sample 51894, genome 51895, sequence viba_51896, sequencing info 51897	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51892	BAN/MY/My-478/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51888	BAN/MY/My-469/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51884	BAN/MY/My-466/2021	cattle	100.0	0	O	ME-SA	SA-2018	
viba_51627	OMN/22Z2085/2021_133	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51639	OMN/22Z2088/2021_136	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51635	OMN/22Z2087/2021_135	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51631	OMN/22Z2086/2021_134	sheep	99.7	0	O	ME-SA	SA-2018	
viba_51647	OMN/22Z2092/2021_141	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51643	OMN/22Z2090/2021_139	cattle	99.7	0	O	ME-SA	SA-2018	
viba_51619	OMN/22Z2065/2021_107	cattle	99.7	0	O	ME-SA	SA-2018	

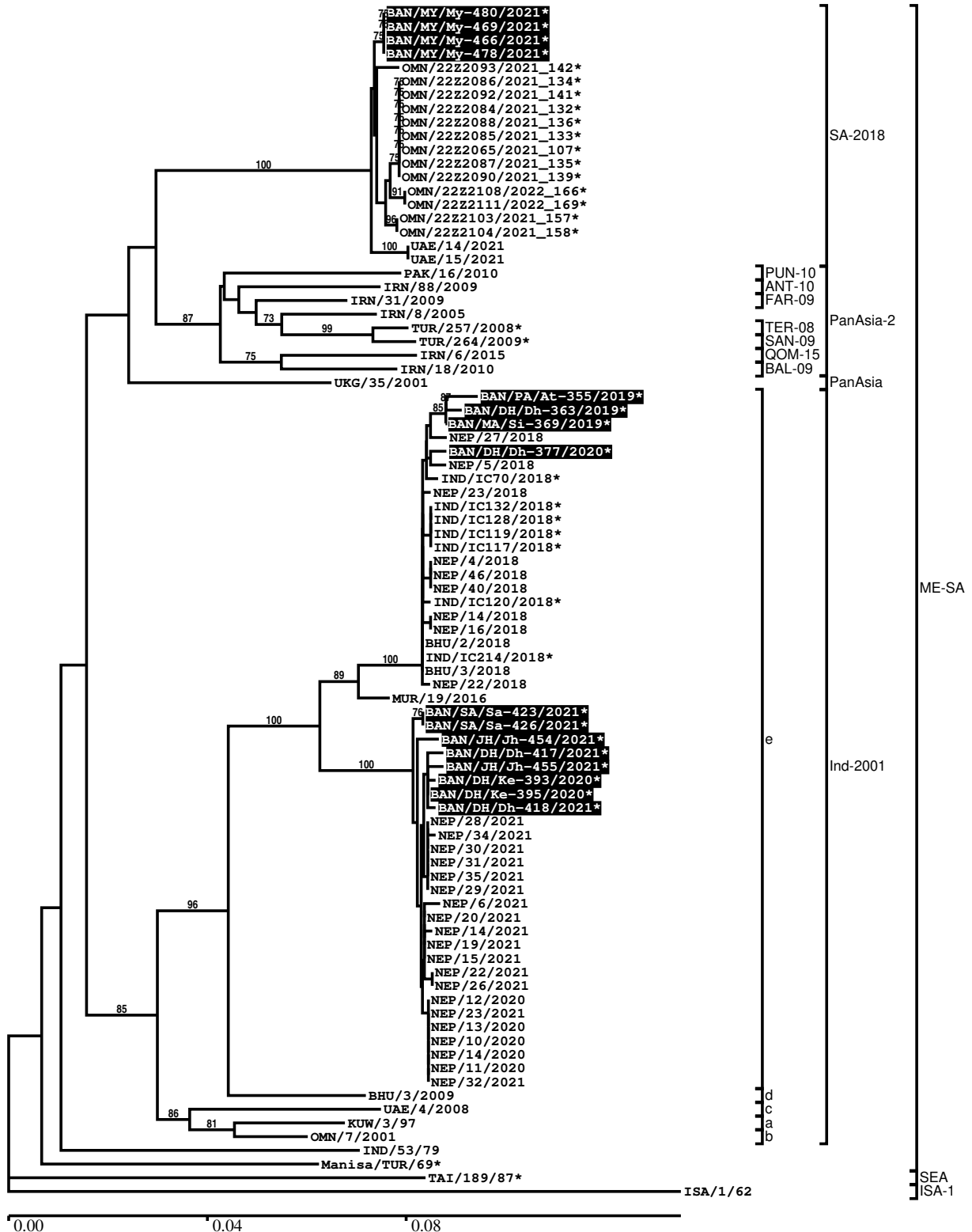
### Most Closely Related Prototype Sequences

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

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_666	IRN/18/2010	cattle	92.1	0	O	ME-SA	PanAsia-2	BAL-09
viba_719	IRN/88/2009		92.1	0	O	ME-SA	PanAsia-2	ANT-10
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_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	90.8	0	O	ME-SA	PanAsia	
viba_860	IRN/6/2015	cattle	90.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_705	KUW/3/97	bovine	89.9	0	O	ME-SA	Ind-2001	a

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Batch: WRLMEG/2022/00040



\*, not a WRLFMD Reference Number

## Analysis Parameters

VP1 subsequence extractor: vp1\_O  
 Query sequence set: WRLMEG/2022/00040-Bangladesh-O (16 sequences)  
 Sequence database set: allseqs\_O (5770 sequences)  
 Prototype sequence set: !prototypes\_O (49 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: 16  
 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
BAN/MY/My-480/2021*	OP320458	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
BAN/MY/My-469/2021*	OP320456	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-478/2021*	OP320457	cattle	UNIV-DHAKA	Bangladesh	ME-SA/SA-2018
OMN/22Z2093/2021_142*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2086/2021_134*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2092/2021_141*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2084/2021_132*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2088/2021_136*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2085/2021_133*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2065/2021_107*	n/a	cattle	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2087/2021_135*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2090/2021_139*	n/a	cattle	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/22Z2103/2021_157*	n/a	sheep	ANSES	Oman	ME-SA/SA-2018
OMN/22Z2104/2021_158*	n/a	cattle	ANSES	Oman	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
PAK/16/2010	KY091285	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-10
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
IRN/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
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/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
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
BAN/PA/At-355/2019*	OP320425	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e

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label	accession	host(s)	lab	country	taxonomic information
BAN/DH/Dh-363/2019*	OP320430	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/MA/Si-369/2019*	OP320433	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
NEP/27/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BAN/DH/Dh-377/2020*	OP320434	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
NEP/5/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/IC70/2018*	MT936099	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/23/2018	n/a	cattle	WRLFMD	Nepal	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/IC119/2018*	MT936102	cattle	PD-FMD	India	ME-SA/Ind-2001/e
IND/IC117/2018*	MT936101	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/4/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/46/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/40/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
IND/IC120/2018*	MT936103	cattle	PD-FMD	India	ME-SA/Ind-2001/e
NEP/14/2018	MT276849	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/16/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
BHU/2/2018	MT276847	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
IND/IC214/2018*	MT936112	cattle	PD-FMD	India	ME-SA/Ind-2001/e
BHU/3/2018	n/a	cattle	WRLFMD	Bhutan	ME-SA/Ind-2001/e
NEP/22/2018	n/a	cattle	WRLFMD	Nepal	ME-SA/Ind-2001/e
MUR/19/2016	MG972510	cattle	WRLFMD	Mauritius	ME-SA/Ind-2001/e
BAN/SA/Sa-423/2021*	OP320444	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/SA/Sa-426/2021*	OP320445	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/JH/Jh-454/2021*	OP320450	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/DH/Dh-417/2021*	OP320442	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/JH/Jh-455/2021*	OP320451	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/DH/Ke-393/2020*	OP320438	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/DH/Ke-395/2020*	OP320439	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
BAN/DH/Dh-418/2021*	OP320443	cattle	UNIV-DHAKA	Bangladesh	ME-SA/Ind-2001/e
NEP/28/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/34/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/30/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/31/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/35/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/29/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/6/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/20/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/14/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/19/2021	n/a	water buffalo	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/15/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/22/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/26/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/12/2020	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/23/2021	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/13/2020	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/10/2020	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/14/2020	n/a	water buffalo	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/11/2020	n/a	bovine	WRLFMD	Nepal	ME-SA/Ind-2001/e
NEP/32/2021	n/a	bovine	WRLFMD	Nepal	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
KUW/3/97	DQ164904	bovine	WRLFMD	Kuwait	ME-SA/Ind-2001/a
OMN/7/2001	DQ164941	bovine	WRLFMD	Oman	ME-SA/Ind-2001/b
IND/53/79	AF292107	bovine	PD-FMD	India	ME-SA
Manisa/TUR/69*	AY593823	n/a	PIADC	Turkey	ME-SA

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label	accession	host(s)	lab	country	taxonomic information
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