

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

## Genotyping Report

FMDV serotype: O  
Country: Thailand  
Year: 2020, 2021  
Batch: WRLFMD/2022/000016  
No. of sequences: 8  
Report date: 26th July 2022  
Report generated by: ██████████  
Report checked by: ██████████



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Virus sample name:	TAI/15/2020
Sender reference:	102/20R2
Location of origin:	Lampam, Mueang, Phatthalung
Country of origin:	Thailand
Date of collection:	12/05/2020
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022

VIBASys IDs: sample 51114, genome 51115, sequence viba\_51116, sequencing info 51117

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47340	TAI/10/2020	cattle	100.0	0	O	ME-SA	Ind-2001	e
viba_44987	VIT/28/2019	water buffalo	99.7	0	O	ME-SA	Ind-2001	e
viba_48005	MAY/35/2020(2)	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_44991	VIT/29/2019	water buffalo	99.7	0	O	ME-SA	Ind-2001	e
viba_47295	LAO/4/2020	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_45022	VIT/7/2020	porcine	99.7	0	O	ME-SA	Ind-2001	e
viba_44975	VIT/20/2019	water buffalo	99.7	0	O	ME-SA	Ind-2001	e
viba_44967	VIT/17/2019	porcine	99.7	0	O	ME-SA	Ind-2001	e
viba_44983	VIT/27/2019	cattle	99.7	0	O	ME-SA	Ind-2001	e
viba_47316	TAI/4/2020	cattle	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	95.7	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	90.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.5	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.6	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	87.9	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009	cattle	87.7	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	87.5	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69	cattle	87.4	0	O	ME-SA		

Virus sample name:	TAI/16/2020
Sender reference:	166/20R2
Location of origin:	Nong Aor, Nong Wua So, Udon Thani
Country of origin:	Thailand
Date of collection:	03/09/2020
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022

VIBASys IDs: sample 51118, genome 51119, sequence viba\_51120, sequencing info 51121

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51132	TAI/20/2020	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_48182	VIT/26/2020	water buffalo	99.7	0	O	ME-SA	Ind-2001	e
viba_47283	LAO/1/2020	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_44987	VIT/28/2019	water buffalo	99.2	0	O	ME-SA	Ind-2001	e
viba_48005	MAY/35/2020(2)	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47308	TAI/2/2020	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47295	LAO/4/2020	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_45022	VIT/7/2020	porcine	99.2	0	O	ME-SA	Ind-2001	e
viba_44967	VIT/17/2019	porcine	99.2	0	O	ME-SA	Ind-2001	e
viba_44983	VIT/27/2019	cattle	99.2	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	95.4	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	90.5	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.2	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.3	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	87.8	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.6	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	87.4	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		87.4	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:	TAI/18/2020
Sender reference:	197-1/20R3
Location of origin:	Klang Dong, Thung Saliam, Sukhothai
Country of origin:	Thailand
Date of collection:	07/10/2020
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022
VIBASys IDs: sample 51122, genome 51123, sequence viba_51124, sequencing info 51125	

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_47892	MAY/1783/20(1)	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_47896	MAY/1783/20(3)	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_44987	VIT/28/2019	water buffalo	99.2	0	O	ME-SA	Ind-2001	e
viba_48005	MAY/35/2020(2)	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47295	LAO/4/2020	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_45022	VIT/7/2020	porcine	99.2	0	O	ME-SA	Ind-2001	e
viba_44967	VIT/17/2019	porcine	99.2	0	O	ME-SA	Ind-2001	e
viba_44983	VIT/27/2019	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47316	TAI/4/2020	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47287	LAO/2/2020	cattle	99.2	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	95.3	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	90.4	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.1	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.3	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	87.7	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.4	0	O	ME-SA	PanAsia	
viba_359	Manisa/TUR/69		87.2	0	O	ME-SA		
viba_719	IRN/88/2009		87.2	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	87.1	0	O	ME-SA	PanAsia-2	

Virus sample name:	TAI/19/2020
Sender reference:	205-1/20R2
Location of origin:	Lamor, Nayong Nuea, Trang
Country of origin:	Thailand
Date of collection:	07/10/2020
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	06/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022

VIBASys IDs: sample 51126, genome 51127, sequence viba\_51128, sequencing info 51129

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_48033	MAY/1388/2020	cattle	99.5	0	O	ME-SA	Ind-2001	e
viba_48085	MAY/4302/2020(1)	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48158	VIT/20/2020	porcine	99.4	0	O	ME-SA	Ind-2001	e
viba_48101	MAY/4425/2020	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48037	MAY/2081/2020	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_50842	MAY/99/2021(1)	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48041	MAY/3041/2020(1)	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_47401	VIT/11359/2020b	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48146	VIT/17/2020	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48069	MAY/3933/2020(3)	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	95.7	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	91.0	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.7	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.9	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.0	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.9	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	87.4	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		87.2	0	O	ME-SA		
viba_666	IRN/18/2010	cattle	87.0	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	TAI/20/2020
Sender reference:	262/20R3
Location of origin:	Phonthong, Mueang, Kalasin
Country of origin:	Thailand
Date of collection:	12/11/2020
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022

VIBASys IDs: sample 51130, genome 51131, sequence viba\_51132, sequencing info 51133

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51120	TAI/16/2020	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_48182	VIT/26/2020	water buffalo	99.5	0	O	ME-SA	Ind-2001	e
viba_47283	LAO/1/2020	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_44987	VIT/28/2019	water buffalo	99.1	0	O	ME-SA	Ind-2001	e
viba_48005	MAY/35/2020(2)	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47308	TAI/2/2020	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47295	LAO/4/2020	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_45022	VIT/7/2020	porcine	99.1	0	O	ME-SA	Ind-2001	e
viba_44967	VIT/17/2019	porcine	99.1	0	O	ME-SA	Ind-2001	e
viba_44983	VIT/27/2019	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	95.3	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	90.4	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	90.1	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.1	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	87.7	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	87.4	0	O	ME-SA	PanAsia	
viba_650	IRN/8/2005	ovine	87.2	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		87.2	0	O	ME-SA	PanAsia-2	ANT-10
viba_860	IRN/6/2015	cattle	86.9	0	O	ME-SA	PanAsia-2	QOM-15

Virus sample name:	TAI/21/2020
Sender reference:	211/20R2
Location of origin:	Baan Kang, Phu Khiao, Chaiyaphum
Country of origin:	Thailand
Date of collection:	28/11/2020
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022
VIBASys IDs: sample 51134, genome 51135, sequence viba_51136, sequencing info 51137	

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_48093	MAY/4266/2020(2)	cattle	99.8	0	O	ME-SA	Ind-2001	e
viba_45069	VIT/34/2019	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_44987	VIT/28/2019	water buffalo	99.1	0	O	ME-SA	Ind-2001	e
viba_48005	MAY/35/2020(2)	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47295	LAO/4/2020	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_45022	VIT/7/2020	porcine	99.1	0	O	ME-SA	Ind-2001	e
viba_44967	VIT/17/2019	porcine	99.1	0	O	ME-SA	Ind-2001	e
viba_44983	VIT/27/2019	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47316	TAI/4/2020	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47287	LAO/2/2020	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	95.4	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	91.2	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	91.0	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	90.1	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	89.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	88.8	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		88.6	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	88.2	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	87.8	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	TAI/1/2021
Sender reference:	6/21R3
Location of origin:	Khao Khram, Mueang, Krabi
Country of origin:	Thailand
Date of collection:	07/03/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022

VIBASys IDs: sample 51138, genome 51139, sequence viba\_51140, sequencing info 51141

#### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_50754	TAI/6/21	bovine	100.0	0	O	ME-SA	Ind-2001	e
viba_50758	TAI/4/21	bovine	99.7	0	O	ME-SA	Ind-2001	e
viba_48105	MAY/877/2021(3)	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_50774	TAI/43/21	bovine	99.4	0	O	ME-SA	Ind-2001	e
viba_48113	MAY/877/2021(6)	cattle	99.4	0	O	ME-SA	Ind-2001	e
viba_48109	MAY/877/2021(5)	cattle	99.2	0	O	ME-SA	Ind-2001	e
viba_47393	VIT/11272/2020b	porcine	99.1	0	O	ME-SA	Ind-2001	e
viba_48170	VIT/23/2020	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_47397	VIT/11359/2020a	cattle	99.1	0	O	ME-SA	Ind-2001	e
viba_48650	MOG/3/2021		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	95.4	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	90.9	0	O	ME-SA	Ind-2001	b
viba_705	KUW/3/97	bovine	89.9	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.3	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_285	UKG/35/2001	porcine	88.5	0	O	ME-SA	PanAsia	
viba_719	IRN/88/2009		88.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_650	IRN/8/2005	ovine	87.9	0	O	ME-SA	PanAsia-2	
viba_359	Manisa/TUR/69		87.8	0	O	ME-SA		



Virus sample name:	TAI/2/2021
Sender reference:	9-4/21R3
Location of origin:	Subsun, Muaklek, Saraburi
Country of origin:	Thailand
Date of collection:	28/04/2021
Host species:	cattle
Serotype:	O
Topotype:	ME-SA
Lineage:	Ind-2001
Sublineage:	e
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	WRL-LFBK1
Harvest date of material:	05/07/2022
Primers:	O-1C244F/EUR-2B52R; FMD-3161F/FMD-4303R
Received for sequencing:	21/07/2022
Created:	26/07/2022
Last updated:	26/07/2022

VIBASys IDs: sample 51142, genome 51143, sequence viba\_51144, sequencing info 51145

### Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_51024	ISA/6/2022	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_50631	PVT-S2AN/ISA/2022	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_50504	VL6-J-T/ISA/2022		97.9	0	O	ME-SA	Ind-2001	e
viba_51016	ISA/1/2022	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_50625	PVT-S234/ISA/2022	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_51020	ISA/3/2022	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_50613	PVT-SP4/ISA/2022	cattle	97.9	0	O	ME-SA	Ind-2001	e
viba_50617	PVT-SP10/ISA/2022	cattle	97.8	0	O	ME-SA	Ind-2001	e
viba_50870	MAY/1577/2021(1)	cattle	97.0	0	O	ME-SA	Ind-2001	e
viba_50874	MAY/1577/2021(6)	cattle	97.0	0	O	ME-SA	Ind-2001	e

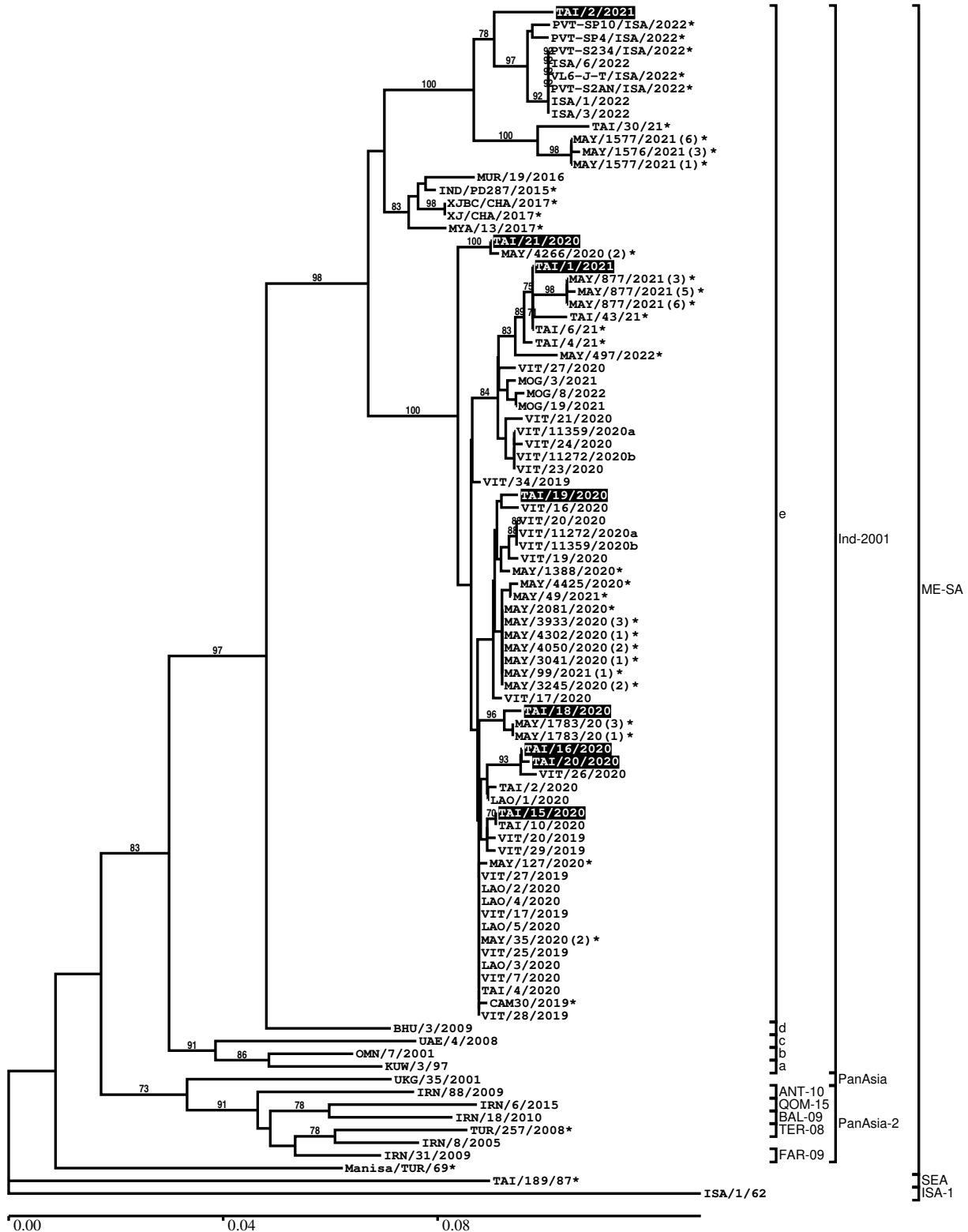
### Most Closely Related Prototype Sequences

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	95.4	0	O	ME-SA	Ind-2001	e
viba_293	BHU/3/2009	cattle	92.4	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	90.4	0	O	ME-SA	Ind-2001	a
viba_397	UAE/4/2008	gazelle	89.1	0	O	ME-SA	Ind-2001	c
viba_766	IRN/31/2009	cattle	88.8	0	O	ME-SA	PanAsia-2	FAR-09
viba_359	Manisa/TUR/69		88.5	0	O	ME-SA		
viba_650	IRN/8/2005	ovine	88.3	0	O	ME-SA	PanAsia-2	
viba_285	UKG/35/2001	porcine	88.3	0	O	ME-SA	PanAsia	
viba_491	TUR/257/2008		88.2	0	O	ME-SA	PanAsia-2	TER-08

Report on FMDV O in Thailand in 2020, 2021

Batch: WRLFMD/2022/000016



\*, not a WRLFMD Reference Number

## Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2022/000016-Thailand-O (8 sequences)
Sequence database set:	allseqs_O (5657 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:	13
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
TAI/2/2021	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
PVT-SP10/ISA/2022*	n/a	cattle	Pusvetma	Indonesia	ME-SA/Ind-2001/e
PVT-SP4/ISA/2022*	n/a	cattle	Pusvetma	Indonesia	ME-SA/Ind-2001/e
PVT-S234/ISA/2022*	n/a	cattle	Pusvetma	Indonesia	ME-SA/Ind-2001/e
ISA/6/2022	n/a	cattle	WRLFMD	Indonesia	ME-SA/Ind-2001/e
VL6-J-T/ISA/2022*	n/a	n/a	Pusvetma	Indonesia	ME-SA/Ind-2001/e
PVT-S2AN/ISA/2022*	n/a	cattle	Pusvetma	Indonesia	ME-SA/Ind-2001/e
ISA/1/2022	n/a	cattle	WRLFMD	Indonesia	ME-SA/Ind-2001/e
ISA/3/2022	n/a	cattle	WRLFMD	Indonesia	ME-SA/Ind-2001/e
TAI/30/21*	n/a	bovine	TRRL	Thailand	ME-SA/Ind-2001/e
MAY/1577/2021(6)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/1576/2021(3)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/1577/2021(1)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MUR/19/2016	MG972510	cattle	WRLFMD	Mauritius	ME-SA/Ind-2001/e
IND/PD287/2015*	MT909659	cattle	PD-FMD	India	ME-SA/Ind-2001/e
XJBC/CHA/2017*	KY696708	n/a	LVRI	China	ME-SA/Ind-2001/e
XJ/CHA/2017*	MF461724	cattle	LVRI	China	ME-SA/Ind-2001/e
MYA/13/2017*	MG972527	cattle	TRRL	Myanmar	ME-SA/Ind-2001/e
TAI/21/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
MAY/4266/2020(2)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
TAI/1/2021	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
MAY/877/2021(3)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/877/2021(5)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/877/2021(6)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
TAI/43/21*	n/a	bovine	TRRL	Thailand	ME-SA/Ind-2001/e
TAI/6/21*	n/a	bovine	TRRL	Thailand	ME-SA/Ind-2001/e
TAI/4/21*	n/a	bovine	TRRL	Thailand	ME-SA/Ind-2001/e
MAY/497/2022*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
VIT/27/2020	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
MOG/3/2021	n/a	n/a	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/8/2022	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
MOG/19/2021	n/a	cattle	WRLFMD	Mongolia	ME-SA/Ind-2001/e
VIT/21/2020	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/Ind-2001/e
VIT/11359/2020a	n/a	cattle	RAHO6	Vietnam	ME-SA/Ind-2001/e
VIT/24/2020	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
VIT/11272/2020b	n/a	porcine	RAHO6	Vietnam	ME-SA/Ind-2001/e

*continued on next page*

label	accession	host(s)	lab	country	taxonomic information
VIT/23/2020	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
VIT/34/2019	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
TAI/19/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
VIT/16/2020	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/Ind-2001/e
VIT/20/2020	n/a	porcine	WRLFMD	Vietnam	ME-SA/Ind-2001/e
VIT/11272/2020a	n/a	porcine	RAHO6	Vietnam	ME-SA/Ind-2001/e
VIT/11359/2020b	n/a	cattle	RAHO6	Vietnam	ME-SA/Ind-2001/e
VIT/19/2020	n/a	n/a	WRLFMD	Vietnam	ME-SA/Ind-2001/e
MAY/1388/2020*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/4425/2020*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/49/2021*	n/a	water buffalo	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/2081/2020*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/3933/2020(3)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/4302/2020(1)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/4050/2020(2)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/3041/2020(1)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/99/2021(1)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/3245/2020(2)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
VIT/17/2020	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
TAI/18/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
MAY/1783/20(3)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
MAY/1783/20(1)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
TAI/16/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
TAI/20/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
VIT/26/2020	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/Ind-2001/e
TAI/2/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
LAO/1/2020	n/a	cattle	WRLFMD	Laos	ME-SA/Ind-2001/e
TAI/15/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
TAI/10/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
VIT/20/2019	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/Ind-2001/e
VIT/29/2019	n/a	water buffalo	WRLFMD	Vietnam	ME-SA/Ind-2001/e
MAY/127/2020*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
VIT/27/2019	n/a	cattle	WRLFMD	Vietnam	ME-SA/Ind-2001/e
LAO/2/2020	n/a	cattle	WRLFMD	Laos	ME-SA/Ind-2001/e
LAO/4/2020	n/a	cattle	WRLFMD	Laos	ME-SA/Ind-2001/e
VIT/17/2019	n/a	porcine	WRLFMD	Vietnam	ME-SA/Ind-2001/e
LAO/5/2020	n/a	cattle	WRLFMD	Laos	ME-SA/Ind-2001/e
MAY/35/2020(2)*	n/a	cattle	MNFMDL	Malaysia	ME-SA/Ind-2001/e
VIT/25/2019	n/a	porcine	WRLFMD	Vietnam	ME-SA/Ind-2001/e
LAO/3/2020	n/a	cattle	WRLFMD	Laos	ME-SA/Ind-2001/e
VIT/7/2020	n/a	porcine	WRLFMD	Vietnam	ME-SA/Ind-2001/e
TAI/4/2020	n/a	cattle	WRLFMD	Thailand	ME-SA/Ind-2001/e
CAM30/2019*	MZ634456	cattle	APQA	Cambodia	ME-SA/Ind-2001/e
VIT/28/2019	n/a	water buffalo	WRLFMD	Vietnam	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
UKG/35/2001	AJ539141	porcine	PIADC	United Kingdom	ME-SA/PanAsia
IRN/88/2009	KY091282	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/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
TUR/257/2008*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/TER-08
IRN/8/2005	KY091281	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
IRN/31/2009	KY091284	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
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

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n/a, not available