

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

Genotyping Report

FMDV serotype: O
Country: Thailand
Year: 2016
Batch: WRLFMD/2016/00031
No. of sequences: 9
Report date: 9th November 2016
Report generated by: Kasia Bankowska
Report checked by: Nick Knowles



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

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Virus sample name:	TAI/21/2016
Sender reference:	96/16
Location of origin:	Pa Bon, Pa Bon, Phatthalung
Country of origin:	Thailand
Date of collection:	11/04/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	19/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30492, genome 30493, sequence viba_30494, sequencing info 30495	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_26288	TAI/22/2015	water buffalo	99.4	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.2	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	98.9	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.9	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	98.6	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	98.4	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.6	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.5	0	O	SEA		
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_491	TUR/257/2008		84.1	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_860	IRN/6/2015	cattle	83.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_354	PAK/16/2010	cattle	83.6	0	O	ME-SA	PanAsia-2	PUN-10
viba_666	IRN/18/2010	cattle	83.5	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	83.4	0	O	ME-SA	PanAsia-2	

Virus sample name:	TAI/26/2016
Sender reference:	86/16
Location of origin:	Nong Kwang, Photharam, Ratchaburi
Country of origin:	Thailand
Date of collection:	25/05/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	21/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30496, genome 30497, sequence viba_30498, sequencing info 30499	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_26288	TAI/22/2015	water buffalo	99.5	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.4	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	99.1	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.1	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	98.9	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.9	0	O	SEA	Mya-98	
viba_30494	TAI/21/2016	cattle	98.9	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	92.4	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	89.3	0	O	SEA		
viba_766	IRN/31/2009	cattle	84.5	0	O	ME-SA	PanAsia-2	FAR-09
viba_491	TUR/257/2008		84.5	0	O	ME-SA	PanAsia-2	TER-08
viba_719	IRN/88/2009		84.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_505	TUR/264/2009		84.2	0	O	ME-SA	PanAsia-2	SAN-09
viba_860	IRN/6/2015	cattle	84.1	0	O	ME-SA	PanAsia-2	QOM-15
viba_354	PAK/16/2010	cattle	84.1	0	O	ME-SA	PanAsia-2	PUN-10
viba_666	IRN/18/2010	cattle	84.0	0	O	ME-SA	PanAsia-2	BAL-09
viba_650	IRN/8/2005	ovine	83.9	0	O	ME-SA	PanAsia-2	

Virus sample name:	TAI/30/2016
Sender reference:	131/16
Location of origin:	Chiang Rai, Khun Tan, Ta
Country of origin:	Thailand
Date of collection:	29/07/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	22/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016

VIBASys IDs: sample 30500, genome 30501, sequence viba_30502, sequencing info 30503

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30506	TAI/31/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.7	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30526	TAI/37/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	99.2	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.1	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.7	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.6	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.5	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.3	0	O	SEA		
viba_491	TUR/257/2008		84.1	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	83.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_860	IRN/6/2015	cattle	83.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		83.6	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	83.4	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	83.4	0	O	ME-SA	PanAsia-2	BAL-09
viba_354	PAK/16/2010	cattle	83.4	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	TAI/31/2016
Sender reference:	132-2/16
Location of origin:	Chiang Rai, Khun Tan, Ta
Country of origin:	Thailand
Date of collection:	29/07/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	22/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016

VIBASys IDs: sample 30504, genome 30505, sequence viba_30506, sequencing info 30507

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30502	TAI/30/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.7	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30526	TAI/37/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	99.2	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.1	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.7	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.6	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.5	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.3	0	O	SEA		
viba_491	TUR/257/2008		84.1	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	83.9	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_860	IRN/6/2015	cattle	83.7	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		83.6	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	83.4	0	O	ME-SA	PanAsia-2	
viba_666	IRN/18/2010	cattle	83.4	0	O	ME-SA	PanAsia-2	BAL-09
viba_354	PAK/16/2010	cattle	83.4	0	O	ME-SA	PanAsia-2	PUN-10

Virus sample name:	TAI/32/2016
Sender reference:	135-2/16
Location of origin:	Chiang Mai, King Amphoe Mae On, Mae Tha
Country of origin:	Thailand
Date of collection:	29/07/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	22/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30508, genome 30509, sequence viba_30510, sequencing info 30511	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30502	TAI/30/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	99.5	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_30526	TAI/37/2016	cattle	99.2	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	99.1	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	98.9	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	98.9	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.6	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.4	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.3	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.8	0	O	SEA		
viba_491	TUR/257/2008		84.5	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.4	0	O	ME-SA	PanAsia-2	FAR-09
viba_719	IRN/88/2009		84.3	0	O	ME-SA	PanAsia-2	ANT-10
viba_505	TUR/264/2009		84.1	0	O	ME-SA	PanAsia-2	SAN-09
viba_860	IRN/6/2015	cattle	84.1	0	O	ME-SA	PanAsia-2	QOM-15
viba_650	IRN/8/2005	ovine	83.9	0	O	ME-SA	PanAsia-2	
viba_354	PAK/16/2010	cattle	83.9	0	O	ME-SA	PanAsia-2	PUN-10
viba_666	IRN/18/2010	cattle	83.8	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	TAI/33/2016
Sender reference:	136-1/16
Location of origin:	Lamphun, Mueang Lamphun, Rim Ping
Country of origin:	Thailand
Date of collection:	29/07/2016
Host species:	porcine
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	RS1
Harvest date of material:	22/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30512, genome 30513, sequence viba_30514, sequencing info 30515	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30522	TAI/35/2016	cattle	100.0	0	O	SEA	Mya-98	
viba_30526	TAI/37/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	99.2	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.1	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.7	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.6	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.5	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.3	0	O	SEA		
viba_491	TUR/257/2008		84.4	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_860	IRN/6/2015	cattle	84.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		83.9	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_354	PAK/16/2010	cattle	83.8	0	O	ME-SA	PanAsia-2	PUN-10
viba_666	IRN/18/2010	cattle	83.7	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	TAI/34/2016
Sender reference:	138/16
Location of origin:	Ratchaburi, Photharam, Ban Lueak
Country of origin:	Thailand
Date of collection:	02/08/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	22/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30516, genome 30517, sequence viba_30518, sequencing info 30519	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_26288	TAI/22/2015	water buffalo	99.4	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.2	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	98.9	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.9	0	O	SEA	Mya-98	
viba_30494	TAI/21/2016	cattle	98.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_30514	TAI/33/2016	porcine	98.6	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	98.6	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	98.4	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.9	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.8	0	O	SEA		
viba_766	IRN/31/2009	cattle	84.1	0	O	ME-SA	PanAsia-2	FAR-09
viba_694	CAM/3/98	bovine	84.1	0	O	SEA	Cam-94	
viba_491	TUR/257/2008		84.1	0	O	ME-SA	PanAsia-2	TER-08
viba_860	IRN/6/2015	cattle	84.1	0	O	ME-SA	PanAsia-2	QOM-15
viba_666	IRN/18/2010	cattle	83.8	0	O	ME-SA	PanAsia-2	BAL-09
viba_505	TUR/264/2009		83.8	0	O	ME-SA	PanAsia-2	SAN-09
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_576	IND/R2/75		83.6	0	O	ME-SA		

Virus sample name:	TAI/35/2016
Sender reference:	139-2/16
Location of origin:	Khon Kaen, Mueang Khon Kaen, Samran
Country of origin:	Thailand
Date of collection:	02/08/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	22/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30520, genome 30521, sequence viba_30522, sequencing info 30523	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30514	TAI/33/2016	porcine	100.0	0	O	SEA	Mya-98	
viba_30526	TAI/37/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.5	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	99.2	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	99.1	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	99.1	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.7	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.6	0	O	SEA	Mya-98	

Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.5	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.3	0	O	SEA		
viba_491	TUR/257/2008		84.4	0	O	ME-SA	PanAsia-2	TER-08
viba_766	IRN/31/2009	cattle	84.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_860	IRN/6/2015	cattle	84.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_505	TUR/264/2009		83.9	0	O	ME-SA	PanAsia-2	SAN-09
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_354	PAK/16/2010	cattle	83.8	0	O	ME-SA	PanAsia-2	PUN-10
viba_666	IRN/18/2010	cattle	83.7	0	O	ME-SA	PanAsia-2	BAL-09

Virus sample name:	TAI/37/2016
Sender reference:	162/16
Location of origin:	Phattalung, Mueang Phattalung, Tamnam
Country of origin:	Thailand
Date of collection:	11/08/2016
Host species:	cattle
Serotype:	O
Topotype:	SEA
Lineage:	Mya-98
Sublineage:	
Sequence length:	633
Ambiguities:	0
Material submitted for sequencing:	BTy1
Harvest date of material:	21/10/2016
Primers:	O-1C244F/EUR-2B52R; O-1C272F/EUR-2B52R
Received for sequencing:	07/11/2016
Created:	08/11/2016
Last updated:	08/11/2016
VIBASys IDs: sample 30524, genome 30525, sequence viba_30526, sequencing info 30527	

Most Closely Related Sequences

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_30514	TAI/33/2016	porcine	99.7	0	O	SEA	Mya-98	
viba_30522	TAI/35/2016	cattle	99.7	0	O	SEA	Mya-98	
viba_30502	TAI/30/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30506	TAI/31/2016	cattle	99.4	0	O	SEA	Mya-98	
viba_30510	TAI/32/2016	cattle	99.2	0	O	SEA	Mya-98	
viba_26288	TAI/22/2015	water buffalo	98.9	0	O	SEA	Mya-98	
viba_25518	MYA/1/2015	bovine	98.7	0	O	SEA	Mya-98	
viba_30498	TAI/26/2016	cattle	98.7	0	O	SEA	Mya-98	
viba_26312	TAI/30/2015	cattle	98.4	0	O	SEA	Mya-98	
viba_30518	TAI/34/2016	cattle	98.3	0	O	SEA	Mya-98	

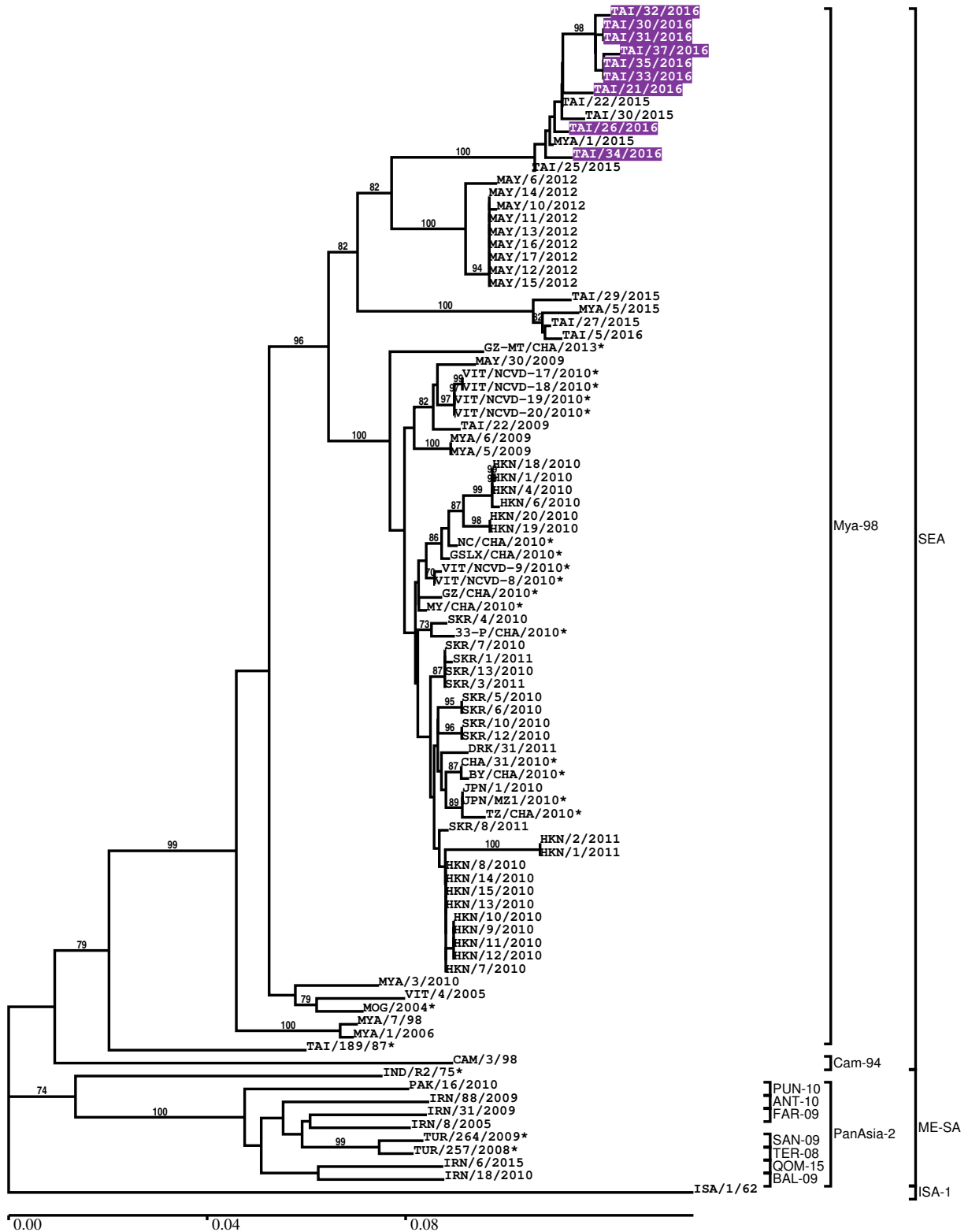
Most Closely Related Prototype Sequences

see http://www.wrlfmd.org/fmd_genotyping/prototypes.htm

sequence	virus name	Host	% Id.	# Ambig.	serotype	topotype	lineage	sublineage
viba_199	MYA/7/98	bovine	91.5	0	O	SEA	Mya-98	
viba_68	TAI/189/87	bovine	88.0	0	O	SEA		
viba_491	TUR/257/2008		84.7	0	O	ME-SA	PanAsia-2	TER-08
viba_505	TUR/264/2009		84.2	0	O	ME-SA	PanAsia-2	SAN-09
viba_766	IRN/31/2009	cattle	84.2	0	O	ME-SA	PanAsia-2	FAR-09
viba_666	IRN/18/2010	cattle	84.0	0	O	ME-SA	PanAsia-2	BAL-09
viba_860	IRN/6/2015	cattle	84.0	0	O	ME-SA	PanAsia-2	QOM-15
viba_650	IRN/8/2005	ovine	83.8	0	O	ME-SA	PanAsia-2	
viba_719	IRN/88/2009		83.8	0	O	ME-SA	PanAsia-2	ANT-10
viba_354	PAK/16/2010	cattle	83.4	0	O	ME-SA	PanAsia-2	PUN-10

Report on FMDV O in Thailand in 2016

Batch: WRLFMD/2016/00031



*, not a WRLFMD Reference Number

Analysis Parameters

VP1 subsequence extractor:	vp1_O
Query sequence set:	WRLFMD/2016/00031-Thailand-O (9 sequences)
Sequence database set:	allseqs_O (3170 sequences)
Prototype sequence set:	!prototypes_O (47 sequences)
Number of related sequences reported:	10
Minimal VP1 subsequence match length	600
Sequence alignment method:	muscle (default parameters)
Sequence alignment length:	636
Phylogeny reconstruction method:	fdnadist, fneighbor
Number of bootstrap samples:	1000
Random seed for bootstrapping:	1
Displaying bootstrap values above:	70.0%
Number of sequences in tree capped at:	100
Number of prototype sequences in tree:	12
VIBASys version:	reflabs-1.1.0

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/32/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/30/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/31/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/37/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/35/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/33/2016	n/a	porcine	WRLFMD	Thailand	SEA/Mya-98
TAI/21/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/22/2015	n/a	water buffalo	WRLFMD	Thailand	SEA/Mya-98
TAI/30/2015	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/26/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
MYA/1/2015	n/a	bovine	WRLFMD	Myanmar	SEA/Mya-98
TAI/34/2016	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/25/2015	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
MAY/6/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/14/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/10/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/11/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/13/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/16/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/17/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/12/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
MAY/15/2012	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
TAI/29/2015	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
MYA/5/2015	n/a	bovine	WRLFMD	Myanmar	SEA/Mya-98
TAI/27/2015	n/a	cattle	WRLFMD	Thailand	SEA/Mya-98
TAI/5/2016	n/a	porcine	WRLFMD	Thailand	SEA/Mya-98
GZ-MT/CHA/2013*	KJ646655	porcine	Guizhou University	China	SEA/Mya-98
MAY/30/2009	n/a	cattle	WRLFMD	Malaysia	SEA/Mya-98
VIT/NCVD-17/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
VIT/NCVD-18/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
VIT/NCVD-19/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
VIT/NCVD-20/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
TAI/22/2009	HQ116269	porcine	WRLFMD	Thailand	SEA/Mya-98
MYA/6/2009	HQ116229	cattle	WRLFMD	Myanmar	SEA/Mya-98
MYA/5/2009	HQ116228	cattle	WRLFMD	Myanmar	SEA/Mya-98

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label	accession	host(s)	lab	country	taxonomic information
HKN/18/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/1/2010	JQ070301	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/4/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/6/2010	JQ070302	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/20/2010	HM229661	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/19/2010	JQ070305	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
NC/CHA/2010*	HQ652080	porcine	SiChuan University	China	SEA/Mya-98
GSLX/CHA/2010*	JQ900581	porcine	LVRI	China	SEA/Mya-98
VIT/NCVD-9/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
VIT/NCVD-8/2010*	n/a	cattle	NVRQS	Vietnam	SEA/Mya-98
GZ/CHA/2010*	JN998086	cattle	LVRI	China	SEA/Mya-98
MY/CHA/2010*	HQ652079	porcine	SiChuan University	China	SEA/Mya-98
SKR/4/2010	JQ070320	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
33-P/CHA/2010*	JQ973889	bovine	LVRI	China	SEA/Mya-98
SKR/7/2010	n/a	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/1/2011	n/a	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/13/2010	n/a	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/3/2011	n/a	porcine	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/5/2010	JQ070321	porcine	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/6/2010	n/a	porcine	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/10/2010	n/a	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
SKR/12/2010	KC438373	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
DRK/31/2011	n/a	cattle	WRLFMD	Democratic People's Republic of Korea	SEA/Mya-98
CHA/31/2010*	JF792356	porcine	LVRI	China	SEA/Mya-98
BY/CHA/2010*	JN998085	porcine	LVRI	China	SEA/Mya-98
JPN/1/2010	n/a	cattle	WRLFMD	Japan	SEA/Mya-98
JPN/MZ1/2010*	AB618503	cattle	NIAH-Japan	Japan	SEA/Mya-98
TZ/CHA/2010*	HQ652081	porcine	SiChuan University	China	SEA/Mya-98
SKR/8/2011	n/a	cattle	WRLFMD	South Korea, Republic of	SEA/Mya-98
HKN/2/2011	JQ070307	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/1/2011	JQ070306	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/8/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/14/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/15/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/13/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/10/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/9/2010	JQ070304	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/11/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98

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label	accession	host(s)	lab	country	taxonomic information
HKN/12/2010	n/a	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
HKN/7/2010	JQ070303	porcine	WRLFMD	Hong Kong SAR	SEA/Mya-98
MYA/3/2010	JQ070319	cattle	WRLFMD	Myanmar	SEA/Mya-98
VIT/4/2005	HQ116278	cattle	WRLFMD	Vietnam	SEA/Mya-98
MOG/2004*	JQ070324	n/a	ARRIAH	Mongolia	SEA/Mya-98
MYA/7/98	DQ164925	bovine	WRLFMD	Myanmar	SEA/Mya-98
MYA/1/2006	JQ070316	porcine	WRLFMD	Myanmar	SEA/Mya-98
TAI/189/87*	n/a	bovine	TRRL	Thailand	SEA
CAM/3/98	AJ294910	bovine	WRLFMD	Cambodia	SEA/Cam-94
IND/R2/75*	AF204276	n/a	PD-FMD	India	ME-SA
PAK/16/2010	n/a	cattle	WRLFMD	Pakistan	ME-SA/PanAsia-2/PUN-10
IRN/88/2009	n/a	n/a	WRLFMD	Iran	ME-SA/PanAsia-2/ANT-10
IRN/31/2009	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/FAR-09
IRN/8/2005	n/a	ovine	WRLFMD	Iran	ME-SA/PanAsia-2
TUR/264/2009*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/SAN-09
TUR/257/2008*	n/a	n/a	FMDI-Ankara	Turkey	ME-SA/PanAsia-2/TER-08
IRN/6/2015	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/QOM-15
IRN/18/2010	n/a	cattle	WRLFMD	Iran	ME-SA/PanAsia-2/BAL-09
ISA/1/62	AJ303500	n/a	WRLFMD	Indonesia	ISA-1

*, not a WRLFMD Reference Number

n/a, not available